Flint Grid Energy Storage System

Exhibit M

Wetland and Waterbody Delineation

Case No. 21-1061-EL-BGN



Engineers, Surveyors, Planners, Scientists

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13713 Jug Street Site (14.9-acres)Investigation of Waters of the United StatesAble Grid Energy Solutions, Inc.September 30, 2020

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1.0 INTRODUCTION

A routine delineation of Waters of the United States, including streams and wetlands, has been conducted and a report prepared by EMH&T for the approximately 14.9-acre site located at 13713 Jug Street. The project site is located on the south side of Jug Street and east of Beech Road in Jersey Township, Licking County, Ohio (Exhibit 1). This routine delineation was performed at the request of and is for the exclusive use of Able Grid Energy Solutions, Inc. Able Grid Energy Solutions, Inc. requests an Approved Jurisdictional Determination (AJD) for the potentially isolated wetlands and non-jurisdictional pond within the approximately 14.9-acre site located at 13713 Jug Street.

The approximately 14.9-acre site consists of a residential dwelling with outbuildings, an abandoned residential dwelling with an abandoned outbuilding, areas of woods and open pasture and an open water pond. The approximate center coordinates of the project site are 40.095807°, - 82.745412°. The 13713 Jug Street site is located in the Headwaters of Blacklick Creek subbasin (HUC: 05060001-15-03) within the Upper Scioto River Watershed. The study area is regulated by the U.S. Army Corps of Engineers (USACE), Huntington District.

A field investigation of the project area was conducted on September 1, 2020 by an EMH&T Environmental Scientist. Four (4) potential isolated wetlands and a non-jurisdictional pond were identified for confirmation by the USACE. The location and extent of the identified potentially isolated/non-jurisdictional surface water features are summarized in the following sections. The boundaries identified by EMH&T are potential, as only the USACE has the final authority to determine whether a wetland or water is jurisdictional.

2.0 LITERATURE REVIEW

A review was made of available topographic maps, soils maps, and wetland inventory maps. This information helped determine topography and soil types present within in the project area. It also identified any previously mapped wetlands and whether any portions of the project area were located within mapped floodways.

2.1 Topographic Features

As shown on Exhibit 2, the project area is relatively flat at the elevation of approximately 1150 feet (National Geodetic Vertical Datum) across the approximately 15-acre site according to the USGS 7.5' Series Jersey, Ohio quadrangle (USGS, 1975). There is one (1) structure and a long driveway mapped for the site. No streams, ponds or marsh symbols were mapped for the site.

2.2 Mapped Soils

According to the Web Soil Survey for Licking County, Ohio (USDA-NCRS, 2018) as shown on Exhibit 3A, the project area contains three (3) soil types. These soils are listed in Table 1 along with their hydric status. As shown on Exhibit 3B, there are no drainageways mapped on the site but an open water pond is mapped in the central portion of the site (USDA, 1992).



Manned Soil Unit	Hydric	Type of Inclusion	Location of Hydric							
Mapped 301 0111	Status	(%)	Inclusions							
Bennington silt loam, 0 to 2	Partially-	Condit (5%)	Drainageways, Depressions							
percent slopes (BeA)	Hydric	Pewamo (3%)	Drainageways, Depressions							
Bennington silt loam, 2 to 6	Partially-	Condit (3%)	Drainageways, Depressions							
percent slopes (BeB)	Hydric	Pewamo (3%)	Drainageways, Depressions							
Pewamo silty clay loam, 0 to	Hydria									
2 percent slopes (Pe)	пуалс									

TABLE 1 Hydric Status of Onsite Soils

A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (USDA-NRCS, 2018). As shown on Exhibit 3A, the Web Soil Survey (NRCS, 2018) for Licking County, Pewamo silty clay loam, 0 to 2 percent slopes (Pe) is a mapped hydric soil for the site. Additionally, Bennington silt loam, 0 to 2 percent slopes (BeA) and Bennington silt loam, 2 to 6 percent slopes (BeB) are non-hydric soils that contain hydric inclusions in drainageways and depressions.

2.3 Hydrologic Conditions

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) was reviewed for the site and the entire project area lies within Zone X (unshaded) which are areas determined to be outside of the 500-year floodplain.

The United States Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) Jersey, Ohio (USFWS, 2018) quadrangle was reviewed for the site. One (1) NWI feature was mapped on the site and identified as a Palustrine, Unconsolidated Bottom, Intermittently Exposed, Excavated (PUBGx) feature. This feature was identified during the field investigation as an onsite open water pond.

3.0 DELINEATION INVESTIGATION RESULTS

EMH&T conducted a field investigation of the project area on September 1, 2020 to determine the location, extent, and quality of potential Waters of the United States, including wetlands. The investigative methodology employed is summarized in Appendix A.

As shown on Exhibit 5, four (4) potential wetlands and an open water pond were identified within the 14.9-acre project area. Table 2 lists the extent of the surface water features identified and Table 3 summarizes the jurisdictional classification of each surface water feature. The USACE wetland and upland data forms are provided in Appendix B. Photographs of the surface water features are included in the Photographs section.

Wetlands A, B, C and D are potentially isolated wetlands since they have all formed in closed depressions on the site and have no surface water connections. Pond 1 is a man-made excavated pond located in upland soils with no surface water connections thus being a potentially non-jurisdictional onsite feature.



Feature ID	Classification	Stream (If)	Wetland (ac)	Open Water (ac)							
Wetland A	Emergent/Forested		1.06								
Wetland B	Forested		1.32								
Wetland C	Emergent		0.08								
Wetland D	Forested		0.15								
Pond 1				0.64							
Total			2.61	0.64							

 TABLE 2

 Extent of Identified Onsite Surface Water Features

TABLE 3

Jurisdictional Classification of Onsite Surface Water Features

Name	Traditionally Navigable Water (TNW)	Perennial Tributary	Intermittent Tributary	Jurisdictional Impoundment	Adjacent Wetland	Non- Jurisdictional Feature/ Isolated Wetlands
Wetland A						Х
Wetland B						Х
Wetland C						Х
Wetland D						Х
Pond 1						Х

• TNW: Traditional Navigable Water

• Perennial Tributary: River, stream, or similar surface water channel contributing flow to a TNW continuously year round.

• Intermittent Tributary: River, stream, or similar surface water channel contributing flow to a TNW during certain times of the year, and more than in direct response to precipitation.

• Jurisdictional Impoundment: Standing body of open water contributing surface flow to a water of the U.S., or inundated by flooding from a water of the U.S. in a typical year.

• Adjacent Wetland: Wetlands abutting a water of the U.S., inundated by flooding from a water of the U.S. in a typical year, or separated from a water of the U.S. only by a berm, bank, dike, culvert or similar feature such that the wetland has a direct hydrologic surface connection to a water of the U.S.

4.0 WETLAND HABITAT ASSESSMENT

The Ohio Rapid Assessment Method (ORAM) Version 5 was developed by the Ohio EPA for use in determining wetland quality (OEPA, 2001). The ORAM seeks to determine whether wetlands are rated as Category 1, 2, or 3 based on the State of Ohio Wetland Water Quality Standards adopted in 1998. Category 1 wetlands exhibit limited quality, function, or value. Category 2 wetlands exhibit moderate quality, function, or value; this includes wetlands that have been degraded but have reasonable potential for restoration (Modified Category 2). Category 3 wetlands are wetlands of superior quality, function, or value. The ORAM asks a series of questions regarding wetland functions and characteristics and scores each wetland based on the answers provided. The result of the ORAM assessment is shown in Table 4 and the ORAM data forms are presented in Appendix C.



Wetland Habitat Assessment Summary										
Wetland	ORAM Score	ORAM Category								
Wetland A	41.5	2								
Wetland B	47	2								
Wetland C	28	1								
Wetland D	45	2								

Table 4

CONCLUSIONS 5.0

A routine delineation of Waters of the United States, including streams and wetlands, has been conducted and a report prepared by EMH&T for the approximately 14.9-acre site located at 13713 Jug Street. The project site is located on the south side of Jug Street and east of Beech Road in Jersey Township, Licking County, Ohio. This routine delineation was performed at the request of and is for the exclusive use of Able Grid Energy Solutions, Inc. Able Grid Energy Solutions, Inc. requests an Approved Jurisdictional Determination (AJD) for the potentially isolated wetlands and non-jurisdictional pond within the 14.9-acre Jug Street site.

The results of the delineation identified four (4) potential isolated wetlands (2.61 acres) and one (1) potentially non-jurisdictional pond within the 14.9-acre 13713 Jug Street Site boundaries. The boundaries and jurisdictional status of the wetlands and pond are potential until verified by the USACE.



6.0 **REFERENCES**

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EXHIBITS



Path: J:\20200835\GIS\Exhibit 1 - Location Map.mxd



Path: J:\20200835\GIS\Exhibit 2 - USGS.mxd



Path: J:\20200835\GIS\Exhibit 3A - Soils.mxd



Path: J:\20200835\GIS\Exhibit 3B - Soils.mxd



Path: J:\20200835\GIS\Exhibit 4 - NWI Map.mxd



Path: J:\20200835\GIS\Exhibit 5 - Delineation Map.mxd



PHOTOGRAPHS





Photograph 1 Wetland A, looking north. (EMH&T, 9/1/2020)



Photograph 2 Wetland A, looking west. (EMH&T, 9/1/2020)





Photograph 3 Wetland A, looking south. (EMH&T, 9/1/2020)



Photograph 4 Wetland A, looking east. (EMH&T, 9/1/2020)





Photograph 5 Wetland B, looking north. (EMH&T, 9/1/2020)



Photograph 6 Wetland B, looking west. (EMH&T, 9/1/2020)





Photograph 7 Wetland B, looking south. (EMH&T, 9/1/2020)



Photograph 8 Wetland B, looking east. (EMH&T, 9/1/2020)





Photograph 9 Wetland C, looking north. (EMH&T, 9/1/2020)



Photograph 10 Wetland C, looking west. (EMH&T, 9/1/2020)





Photograph 11 Wetland C, looking south. (EMH&T, 9/1/2020)



Photograph 12 Wetland C, looking east. (EMH&T, 9/1/2020)





Photograph 13 Wetland D, looking north. (EMH&T, 9/1/2020)



Photograph 14 Wetland D, looking east. (EMH&T, 9/1/2020)





Photograph 15 Wetland D, looking south. (EMH&T, 9/1/2020)



Photograph 16 Wetland D, looking west. (EMH&T, 9/1/2020)





Photograph 17 Small portion of pond area, looking northwest. (EMH&T, 9/1/2020)



Photograph 18 Small portion of pond area, looking southeast. (EMH&T, 9/1/2020)





Photograph 19 Large portion of pond area, looking southeast. (EMH&T, 9/1/2020)



Photograph 20 Large portion of pond area, looking southwest. (EMH&T, 9/1/2020)





Photograph 21 Large portion of pond area, looking south. (EMH&T, 9/1/2020)



Photograph 22 Drain tile that connects the two pond areas. (EMH&T, 9/1/2020)



APPENDIX A:

Investigative Methodology



INVESTIGATIVE METHODOLOGY

Wetlands

According to the Federal Register (1980; 1982), wetlands are defined as Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Potential wetlands located on non-agricultural lands are identified using the 1987 Wetland Delineation Manual (Environmental Laboratory, 1987) for confirmation by the U.S. Army Corps of Engineers (USACE).

Under normal site conditions, all three (3) indicators of jurisdictional wetlands including the presence of hydrophytic macrophytes, hydric soils and certain hydrologic indicators must be identified to meet the criteria for a jurisdictional wetland (Environmental Laboratory, 1987). As such, identification of potential wetlands requires characterization of plant community types, identification of hydric soils, and hydrologic indicators for each community type.

For all potential wetland areas, dominant species in the tree, sapling, shrub, woody vine, and herb layers are determined, in accordance with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, Version 2.0 (USACE, 2010). Recorded vegetative data consists of herbs with the greatest percentage of aerial cover within 5' of the plot center. Within a 15' radius of the plot center, saplings and shrubs with the greatest height are recorded. Within a 30' radius of the plot center, trees with the largest relative basal area and woody vines with the greatest number of stems are recorded. Species within each of these layers are listed on data forms in order of dominance.

Dominance is determined for each stratum individually. Dominant species include those that comprise 50 percent of the total dominance measure for a stratum, plus any additional species comprising 20 percent or more of the total dominance measure of a stratum. Hydrophytic vegetation is determined to be present when more than 50 percent of the dominants in a sample area are listed as facultative (FAC), facultative wetland (FACW) or obligate wetland (OBL) plants according to Lichvar (2016).

Where possible, soil data are collected by digging a test pit to a maximum depth of 20" to determine the presence of hydric soil. Soil matrix and mottle colors are identified using a Munsell Soil Color Chart (Macbeth, Revised 1994). Evidence of any hydric soil characteristics and evidence of the presence of wetland hydrology are also recorded.

The boundaries of areas that meet all three (3) wetland criteria are identified and measured in the field. Points at which dominant vegetation species changes from wetland to upland, where soils change from hydric to non-hydric, or where indicators of wetland hydrology are no longer observed are noted. The characteristics of each community type are recorded on dataforms and sample points are chosen to represent both an identified potential wetland and its surrounding upland community. All potential wetlands delineated in the field are marked with flagging and mapped using a Trimble GeoXH GPS unit. The dominant vegetation, soils, and indicators of wetland



hydrology are described on delineation forms. Wetland communities are classified according to the classification scheme of Cowardin et al. (1979).

Wetlands are further classified using the Ohio Rapid Assessment Method (ORAM) Version 5 (OEPA, 2001). The ORAM seeks to determine whether wetlands are rated as Category 1, 2, or 3 based on the State of Ohio Wetland Water Quality Standards. Category 1 wetlands exhibit limited quality, function, or value. Category 2 wetlands exhibit moderate quality, function, or value; this includes wetlands that have been degraded but have reasonable potential for restoration (Modified Category 2). Category 3 wetlands are wetlands of superior quality, function, or value.

Streams

The centerline of the streams are mapped for their entire length found on-site using a Trimble[®] GPS unit. Ordinary High Water Marks (OHWM), which define the outermost regulatory boundaries of streams and open waters, are flagged and mapped using the GPS unit.

Streams are classified as ephemeral, intermittent, or perennial based on site observations, and are assigned a regulatory classification according to the most recent USACE guidance. Streams are also assessed using the Ohio EPA's Qualitative Habitat Evaluation Index (QHEI) and/or Headwater Habitat Evaluation Metric (HHEI). Assessment locations are placed in representative reaches of the streams within the assessment area.

The QHEI is used for streams with drainage areas greater than one square mile and pools with maximum water depths greater than 15.75 in (40 cm) (Ohio EPA 2006). QHEI scoring is based on substrate types, in-stream cover, channel morphology, riparian quality and bank erosion, pool/glide and riffle/run quality, and gradient. These metrics reflect stream habitat features that are correlated with the potential to attain the aquatic life use designation for Ohio streams.

Streams that do not meet these requirements are assessed using the HHEI (Ohio EPA, 2012). HHEI scoring is based on three (3) parameters that are associated with habitat quality in small headwater streams: substrate type, maximum pool depth and bankfull width. Using the HHEI scoring system, streams may be categorized as Ephemeral Aquatic Streams (modified/natural channel), Small Drainage Warm Water Streams (modified /natural channel), and Spring Water Streams. Spring Water Streams represent high quality, cold water streams, Small Drainage Warm Water Streams and Ephemeral Aquatic Streams (seasonally dry) with limited ecological function.

Open Water Habitat

The boundaries of open water systems (ponds and lakes) are delineated either using recent aerial photography or by flagging boundaries in the field and locating them using a GPS unit.

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APPENDIX B:

USACE Wetland and Upland Dataforms

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: 13713	Project/Site: 13713 Jug Street				City/	County:	Jersey	y TWP / Licking	9	Sampling Da	ate:	9/1/2()20
Applicant/Owner:	Owner: Able Grid Energy Solutions, Inc.							State:	ОН	Sampling Po	oint:	W	A-9
Investigator(s): Eric	Nagy, EMH& ⁻	Г			Section	on, Tow	nship, R	Range:					
Landform (hillside, terrace, etc.): Plain						Loc	al relief	(concave, con	vex, none):	concave			
Slope (%): 2	Slope (%): 2 Lat: 40.095810					g: -82.1	746405		-	Datum:			
Soil Map Unit Name	: Pewamo sil	ty clay loem	n, low ca	bonate till, 0	to 2 perce	nt slope	s (Pe)		NWI classif	fication: No			
Are climatic / hydrolo	ogic condition	is on the sit	e typical	for this time o	of year?	Yes	ъX	No	(If no, exp	plain in Remark	(s.)		
Are Vegetation N	, Soil N	, or Hydrold	ogy No	significantly	disturbed	Are	'Normal	Circumstance	s" present?	Yes X	No		
Are Vegetation N	Are Vegetation N, Soil N, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)												
SUMMARY OF	FINDINGS	- Attach	site n	nap showi	ng sam	oling	ooint l	ocations, t	ransects	, important	feat	ures	, etc.
Hydrophytic Vegeta Hydric Soil Present Wetland Hydrology Remarks:	Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Hydric Soil Present? Yes X No within a Wetland? Yes X No Wetland Hydrology Present? Yes X No Yes X No Remarks: <td< td=""></td<>												
VEGETATION -	- Use scien	tific nam	es of pl	ants.									
Tree Stratum 1. Quercus palust 2. Acer saccharing	(Plot size: ris um	30')	Absolute % Cover 10 10	Domina Specie Yes Yes	nt In <u>s? 5</u> F F	dicator Status ACW	Dominan Number o Are OBL,	ce Test wo f Dominant FACW, or F	r ksheet: Species That AC:	Ę	5	(A)
3 4								Total Num Across All	ber of Dom Strata:	inant Species	5	5	(B)
5 Sapling/Shrub Stra	tum (Pl	lot size:	15') 20	=Total Co	ver		Percent of Are OBL,	Dominant S FACW, or F	Species That AC:	100.	.0%	(A/B)

5.				Percent of Dominant Species That				
	20	=Total Cover		Are OBL, FACW, or FAC:			100.0%	(A/B)
Sapling/Shrub Stratum (Plot size: 15')								
1. Fraxinus pennsylvanica	20	Yes	FACW	Prevalence Index worksheet:				
2.				Total % Cover	r of:	Mu	ltiply by:	_
3				OBL species	70	x 1 =	70	
4				FACW species	70	x 2 =	140	
5.				FAC species	0	x 3 =	0	
	20	=Total Cover		FACU species	0	x 4 =	0	_
Herb Stratum (Plot size: 5')		_		UPL species	0	x 5 =	0	_
1. Leersia oryzoides	70	Yes	OBL	Column Totals:	140	(A)	210	(B)
2. Bidens frondosa	28	Yes	FACW	Prevalence Inde	ex = B/A	<u>م</u> =	1.50	
3. Boltonia asteroides	2	No	FACW					
4.				Hydrophytic Vege	atation I	Indicators	:	
5.				1 - Rapid Test	for Hyd	rophytic V	egetation	
6.				X 2 - Dominance	Test is	>50%		
7.		_		X 3 - Prevalence	Index is	s ≤3.0 ¹		
8.				4 - Morphologi	cal Ada	ptations ¹ (I	Provide su	pporting
9.				data in Rem	arks or	on a sepa	rate sheet)
10.				Problematic Hy	ydrophy	tic Vegeta	tion ¹ (Expl	ain)
Woody Vine Stratum (Plot size: 15')		=Total Cover		¹ Indicators of hydrid be present, unless	c soil ar disturbe	nd wetland ed or probl	hydrology ematic.	r must
1				Hydrophytic				
2				Vegetation				
		=Total Cover		Present? Ye	es <u>X</u>	No		
Remarks: (Include photo numbers here or on a separa	te sheet.)						

