LINCOLN PARK – RIVERBEND 138 kV TRANSMISSION LINE PROJECT

WETLAND DELINEATION AND STREAM ASSESSMENT REPORT

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March 2021

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LIST OF ACRONYMS and ABBREVIATIONS

ATSI American Transmission Systems, Incorporated

CWH Coldwater Habitat

DBH Diameter at Breast Height

°F Degree Fahrenheit

FAC Facultative

FACU Facultative upland FACW Facultative wetland

GPS Global Positioning System

HHEI Headwater Habitat Evaluation Index

IBI Index of Biotic Integrity

NRCS Natural Resources Conservation Service

NWI National Wetlands Inventory

NWP Nationwide Permit

OAC Ohio Administrative Code

OBL Obligate wetland

OEPA Ohio Environmental Protection Agency

OHWM Ordinary High Water mark

ORAM Ohio Rapid Assessment Method

PEM Palustrine Emergent
PFO Palustrine Forested
PHW Primary Headwater
PSS Palustrine Scrub/Shrub

OHEI Qualitative Habitat Evaluation Index

ROW Right-of-way

UPL Upland

U.S. United States

USACE United States Army Corps of Engineers
USDA United States Department of Agriculture
USFWS United States Fish and Wildlife Service

USGS United States Geological Survey

WWH Warmwater Habitat





1.0 INTRODUCTION

American Transmission Systems, Incorporated (ATSI), a FirstEnergy Company (FirstEnergy), is proposing to construct a new 138 kV transmission line from the existing Riverbend Substation to the existing Lincoln Park Substation in Youngstown, Mahoning County, Ohio. The Lincoln Park - Riverbend 138 kV Transmission Line (Project) is located on the United States Geological Survey (USGS) Youngstown, Ohio and Campbell, Ohio 7.5-minute series topographic quadrangles (National Geographic Society, 2013) (Figure 1). The Project begins at the Riverbend Substation and terminates at the Lincoln Park Substation, in the City of Youngstown. Additionally, ATSI intends to expand the existing Riverbend Substation to accommodate the new transmission line. The approximate coordinates for the Riverbend Substation are 41.1043°, -80.6603° and the Lincoln Park Substation are 41.103°, -80.5953°. The limits of the Project investigation are defined by the survey boundary (Figure 2 and Figure 3).

Land uses in the Project area were assigned a general classification based upon the principal land characteristics as observed through aerial photography review and observations during the field surveys. General land use types in the vicinity of the proposed Project include residential lots, agricultural, commercial lots, wetlands, wooded lots, railroad right-of-way (ROW), and maintained transmission line ROW. Railroad and maintained transmission line ROWs are the dominant land uses in the vicinity of the Project.

The site drains to Crab Creek, Dry Run, Mahoning River, and their unnamed tributaries (UNT). Crab Creek, Dry Run, and Mahoning River are within the Upper Ohio-Beaver drainage basin, which flows east into the Ohio River. The watersheds identified in the Project area include the Dry Run-Mahoning River Watershed [Hydrologic Unit Code (HUC) HUC12 050301030807] and the Crab Creek Watershed (HUC12 050301030807). As per the Section 401 Water Quality Certification (WQC) for Nationwide Permit and Stream Eligibility Web Map website, the Project is located within Eligible areas and impacts to streams, if required, could be authorized by the United States Army Corps of Engineers (USACE) under the Nationwide Permit Conditions.

Crab Creek and Mahoning River have Ohio Administrative Code (OAC) Chapter 3745-1 aquatic life habitat use designations of Warm Water Habitat (WWH). Dry Run has an OAC Chapter 3745-1 aquatic life habitat use designation of WWH except for the portion within the Project area located between Oak Street (RM 1.42) and Wilson Avenue (RM 0.31), which is listed as Coldwater Habitat (CWH) (OAC 2018).

According to the Ohio 2018 Ohio Integrated Water Quality Monitoring and Assessment Report, the Dry Run-Mahoning River watershed is listed as impaired for the aquatic life habitat and





recreation designated uses. Sources of impairment include natural causes and sources (OEPA 2018b).

2.0 METHODOLOGY

Prior to conducting field surveys, digital and published county Natural Resources Conservation Service (NRCS) soil surveys, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, and U.S. Geological Survey (USGS) 7.5-minute topographic maps were reviewed as an exercise to identify the occurrence and location of potential wetland areas (Figure 2). The purpose of the field survey was to assess whether wetlands and other "Waters of the U.S." are present within the Project's survey boundary. The Project's survey boundary is approximately 388acres that encompasses the proposed 65-foot ROW centered along the Project's proposed 1.21-miles common route, 4.00-miles preferred route, and 5.02-miles alternative route. The survey boundary extends outside of the 65-foot ROW to include future potential ancillary work areas such as lay-down yards, pull sites, and access roads. Additionally, the Project's survey boundary includes the extent of the proposed expansion to the existing Riverbend Substation Project as shown on Figure 3

AECOM ecologists walked the Project's survey boundary, access roads, and work areas to conduct a wetland delineation and stream assessment. Initial field investigations were conducted on January 6th to 8th, August 20, October 06, November 03, 2020, and March 11, 2021. During the field survey, the physical boundaries of observed water features, if identified, were recorded using sub-decimeter capable EOS Arrow Global Navigation Satellite System (GNSS) receivers in conjunction with ArcCollector application on iPad tablets. The GNSS data were imported into ArcMap GIS software, where the data was then reviewed and edited for accuracy.

2.1 WETLAND DELINEATION

The Project's survey boundary was evaluated according to the procedures outlined in the USACE 1987 Wetland Delineation Manual (1987 Manual) (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (Regional Supplement) (USACE 2012). The Regional Supplement was released in August 2010 by the USACE to address regional wetland characteristics and improve the accuracy and efficiency of wetland delineation procedures. Version 2.0 was released in January 2012. The 1987 Manual and Regional Supplement define wetlands as areas that have positive evidence of three environmental parameters: hydric soils, wetland hydrology, and hydrophytic vegetation. Wetland boundaries are placed where one or more of these parameters give way to upland characteristics.





Since quantitative data were not available for any of the identified wetlands, AECOM utilized the routine delineation method described in the 1987 Manual and Regional Supplement that consisted of a pedestrian site reconnaissance, including identifying the vegetation communities, soils identification, a geomorphologic assessment of hydrology, and notation of disturbance. The methodology used to examine each parameter is described in the following sections.

Land uses observed within the Project's survey boundary were assigned a general classification based upon the principal land characteristics of the location as observed through aerial photography review and observations during the field surveys.

2.1.1 Soils

Soils were examined for hydric soil characteristics using a spade shovel to extract soil samples. A *Munsell Soil Color Chart* (Kollmorgen Corporation 2010) was used to identify the hue, value, and chroma of the matrix and mottles of the soils. Generally, mottled soils with a matrix chroma of two or less, or unmottled soils with a matrix chroma of one or less are considered to exhibit hydric soil characteristics (Environmental Laboratory 1987). In sandy soils, mottled soils with a matrix chroma of three or less, or unmottled soils with a matrix chroma of two or less are considered to be hydric soils.

2.1.2 Hydrology

The 1987 Manual requires that an area be inundated or saturated to the surface for an absolute minimum of five percent of the growing season (areas saturated between five percent and 12.5 percent of the growing season may or may not be wetlands, while areas saturated over 12.5 percent of the growing season fulfill the hydrology requirements for wetlands). The Regional Supplement states that the growing season dates are determined through onsite observations of the following indicators of biological activity in a given year: (1) above-ground growth and development of vascular plants, and/or (2) soil temperature (12-in. depth) is 41 degrees Fahrenheit (°F) or higher as an indicator of soil microbial activity. Therefore, the beginning of the growing season in a given year is indicated by whichever condition occurs earlier, and the end of the growing season by whichever persists later.

The *Regional Supplement* also states that if onsite data gathering is not practical, the growing season can be approximated by the number of days between the average (five years out of ten, or 50 percent probability) date of the last and first 28°F air temperature in the spring and fall, respectively. The National Weather Service WETS data review from the NRCS National Water and Climate Center for Mahoning County states that both stations lack sufficient data for growing season calculation; therefore, data from the neighboring Portage County was reviewed. In an





average year for neighboring Portage County, the growing season period lasts from April 18 to November 3, or about 199 days. In the Project area, five percent of the growing season equates to approximately eleven days (NRCS 2018b).