SOIL

Profile Desc	ription: (Descril Matrix	be to the depi	In needed to docu Redo	ument ti x Featur	ne indica es	ator or o	confirm the absence	of indicators.)		
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	F	Remarks	
0-12	10YR 4/1	60	7.5YR 4/6	40	<u> </u>	PI	Loamy/Clavey			
			1.0117 #0	10			<u>Louiny</u> , olayoy			
					. <u> </u>					
¹ Type: C=Co	oncentration, D=D	epletion, RM=	Reduced Matrix, N	/IS=Mas	ked San	d Grains	s. ² Location	n: PL=Pore Lining	g, M=Matrix	
Hydric Soil I	ndicators:						Indicato	rs for Problema	tic Hydric S	Soils ³ :
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		Coa	st Prairie Redox (A16)	
Histic Ep	ipedon (A2)		Sandy Rec	lox (S5)			Iron-	Manganese Mas	ses (F12)	
Black His	stic (A3)		Stripped M	atrix (Se	5)		Red	Parent Material (F21)	
Hydroger	n Sulfide (A4)		Dark Surfa	ce (S7)			Very	Shallow Dark Su	urface (F22)	
Stratified	Layers (A5)		Loamy Mu	cky Mine	eral (F1)		Othe	er (Explain in Ren	narks)	
2 cm Mud	CK (AIU) Rolow Dork Surf	000 (111)		yed iviai	(FZ)					
Depleted	rk Surface (Δ12)			k Surfac	5) Se (E6)		³ Indicato	rs of hydrophytic	vegetation	and
Sandy M	ucky Mineral (S1)		Depleted F)ark Sur	face (F7)		wetla	and hydrology mu	ist be prese	nt.
5 cm Mu	cky Peat or Peat	(S3)	Redox Der	pression	s (F8)		unle	ss disturbed or pr	oblematic.	,
Restrictive I	aver (if observe	d).			ζ,			•		
Tvpe:	N/	а <i>).</i> А								
Depth (in	ches):						Hydric Soil Presen	it?	res X	No
Remarks:						I				
r tomanto.										
HYDROLO	GY									
Wetland Hyd	drology Indicato	rs:								
Primary Indic	ators (minimum o	of one is requir	ed; check all that a	apply)			Seconda	ry Indicators (mir	nimum of tw	<u>o required)</u>
Surface \	Water (A1)		Water-Stai	ned Lea	ves (B9)		X Surf	ace Soil Cracks (B6)	
High Wat	ter Table (A2)		Aquatic Fa	una (B1	3)		Drai	nage Patterns (B	10)	
Saturatio	n (A3)		I rue Aqua	tic Plant	s (B14) 2der (C1	`	Dry-	Season Water Ta	able (C2)	
	t Deposits (B2)			Suillue (bizosob) Livina R	oots (C3) X Satu	ration Visible on) Aorial Imag	env (CQ)
Drift Dep	(B3)		Presence	of Reduc	red Iron ((C.4)	Stun	ited or Stressed F	Plants (D1)	ery (03)
Algal Mat	t or Crust (B4)		Recent Iro	n Reduc	tion in Ti	lled Soil	s (C6) X Geo	morphic Position	(D2)	
Iron Depo	osits (B5)		Thin Muck	Surface	(C7)		X FAC	-Neutral Test (D5	(- <i>-)</i> 5)	
X Inundatio	on Visible on Aeria	al Imagery (B7) Gauge or \	Vell Dat	a (D9)			,	,	
Sparsely	Vegetated Conca	ave Surface (E	88) Other (Exp	lain in R	Remarks)					
Field Observ	vations:									
Surface Wate	er Present?	Yes	No X	Depth (i	nches):					
Water Table	Present?	Yes	No X	Depth (i	nches):					
Saturation Pr	resent?	Yes	No X	Depth (i	nches):		Wetland Hydrolo	gy Present?	res <u>X</u>	No
(includes cap	illary fringe)									
Describe Rec	corded Data (strea	am gauge, mo	nitoring well, aeria	l photos	, previou	s inspec	ctions), if available:			
Remarks [.]										
Normarika.										

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: 13713	roject/Site: 13713 Jug Street					sey TWP	/ Licking		Sampling Date:	9/1/2020
Applicant/Owner:	Able Grid Ene	rgy Solutions, Ir	IC.				State:	ОН	Sampling Point:	UPA-9
Investigator(s): Eric N	Nagy, EMH&T			Section,	Township	o, Range:				
Landform (hillside, te	errace, etc.): Pla	ain			Local rel	lief (conca	ve, conve	ex, none):	convex	
Slope (%): 10	Lat: 40.0958	10		Long:	82.7464	05			Datum:	
Soil Map Unit Name:	Pewamo silty	clay loem, low c	arbonate till, 0 to 2	percent s	lopes (Pe	e)	N	WI classif	ication: <u>No</u>	
Are climatic / hydrold	gic conditions of	on the site typic	al for this time of ye	ar?	Yes X	K No)	(If no, exp	lain in Remarks.)	
Are Vegetation N	, Soil <u>N</u> , o	r Hydrology No	significantly dist	urbed?	Are "Norr	mal Circun	nstances'	' present?	Yes <u>X</u> No)
Are Vegetation N	, Soil <u>N</u> , o	r Hydrology No	naturally problem	natic?	(If neede	d, explain	any ansv	vers in Rei	marks.)	
SUMMARY OF I	FINDINGS –	Attach site	map showing	sampliı	ng poin	nt locatio	ons, tra	ansects,	important fea	tures, etc.
Hydrophytic Vegeta	tion Present?	Yes	No <u>X</u>	Is the	e Sample	ed Area				
Hydric Soil Present	?	Yes X	No	withi	n a Wetl	and?	Y	es	No <u>X</u>	
Wetland Hydrology	Present?	Yes	No <u>X</u>							
Remarks:										

VEGETATION – Use scientific names of plants.

		Absolute	Dominant	Indicator					
Tree Stratum (Plot size: 3	30')	% Cover	Species?	Status	Dominance Tes	st worksho	eet:		
1					Number of Domi	inant Spec	ies That		
2			<u></u> .		Are OBL, FACW	I, or FAC:	_	1	(A)
3					Total Number of	Species			
4					Across All Strata	•	2	(B)	
5					Percent of Domi	nant Spec	ies That		
			=Total Cover		Are OBL, FACW	I, or FAC:	_	50.0%	(A/B)
Sapling/Shrub Stratum (Plot size): <u>15'</u>	1							
1					Prevalence Inde	ex worksh	neet:		
2.					Total % Co	ver of:	Mu	Itiply by:	_
3.					OBL species	30	x 1 =	30	
4.					FACW species	15	x 2 =	30	_
5.					FAC species	0	x 3 =	0	-
			=Total Cover		FACU species	55	x 4 =	220	-
Herb Stratum (Plot size:	5')				UPL species	0	x 5 =	0	-
1. Ambrosia trifida		55	Yes	FACU	Column Totals:	100	(A)	280	(B)
2. Impatiens capensis		10	No	FACW	Prevalence In	ndex = B/A	<u>-</u> =	2.80	-
3. Bidens frondosa		5	No	FACW					-
4. Leersia oryzoides		30	Yes	OBL	Hydrophytic Ve	getation I	Indicators	:	
5.					1 - Rapid Te	est for Hyd	rophytic V	egetation	
6.					2 - Dominan	nce Test is	>50%		
7.					3 - Prevalen	ice Index is	s ≤3.0 ¹		
8.					4 - Morpholo	ogical Ada	ptations ¹ (Provide su	pporting
9.					data in Re	emarks or	on a sepa	rate sheet))
10.					Problematic	Hydrophy	tic Vegeta	ition ¹ (Expl	ain)
		100	=Total Cover		¹ Indicators of by	dric soil ar	nd wetland	l hydrology	must
Woody Vine Stratum (Plot size	ə: 15')				be present, unle	ss disturbe	ed or prob	lematic.	must
1.					Undrenkutie				
2.					Vegetation				
			=Total Cover		Present?	Yes	No	Х	
Remarks: (Include photo numbers her	e or on a separ	ate sheet.)							

mowed planted grass next to bike path

Depth	Matrix		Redo	x Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-4	10YR 2/1	70	10YR 5/6	30	С	М	Loamy/Clayey		
4-10	10YR 4/1	65	10YR 5/6	35	С	М	Loamy/Clayey		
Type: C=Co	oncentration, D=Dep	oletion, RM	Reduced Matrix, I	MS=Mas	ked San	d Grains	- ² Location:	PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:				(O 4)		Indicator	s for Problematic Hydric Soils":	
Histosol (A1)			Sandy Gle	Sandy Gleyed Matrix (S4)				Coast Prairie Redox (A16)	
Histic Epipedon (A2)			Sandy Red	Sandy Redox (S5)			Iron-Manganese Masses (F12)		
Black Histic (A3)			Dark Surfa	anix (30)		Red Parent Material (F21)		
Hydrogen Sulfide (A4) Stratified Lavers (A5)			Loamy Mu	Loamy Mucky Mineral (F1)				Other (Explain in Remarks)	
2 cm Mu	ck (A10)		Loamy Gle	eved Mat	rix (F2)				
X Depleted	Below Dark Surfac	e (A11)	Depleted I	Matrix (F	3)				
Thick Da	irk Surface (A12)	 Redox Da	Redox Dark Surface (F6)				s of hydrophytic vegetation and		
Sandy Mucky Mineral (S1)			Depleted [Depleted Dark Surface (F7)				wetland hydrology must be present,	
5 cm Mucky Peat or Peat (S3)			Redox De	Redox Depressions (F8)				unless disturbed or problematic.	
Restrictive I	Layer (if observed)	:							
Type:									
Depth (ir	nches):						Hydric Soil Present	? Yes <u>X</u> No	
Remarks:									
Soil looks dis	sturbed								
Soil looks dis	sturbed								
Soil looks dis	sturbed								
Soil looks dis	sturbed								
Soil looks dis	sturbed								
Soil looks dis	sturbed IGY drology Indicators:								
Soil looks dis HYDROLO Wetland Hyd Primary India	sturbed IGY drology Indicators: cators (minimum of d	: one is requ	ired; check all that i	apply)			<u>Secondar</u>	y Indicators (minimum of two required)	
Soil looks dis HYDROLO Wetland Hyo Primary Indic Surface	o GY drology Indicators: cators (minimum of o Water (A1)	: one is requ	ired; check all that a	apply)	ves (B9)		<u>Secondar</u> Surfa	<u>y Indicators (minimum of two required)</u> ce Soil Cracks (B6)	
Soil looks dis HYDROLO Wetland Hyd Primary India Surface V High Wa	o GY drology Indicators: cators (minimum of o Water (A1) ter Table (A2)	: one is requ	ired; check all that a Water-Sta	apply) ined Lea auna (B1	ves (B9) 3)		Secondar Surfa Drain	<u>y Indicators (minimum of two required)</u> ce Soil Cracks (B6) age Patterns (B10)	
Soil looks dis HYDROLO Wetland Hyd Primary India Surface V High Wa Saturatio	GY drology Indicators: cators (minimum of of Water (A1) ter Table (A2) on (A3)	: one is requ	ired; check all that i Water-Sta Aquatic Fa True Aqua	apply) ined Lea auna (B1 tic Plant	ves (B9) 3) s (B14)		Secondar Surfa Drain Dry-S	y Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) ieason Water Table (C2)	
Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wa Saturatic Water Mi	eturbed GGY drology Indicators: cators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1)	: one is requ	ired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen	apply) ined Lea auna (B1 titc Plant Sulfide (ves (B9) 3) s (B14) Ddor (C1)	Secondar Surfa Drain Dry-S Crayf	y Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8)	
Soil looks dis HYDROLO Wetland Hyu Primary India Surface V High Wa Saturatic Water Mi Sedimen	o GY drology Indicators: cators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2)	: one is requ	ired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	apply) ined Lea auna (B1 tic Plant Sulfide (Rhizosph	ves (B9) 3) s (B14) Ddor (C1 eres on) Living R	<u>Secondar</u> Surfa Drain Dry-S Crayf poots (C3)Satur	y Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9)	
Soil looks dis HYDROLO Wetland Hyd Primary India Surface V High Wa Saturatic Water Ma Sedimen Drift Dep	esturbed GY drology Indicators: cators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) t Deposits (B2) posits (B3) t or Cruct (B4)	one is requ	ired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence	apply) ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc	ves (B9) 3) s (B14) Ddor (C1 eres on æd Iron) Living R ⁱ (C4)	<u>Secondar</u> Surfa Drain Dry-S Crayf pots (C3) Satur Stunt	y Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1)	
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Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wa Saturatic Water M: Sedimen Drift Dep Algal Ma Iron Dep	esturbed GGY drology Indicators: <u>cators (minimum of c</u> Water (A1) ter Table (A2) on (A3) arks (B1) to Deposits (B2) posits (B3) t or Crust (B4) osits (B5) on Visible on Aerial	: one is requ	ired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck	apply) ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat	ves (B9) 3) s (B14) Odor (C1 eres on ced Iron tion in Ti (C7) a (D9)) Living R (C4) illed Soil	<u>Secondar</u> Surfa Drain Dry-S Crayf pots (C3) Satur s (C6) Econ Stunt Stunt FAC-	y Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) ieason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)	
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Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wa Saturatic Water M. Sedimen Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obser Surface Water Water Table Saturation Pl (includes cap Describe Reference)	sturbed GGY drology Indicators: cators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) oosits (B3) tt or Crust (B4) osits (B5) on Visible on Aerial I vegetated Concave vations: er Present? Ye Present? Ye present? Ye pillary fringe) corded Data (stream	Imagery (B e Surface (es es n gauge, m	ired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or 1 B8) Other (Exp No X No X No X No X No X	apply) ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat blain in R Depth (i Depth (i Depth (i	ves (B9) 3) s (B14) Odor (C1 eres on ced Iron tion in Ti (C7) a (D9) a (D9) emarks) nches): nches): , previou) Living R (C4) illed Soil	Secondar Surfa Drain Dry-S Crayf Doots (C3) Saturt s (C6) Geon FAC- Wetland Hydrolog	y Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) ieason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)	
Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wa Saturatic Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Obser Surface Wate Water Table Saturation Pri (includes cap Describe Rec	Arrived Arright Starter Arright Starte	Imagery (B e Surface (es es n gauge, m	ired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or 1 B8) Other (Exp No X No X No X No X	apply) ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat Delain in R Depth (i Depth (i Depth (i	ves (B9) 3) s (B14) Ddor (C1 eres on ced Iron (tion in Ti (C7) a (D9) emarks) nches): nches):) Living R (C4) illed Soil	Secondar	y Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) season Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)	
Soil looks dis HYDROLO Wetland Hyd Primary India Surface V High Wa Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Obser Surface Water Water Table Saturation Pro (includes cap Describe Red	sturbed GGY drology Indicators: cators (minimum of of Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) arks (B1) t Deposits (B2) posits (B3) arks (B3) t or Crust (B4) osits (B5) on Visible on Aerial I vegetated Concave vations: er Present? Ye present? Ye pillary fringe) corded Data (stream	: one is requ Imagery (B e Surface (es es n gauge, m	ired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp No X No X No X No X No X	apply) ined Lea auna (B1 Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat olain in R Depth (i Depth (i Depth (i I photos	ves (B9) 3) s (B14) Ddor (C1 eres on ced Iron tion in Ti (C7) a (D9) lemarks) nches): nches): nches): nches):) Living Ri (C4) illed Soil	Secondar Surfa Drain Dry-S Crayf bots (C3) Satur Stunt s (C6) Geon FAC- Wetland Hydrolog tions), if available:	y Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) ieason Water Table (C2) ish Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)	
OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

		10 -11	•	-					
Project/Site: 13713 Jug Street	City/Cour	nty: Jersey TW	ampling Da	ate: <u>9/1/2</u>	2020				
Applicant/Owner: Able Grid Energy Solutions, Inc.			State:	OH S	ampling Po	int: W	/A-11		
Investigator(s): Eric Nagy, EMH&T	Section, T	ownship, Rang	e:						
Landform (hillside, terrace, etc.): Plain	Local relief (concave, convex, none): concave								
Slope (%): 2 Lat: 40.095810	Long: -8	32.746405		Dat	um:				
Soil Map Unit Name: Pewamo silty clay loem, low carbonate till, 0 to	2 percent slo	opes (Pe)	N۱	NI classificat	ion: No				
Are climatic / hydrologic conditions on the site typical for this time of	vear?	Yes X	No (If no, explair	n in Remark	(s.)			
Are Vegetation N Soil N or Hydrology No significantly d	isturbed? A	re "Normal Circ	umstances"	present?	Yes X	, No			
Are Vegetation N Soil N or Hydrology No naturally proh	lematic? (I	f needed expla	ain anv answ	ers in Remar	rks)		-		
						£	4 -		
SUMMARY OF FINDINGS – Attach site map showin	g samplin	g point loca	itions, tra	nsects, in	nportant	teatures	3, etc.		
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	ls the within	Sampled Area a Wetland?	ι Υε	es <u>X</u>	No				
Remarks:									
VEGETATION – Use scientific names of plants.									
Absolute	Dominant	Indicator							
Tree Stratum (Plot size: 30') % Cover	Species?	Status	Dominance	Test worksh	neet:				
1. Quercus bicolor 40	Yes No		Number of D	ominant Spe	cies That	6	(A)		
2. Quercus palusins 10					·	0	_(A)		
4. Carva laciniosa 5	No	FAC	Across All St	r of Dominar rata:	nt Species	6	(B)		
5.			Percent of D	ominant Sne	- cies That		_``		
100 =	Total Cover		Are OBL, FA	CW, or FAC:	:	100.0%	(A/B)		
Sapling/Shrub Stratum (Plot size: 15')					_		_		
1. Fraxinus pennsylvanica 10	Yes	FACW	Prevalence	Index works	sheet:				
2		_	Total %	Cover of:	Mu	ltiply by:	_		
3		(OBL species	20	x 1 =	20	_		
4		'	FACW specie	es <u>155</u>	x 2 =	310	_		
5		'	FAC species	35	x 3 =	105	_		
$\frac{10}{10} =$	I otal Cover		FACU specie	es 0	x 4 =	0	-		
Herb Stratum (Plot size: 5')	Vee	EACIN		U 	$-\frac{x5}{(1)}$	0	- (P)		
1. Cinina arunulilacea 50	Vee			10.210	(A)	400	- ^(D)		

1. Cinna arundinacea	50	Yes	FACW	Column Totals: 210 (A) 435 (B)
2. <u>Toxicodendron radicans</u>	30	Yes	FAC	Prevalence Index = B/A = 2.07
3. Lysimachia nummularia	20	Yes	OBL	
4.				Hydrophytic Vegetation Indicators:
5.				1 - Rapid Test for Hydrophytic Vegetation
6.				X 2 - Dominance Test is >50%
7.				X 3 - Prevalence Index is $\leq 3.0^{1}$
8.				4 - Morphological Adaptations ¹ (Provide supporting
9.				data in Remarks or on a separate sheet)
10				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: 15'	100	=Total Cover		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1				Hydrophytic Vegetation
		=Total Cover		Present? Yes X No

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

Depth	Matrix		Redo	x realure	.s 1	.)		
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc ²	Texture	Remarks
0-3	10YR 4/1	85	10YR 3/6	15	С	PL	Loamy/Clayey	
3-12	10YR 2/1	80	10YR 3/6	20	С	М	Loamy/Clayey	
	<u> </u>	·		_			<u> </u>	
		·						
								-
		lation PM			ad San	d Craine	² Location	· DI-Doro Lining M-Matrix
Type. C-Co	ncentration, D-Dep		EReduced Matha, i	VIS-IVIASK	eu San	J Grains	Indicator	re for Problematic Hydric Soils ³
Histosol (Παιταίοις. (Δ1)		Sandy Gle	wed Matri	iv (S4)		Coas	t Prairie Redox (A16)
Histic Ep	inedon (A2)		Sandy Re	dox (S5)	× (0-)		lron-l	Manganese Masses (F12)
Black His	stic (A3)		Stripped N	Aatrix (S6))		Red	Parent Material (F21)
Hydroger	n Sulfide (A4)		Dark Surfa	ace (S7)	, 		Very	Shallow Dark Surface (F22)
Stratified	Layers (A5)		Loamy Mu	icky Mine	ral (F1)		Othe	r (Explain in Remarks)
2 cm Muo	ck (A10)		Loamy Gle	eyed Matr	ix (F2)			
Depleted	Below Dark Surface	e (A11)	X Depleted	Matrix (F3	5)			
Thick Dar	rk Surface (A12)		Redox Da	rk Surface	ə (F6)		³ Indicator	s of hydrophytic vegetation and
Sandy M	ucky Mineral (S1)		Depleted [Dark Surfa	ace (F7)	1	wetla	nd hydrology must be present,
5 cm Muo	ky Peat or Peat (S	3)	Redox De	pressions	(F8)		unles	s disturbed or problematic.
Restrictive L	ayer (if observed).	:						
Restrictive L Type:	ayer (if observed). N/A	:						
Restrictive L Type: Depth (in Remarks:	ayer (if observed) N/A ches):	: 	<u> </u>				Hydric Soil Present	t? Yes <u>X</u> No
Restrictive L Type: _ Depth (in Remarks:	ayer (if observed) N/A ches):	: 					Hydric Soil Present	t? Yes <u>X</u> No
Restrictive L Type: Depth (in Remarks:	ayer (if observed) N/A ches):	: 					Hydric Soil Present	t? Yes <u>X</u> No
Restrictive L Type: _ Depth (in Remarks: IYDROLO	GY	: 					Hydric Soil Present	t? Yes <u>X</u> No
Restrictive L Type: Depth (in Remarks: IYDROLO Wetland Hyd	GY Irology Indicators: ators (minimum of c	: <u>ne is requ</u>	ired; check all that i	apply)			Hydric Soil Present	t? Yes X No
Restrictive L Type: Depth (in Remarks: IYDROLO Wetland Hyd Primary Indic Surface V	Ayer (if observed) N/A ches): GY Irology Indicators: ators (minimum of c Vater (A1)	: 	ired; check all that a	apply) ined Leav	res (B9)		Hydric Soil Present	t? Yes X No
Restrictive L Type: _ Depth (in Remarks: IYDROLO Wetland Hyc Primary Indic Surface V High Wat	Ager (if observed) N/A ches): GY Irology Indicators: ators (minimum of c Vater (A1) er Table (A2)	: 	iired; check all that a X_Water-Sta Aquatic Fa	apply) ined Leav auna (B13	'es (B9) .)		Hydric Soil Present	t? Yes X No <u>y Indicators (minimum of two requir</u> ce Soil Cracks (B6) age Patterns (B10)
Restrictive L Type: _ Depth (in Remarks: IYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturatio	GY Irology Indicators: ators (minimum of c Vater (A1) er Table (A2) n (A3) i (A2)	: 	ired; check all that is X Water-Sta Aquatic Fa	apply) ined Leav auna (B13 itic Plants	res (B9)) (B14)		Hydric Soil Present	<u>t? Yes X No</u> <u>y Indicators (minimum of two requir</u> ice Soil Cracks (B6) iage Patterns (B10) Season Water Table (C2)
Restrictive L Type: _ Depth (in Remarks: IYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma	GY Irology Indicators: ators (minimum of c Vater (A1) er Table (A2) n (A3) arks (B1) Descrite (B2)	: 	<u>iired; check all that a</u> <u>X</u> Water-Sta Aquatic Fa True Aqua Hydrogen	apply) ined Leav auna (B13 itic Plants Sulfide O	/es (B9) i) (B14) dor (C1)	Hydric Soil Present	t? Yes X No <u>y Indicators (minimum of two requir</u> ice Soil Cracks (B6) iage Patterns (B10) Season Water Table (C2) ish Burrows (C8)
Restrictive L Type: Depth (in Remarks: IYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturatio Water Ma Sediment	Agyer (if observed) N/A ches): GY Irology Indicators: ators (minimum of c Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2)	: 	ired; check all that i X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F	apply) ined Leav auna (B13 ttic Plants Sulfide O Rhizosphe	res (B9) ;) (B14) dor (C1 ;res on l) 	Hydric Soil Present	t? Yes X No <u>ry Indicators (minimum of two requir</u> ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) ish Burrows (C8) ration Visible on Aerial Imagery (C9) od as Streaged Plants (D1)
Restrictive L Type: _ Depth (in Remarks: IYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depp	GY Irology Indicators: ators (minimum of c Vater (A1) rer Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4)	: me is requ	ired; check all that is X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Iro	apply) ined Leav auna (B13 itic Plants Sulfide O Rhizosphe of Reduce	res (B9) i) (B14) dor (C1 eres on l ed Iron () iving Rc C4)	Hydric Soil Present	<u>t? Yes X No</u> <u>y Indicators (minimum of two requir</u> ice Soil Cracks (B6) iage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) porphic Position (D2)
Restrictive L Type: Depth (in Remarks: HYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	GY Irology Indicators: ators (minimum of c Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5)	: me is requ	ired; check all that a X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Iro Thin Muck	apply) ined Leav auna (B13 itic Plants Sulfide O Rhizosphe of Reduce n Reducti	res (B9) i) (B14) dor (C1 eres on l ed Iron (ion in Ti (C7)) _iving Ro C4) Iled Soils	Hydric Soil Present Secondar X Surfa Drair Dry-S Cray pots (C3) X Satur s (C6) X Geor X FAC-	t? Yes X No <u>y Indicators (minimum of two requir</u> ice Soil Cracks (B6) iage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Restrictive L Type: Depth (in Remarks: IYDROLO Wetland Hyo Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo X Inundatio	GY Irology Indicators: ators (minimum of c Vater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) psits (B3) c or Crust (B4) psits (B5) n Visible on Aerial I	ne is requ	ired; check all that a X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Iro Thin Muck 7) Gauge or	apply) ined Leav auna (B13 itic Plants Sulfide O Rhizosphe of Reduce n Reducti Surface (Well Data	res (B9) ;) (B14) dor (C1 eres on l ed Iron (ion in Ti (C7) (D9)) _iving Ro C4) Iled Soils	Hydric Soil Present Secondar X Surfa Drair Dry-S Cray pots (C3) X Satur s (C6) X Geor X FAC-	t? Yes X No <u>ry Indicators (minimum of two requir</u> ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Restrictive L Type: Depth (in Remarks: TYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo X Inundatio Sparsely	Ager (if observed) N/A ches):	ne is requ nagery (B ∋ Surface (ired; check all that i X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Leav auna (B13 sulfide O Rhizosphe of Reducte n Reducte Surface (Well Data plain in Re	res (B9) i) (B14) dor (C1 eres on l ed Iron (ion in Ti (C7) (D9) emarks)) iving Ro _C4) Iled Soils	Hydric Soil Present Secondar X Surfa Drair Dry-S Cray bots (C3) X Satur s (C6) X Geor X FAC-	t? Yes X No <u>y Indicators (minimum of two requir</u> ice Soil Cracks (B6) iage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) :ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Restrictive L Type: _ Depth (in Remarks: IYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo X Inundatio Sparsely Field Observ	GY GY frology Indicators: ators (minimum of c Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) c or Crust (B4) posits (B5) n Visible on Aerial I Vegetated Concave rations:	ne is requ magery (B ∋ Surface (tired; check all that X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Leav auna (B13 itic Plants Sulfide O Rhizosphe of Reduce in Reducti Surface (Well Data plain in Re	res (B9) i) (B14) dor (C1) eres on l ed Iron (ion in Ti (C7) (D9) ∋marks)) _iving Rc (C4) Iled Soils	Hydric Soil Present Secondar X Surfa Drain Dry-S Cray bots (C3) X Satur s (C6) X Geor X FAC-	t? Yes X No ry Indicators (minimum of two requir ice Soil Cracks (B6) iage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Restrictive L Type: _ Depth (in Remarks: IYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo X Inundatio Sparsely Field Observ Surface Wate	GY Trology Indicators: ators (minimum of c Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial I Vegetated Concave rations: pr Present? Ye	magery (B	tired; check all that X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Leav auna (B13 itic Plants Sulfide O Rhizosphe of Reduce in Reducti Surface (Well Data plain in Re	res (B9) (B14) dor (C1 res on l ed Iron (ion in Ti (C7) (D9) marks) ches):) _iving Rc C4) Iled Soils	Hydric Soil Present Secondal X Surfa Drair Dry-S Cray pots (C3) X Satur s (C6) X Geor X FAC-	t? Yes X No ry Indicators (minimum of two requir ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Restrictive L Type: Depth (in Remarks: TYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo X Inundatio Sparsely Field Observ Surface Wate Water Table	Ager (if observed) N/A ches):	magery (B Surface (iired; check all that X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Iro Thin Muck 57) Gauge or B8) Other (Exp No X No X	apply) ined Leav auna (B13 itic Plants Sulfide O Rhizosphe of Reduce in Reducti Surface (Well Data blain in Re Depth (in Depth (in	/es (B9))) (B14) dor (C1 eres on l ed Iron (ion in Ti (C7) (D9) emarks) ches): _ ches): _) _iving Ro (C4) Iled Soils	Hydric Soil Present	t? Yes X No ry Indicators (minimum of two requir ice Soil Cracks (B6) iage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) red or Stressed Plants (D1) norphic Position (D2) -Neutral Test (D5)
Restrictive L Type: _ Depth (in Remarks: TYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo X Inundatio Sparsely Field Observ Surface Wate Water Table I Saturation Pr	Agyer (if observed) N/A ches): GY frology Indicators: ators (minimum of c Vater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) c or Crust (B4) osits (B5) n Visible on Aerial I Vegetated Concave rations: Present? Ye esent? Ye	: <u>magery (B</u> ⇒ Surface (>s 	iired; check all that. X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Iro Thin Muck 7) Gauge or 1 (B8) Other (Exp No X No X No X	apply) ined Leav auna (B13 itic Plants Sulfide O Rhizosphe of Reducti Surface (Well Data blain in Re Depth (in Depth (in Depth (in	/es (B9) 3) (B14) dor (C1 eres on l ed Iron (ion in Ti (C7) (D9) emarks) ches): _ ches): _ ches): _) iving Rc [C4) Iled Soils	Secondar X Surfar Drair Drair Dry-S Cray: Doots (C3) X Saturd s (C6) X Geor X FAC-	t? Yes X No ry Indicators (minimum of two requir nce Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5) gy Present? Yes X No
Restrictive L Type: Depth (in Remarks: TYDROLO Wetland Hyc Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo X Inundatio Sparsely Field Observ Surface Wate Water Table I Saturation Pr (includes cap	Agyer (if observed) N/A ches):	magery (B Surface (Ss Ss Ss	iired; check all that X Water-Sta Aquatic Fa True Aqua Hydrogen X Oxidized F Presence Recent Iro Thin Muck 7) Gauge or 1 (B8) Other (Exp No X No X No X	apply) ined Leav auna (B13 itic Plants Sulfide O Rhizosphe of Reduce in Reducti Surface (Well Data plain in Re plain in Re Depth (in Depth (in	/es (B9) 3) (B14) dor (C1) eres on l ed Iron (ion in Ti (C7) (D9) emarks) (D9) ches): _ ches): _) _iving Rc [C4) Iled Soils	Secondar X Surfa Drain Drain Dry-S Cray Dots (C3) X Saturd s (C6) X Geor X FAC Wetland Hydrolog	t? Yes X No ry Indicators (minimum of two requires of the second sec

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: 13713	Jug Street	City/Coun	y: Jersey	y TWP / Licl	king		Sampling Date:	9/1/2020		
Applicant/Owner:	Able Grid Ene	rgy Solutions,	Inc.			Sta	te:	OH	Sampling Point:	UPA-11
Investigator(s): Eric	Section, To	wnship, F	Range:							
Landform (hillside, t	L	ocal relief	(concave, c	onve	ex, none):	convex				
Slope (%): 10	Long: <u>-8</u>	2.746405				Datum:				
Soil Map Unit Name	: Pewamo silty	clay loem, low	carbonate till, 0 to 2	percent slo	pes (Pe)		N	WI classi	fication: No	
Are climatic / hydrol	ogic conditions	on the site typi	cal for this time of ye	ear? Y	es X	No		(If no, ex	plain in Remarks.)	
Are Vegetation N	, Soil <u>N</u> , c	r Hydrology <u></u>	lo_significantly dist	urbed? Ar	e "Norma	l Circumstar	nces"	present	? Yes <u>X</u> No	o
Are Vegetation N	, Soil <u>N</u> , c	r Hydrology <u></u>	lo_naturally proble	matic? (If	needed, e	explain any	answ	ers in Re	emarks.)	
SUMMARY OF	FINDINGS -	Attach site	e map showing	sampling	ı point l	locations	, tra	insects	s, important fea	tures, etc.
Hydrophytic Vegeta Hydric Soil Presen Wetland Hydrology	ation Present? t? v Present?	Yes Yes Yes	No X No No X	Is the s within	Sampled . a Wetland	Area d?	Y	es	NoX	
Remarks:										

$\label{eq:VEGETATION} \textbf{VEGETATION} - \textbf{Use scientific names of plants}.$

T 01 1		0.01		Absolute	Dominant	Indicator			
Tree Stratum	(Plot size:	30')	% Cover	Species?	Status	Dominance Test worksheet:		
1							Number of Dominant Species That		
2							Are OBL, FACW, or FAC:	1	(A)
3					·		Total Number of Dominant Species		
4.							Across All Strata:	2	(B)
5.							Percent of Dominant Species That		
					=Total Cover		Are OBL, FACW, or FAC:	50.0%	(A/B)
Sapling/Shrub Stra	<u>tum</u> (Plot	size:	15')					_
1.							Prevalence Index worksheet:		
2.							Total % Cover of: Mu	ultiply by:	
3.							OBL species 45 x 1 =	45	
4.							FACW species 3 x 2 =	6	_
5.							FAC species 0 x 3 =	0	_
					=Total Cover		FACU species 52 x 4 =	208	_
Herb Stratum	(Plot size:	5')				UPL species 0 x 5 =	0	_
1. Ambrosia trifida	· <u> </u>			50	Yes	FACU	Column Totals: 100 (A)	259	(B)
2. Leersia oryzoid	es			45	Yes	OBL	Prevalence Index = B/A =	2.59	
3. Cirsium arvense	9			2	No	FACU			_
4. Bidens frondos	а			3	No	FACW	Hydrophytic Vegetation Indicators	s:	
5.							1 - Rapid Test for Hydrophytic V	/egetation	
6.							2 - Dominance Test is >50%		
7.							$3 - $ Prevalence Index is $\leq 3.0^{1}$		
8							4 - Morphological Adaptations ¹	Provide su	pportina
9							data in Remarks or on a sepa	arate sheet)
10							Problematic Hydrophytic Vegeta	ation ¹ (Expl	ain)
				100	=Total Cover				
Woody Vine Stratu	m (Plot	sizo.	15')			hadicators of hydric soil and wetiand	1 nyarology	must
1	<u>III</u> (1101	3120.	15)				iematic.	
1 2							Hydrophytic		
<u> </u>					-Total Covor		vegetation Present? Ves No.	x	
Remarks: (Include	photo numbers	here or c	on a sepa	rate sheet.)					

SOIL

Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 2/1	70	10YR 5/6	30	С	М	Mucky Loam/Clay	
4-10	10YR 4/1	65	10YR 5/6	35	С	M	Mucky Loam/Clay	
¹ Type: C=Co	oncentration, D=Dep	letion, RM	I=Reduced Matrix, I	MS=Mas	ked San	d Grains	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for	or Problematic Hydric Soils ³ :
Histosol ((A1)		Sandy Gle	eyed Mat	rix (S4)		Coast Pr	airie Redox (A16)
Histic Epi	ipedon (A2)		Sandy Ree	dox (S5)			Iron-Mar	nganese Masses (F12)
Black His	tic (A3)		Stripped M	latrix (S6	6)		Red Pare	ent Material (F21)
Hydroger	n Sulfide (A4)		Dark Surfa	ace (S7)			Very Sha	allow Dark Surface (F22)
Stratified	Layers (A5)		Loamy Mu	icky Mine	eral (F1)		Other (E	xplain in Remarks)
2 cm Muc	ck (A10)		Loamy Gle	eyed Mat	rix (F2)			
X Depleted	Below Dark Surface) (A11)	Depleted I	Matrix (F	3)		2	
Thick Da	rk Surface (A12)		Redox Da	rk Surfac	e (F6)		°Indicators of	f hydrophytic vegetation and
Sandy Mi	ucky Mineral (S1)		Depleted [Dark Sur	face (F7))	wetland	hydrology must be present,
5 cm Muc	cky Peat or Peat (S3)	Redox De	pression	s (F8)	r	unless di	isturbed or problematic.
Restrictive L	ayer (if observed):							
Restrictive L Type:	ayer (if observed): N/A							
Restrictive L Type: _ Depth (in Remarks: Soil looks dis	ayer (if observed): N/A ches):						Hydric Soil Present?	Yes <u>X</u> No
Restrictive L Type: Depth (in Remarks: Soil looks dis	ayer (if observed): N/A ches):						Hydric Soil Present?	Yes <u>X</u> No
Restrictive L Type: _ Depth (in Remarks: Soil looks dis	ayer (if observed): N/A ches): turbed						Hydric Soil Present?	Yes <u>X</u> No
Restrictive L Type: _ Depth (in Remarks: Soil looks dis	Ayer (if observed): N/A ches): turbed GY frology Indicators:						Hydric Soil Present?	Yes <u>X</u> No
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic	Ayer (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o	ne is requ	ired; check all that	apply)			Hydric Soil Present?	Yes X No
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V	Ayer (If observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Water (A1)	ne is requ	ired; check all that a	apply) ined Lea	ves (B9)		Hydric Soil Present?	Yes X No
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat	Ayer (If observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2)	ne is requ	<u>ired; check all that i</u> Water-Sta	apply) ined Lea auna (B1	ves (B9) 3)		Hydric Soil Present?	Yes X No
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio	Ayer (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3)	ne is requ	<u>iired; check all that a</u> Water-Sta Aquatic Fa True Aqua	apply) ined Lea auna (B1 ttic Plant	ves (B9) 3) s (B14)		Hydric Soil Present?	Yes X No ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma	Ayer (If observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1)	ne is requ	iired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen	apply) ined Lea auna (B1 tic Plant Sulfide (ves (B9) 3) s (B14) Ddor (C1)	Hydric Soil Present?	Yes X No ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Sediment	Ayer (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2)	ne is requ	iired; check all that i Water-Sta Aquatic Fa True Aqua Hydrogen	apply) ined Lea auna (B1 titc Plant Sulfide (Rhizosph	ves (B9) 3) s (B14) Ddor (C1 eres on) Living R	Hydric Soil Present?	Yes X No adicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Dept	Ayer (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3)	ne is requ	ired; check all that i Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence	apply) ined Lea auna (B1 titic Plant Sulfide (Rhizosph of Reduc	ves (B9) 3) s (B14) Ddor (C1 eres on ered Iron () Living R (C4)	Hydric Soil Present?	Yes X No ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat	Ayer (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	ne is requ	ired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro	apply) ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc	ves (B9) 3) s (B14) Ddor (C1 eres on ced Iron (tion in Ti (Q2)) Living R (C4) Illed Soil	Hydric Soil Present?	Yes X No ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo	Ayer (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) posits (B5) r) (asible on Acciel b	ne is requ	iired; check all that a Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck	apply) ined Lea auna (B1 Sulfide (Rhizosph of Reduc n Reduc s Surface	ves (B9) 3) s (B14) Ddor (C1 eres on ced Iron (tion in Ti (C7)) Living R (C4) Iled Soil	Hydric Soil Present?	Yes X No adicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio	Ayer (If observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial In Vigential Conservation	ne is requ	iired; check all that i Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or	apply) ined Lea auna (B1 tic Plant Sulfide (Rhizosph of Reduc n Reduc s Surface Well Dat	ves (B9) 3) s (B14) Ddor (C1 eres on l ced Iron (tion in Ti (C7) a (D9)) Living R (C4) Iled Soil	Hydric Soil Present?	Yes X No Adicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Dept Algal Mat Iron Dept Inundatio Sparsely	Ayer (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial II Vegetated Concave	ne is requ nagery (B Surface (iired; check all that. Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) B8) Other (Exp	apply) ined Lea auna (B1 titic Plant Sulfide (Rhizosph of Reduc n Reduc s Surface Well Dat plain in R	ves (B9) 3) s (B14) Ddor (C1 eres on tion in Ti (C7) a (D9) temarks)) Living R (C4) Iled Soil	Hydric Soil Present?	Yes X No ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depd Algal Mat Iron Depd Inundatio Sparsely	Ager (if observed): N/A N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial In Vegetated Concave vations:	ne is requ nagery (B Surface (iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 7) Gauge or B8) Other (Exp	apply) ined Lea auna (B1 titic Plant Sulfide (Rhizosph of Reduc r Reduc sufface Well Dat blain in R	ves (B9) 3) s (B14) Ddor (C1 eres on l ced Iron (tion in Ti (C7) a (D9) temarks)) Living R (C4) Illed Soil	Hydric Soil Present?	Yes X No ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Wate	Ayer (If observed): N/A ches): turbed GY frology Indicators: ators (minimum of of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial II Vegetated Concave vations: er Present? Ye	ne is requ nagery (B Surface (iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck i7) Gauge or B8) Other (Exp	apply) ined Lea auna (B1 titic Plant Sulfide (Rhizosph of Reduc n Reduc : Surface Well Dat blain in R Depth (ii	ves (B9) 3) s (B14) Odor (C1 eres on tion in Ti (C7) a (D9) emarks) centes):) Living R (C4) Iled Soil	Hydric Soil Present?	Yes X No adicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Restrictive L Type: Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Wate	Ager (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial In Vegetated Concave vations: er Present? Ye Present? Ye	ne is requ nagery (B Surface (ss	iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck (7) Gauge or 1 (7) Gauge or 1 (7) Other (Exp No X No X No X	apply) ined Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc n Reduc Surface Well Dat blain in R Depth (ii Depth (ii	ves (B9) 3) s (B14) Odor (C1 eres on l ced Iron (tion in Ti (C7) a (D9) cemarks) cemarks):) Living R (C4) Iled Soil	Hydric Soil Present?	Yes X No Adicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Wate Water Table I Saturation Pr	Ager (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial II Vegetated Concave vations: er Present? Ye resent? Ye esent? Ye	ne is requ nagery (B Surface (ss	tired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 57) Gauge or 1 [B8) Other (Exp No X No X No X	apply) ined Lea auna (B1 ttic Plant Sulfide (Rhizosph of Reduc n Reduc s Surface Well Dat blain in R Depth (i Depth (i	ves (B9) 3) s (B14) Odor (C1 eres on l ced Iron (tion in Ti (C7) a (D9) eemarks) a (D9) eemarks):) Living R (C4) Iled Soil	Hydric Soil Present? Secondary Ir Surface 3 Drainage Dry-Seas Crayfish Saturatic Stunted of s (C6) FAC-Net	Yes X No ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5) Present? Yes No X
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyo Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Wate Water Table I Saturation Pr (includes cap	Ager (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of o Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial In Vegetated Concave Vations: er Present? Ye resent? Ye resent? Ye illary fringe) porded Data (stream	ne is required in the ist of the	tired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck (7) Gauge or (B8) Other (Exp No X No X No X No X	apply) ined Lea auna (B1 titc Plant Sulfide (Rhizosph of Reduc n Reduc Sulface Well Dat blain in R Depth (ii Depth (ii Depth (ii	ves (B9) 3) s (B14) Ddor (C1 eres on l tion in Ti (C7) a (D9) Remarks) nches): nches):) Living R (C4) Iled Soil	Hydric Soil Present? Secondary Ir Surface 3 Drainage Dry-Seas Crayfish oots (C3) Stunted 0 Stunted 0 Stunted 0 FAC-Net Wetland Hydrology F tions) if available:	Yes X No ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5) Present? Yes No X
Restrictive L Type: _ Depth (in Remarks: Soil looks dis HYDROLO Wetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Wate Water Table I Saturation Pr (includes cap Describe Rec	Ager (if observed): N/A ches): turbed GY frology Indicators: ators (minimum of of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial In Vegetated Concave vations: er Present? Ye esent? Ye esent? Ye illary fringe) corded Data (stream	ne is requ nagery (B Surface (ss gauge, m	iired; check all that Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck (7) Gauge or (58) Other (Exp No X No X No X No X	apply) ined Lea auna (B1 titc Plant Sulfide (Rhizosph of Reduc n Reduc : Surface Well Dat blain in R Depth (ii Depth (ii Depth (ii al photos	ves (B9) 3) s (B14) Odor (C1 eres on tion in Ti (C7) a (D9) a (D9) a (D9) chemarks): nches): nches): nches): nches):) Living R (C4) Iled Soil	Hydric Soil Present? Secondary Ir Surface 3 Drainage Dry-Seas Crayfish oots (C3) Saturatic Stunted of Stunted of Stunted of FAC-Nea Wetland Hydrology F titons), if available:	Yes X No ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5) Present? Yes No X

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: 13713 Jug Street	City/County: Jersey	TWP / Licking	Sampling Date	: 9/1/2020
Applicant/Owner: Able Grid Energy Solutions, Inc.	_ · · <u></u>	State: OH	Sampling Point	:: WB-1
Investigator(s): Eric Nagy, EMH&T	Section, Township, R	ange:		
Landform (hillside, terrace, etc.): Plain	Local relief	(concave, convex, none):	concave	
Slope (%): 2 Lat: 40.095610	Long: -82.745460		Datum:	
Soil Map Unit Name: Bennington silt loem, 2 to 6 percent slopes (E	BeB)	NWI classi	fication: No	
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes X	No (If no, ex	plain in Remarks.)
Are Vegetation N , Soil N , or Hydrology No significantly	disturbed? Are "Normal	Circumstances" present?	Yes X	No
Are Vegetation N , Soil N , or Hydrology No naturally pro	blematic? (If needed, e	xplain any answers in Re	emarks.)	
SUMMARY OF FINDINGS – Attach site man showi	na samplina point l	ocations transacts	important fe	aturas atc
			, important le	
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	Is the Sampled A within a Wetland	Area I? Yes <u>X</u>	No	
Remarks:				
VEGETATION – Use scientific names of plants.				
Absolute Tree Stratum (Plot size: 30') % Cover	Dominant Indicator Species? Status	Dominance Test wo	rksheet.	
1. Acer saccharinum 80	Yes FACW	Number of Dominant	Species That	
2. Ulmus americana 15	No FACW	Are OBL, FACW, or F	AC:	4 (A)
3. Quercus bicolor 3	No FACW	Total Number of Dom	inant Species	
4. Juglans 2	No FACU	Across All Strata:	· · ·	5 (B)
5		Percent of Dominant	Species That	
100	=Total Cover	Are OBL, FACW, or F	AC:	80.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15')		December of the large		
1. Rosa multinora 10	Yes FACU	Tetal % Cover et	orksneet:	
	TES FACW			40
4.		FACW species 17	$\frac{1}{73}$ x 2 =	346
· · · · · · · · · · · · · · · · · · ·		1.0.0.000000		

1. Rosa multifiora	10	Yes	FACU	Prevalence index worksneet:						
2. Ulmus americana	30	Yes	FACW	Total % Cover of: Multiply by:						
3.				OBL species	40	x 1 =	40			
4.				FACW species	173	x 2 =	346			
5.				FAC species	15	x 3 =	45			
	40	=Total Cover		FACU species	12	x 4 =	48			
Herb Stratum (Plot size: 5')		_		UPL species	0	x 5 =	0			
1. Toxicodendron radicans	15	No	FAC	Column Totals:	240	(A)	479	(B)		
2. Leersia oryzoides	40	Yes	OBL	Prevalence Inc	dex = B/	A =	2.00			
3. Cinna arundinacea	40	Yes	FACW							
4. Carex aquatilis	5	No	FACW	Hydrophytic Veg	getation	Indicators	:			
5.				1 - Rapid Tes	st for Hyd	drophytic Ve	egetation			
6.				X 2 - Dominand	ce Test is	s >50%				
7.				X 3 - Prevalence	e Index	is ≤3.0 ¹				
8.				4 - Morpholo	gical Ada	aptations ¹ (F	Provide su	pporting		
9.				data in Re	marks or	on a sepai	ate sheet)		
10.				Problematic	Hydrophy	ytic Vegeta	tion ¹ (Exp	lain)		
Woody Vine Stratum (Plot size: 15'	100	=Total Cover		¹ Indicators of hyd be present, unles	lric soil a s disturb	nd wetland ed or probl	hydrology ematic.	/ must		
1. 2.				Hydrophytic Vegetation						
		=Total Cover		Present?	Yes X	No				
Demonstrative (Include whete muschave have an energy		1								

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

SOIL

Profile Desc	cription: (Describe	to the depth	needed to doc	ument th	ne indica	tor or o	confirm the absence	of indicators.)			
Depth	Matrix		Redo	x Featur	es						
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc [∠]	Texture	Remarks			
0-8	10YR 3/1	85	10YR 4/4	15	С	М	Loamy/Clayey				
8-12	10YR 4/1	80	10YR 3/6	20	С	М	Loamy/Clayey	Prominent redox concentrations			
¹ Type: C=C	oncentration, D=Dep	letion, RM=R	educed Matrix,	MS=Mas	ked Sand	Grains	s. ² Location	: PL=Pore Lining, M=Matrix.			
Hydric Soil	Indicators:						Indicator	s for Problematic Hydric Soils ³ :			
Histosol	(A1)		Sandy Gle	eyed Mat	rix (S4)		Coas	t Prairie Redox (A16)			
Histic Ep	oipedon (A2)		Sandy Re	dox (S5)			Iron-I	Manganese Masses (F12)			
Black Hi	stic (A3)		Stripped N	/latrix (Se	6)		Red	Parent Material (F21)			
Hydroge	n Sulfide (A4)		Dark Surfa	ace (S7)			Very	Shallow Dark Surface (F22)			
Stratified	l Layers (A5)		Loamy Mu	ucky Mine	eral (F1)		Othe	r (Explain in Remarks)			
2 cm Mu	ick (A10)		Loamy Gl	eyed Mat	rix (F2)						
X Depleted	d Below Dark Surface	e (A11)	Depleted	Matrix (F	3)						
Thick Da	ark Surface (A12)		Redox Da	rk Surfac	æ (F6)		³ Indicator	s of hydrophytic vegetation and			
Sandy M	lucky Mineral (S1)		Depleted	Dark Sur	face (F7)		wetla	nd hydrology must be present,			
5 cm Mu	icky Peat or Peat (S3	8)	Redox De	pression	s (F8)		unless disturbed or problematic.				
Restrictive	Layer (if observed):										
Type:	dry cla	/	_								
Depth (ir	nches):	10	_				Hydric Soil Present	? Yes <u>X</u> No			
HYDROLC)GY										
Wetland Hy	drology Indicators:										
Primary Indi	<u>cators (minimum of c</u>	ne is require	d; check all that	apply)			Seconda	y Indicators (minimum of two required)			
Surface	Water (A1)		X Water-Sta	ined Lea	ves (B9)		Surfa	ice Soil Cracks (B6)			
High Wa	iter Table (A2)		Aquatic Fa	auna (B1	3)		Drain	age Patterns (B10)			
Saturatio	on (A3)		True Aqua	atic Plant	s (B14)		Dry-S	Season Water Table (C2)			
Water M	arks (B1)		Hydrogen	Sulfide C	Ddor (C1)		Cray	fish Burrows (C8)			
Sedimer	nt Deposits (B2)			Rhizosph	eres on L	iving R	Roots (C3) X Satur	ration Visible on Aerial Imagery (C9)			
Drift Dep	oosits (B3)		Presence	of Reduc	tion in Til	(4) 1. al 0. al	Stuni	ed or Stressed Plants (D1)			
	at or Crust (B4)		Recent Irc	n Reduc		iea Soi		Noutral Test (D5)			
IIUII Dep	on Visible on Aerial I	magany (B7)			(\mathbf{C}^{\prime})		<u></u> FAC-	Neutral Test (D3)			
X Sparsely	Vegetated Concave	Surface (B8) Other (Exi	olain in R	emarks)						
Field Obser	vations:		, <u> </u>		(cinano)						
Surface Wat	er Present? Ve	s	No X	Denth (ii	nches).						
Water Table	Present? Ye	s	No X	Depth (ii	nches):						
Saturation P	resent? Ye	s	No X	Depth (ii	nches):		Wetland Hydrolog	av Present? Yes X No			
(includes car	pillary fringe)			(II				<u>,</u>			
Describe Re	corded Data (stream	gauge, mon	itoring well, aeria	al photos	, previous	inspe	ctions), if available:				
Derrord											
Remarks:											

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: 13713	Jug Stree	t		City/Count	y: Jersey	TWP / Licking]	Sampling Date:	9/1/2020
Applicant/Owner:	Able Gri	d Energy Solutions,	Inc.			State:	ОН	Sampling Point:	UPB-1
Investigator(s): Eric N	Vagy, EM	H&T		Section, To	wnship, Ra	ange:			
Landform (hillside, te	errace, etc	c.): <u>Plain</u>		Lo	ocal relief (concave, conv	vex, none)	convex	
Slope (%): 10	Lat: 40	.095610		Long: -8	2.745460			Datum:	
Soil Map Unit Name:	Benning	ton silt loem, 2 to 6 j	percent slopes				NWI class	ification: No	
Are climatic / hydrolo	gic condi	tions on the site typi	cal for this time of	year? Y	es <u>X</u>	No	(If no, ex	plain in Remarks.)	
Are Vegetation N	, Soil 1	N_, or Hydrology_1	No significantly di	isturbed? Ar	e "Normal	Circumstance	s" present	? Yes <u>X</u> No	o
Are Vegetation N	, Soil 1	N_, or Hydrology_1	No naturally prob	lematic? (If	needed, e	xplain any ans	swers in Re	emarks.)	
SUMMARY OF I	FINDIN	GS – Attach site	e map showin	g sampling	point lo	ocations, ti	ransects	s, important fea	tures, etc.
Hydrophytic Vegeta	tion Pres	ent? Yes	No_X	Is the S	Sampled A	rea			
Hydric Soil Present	?	Yes X	No	within	a Wetland	?	Yes	No X	
Wetland Hydrology	Present?	Yes	No <u>X</u>						
Remarks:									

VEGETATION – Use scientific names of plants.

				Absolute	Dominant	Indicator					
Tree Stratum	(Plot size:	30'	_)	% Cover	Species?	Status	Dominance Tes	st worksh	eet:		
1							Number of Domi	inant Spec	ies That		
2							Are OBL, FACW	l, or FAC:	-	1	(A)
3.							Total Number of	Dominant	Species		
4.							Across All Strata	a:	-	2	(B)
5.					<u></u>		Percent of Domi	nant Spec	ies That		
					=Total Cover		Are OBL, FACW	I, or FAC:	_	50.0%	(A/B)
Sapling/Shrub S	<u>tratum</u> (Plot	i size:	15')								
1							Prevalence Inde	ex worksh	neet:		
2.							Total % Co	ver of:	Mu	ltiply by:	
3.							OBL species	30	x 1 =	30	-
4.							FACW species	15	x 2 =	30	_
5.							FAC species	0	x 3 =	0	-
					=Total Cover		FACU species	55	x 4 =	220	-
Herb Stratum	(Plot size:	5')				UPL species	0	x 5 =	0	-
1. Ambrosia trif	ida –		<u> </u>	55	Yes	FACU	Column Totals:	100	(A)	280	(B)
2. Impatiens ca	pensis			10	No	FACW	Prevalence In	ndex = B/A	<u> </u>	2.80	-` ´
3. Bidens frond	osa			5	No	FACW					-
4. Leersia oryzo	oides			30	Yes	OBL	Hydrophytic Ve	getation	Indicators		
5.							1 - Rapid Te	est for Hyd	rophytic V	eaetation	
6.							 2 - Dominan	ice Test is	>50%	-0	
7.							3 - Prevalen	ice Index i	s ≤3.0 ¹		
8.							4 - Morpholo	paical Ada	ptations ¹ (I	Provide su	pporting
9							data in Re	emarks or	on a sepa	rate sheet)
10.							Problematic	Hvdrophy	tic Vegeta	tion ¹ (Expl	ain)
				100	=Total Cover						
Woody Vine Stra	atum (Plot	t size:	15')				be present, unle	dric soli ar ss disturbe	nd wetiand ed or probl	hydrology ematic.	must
1							Hydrophytic				
2.							Vegetation				
					=Total Cover		Present?	Yes	No		
Remarks: (Inclu	de photo numbers	s here or c	n a separ	ate sheet.)							

mowed planted grass next to bike path

Depth	Matrix		Redo	x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 2/1	70	10YR 5/6	30	С	М	Loamy/Clayey	
4-10	10YR 4/1	65	10YR 5/6	35	С	М	Loamy/Clayey	
							·	
		<u> </u>						
ype: C=C	oncentration, D=Dep	letion, RN	/I=Reduced Matrix, I	MS=Mas	ked San	d Grains	² Location:	PL=Pore Lining, M=Matrix.
ydric Soil	Indicators:						Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gle	yed Mat	rix (S4)		Coast	Prairie Redox (A16)
Histic Ep	oipedon (A2)		Sandy Re	dox (S5)			Iron-M	anganese Masses (F12)
Black Hi	stic (A3)		Stripped N	latrix (Se	6)		Red Pa	arent Material (F21)
Hydroge	n Sulfide (A4)		Dark Surfa	ace (S7)			Very S	hallow Dark Surface (F22)
Stratified	l Layers (A5)		Loamy Mu	icky Mine	eral (F1)		Other ((Explain in Remarks)
2 cm Mu	ck (A10)		Loamy Gle	eyed Mat	rix (F2)			
Depleted	d Below Dark Surface	e (A11)	Depleted I	Matrix (F	3)			
Thick Da	ark Surface (A12)		Redox Da	rk Surfac	e (F6)		³ Indicators	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Depleted I	Dark Sur	face (F7)		wetlan	d hydrology must be present,
5 cm Mu	cky Peat or Peat (S3	3)	Redox De	pression	s (F8)		unless	disturbed or problematic.
estrictive	Layer (if observed):							
Type:	N/A							
Depth (ir	nches):						Hydric Soil Present?	Yes X No
YDROLC	GY							
etland Hy	drology Indicators:							
rimary Indi	cators (minimum of o	ne is requ	uired; check all that	apply)			<u>Secondary</u>	Indicators (minimum of two require
Surface	Water (A1)		Water-Sta	ined Lea	ves (B9)		Surfac	e Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	auna (B1	3)		Draina	ge Patterns (B10)
Saturatio	on (A3)		True Aqua	itic Plant	s (B14)		Dry-Se	ason Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide 0	Ddor (C1)	Crayfis	sh Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosph	eres on l	_iving R	oots (C3) Satura	tion Visible on Aerial Imagery (C9
Drift Dep	oosits (B3)		Presence	of Reduc	ed Iron (C4)	Stunte	d or Stressed Plants (D1)
Algal Ma	it or Crust (B4)		Recent Iro	n Reduc	tion in Ti	lled Soil	s (C6) Geomo	orphic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface	(C7)		FAC-N	eutral Test (D5)
Inundatio	on Visible on Aerial I	magery (E	B7) Gauge or	Well Dat	a (D9)			
Sparsely	Vegetated Concave	Surface	(B8) Other (Exp	blain in R	lemarks)		-	
ield Obser	vations:							
urface Wat	er Present? Ye	S	No <u>X</u>	Depth (i	nches):			
Vater Table	Present? Ye	S	No <u>X</u>	Depth (i	nches):			-
aturation P	resent? Ye	s	No <u>X</u>	Depth (i	nches):		Wetland Hydrology	Present? Yes No
ncludes ca	oillary tringe)							
–								
escribe Re	corded Data (stream	gauge, n	nonitoring well, aeria	I photos	, previou	s inspec	tions), if available:	
escribe Re	corded Data (stream	gauge, n	nonitoring well, aeria	Il photos	, previou	s inspec	tions), if available:	
escribe Re emarks:	corded Data (stream	gauge, n	nonitoring well, aeria	Il photos	, previou	s inspec	tions), if available:	

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: 13713	Jug Street			City/Co	ounty: Je	rsey TWP	/ Licking		Sampling Date:	9/1/2020
Applicant/Owner:	Able Grid Ene	rgy Solutions, I	nc.				State:	ОН	Sampling Point:	WC-1
Investigator(s): Eric	Nagy, EMH&T			Section,	Townshi	p, Range:				
Landform (hillside, te	errace, etc.): <u>Pl</u>	ain			Local re	lief (conca	ave, conv	ex, none)	concave	
Slope (%): 2	Lat: 40.0964	91		Long:	-82.7456	78			Datum:	
Soil Map Unit Name	: Pewamo silty	clay loam, low	carbonate till, 0 to 2	2 percent	slopes (P	e)	<u> </u>	WI class	ification: No	
Are climatic / hydrole	ogic conditions	on the site typic	al for this time of y	ear?	Yes 🛛	<u>K</u> N(0	(If no, ex	plain in Remarks.)	
Are Vegetation N	, Soil <u>N</u> , c	or Hydrology N	o significantly dis	turbed?	Are "Nor	mal Circu	mstances	" present	? Yes <u>X</u> No	o
Are Vegetation N	, Soil <u>N</u> , c	or Hydrology N	o_naturally proble	matic?	(If neede	d, explain	any ans	wers in Re	emarks.)	
SUMMARY OF	FINDINGS -	· Attach site	map showing	sampli	ing poi	nt locati	ions, tr	ansects	s, important fea	tures, etc.
Hydrophytic Vegeta Hydric Soil Present Wetland Hydrology	ation Present? ? Present?	Yes X Yes X Yes X	No No No	ls th with	ne Sampl nin a Wet	ed Area land?	١	fes <u>X</u>	No	
Remarks:										
VEGETATION -	- Use scienti	fic names of	plants.							
			Absolute I	Dominant	Indica	lor				

Tree Stratum	(Plot size:	30')	% Cover	Species?	Status	Dominance Tes	st worksh	eet:		
1 2							Number of Dom Are OBL, FACW	inant Spec /, or FAC:	cies That	4	(A)
3. 4.							Total Number of Across All Strata	[:] Dominant a:	t Species -	5	(B)
5					=Total Cover		Percent of Domi Are OBL, FACW	nant Spec /, or FAC:	ies That -	80.0%	(A/B)
Sapling/Shrub Strat	<u>um</u> (Plot dvanica	size:	15') 5	Ves	FACW	Brevalence Ind	ox workel	heet:		
2 Rosa multiflora	ivanica			5	Yes	FACU	Total % Co	ver of	Mu	litinly by:	
3					103	TACO		25	<u>v1=</u>	25	-
4							FACW species	80	$- x^{2} = -$	160	-
5.							FAC species	0	$- x^{2} - x^{3} = - x^{3}$	0	
···				10	=Total Cover		FACU species	5	- x 4 =	20	-
Herb Stratum	(Plot size:	5')				UPL species	0		0	_
1. Impatiens caper	sis		/	50	Yes	FACW	Column Totals:	110	(A)	205	(B)
2. Typha latifolia				5	No	OBL	Prevalence Ir	idex = B//	<u> </u>	1.86	_ ()
3. Aster spp.				20	Yes	OBL					-
4. Carex spp.				25	Yes	FACW	Hydrophytic Ve	getation	Indicators	5:	
5.							1 - Rapid Te	est for Hyd	rophytic V	egetation	
6.							X 2 - Dominar	nce Test is	>50%	-	
7.							X 3 - Prevaler	ice Index i	s ≤3.0 ¹		
8.							4 - Morphole	ogical Ada	ptations ¹ (Provide su	pporting
9.							data in R	emarks or	on a sepa	rate sheet))
10.							Problematic	Hydrophy	rtic Vegeta	ition ¹ (Expl	ain)
Woody Vine Stratun	<u>n</u> (Plot	size:	15'	100	=Total Cover		¹ Indicators of hy be present, unle	dric soil ar ss disturbe	nd wetland ed or probl	hydrology lematic.	must
1. 2.							Hydrophytic Vegetation				
					=Total Cover		Present?	Yes X	No		
Remarks: (Include	photo numbers	here or c	n a sepai	rate sheet.)			•				

SOIL

Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-12	10YR 2/1	98	10YR 3/4	2	С	PL	Loamy/Clayey			
12-20	10YR 4/1	80	10YR 3/6	20	С	PL	Loamy/Clayey	Prominer	nt redox conce	entrations
Гуре: С=Сс	ncentration, D=Dep	letion, RM	=Reduced Matrix, I	MS=Mas	ked San	d Grains	. ² Location	: PL=Pore Li	ning, M=Matrix	Χ.
lydric Soil I	ndicators:						Indicator	s for Probler	matic Hydric	Soils ³ :
Histosol (A1)		Sandy Gle	yed Mat	rix (S4)		Coas	t Prairie Redo	ox (A16)	
Histic Epi	pedon (A2)		Sandy Ree	dox (S5)			Iron-I	Manganese N	lasses (F12)	
Black His	tic (A3)		Stripped M	latrix (Se	5)			Parent Materi	al (F21)	
Hydroger	Sulfide (A4)		Dark Surfa	ace (S7)			Very	Shallow Dark	Surface (F22)
Stratified	Layers (A5)		Loamy Mu	ICKY Min	eral (F1)		Othe	r (Explain in F	kemarks)	
2 cm Muo	ж (ATU) Dalam Dada Oraf	()))	Loamy Gle	eyed Ma	mx (F2)					
X Depleted	Below Dark Surface	e (A11)		Viatrix (F	3)		31			
	k Surface (ATZ)				е (го) face (Г7)		Indicator			and
Sanuy wi	ucky Milleral (ST)	2)	Depleted I				wella	nu nyuruluyy	r problematic	ent,
		<i>,</i>)		010331011	3 (1 0)		unes			
	ayer (if observed):									
Dopth (in							Hudria Sail Bracant	. . .	Vec V	No
								-		
YDROLO	GY									
Primary Indic	ators (minimum of c	ne is reau	ired: check all that	apply)			Secondar	v Indicators (minimum of tw	vo reauir
Surface V	Vater (A1)		Water-Sta	ined Lea	ives (B9)		Surfa	ce Soil Crack	(B6)	
High Wat	er Table (A2)		Aquatic Fa	auna (B1	3)		Drain	age Patterns	(B10)	
Saturatio	n (A3)		True Aqua	tic Plant	s (B14)		Dry-S	Season Water	Table (C2)	
Water Ma	arks (B1)		Hydrogen	Sulfide (Odor (C1)	Crayl	ish Burrows ((C8)	
Sediment	t Deposits (B2)		X Oxidized F	Rhizosph	eres on l	Living Ro	oots (C3) X Satur	ation Visible	on Aerial Imag	gery (C9)
Drift Dep	osits (B3)		Presence	of Reduo	ced Iron ((C4)	Stunt	ed or Stresse	ed Plants (D1)	
Algal Mat	or Crust (B4)		Recent Iro	n Reduc	tion in Ti	lled Soils	s (C6) X Geon	norphic Positi	on (D2)	
Iron Depo	osits (B5)		Thin Muck	Surface	e (C7)		X FAC-	Neutral Test	(D5)	
Inundatio	n Visible on Aerial I	magery (B	7) Gauge or	Well Dat	a (D9)					
Sparsely	Vegetated Concave	e Surface (B8) Other (Exp	olain in F	Remarks)		1			
ield Observ	vations:									
Surface Wate	er Present? Ye	S	No <u>X</u>	Depth (i	nches):					
vater Table	Present? Ye	s	No <u>X</u>	Depth (i	nches):		Wetlen dittering		Vee V	NI -
baturation Pr	esent? Ye			Depth (i	ncnes):		wetiand Hydrolog	gy Present?	res X	NO
IDOULDOC COD	mary tringe)									
escribe Rec	corded Data (stream	gauge, m	onitoring well, aeria	I photos	, previou	s inspec	tions), if available:			
escribe Rec	corded Data (stream	gauge, m	onitoring well, aeria	Il photos	, previou	s inspec	tions), if available:			
escribe Rec	corded Data (stream	gauge, m	onitoring well, aeria	Il photos	, previou	s inspec	tions), if available:			

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: 13713 Jug Street	City/County: Jersey	TWP / Licking	Sampling Date:	9/1/2020
Applicant/Owner: Able Grid Energy Solutions, Inc.		State: OH	Sampling Point	WD-1
Investigator(s): Eric Nagy, EMH&T	Section, Township, Ra	ange:		
Landform (hillside, terrace, etc.): Plain	Local relief (concave, convex, none):	concave	
Slope (%): 2 Lat: 40.094382	Long: -82.745031		Datum:	
Soil Map Unit Name: Bennington silt loam, 2 to 6 percent slopes	(BeB)	NWI classi	fication: No	
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X	No (If no, ex	plain in Remarks.)	
Are Vegetation N, Soil N, or Hydrology No significantl	v disturbed? Are "Normal (Circumstances" present?	Yes X N	lo
Are Vegetation N . Soil N . or Hydrology No naturally p	roblematic? (If needed, ex	xplain any answers in Re	emarks.)	
SUMMARY OF EINDINGS – Attach site man show	ing sampling point lo	cations transacts	important fo	aturos oto
SUMMART OF FINDINGS – Attach site map show			, important le	atures, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	Is the Sampled A within a Wetland	vrea ? Yes <u>X</u>	No	
Remarks:				
VEGETATION – Use scientific names of plants.				
Tree Stratum (Plot size: 30') % Cover	e Dominant Indicator Species? Status	Dominance Test wo	rksheet:	
1. Quercus palustris 35	Yes FACW	Number of Dominant	Species That	
2. Fraxinus pennsylvanica 50	Yes FACW	Are OBL, FACW, or F	AC:	4 (A)
3. <u>Ulmus americana</u> 15	No FACW	Total Number of Dom	inant Species	
4		Across All Strata:		<u>4</u> (B)
^{5.}	=Total Cover	Are OBL FACW or F	Species That	00.0% (A/B)
Sapling/Shrub Stratum (Plot size: 15')		AIC ODE, I AOW, OI I	<u> </u>	00.070 (77.0)
1.		Prevalence Index we	orksheet:	
2.		Total % Cover of	f: Multip	ly by:
3.		OBL species 5	5 x 1 =	55
4		FACW species 12	20 x 2 =	240
5		FAC species 2	5 x 3 =	75
	=Total Cover	FACIL species ($v_{4} =$	0

			FACW species	120	x 2 =	240	
			FAC species	25	x 3 =	75	
	=Total Cover		FACU species	0	x 4 =	0	
			UPL species	0	x 5 =	0	
10	No	FACW	Column Totals:	200	(A)	370	(B)
10	No	FACW	Prevalence Inc	dex = B/A	A =	1.85	
5	No	OBL					
25	Yes	FAC	Hydrophytic Ve	getation	Indicators	:	
50	Yes	OBL	1 - Rapid Te	st for Hyd	rophytic V	egetation	
			X 2 - Dominano	ce Test is	>50%		
			X 3 - Prevalence	e Index i	s ≤3.0 ¹		
			4 - Morpholo	gical Ada	ptations ¹ (I	Provide su	upportin
			data in Re	marks or	on a sepa	rate sheet	t)
			Problematic	Hydrophy	tic Vegeta	tion ¹ (Exp	lain)
100)	=Total Cover		¹ Indicators of hyc be present, unles	lric soil ar s disturbe	nd wetland ed or probl	hydrology ematic.	y must
	=Total Cover		Hydrophytic Vegetation Present?	Yes X	No		
	10 10 5 25 50 100	=Total Cover <u>10</u> No <u>10</u> No <u>5</u> No <u>25</u> Yes <u>50</u> Yes <u>50</u> Yes <u>100</u> =Total Cover <u>100</u> =Total Cover	=Total Cover <u>10</u> No FACW <u>10</u> No FACW <u>5</u> No OBL <u>25</u> Yes FAC <u>50</u> Yes OBL <u>100</u> =Total Cover <u>=Total Cover</u>	=Total Cover FACW species =Total Cover FACU species 10 No FACW 10 No FACW 10 No FACW 10 No FACW 25 Yes FAC 50 Yes OBL 25 Yes OBL 1 Rapid Test X 2 - Dominand X 3 - Prevalence 4 - Morpholo data in Re 100 =Total Cover 1 Indicators of hydide Present, unlest Hydrophytic	=Total Cover FACW species 120 =Total Cover FAC species 25 10 No FACW 25 Yes FAC 50 Yes OBL 1 Rapid Test for Hyd X 2 - Dominance Test is X 3 - Prevalence Index is 4 - Morphological Ada data in Remarks or Problematic Hydrophy 100 =Total Cover - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	FACW species 120 $x 2 =$ $x = Total Cover$	FACW species120 $x 2 = 240$ FAC species25 $x 3 = 75$ FACU species0 $x 4 = 0$ UPL species0 $x 5 = 0$ 10NoFACW10NoFACW5NoOBL25YesFAC50YesOBL10YesOBL10YesOBL25YesFAC50YesOBL10YesOBL10YesOBL25YesYes50YesOBL1- Rapid Test for Hydrophytic VegetationX2 - Dominance Test is >50%X3 - Prevalence Index is $\leq 3.0^1$ 4 - Morphological Adaptations ¹ (Provide su data in Remarks or on a separate sheel Problematic Hydrophytic Vegetation ¹ (Exp100=Total CoverIndicators of hydric soil and wetland hydrology be present, unless disturbed or problematic.HydrophyticVegetation Present?Yes X

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

SOIL

Depth	Matrix	·	Redo	x Featur	es	2					
(inches)	Color (moist)	%	Color (moist)	%	Туре	Loc ²	Text	ure		Remarks	
0-8	10YR 3/2	80	10YR 4/4	20	С	М	Loamy/C	Clayey			
8-14	10YR 5/1	70	10YR 4/6	30	С	М	Loamy/C	Clayey			
		·									
		·									
Type: C=Co	ncentration, D=Dep	letion, RM	=Reduced Matrix, N	MS=Mas	ked San	d Grains		² Location:	PL=Pore Li	ining, M=Matr	ix.
-Iydric Soil Ir	ndicators:							Indicator	s for Proble	matic Hydric	Soils ³ :
Histosol (41)		Sandy Gle	yed Mat	rix (S4)			Coast	Prairie Red	ox (A16)	
Histic Epi	oedon (A2)		Sandy Rec	dox (S5)				Iron-N	Nanganese N	Masses (F12)	
Black Hist	tic (A3)		Stripped N	latrix (S6	5)			Red F	Parent Mater	ial (F21)	
Hydrogen	Sulfide (A4)		Dark Surfa	ice (S7)				Very	Shallow Dark	c Surface (F2	2)
Stratified	Layers (A5)		Loamy Mu	cky Mine	eral (F1)			Other	(Explain in I	Remarks)	
2 cm Muc	k (A10)		Loamy Gle	eyed Mat	rix (F2)						
X Depleted	Below Dark Surface	e (A11)	Depleted N	Matrix (F:	3)						
Thick Dar	k Surface (A12)		Redox Dar	rk Surfac	e (F6)			³ Indicators	s of hydroph	ytic vegetatio	n and
Sandy Mu	icky Mineral (S1)		Depleted D	Dark Surl	face (F7))		wetla	nd hydrology	must be pres	sent,
5 cm Muc	ky Peat or Peat (S3)	Redox Dep	pression	s (F8)			unles	s disturbed c	or problematic	
Restrictive L	ayer (if observed):										
Type:	N/A										
Depth (inc	ches):						Hydric So	il Present	?	Yes X	No
Depth (inc Remarks:	ches):						Hydric So	il Present	?	Yes X	No
Depth (inc	shes):						Hydric So	il Present	?	Yes X	<u>No</u>
Depth (inc Remarks:	SY						Hydric So	il Present	?	Yes X	No
Depth (inc Remarks: HYDROLOC Wetland Hyd	shes): GY rology Indicators:						Hydric So	il Present	?	Yes X	No
Depth (inc Remarks: IYDROLO(Wetland Hyd Primary Indica	SY stors (minimum of o	ne is requ	ired; check all that a	apply)			Hydric So	il Present	? y Indicators (Yes X	No
Depth (inc Remarks: IYDROLOC Wetland Hyd Primary Indica Surface W	SY rology Indicators: ators (minimum of o /ater (A1)	ne is requ	ired; check all that a	apply) ined Lea	ves (B9)		Hydric So	il Present <u>Secondar</u> <u>X</u> Surfa	? y Indicators (ce Soil Crack	Yes X (minimum of t <s (b6)<="" td=""><td>No</td></s>	No
Depth (inc Remarks: IYDROLOC Wetland Hyd Primary Indica Surface W High Wate	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2)	ne is requ	ired; check all that a Water-Stai Aquatic Fa	apply) ined Lea iuna (B1:	ves (B9) 3)		Hydric So	il Present <u>Secondar</u> X Surfa Drain	? y Indicators (ce Soil Cracl age Patterns	Yes X (minimum of t <s (b6)<br="">; (B10)</s>	No
Depth (inc Remarks: IYDROLOC Wetland Hyd Primary Indica Surface W High Wate Saturatior	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2) n (A3)	ne is requ	ired; check all that a Water-Stai Aquatic Fa	apply) ined Lea iuna (B1: tic Plants	ves (B9) 3) s (B14)		Hydric So	Secondar X Surfa Drain Dry-S	<u>y Indicators (</u> ce Soil Cracl age Patterns eason Wate	Yes X (<u>minimum of t</u> (ks (B6) (B10) r Table (C2)	No
Depth (inc Remarks: HYDROLOO Wetland Hyd Primary Indica Surface V High Wate Saturatior Water Ma	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2) n (A3) rks (B1)	ne is requ	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen	apply) ined Lea auna (B1: tic Plants Sulfide C	ves (B9) 3) s (B14) Ddor (C1)	Hydric So	Secondar X Surfa Drain Dry-S Crayf	y Indicators of ce Soil Crack age Patterns eason Wate ish Burrows	Yes X (minimum of t (xs (B6) (minimum of t) (xs (B10) (minimum of t) (minimum of	No
Depth (inc Remarks: IYDROLOC Wetland Hyd Primary Indica Surface W High Wate Saturation Water Ma Sediment	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	ne is requ	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F	apply) ined Lea iuna (B1 itic Plants Sulfide C Rhizosph	ves (B9) 3) s (B14) Ddor (C1 eres on l) Living Ro	Hydric So	Secondar X Surfa Drain Dry-S Crayf X Satur	y Indicators (ce Soil Cracl age Patterns eason Wate ish Burrows ation Visible	Yes X (minimum of t (ks (B6) (mathe (B10) (mathe (C2) (C8) on Aerial Imathe	No wo required
Depth (inc Remarks: IYDROLOO Wetland Hyd Primary Indica Surface W High Wate Saturatior Water Ma Sediment Drift Depo	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3)	ne is requ	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F	apply) ined Lea tuna (B1: tic Plants Sulfide C Rhizosph of Reduc	ves (B9) 3) s (B14) Ddor (C1 eres on l sed Iron () Living Ro (C4)	Hydric So	Secondar X Surfa Drain Dry-S Crayf X Satur Sturt	<u>y Indicators (</u> ce Soil Cracl age Patterns eason Wate ish Burrows ation Visible ed or Stresse	Yes X (minimum of t <s (b6)<br="">; (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1</s>	No wo required gery (C9)
Depth (inc Remarks: IYDROLOO Wetland Hyd Primary Indica Surface W High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat	Ches): Comparison of the system of the syst	ne is requ	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro	apply) ined Lea tuna (B1: tic Plants Sulfide C Sulfide C Shizosph of Reduc n Reduc	ves (B9) 3) s (B14) Ddor (C1 eres on l ered Iron (tion in Ti) Living Ro (C4) illed Soil:	Hydric So boots (C3) s (C6)	Secondar X Surfa Drain Dry-S Crayf X Satur Stunt X Geor	<u>y Indicators (</u> ce Soil Crack age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit	Yes X (minimum of t (ks (B6) (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1 ion (D2)	No wo required gery (C9)
Depth (inc Remarks: HYDROLOC Wetland Hyd Primary Indica Surface W High Wate Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depo	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) psits (B3) or Crust (B4) sits (B5)	ne is requ	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck	apply) ined Lea auna (B1: tic Plants Sulfide C Rhizosph of Reduc n Reduc Surface	ves (B9) 3) s (B14) Ddor (C1 eres on l æd Iron (tion in Ti (C7)) Living Ro (C4) illed Soil:	Hydric So bots (C3) s (C6)	Secondar X Surfa Drain Dry-S Crayf X Saturt X Saturt X Geom X FAC-	y Indicators of ce Soil Crack age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit Neutral Test	Yes X (minimum of t (xs (B6) (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5)	No wo required
Depth (inc Remarks: IYDROLOO Wetland Hyd Primary Indica Surface V High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundatior	GY rology Indicators: ators (minimum of o vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ir	ne is requ nagery (B	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck 7) Gauge or V	apply) ined Lea tuna (B1: tic Plants Sulfide C Rhizosph of Reduc n Reduc Surface Well Data	ves (B9) 3) s (B14) Ddor (C1 eres on l æd Iron (tion in Ti (C7) a (D9)) Living Ro (C4) Illed Soils	Hydric So boots (C3) s (C6)	Secondar X Surfa Drain Dry-S Crayf X Saturt X Saturt X Georr X FAC-	y Indicators of ce Soil Crack age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit Neutral Test	Yes X (minimum of t (xs (B6) (c8) on Aerial Ima ed Plants (D1 ion (D2) (D5)	No wo required gery (C9)
Depth (inc Remarks: IYDROLOO Wetland Hyd Primary Indica Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ir /egetated Concave	ne is requ nagery (B Surface (ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck 7) Gauge or V B8) Other (Exp	apply) ined Lea auna (B1: tic Plants Sulfide C Rhizosph of Reduc n Reduc Surface Well Data olain in R	ves (B9) 3) s (B14) Odor (C1 eres on l æd Iron (tion in Ti (C7) a (D9) emarks)) Living Ro (C4) illed Soil:	Hydric So bots (C3)	Secondar X Surfa Drain Dry-S Crayf X Satur X Satur X Geom X FAC-	? y Indicators (ce Soil Cracl age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit Neutral Test	Yes X (minimum of t (s (B6) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5)	No wo required
Depth (inc Remarks: IYDROLOO Wetland Hyd Primary Indica Surface W High Water Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Sparsely V Field Observ	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) h Visible on Aerial Ir //egetated Concave ations:	ne is requ nagery (B Surface (ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck 7) Gauge or V B8) Other (Exp	apply) ined Lea tuna (B1: tic Plants Sulfide C Rhizosph of Reduc n Reduc Surface Well Data Jain in R	ves (B9) 3) s (B14) Odor (C1 eres on l ced Iron (tion in Ti (C7) a (D9) emarks)) Living Ro (C4) illed Soils	Hydric So bots (C3) s (C6)	Secondar X Surfa Drain Dry-S Crayf X Satur Stunt X Geon X FAC-	? y Indicators (ce Soil Crack age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit Neutral Test	Yes X (minimum of t ks (B6) ; (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5)	No wo required gery (C9)
Depth (inc Remarks: TYDROLOO Wetland Hyd Primary Indica Surface W High Water Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundatior Sparsely V Field Observ Surface Wate	Ches): Comparison of the system of the syst	ne is requ nagery (B Surface (s	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck 7) Gauge or V B8) Other (Exp	apply) ined Lea tuna (B1: tic Plants Sulfide C Sulfide C	ves (B9) 3) s (B14) Ddor (C1 eres on l æd Iron (tion in Ti (C7) a (D9) emarks) nches): _) Living Ro (C4) illed Soil:	Hydric So bots (C3) s (C6)	Secondar X Surfa Drain Dry-S Crayf X Saturt X Saturt X Geom X FAC-	? v Indicators (ce Soil Crack age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit Neutral Test	Yes X (minimum of t ks (B6) ; (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5)	No wo required gery (C9)
Depth (inc Remarks: HYDROLOO Wetland Hyd Primary Indica Surface W High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundatior Sparsely V Field Observ Surface Wate Water Table F	GY rology Indicators: ators (minimum of o /ater (A1) Per Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ir /egetated Concave ations: r Present? Ye	ne is requ nagery (B Surface (s	ired; check all that a Water-Stail Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck 7) Gauge or V B8) Other (Exp No X No X	apply) ined Lea auna (B1: tic Plant: Sulfide C Rhizosph of Reduc n Reduc Surface Well Data blain in R Depth (ir Depth (ir	ves (B9) 3) s (B14) Odor (C1 eres on l ced Iron (tion in Ti (C7) a (D9) emarks) emarks):) Living Rơ (C4) Illed Soil:	Hydric So bots (C3) s (C6)	Secondar X Surfa Drain Dry-S Crayf X Saturt X Saturt X Geom X FAC-I	<u>y Indicators (</u> ce Soil Cracl age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit Neutral Test	Yes X (minimum of t (xs (B6) (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5)	No wo required
Depth (inc Remarks: HYDROLOO Wetland Hyd Primary Indica Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely V Field Observ Surface Wate Water Table F Saturation Pre	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ir /egetated Concave ations: r Present? Ye essent? Ye	ne is requ magery (B Surface (ss	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck 7) Gauge or V B8) Other (Exp No X No X No X	apply) ined Lea iuna (B1: tic Plants Sulfide C Rhizosph of Reduc n Reduc Surface Well Data blain in R Depth (in Depth (in	ves (B9) 3) s (B14) Odor (C1 eres on l red Iron (tion in Ti (C7) a (D9) emarks) nches): _ nches): _ nches): _) Living Ro (C4) Illed Soil:	Hydric So bots (C3) s (C6) Wetland	Secondar X Surfa Drain Dry-S Crayf X Satur X Satur X Georr X FAC-I	? y Indicators i ce Soil Cracl age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit Neutral Test	Yes X (minimum of t (s (B6) (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5) Yes X	No
Depth (ind Remarks: HYDROLOO Wetland Hyd <u>Primary Indica</u> Surface W High Wate Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Sparsely Field Observ Surface Wate Water Table F Saturation Pre (includes capi	Ches): Contemposite of the second state of th	ne is requ nagery (B Surface (ss	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck 7) Gauge or N B8) Other (Exp No X No X No X	apply) ined Lea auna (B1: tic Plants Sulfide C Rhizosph of Reduc n Reduc Surface Well Data olain in R Depth (in Depth (in Depth (in	ves (B9) 3) s (B14) Odor (C1 eres on l æd Iron (tion in Ti (C7) a (D9) emarks) nches): nches):) Living Ro (C4) illed Soil:	Hydric So bots (C3) s (C6) Wetland	Secondar X Surfa Drain Dry-S Crayf X Satur Stunt X Geom X FAC-I	y Indicators (ce Soil Crack age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit Neutral Test	Yes X (minimum of t (s (B6) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5) Yes X	No
Depth (ind Remarks: TYDROLOO Wetland Hyd Primary Indica Surface W High Water Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely W Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Rec	Ches): Contemposite of the second state of th	ne is requ nagery (B Surface (ss s gauge, m	ired; check all that a Water-Stai Aquatic Fa True Aqua Wydrogen X Oxidized F Presence of Recent Iro Thin Muck 7) Gauge or N B8) Other (Exp No X No X No X No X	apply) ined Lea auna (B1: tic Plants Sulfide C Rhizosph of Reduc n Reduc Surface Well Data Jain in R Depth (in Depth (in Depth (in	ves (B9) 3) s (B14) Odor (C1 eres on l æd Iron (tion in Ti (C7) a (D9) emarks) a (D9) emarks):) Living Ro (C4) illed Soil:	Hydric So bots (C3) s (C6) Wetland	il Present Secondar X Surfa Drain Dry-S Crayf X Satur X Satur X Geon X FAC-1 Hydrolog	? y Indicators (ce Soil Crack age Patterns eason Wate ish Burrows ation Visible ed or Stresse horphic Posit Neutral Test y Present?	Yes X (minimum of t ks (B6) ; (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5) Yes X	No wo requirec gery (C9))
Depth (inc Remarks: TYDROLOO Wetland Hyd Primary Indica Surface W High Water Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundation Sparsely Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Rec	Ches): Control Control Contro	ne is requ magery (B Surface (ss s gauge, m	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck 7) Gauge or V B8) Other (Exp No X No X No X No X No X	apply) ined Lea auna (B1: tic Plants Sulfide C Sulfide C Rhizosph of Reduc n Reduc Surface Well Data blain in R Depth (in Depth (in Depth (in	ves (B9) 3) s (B14) Odor (C1 eres on l ced Iron (tion in Ti (C7) a (D9) emarks) mches): nches): previou) Living Rd (C4) illed Soils	Hydric So bots (C3) s (C6) Wetland tions), if ava	Secondar X Surfa Drain Dry-S Crayf X Saturt X Saturt X Geom X FAC-I	? <u>y Indicators (</u> ce Soil Crack age Patterns eason Wate ish Burrows ation Visible ed or Stresse norphic Posit Neutral Test y Present?	Yes X (minimum of t ks (B6) 5 (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5) Yes X	No wo required gery (C9))
Depth (inc Remarks: IYDROLOO Wetland Hyd Primary Indica Surface W High Wate Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundation Sparsely Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	GY rology Indicators: ators (minimum of o /ater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) or Crust (B4) sits (B5) n Visible on Aerial Ir /egetated Concave ations: r Present? Ye esent? Ye llary fringe) orded Data (stream	ne is requ nagery (B Surface (ss s gauge, m	ired; check all that a Water-Stai Aquatic Fa True Aqua Hydrogen X Oxidized F Presence o Recent Iro Thin Muck 7) Gauge or V B8) Other (Exp No X No X No X No X No X	apply) ined Lea iuna (B1: tic Plants Sulfide C Rhizosph of Reduc n Reduc Surface Well Data Jain in R Depth (in Depth (in Depth (in I photos,	ves (B9) 3) s (B14) Odor (C1 eres on l red Iron (tion in Ti (C7) a (D9) emarks) nches): nches): nches):) Living Ro (C4) Illed Soils	Hydric So bots (C3) s (C6) Wetland	Secondar X Surfa Drain Dry-S Crayf X Saturt X Saturt X Georr X FAC-I Hydrolog	? y Indicators i ce Soil Crack age Patterns eason Wate ish Burrows ation Visible ed or Stresse horphic Posit Neutral Test y Present?	Yes X (minimum of t (ss (B6) (B10) r Table (C2) (C8) on Aerial Ima ed Plants (D1 ion (D2) (D5) Yes X	No

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: 13713 Jug Street		City/Cou	Inty: Jersey	TWP / Licking		Sampling Date	: 9/1/2	2020
Applicant/Owner: Able Grid Ener	gy Solutions, Inc.			State:	ОН	Sampling Point	t: U	PD-1
Investigator(s): Eric Nagy, EMH&T		Section, ⁻	Township, Ra	nge:				
Landform (hillside, terrace, etc.): Pla	lin		Local relief (c	concave, conve	ex, none): c	onvex		
Slope (%): 10 Lat: 40.09438	32	Long: -	-82.745031		C	Datum:		
Soil Map Unit Name: Bennington silt	loem, 2 to 6 percent slopes			N	WI classific	cation: No		
Are climatic / hydrologic conditions o	n the site typical for this time of	year?	Yes X	No	(If no, expl	ain in Remarks.)	
Are Vegetation N, Soil N, or	r Hydrology No significantly d	isturbed?	Are "Normal C	Circumstances'	present?	Yes X	No	
Are Vegetation N , Soil N , or	Hydrology No naturally prob	lematic? ((If needed, ex	plain any ansv	vers in Ren	narks.)		-
SUMMARY OF FINDINGS -	Attach site map showin	g samplir	ng point lo	cations, tra	ansects,	important fe	ature	s, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No X Yes No X Yes No X	Is the withi	e Sampled A n a Wetland?	rea ? Y	'es	No <u>X</u>		
VEGETATION – Use scientifi	c names of plants.							
Tree Stratum (Plot size:	Absolute30')% Cover	Dominant Species?	Indicator Status	Dominance	Test work	sheet:		
1. Quercus palustris	30	Yes	FACW	Number of [Dominant S	pecies That		
2. Acer saccharinum	70	Yes	FACW	Are OBL, FA	ACW, or FA	\C:	3	_(A)
3 4				Total Numb Across All S	er of Domir strata:	ant Species	4	(B)
5	=	Total Cover		Percent of D Are OBL, FA	Dominant S ACW, or FA	pecies That	75.0%	_(A/B)
Sapling/Shrub Stratum (Plot s 1. Rosa multiflora	size: <u>15'</u>) 15	Yes	FACU	Prevalence	Index wor	ksheet:		

3 4				Total Number of I Across All Strata:	Dominant	t Species	4	(B)
5	100	=Total Cover		Percent of Domin Are OBL, FACW,	ant Spec or FAC:	ies That -	75.0%	(A/B)
Sapling/Shrub Stratum (Plot size: 15)	15	Yes	FACU	Prevalence Inde	x worksl	neet:		
2.	10	100	17.00	Total % Cov	er of:	Mu	ltiply by:	
3.				OBL species	0	x 1 =	0	_
4.				FACW species	100		200	_
5.				FAC species	80	x 3 =	240	_
	15	=Total Cover		FACU species	15	x 4 =	60	_
Herb Stratum (Plot size: 5')		_		UPL species	0	x 5 =	0	_
1. Toxicodendron radicans	80	Yes	FAC	Column Totals:	195	(A)	500	(B)
2.				Prevalence Inc	dex = B/A	<u> </u>	2.56	
3.								_
4.				Hydrophytic Veg	getation	Indicators	:	
5.				1 - Rapid Tes	st for Hyd	rophytic V	egetation	
6.				X 2 - Dominand	ce Test is	>50%	C	
7.				3 - Prevalenc	e Index i	s ≤3.0 ¹		
8.				4 - Morpholog	gical Ada	ptations ¹ (F	Provide su	pporting
9.				data in Re	marks or	on a sepa	rate sheet)
10.				Problematic I	Hydrophy	rtic Vegeta	tion ¹ (Expl	ain)
Woody Vine Stratum (Plot size: 15')	80	=Total Cover		¹ Indicators of hyd be present, unles	ric soil ar	nd wetland ed or probl	hydrology ematic.	must
1				Hydrophytic				
2				Vegetation				
		=Total Cover		Present?	Yes <u>X</u>	No		
Pomarke: (Include photo numbers here or on a senar	to choot	\						

Remarks: (Include photo numbers here or on a separate sheet.) mowed planted grass next to bike path SOIL

Donth	Motrix	to the dep	Dode					IDSence of n	lucators.
(inches)	Color (moist)	%	Color (moist)	X Featur	Tvpe ¹	$l oc^2$	Textu	ro	Romarks
0_8	10VR 4/1	80	10VR 3/4	20	<u> </u>	 M			Romano
U-0		00		20			LUamy/C		
		·							
	·	·							
		, <u> </u>							
¹ Type: C=C	concentration, D=Dep	letion, RM	=Reduced Matrix,	MS=Mas	ked San	J Grains	s. "	² Location: Pl	L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:		Condu Ch		() () ()		I	Indicators fo	or Problematic Hydric Soils ³ :
HISTOSO	(A1)		Sandy Gle	yed Mai	irix (54)		-	Coast Pr	
	pipedon (A2)		Sandy Ker	dox (55)	~		-	Iron-Ivian	iganese Masses (F12)
Black H	istic (A3)		Strippea iv	latrix (Si	6)		-	Red Pare	ent Material (F21)
Hydroge	en Sulfide (A4)		Dark Suna	ace (S7)			-	Very Sna	allow Dark Surface (F22)
Stratifie	d Layers (A5)		Loamy Mu	icky Min	eral (F1)		-	Other (E	xplain in Remarks)
2 cm Mi	Jck (A10)	(.)		eyed Ma	trix (⊦2)				
Deplete	d Below Dark Surface	ə (A11)	X Depleted r	Matrix (F	3)			a , . ,	
Thick Da	ark Surface (A12)		Redox Da	rk Surfac	ce (F6)			Indicators of	hydrophytic vegetation and
Sandy N	Aucky Mineral (S1)		Depleted I	Dark Sur	face (F7)			wetland I	hydrology must be present,
5 cm Mu	Jcky Peat or Peat (S3	3)	Redox De	pression	ıs (F8)			unless di	sturbed or problematic.
Restrictive	Layer (if observed):	:							
Type:	N/A								
Depth (i	nches):						Hydric Soi	I Present?	Yes <u>X</u> No
Remarks:									
HYDROLO)GY								
Wetland Hy	/drology indicators:		·	··· ·· · · · · · · · · · · · · · · · ·				• • • • • • • • • •	
Primary mu	Cators (minimum or o	ne is requ	Wotor Sto	appiy)	(P0)		!	Secondary in	Idicators (minimum or two required
Surface	Mator (A1)		VValei-Jio	Ineu Lea	ives (Da)		-	Sunace	Soll Cracks (DO)
Surface	Water (A1)		Aquatic Es	רחייג (R1	3)			Drainage	Pattorne (B10)
Surface	e Water (A1) ater Table (A2)		Aquatic Fa	auna (B1	3) (B14)		-	Drainage	e Patterns (B10)
Surface High Wa	e Water (A1) ater Table (A2) on (A3)		Aquatic Fa	auna (B1 atic Plant	13) ts (B14) Odor (C1)	1	-	Drainage Dry-Seas	Patterns (B10) son Water Table (C2)
Surface High Wa Saturati Water M	Water (A1) ater Table (A2) on (A3) 1arks (B1) at Deposits (B2)		Aquatic Fa True Aqua Hydrogen	auna (B1 atic Plant Sulfide (I3) ts (B14) Odor (C1)) iving R	- - 	Drainage Dry-Seas Crayfish	Patterns (B10) son Water Table (C2) Burrows (C8)
Surface High Wa Saturati Water M Sedimer	Water (A1) ater Table (A2) fon (A3) farks (B1) nt Deposits (B2)		Aquatic Fa True Aqua Hydrogen Oxidized F	auna (B1 atic Plant Sulfide (Rhizosph	I3) ts (B14) Odor (C1) teres on I) _iving Ro		Drainage Dry-Seas Crayfish Saturatic	Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9)
Surface High Wa Saturati Water M Sedimer Drift De	e Water (A1) ater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Cruct (B4)		Aquatic Fa True Aqua Hydrogen Oxidized F Presence	auna (B1 atic Plant Sulfide (Rhizosph of Reduc	I3) ts (B14) Odor (C1) teres on I ced Iron () ₋iving R(C4)		Drainage Dry-Seas Crayfish Saturatio Stunted o	Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)

Iron Deposits (B5) Inundation Visible on A Sparsely Vegetated Co	erial Imagery (B7) ncave Surface (B8	Thin M Gauge	uck Surface (C7) or Well Data (D9) Explain in Remarks)	FAC-Neutral Test (D)5)
Field Observations:					
Surface Water Present?	Yes	No X	Depth (inches):		
Water Table Present?	Yes	No X	Depth (inches):		
Saturation Present?	Yes	No X	Depth (inches):	Wetland Hydrology Present?	Yes No _X
(includes capillary fringe)					
Describe Recorded Data (s	tream gauge, mon	itoring well, a	erial photos, previous inspe	ctions), if available:	
Remarks:					
None Observed					



APPENDIX C:

ORAM Dataforms

	Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization		
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001	

Instructions

The investigator is *STRONGLY URGED* to read the Manual for Using the Ohio Rapid Assessment Method for Wetlands for further elaboration and discussion of the questions below prior to using the rating forms.

The Narrative Rating is designed to categorize a wetland or to provide alerts to the Rater based on the presence or possible presence of threatened or endangered species. The presence or proximity of such species is often an indicator of the quality and lack of disturbance of the wetland being evaluated. In addition, it is designed to categorize certain wetlands as very low quality (Category 1) or very high quality (Category 3) regardless of the wetland's score on the Quantitative Rating. In addition, the Narrative Rating also alerts the investigator that a particular wetland *may* be a Category 3 wetland, again, regardless of the wetland's score on the Quantitative Rating.

It is *VERY IMPORTANT* to properly and thoroughly answer each of the questions in the ORAM in order to properly categorize a wetland. To *properly* answer all the questions, the boundaries of the wetland being assessed must be correctly identified. Refer to Scoring Boundary worksheet and the User's Manual for a discussion of how to determine the "scoring boundaries." In some instances, the scoring boundaries may differ from the "jurisdictional boundaries."

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories. The most recent version of this document is posted on Ohio EPA's Division of Surface Water web page at: <u>http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx</u>

Background Information

Name: Fric Nagy	
Date:	
9/1/20	
Affiliation: FMH&T	
Address:	
5500 New Albany Road, Columbus, OH, 43054	
Phone Number:	
614.775.4518	
enagy@emht.com	
Name of Wetland: Wetland A	
Vegetation Communit(ies):	
Emergent/Forested	
HGM Class(es):	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
See Exhibit 1	
Lat/Long or UTM Coordinate	40.005910/ 92.746405
	40.093610/-62.746405
	Jersey, Ohio
County	Licking
Township	Jersey TWP
Section and Subsection	
Hydrologic Unit Code	05060001-15-03
Site Visit	9/1/20
National Wetland Inventory Map	No
Ohio Wetland Inventory Map	NA
Soil Survey	Pewamo silty clay loam. low
Delineation report/man	carbonate till, 0 to 2 % slopes
	Exhibit 6

Name of Wetland: Wetland A		
Wetland Size (acres, hectares):		1.06 ac
Sketch: Include north arrow, relationship with other surface waters, vegetation zones,	etc.	
See Exhibit 6		
Comments Narrative Discussion Justification of Category Changes		
Final score : A1 5	ategory:	2
		<u>ک</u>

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	Х	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	x	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		×
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		x

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	<u> </u>
	Critical Habitat I a the watland in a township spatian or subsection of	VEQ	
I	a United States Geological Survey 7.5 minute Quadrandle that has	TES	
	been designated by the U.S. Fish and Wildlife Service as "critical	Wetland should be	Go to Question 2
	habitat" for any threatened or endangered plant or animal species?	evaluated for possible	
	Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Obio, the Indiana Bat has	Category 3 status	
	had critical habitat designated (50 CFR 17.95(a)) and the piping plover	Go to Question 2	
	has had critical habitat proposed (65 FR 41812 July 6, 2000).		
2	Threatened or Endangered Species. Is the wetland known to contain	YES	NO
	an individual of, or documented occurrences of federal or state-listed	Wetland is a Category	Go to Question 3
	inteatened of endangered plant of animal species:	3 wetland.	Co to Question 5
		Go to Question 3	
3	Documented High Quality wetland. Is the wetland on record in Natural Heritage Database as a high guality wetland?	15	
	Hatara Hontago Databaco ao a high quality wonana.	Wetland is a Category	Go to Question 4
		3 wetland	
		Go to Question 4	
4	Significant Breeding or Concentration Area. Does the wetland	YES	NO
	contain documented regionally significant breeding or nonbreeding		\smile
	waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	In size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover)	Wetland is a Category	Go to Question 6
	by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or	1 wetland	
	2) an acidic pond created or excavated on mined lands that has little or		
	no vegetation?	Go to Question 6	
o	significant inflows or outflows. 2) supports acidophilic mosses.	YES	
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30%	Wetland is a Category	Go to Question 7
	cover, 4) at least one species from Table 1 is present, and 5) the	3 wetland	
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
_	is saturated during most of the year, primarily by a discharge of free		
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0)	Wetland is a Category	Go to Question 8a
	invasive species listed in Table 1 is <25%?		
	····	Go to Question 8a	
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	overstory canopy trees of great age (exceeding at least 50% of a	Wetland is a Category	Go to Question 8h
		2 wetland	
	projected maximum attainable age for a species); little or no evidence	s welland.	
	projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100	5 weitand.	
	projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canoput trace interpersed with canoput card classificant surplayer	Go to Question 8b	
	projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of	YES	NO
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible	Go to Question 9a
		Category 3 status.	
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES	NO
	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially bydrologically restricted from Lake Frie due to lakeward or	Wetland should be	Go to Question 9c
	landward dikes or other hydrological controls?	evaluated for possible	
		Category 3 status	
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
	border alterations), or the wetland can be characterized as an	Go to Question 9d	Go to Question 10
	"estuarine" wetland with lake and river influenced hydrology. These		
	include sandbar deposition wetlands, estuarine wetlands, river mouth		
9d	Does the wetland have a predominance of native species within its	YES	NO
•••	vegetation communities, although non-native or disturbance tolerant		
	native species can also be present?	Wetland is a Category	Go to Question 9e
		3 wetland	
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
		Wetland should be	Go to Question 10
		evaluated for possible	
		Category 3 status	
		Go to Question 10	\frown
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	NO
	characterized by the following description: the wetland has a sandy	Wetland is a Category	Go to Question 11
	substrate with interspersed organic matter, a water table often within	3 wetland.	
	several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be	Go to Question 11	
	present). The Ohio Department of Natural Resources Division of		
	Natural Areas and Preserves can provide assistance in confirming this		
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	NO
	dominated by some or all of the species in Table 1. Extensive prairies		
	were formerly located in the Darby Plains (Madison and Union	Wetland should be	Complete
	Counties), Sandusky Flams (wyandol, Clawford, and Manon Counties), northwest Ohio (e.g. Erie. Huron. Lucas. Wood Counties).	Category 3 status	Rating
	and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,		
	Montgomery, Van Wert etc.).	Complete Quantitative	
	1	rauny	I

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.









Category 2

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality

41.5

	circle		
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat		If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YESNO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	2
-	Metric 2. Buffers and surrounding land use	12	- 14 -
	Metric 3. Hydrology	7	21
	Metric 4. Habitat	8.5	29.5
	Metric 5. Special Wetland Communities	0	29.5
	Metric 6. Plant communities, interspersion, microtopography	12	41.5
	TOTAL SCORE	41.5	Category based on score breakpoints 2

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	<u>.</u>	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria		Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

	Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization		
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001	

Instructions

The investigator is *STRONGLY URGED* to read the Manual for Using the Ohio Rapid Assessment Method for Wetlands for further elaboration and discussion of the questions below prior to using the rating forms.

The Narrative Rating is designed to categorize a wetland or to provide alerts to the Rater based on the presence or possible presence of threatened or endangered species. The presence or proximity of such species is often an indicator of the quality and lack of disturbance of the wetland being evaluated. In addition, it is designed to categorize certain wetlands as very low quality (Category 1) or very high quality (Category 3) regardless of the wetland's score on the Quantitative Rating. In addition, the Narrative Rating also alerts the investigator that a particular wetland *may* be a Category 3 wetland, again, regardless of the wetland's score on the Quantitative Rating.

It is *VERY IMPORTANT* to properly and thoroughly answer each of the questions in the ORAM in order to properly categorize a wetland. To *properly* answer all the questions, the boundaries of the wetland being assessed must be correctly identified. Refer to Scoring Boundary worksheet and the User's Manual for a discussion of how to determine the "scoring boundaries." In some instances, the scoring boundaries may differ from the "jurisdictional boundaries."

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories. The most recent version of this document is posted on Ohio EPA's Division of Surface Water web page at: <u>http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx</u>

Background Information

Nama	
Name: Eric Nagy	
Date:	
9/1/20	
Affiliation: EMLIAT	
Address:	
5500 New Albany Road, Columbus, OH, 43054	
Phone Number:	
614.775.4518	
e-mail address: enagy@emht.com	
Name of Wetland: Wetland B	
Vegetation Communit(ies):	
Forested	
HGM Class(es):	
Depressional	
See Exhibit 1	
Lat/Long or UTM Coordinate	
	40.095610/-82.745460
	Jersey, Ohio
	Licking
Township	Jersey TWP
Section and Subsection	
Hydrologic Unit Code	05060001-15-03
Site Visit	9/1/20
National Wetland Inventory Map	No
Ohio Wetland Inventory Map	
Soil Survey	Bennington silt loam, 2 to 6
Delineation report/man	percent slopes
	Exhibit 6

Name of Wetland: Wetland B			
Wetland Size (acres, hectares):		1.32 ac	
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, e	etc.		
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, o See Exhibit 6	etc.		
Comments, Narrative Discussion, Justification of Category Changes:			
Final access (-4		
Final score : 47 C	ategory:	2	

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	Х	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	x	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		x
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		x

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <u>http://www.dnr.state.oh.us/dnap</u>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

			1
#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical	YES Wetland should be	(NO) Go to Question 2
	habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Obio, the Indiana Bat has	evaluated for possible Category 3 status	
	had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain an individual of or documented occurrences of federal or state listed	YES	NO
	threatened or endangered plant or animal species?	Wetland is a Category 3 wetland.	Go to Question 3
		Go to Question 3	
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high guality wetland?	YES	NO
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	
4	Significant Breeding or Concentration Area. Does the wetland	YES	NO
	waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis,</i> or	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no	YES	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses, cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is $<25\%2$	Wetland is a Category 3 wetland	Go to Question 7
		Go to Question 7	
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is $<25\%$?	Wetland is a Category 3 wetland	Go to Question 8a
		Go to Question 8a	\sim
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to the following characteristics:	YES	NO
	overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8b
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of	YES	NO
	deciduous trees with large diameters at breast height (dbh), generally	Wetland should be	Go to Question 9a
	diameters greater than 45cm (17.7in) dbh?	evaluated for possible Category 3 status.	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES	NO
	an elevation less than 575 feet on the USGS map, adjacent to this		
06	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
90	prevent erosion and the loss of aquatic plants, i.e. the wetland is	TES	NO
	partially hydrologically restricted from Lake Erie due to lakeward or	Wetland should be	Go to Question 9c
	andward dikes of other hydrological controls?	Category 3 status	
		Co to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
	i.e. the wetland is hydrologically unrestricted (no lakeward or upland		
	estuarine" wetland with lake and river influenced hydrology. These	Go to Question 9d	Go to Question 10
	include sandbar deposition wetlands, estuarine wetlands, river mouth		
- 0d	wetlands, or those dominated by submersed aquatic vegetation.	VES	
3 u	vegetation communities, although non-native or disturbance tolerant	123	NO
	native species can also be present?	Wetland is a Category	Go to Question 9e
		5 welland	
		Go to Question 10	
9e	tolerant native plant species within its vegetation communities?	YES	NO
		Wetland should be	Go to Question 10
		evaluated for possible Category 3 status	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	Go to Question 10	NO
10	Lucas, Fulton, Henry, or Wood Counties and can the wetland be	120	
	characterized by the following description: the wetland has a sandy	Wetland is a Category	Go to Question 11
	several inches of the surface, and often with a dominance of the	5 wettand.	
	gramineous vegetation listed in Table 1 (woody species may also be	Go to Question 11	
	Natural Areas and Preserves can provide assistance in confirming this		
	type of wetland and its quality.		
11	Kellct wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies	YES	
	were formerly located in the Darby Plains (Madison and Union	Wetland should be	Complete
	Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Frie, Huron, Lucas, Wood Counties)	evaluated for possible Category 3 status	Quantitative Rating
	and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,		- totaling
	Montgomery, Van Wert etc.).	Complete Quantitative	
		raung	L

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.









47

Category 2

End of Quantitative Rating. Complete Categorization Worksheets.

1

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

ORAM S	Summary	Worksheet
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		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YESNO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	2
	Metric 2. Buffers and surrounding land use	12	14
	Metric 3. Hydrology	9	23
	Metric 4. Habitat	16	39
	Metric 5. Special Wetland Communities	0	0
	Metric 6. Plant communities, interspersion, microtopography	8	47
	TOTAL SCORE	47	Category based on score breakpoints 2

Complete Wetland Categorization Worksheet.
Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	VES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria		Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

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Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001		

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Background Information

Name: Eric Nagv	
Date:	
9/1/20	
FMH&T	
Address:	
5500 New Albany Road, Columbus, OH, 43054	
Phone Number:	
e-mail address:	
enagy@emht.com	
Name of Wetland: Wetland C	
Vegetation Communit(ies):	
Emergent	
HGM Class(es):	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
See Exhibit 1	
Lat/Long or UTM Coordinate	40 096491/-82 745678
LISGS Quad Name	40.000401/ 02.140070
	Jersey, Ohio
County	Licking
Township	Jersey TWP
Section and Subsection	
Hydrologic Unit Code	05060001-15-03
Site Visit	9/1/20
National Wetland Inventory Map	No
Ohio Wetland Inventory Map	
Soil Survey	Pewamo silty clay loam, low
	carbonate till, 0 to 2 percent slopes
Delineation report/map	Exhibit 6

Name of Wetland: Wetland C		
Wetland Size (acres, hectares):		0.08 ac
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.		
See Exhibit 6		
Comments, Narrative Discussion, Justification of Category Changes:		
		Γ
Final score : 28 Cate	gory:	1

Scoring Boundary Worksheet

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Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	Х	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	x	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		×
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		x

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	<u> </u>
	Critical Habitat I a the watland in a township spatian or subsection of	VEQ	
I	a United States Geological Survey 7.5 minute Quadrandle that has	TES	
	been designated by the U.S. Fish and Wildlife Service as "critical	Wetland should be	Go to Question 2
	habitat" for any threatened or endangered plant or animal species?	evaluated for possible	
	Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has	Category 3 status	
	had critical habitat designated (50 CFR 17.95(a)) and the piping plover	Go to Question 2	
	has had critical habitat proposed (65 FR 41812 July 6, 2000).		
2	Threatened or Endangered Species. Is the wetland known to contain	YES	NO
	an individual of, or documented occurrences of federal or state-listed	Wetland is a Category	Go to Question 3
	inteatened of endangered plant of animal species:	3 wetland.	Co to Question 5
		Go to Question 3	
3	Documented High Quality wetland. Is the wetland on record in Natural Heritage Database as a high guality wetland?	15	
	Hatara Hontago Databaco ao a high quality wonana.	Wetland is a Category	Go to Question 4
		3 wetland	
		Go to Question 4	
4	Significant Breeding or Concentration Area. Does the wetland	YES	NO
	contain documented regionally significant breeding or nonbreeding		\smile
	waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
	In size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover)	Wetland is a Category	Go to Question 6
	by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or	1 wetland	
	2) an acidic pond created or excavated on mined lands that has little or		
	no vegetation?	Go to Question 6	
o	significant inflows or outflows. 2) supports acidophilic mosses.	YES	
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30%	Wetland is a Category	Go to Question 7
	cover, 4) at least one species from Table 1 is present, and 5) the	3 wetland	
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
_	is saturated during most of the year, primarily by a discharge of free		
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0)	Wetland is a Category	Go to Question 8a
	invasive species listed in Table 1 is <25%?		
	····	Go to Question 8a	
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	overstory canopy trees of great age (exceeding at least 50% of a	Wetland is a Category	Go to Question 8h
		2 wetland	
	projected maximum attainable age for a species); little or no evidence	s welland.	
	projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100	5 weitand.	
	projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canoput trace interpersed with canoput card classificant surplayer	Go to Question 8b	
	projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of	YES	NO
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible	Go to Question 9a
		Category 3 status.	
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES	NO
	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially bydrologically restricted from Lake Frie due to lakeward or	Wetland should be	Go to Question 9c
	landward dikes or other hydrological controls?	evaluated for possible	
		Category 3 status	
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
	border alterations), or the wetland can be characterized as an	Go to Question 9d	Go to Question 10
	"estuarine" wetland with lake and river influenced hydrology. These		
	include sandbar deposition wetlands, estuarine wetlands, river mouth		
9d	Does the wetland have a predominance of native species within its	YES	NO
•••	vegetation communities, although non-native or disturbance tolerant		
	native species can also be present?	Wetland is a Category	Go to Question 9e
		3 wetland	
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
		Wetland should be	Go to Question 10
		evaluated for possible	
		Category 3 status	
		Go to Question 10	\frown
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	NO
	characterized by the following description: the wetland has a sandy	Wetland is a Category	Go to Question 11
	substrate with interspersed organic matter, a water table often within	3 wetland.	
	several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be	Go to Question 11	
	present). The Ohio Department of Natural Resources Division of		
	Natural Areas and Preserves can provide assistance in confirming this		
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	NO
	dominated by some or all of the species in Table 1. Extensive prairies		
	were formerly located in the Darby Plains (Madison and Union	Wetland should be	Complete
	Counties), Sandusky Flams (wyandol, Clawiolu, and Manon Counties), northwest Ohio (e.g. Erie. Huron. Lucas. Wood Counties).	Category 3 status	Rating
	and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,		
	Montgomery, Van Wert etc.).	Complete Quantitative	
	1	rauny	I

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.



Rater(s): Eric Nagy





28 0

Category 1

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

of marginal quality

and of highest quality

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

	circle		
		answer or	
		insert	Result
		score	· · · · ·
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YESNO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	0
	Metric 2. Buffers and surrounding land use	12	12
	Metric 3. Hydrology	5	17
	Metric 4. Habitat	8	25
	Metric 5. Special Wetland Communities	0	25
	Metric 6. Plant communities, interspersion, microtopography	3	28
	TOTAL SCORE	28	Category based on score breakpoints 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	<u>.</u>	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria		Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

	Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization			
Version 5.0	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001		

Instructions

The investigator is *STRONGLY URGED* to read the Manual for Using the Ohio Rapid Assessment Method for Wetlands for further elaboration and discussion of the questions below prior to using the rating forms.

The Narrative Rating is designed to categorize a wetland or to provide alerts to the Rater based on the presence or possible presence of threatened or endangered species. The presence or proximity of such species is often an indicator of the quality and lack of disturbance of the wetland being evaluated. In addition, it is designed to categorize certain wetlands as very low quality (Category 1) or very high quality (Category 3) regardless of the wetland's score on the Quantitative Rating. In addition, the Narrative Rating also alerts the investigator that a particular wetland *may* be a Category 3 wetland, again, regardless of the wetland's score on the Quantitative Rating.

It is *VERY IMPORTANT* to properly and thoroughly answer each of the questions in the ORAM in order to properly categorize a wetland. To *properly* answer all the questions, the boundaries of the wetland being assessed must be correctly identified. Refer to Scoring Boundary worksheet and the User's Manual for a discussion of how to determine the "scoring boundaries." In some instances, the scoring boundaries may differ from the "jurisdictional boundaries."

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories. The most recent version of this document is posted on Ohio EPA's Division of Surface Water web page at: <u>http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx</u>

Background Information

Name: Eric Nagy	
Date:	
9/1/20	
Affiliation:	
Address:	
5500 New Albany Road, Columbus, OH, 43054	
Phone Number:	
e-mail address:	
enagy@emht.com	
Name of Wetland: Wetland D	
Vegetation Communit(ies):	
depressional	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
See Exhibit 1	
	_
Lat/Long or UTM Coordinate	40.094382/-82.745031
USGS Quad Name	Jersev. Ohio
County	Licking
Township	Jersev TWP
Section and Subsection	
Hydrologic Unit Code	05060001-15-03
Site Visit	9/1/20
National Wetland Inventory Map	9/1/20
Ohio Wetland Inventory Map	INO
	NA
Soli Survey	Bennington silt loam, 2 to 6 percent slopes
Delineation report/map	Exhibit 6

Name of Wetland: Wetland D		
Wetland Size (acres, hectares):		0.15 ac
Sketch: Include north arrow, relationship with other surface waters, vegetation zones,	, etc.	
See Exhibit 6		
Comments, Narrative Discussion, Justification of Category Changes:		
Final score : 45	Jategory:	2

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	Х	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human- induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	x	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		×
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		x

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

Critical Habitat Is the watland in a township section or subsection of	VEQ	
a United States Geological Survey 7.5 minute Quadrangle that has	160	
been designated by the U.S. Fish and Wildlife Service as "critical	Wetland should be	Go to Question 2
habitat" for any threatened or endangered plant or animal species?	evaluated for possible	
Note: as of January 1, 2001, of the federally listed endangered or the ladiana Bat has	Category 3 status	
had critical habitat designated (50 CFR 17.95(a)) and the piping plover	Go to Question 2	
has had critical habitat proposed (65 FR 41812 July 6, 2000).		
Threatened or Endangered Species. Is the wetland known to contain	YES	(NO)
an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	Wetland is a Category	Go to Question 3
	3 wetland.	
Desumented Link Quelity Wetland Is the wetland on record in	Go to Question 3	
Natural Heritage Database as a high quality wetland?	TEO	
	Wetland is a Category	Go to Question 4
	3 wetland	
	Go to Question 4	
Significant Breeding or Concentration Area. Does the wetland	YES	NO
contain documented regionally significant breeding or nonbreeding		\smile
waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category	Go to Question 5
	5 welland	
	Go to Question 5	
Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES	NO
In size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover)	Wetland is a Category	Go to Question 6
by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or	1 wetland	
2) an acidic pond created or excavated on mined lands that has little or		
no vegetation? Bogs Is the wotland a post accumulating wotland that 1) has no	Go to Question 6	NO
significant inflows or outflows. 2) supports acidophilic mosses.	TE5	
particularly Sphagnum spp., 3) the acidophilic mosses have >30%	Wetland is a Category	Go to Question 7
cover, 4) at least one species from Table 1 is present, and 5) the	3 wetland	
cover of invasive species (see Table 1) is <23%?	Go to Question 7	
Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO
is saturated during most of the year, primarily by a discharge of free	Watland is a Catagory	
and with one or more plant species listed in Table 1 and the cover of	3 wetland is a Calegory	Go to Question 8a
invasive species listed in Table 1 is <25%?	owelland	
· · · · · · · · · · · · · · · · · · ·	Go to Question 8a	
"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by but not limited to the following characteristics:	YES	\bigcirc
overstory canopy trees of great age (exceeding at least 50% of a	Wetland is a Categorv	Go to Question 8b
projected maximum attainable age for a species); little or no evidence	3 wetland.	
of human-caused understory disturbance during the past 80 to 100	Co to Ourother Ob	
years, an an-aged structure and mutiliayered canoples; aggregations of canopy trees interspersed with canopy gaps; and significant numbers	GO TO QUESTION SD	
of standing dead space and downed logs?		
	 Category 1 Wetlands. Is the wetland line viewship, section, or subsection of a vegetation for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000). Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species? Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland? Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas? Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation? Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly Sphagnum spp. 3) the acidophilic mosses have >30% cover of invasive species (see Table 1) is <25%? Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%? Told Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteri	Childen Habitation Files Childen Habitation Construction Deen designated by the U.S. Fish and Wildlife Service as "critical habitation or mainal species? Wetland should be evaluated for possible Category 3 status Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has an individual of, or documented (50 FR 41812 July 6, 2000). Wetland should be evaluated for possible Category 3 status Data critical habitat designated (50 CFR 41812 July 6, 2000). YES Threatened or Endangered Species. Is the wetland known to contain individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species? YES Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland? YES Wetland is a Category 3 wetland Go to Question 3 Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas? YES Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) or ovegetation? YES Spanicularly Sphagnum sp., 3) the acidophilic mosses, have 30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%? YES

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of	YES	NO
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible	Go to Question 9a
		Category 3 status.	
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES	NO
	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially bydrologically restricted from Lake Frie due to lakeward or	Wetland should be	Go to Question 9c
	landward dikes or other hydrological controls?	evaluated for possible	
		Category 3 status	
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
	border alterations) or the wetland can be characterized as an	Go to Question 9d	Go to Question 10
	"estuarine" wetland with lake and river influenced hydrology. These		
	include sandbar deposition wetlands, estuarine wetlands, river mouth		
9d	Does the wetland have a predominance of native species within its	YES	NO
0 u	vegetation communities, although non-native or disturbance tolerant		
	native species can also be present?	Wetland is a Category	Go to Question 9e
		3 wetland	
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
		Wetland should be	Go to Question 10
		evaluated for possible	
		Category 3 status	
		Go to Question 10	\frown
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	NO
	characterized by the following description: the wetland has a sandy	Wetland is a Category	Go to Question 11
	substrate with interspersed organic matter, a water table often within	3 wetland.	
	several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be	Go to Question 11	
	present). The Ohio Department of Natural Resources Division of		
	Natural Areas and Preserves can provide assistance in confirming this		
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	NO
	dominated by some or all of the species in Table 1. Extensive prairies		
	were formerly located in the Darby Plains (Madison and Union	Wetland should be	Complete
	Counties), Sandusky Plains (wyandol, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties).	Category 3 status	Rating
	and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,		
	Montgomery, Van Wert etc.).	Complete Quantitative	
	1	raung	l

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.









 2
 Present in moderate amounts of highest quality

 3
 Present in moderate or greater amounts and of highest quality

Category 2

End of Quantitative Rating. Complete Categorization Worksheets.

45

	circle		
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YESNO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	1	1
	Metric 2. Buffers and surrounding land use	12	- 13 -
	Metric 3. Hydrology	11	24
	Metric 4. Habitat	16	40
	Metric 5. Special Wetland Communities	0	40
	Metric 6. Plant communities, interspersion, microtopography	5	45
	TOTAL SCORE	45	Category based on score breakpoints 2

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	<u>_</u>	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions:	YES Wetland is	NO	Is quantitative rating score less than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC
Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	categorized as a Category 3 wetland		Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over- categorized by the ORAM
Did you answer "Yes" to any of the following questions:	YES Wetland should be	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using
Narrative Rating Nos . 1, 8b, 9b, 9e, 11	evaluated for possible Category 3 status		either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to	YES	NO	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes,
Narrative Rating No. 5	Wetland is categorized as a Category 1 wetland		reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the <i>"gray zone"</i> for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1- 54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.



End of Ohio Rapid Assessment Method for Wetlands.

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Case No(s). 21-1061-EL-BGN

Summary: Application Exhibit M Wetland and Waterbody Delineation electronically filed by Teresa Orahood on behalf of Dylan F. Borchers