The soils and ground surface were examined for evidence of wetland hydrology in lieu of detailed hydrological data. This is an acceptable approach according to the *1987 Manual* and *Regional Supplement*. Evidence indicating wetland hydrology typically includes primary indicators such as surface water, saturation, water marks, drift deposits, water-stained leaves, sediment deposits and oxidized rhizospheres on living roots; and secondary indicators such as, drainage patterns, geomorphic position, micro-topographic relief, and a positive Facultative (FAC)-neutral test (USACE 2012).

2.1.3 Vegetation

Dominant vegetation was visually assessed for each stratum (tree, sapling/shrub, herb and woody vine) and an indicator status of obligate wetland (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), and/or upland (UPL) was assigned to each plant species based on the U.S. Army Corps of Engineers 2018 National Wetland Plant List: Northcentral and Northeast Region (Lichvar et al. 2018), which encompasses the area of the Project. An area is determined to have hydrophytic vegetation when, under normal circumstances, 50 percent or more of the composition of the dominant species are OBL, FACW and/or FAC species. Vegetation of an area was determined to be non-hydrophytic when more than 50 percent of the composition of the dominant species was FACU and/or UPL species. In addition to the dominance test, the FAC-Neutral test and prevalence tests are used to determine if a wetland has a predominance of hydrophytic vegetation. Recent USACE guidance indicates that to the extent possible, the hydrophytic vegetation decision should be based on the plant community that is normally present during the wet portion of the growing season in a normal rainfall year (USACE 2012).

Vegetation sampling for wetland delineations can be challenging when plants die back due to freezing temperatures or other factors (USACE, 2010). The end of the growing season is indicated when woody deciduous species lose their leaves or the last herbaceous plants cease flowering and their leaves become dry or brown, whichever occurs latest. The wetland delineation field work within the Project area was conducted after the occurrence of these events and therefore, outside the normal growing season. Conducting a wetland delineation outside the normal growing season can make identifying the wetland/upland boundary more challenging and may require further assessment during the next growing season.





2.1.4 Wetland Classifications

Wetlands were classified based on the naming convention found in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). If wetlands were identified within the Project's survey boundary; they would typically be classified as freshwater, palustrine systems, which include non-tidal wetlands dominated by trees, shrubs, emergents, mosses, or lichens. The palustrine wetland classification types are as follows:

- *PEM* Palustrine emergent wetlands are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.
- *PSS* Palustrine scrub/shrub wetlands are characterized by woody vegetation that is less than three inches diameter at breast height (DBH), and greater than 3.28 feet tall. The woody angiosperms (i.e., small trees or shrubs) in this broad-leaved deciduous community have relatively wide, flat leaves that are shed annually during the cold or dry season.
- PFO Palustrine forested wetlands are characterized by woody vegetation that is three
 inches or more DBH, regardless of total height. These wetlands generally include a canopy
 of broad-leaved and needle-leaved trees, an understory or young saplings and shrubs, and
 an herbaceous layer.
- *PUB* Palustrine unconsolidated bottom wetlands includes all open water wetlands and deepwater habitats with at least 25 percent cover of particles smaller than stones, and a vegetative cover less than 30 percent. Palustrine open water wetlands are characterized by the lack of large stable surfaces for plant and animal attachment.
- *PAB* Palustrine aquatic bed wetlands are characterized by plants that grow principally on or below the surface of the water for most of the growing season in most years. These plants are best developed in relatively permanent water or under conditions of repeated flooding.
- *PML* Palustrine moss-lichen wetlands include areas where mosses or lichens cover at least 30 percent of substrates other than rock and where emergents, shrubs, or trees alone or in combination cover less than 30 percent.
- PUS Palustrine unconsolidated shore wetlands are characterized by substrates lacking vegetation except for pioneer plants that become established during brief periods when growing conditions are favorable. Unconsolidated shore wetlands have less than 30% areal coverage of vegetation and less than 75 percent areal cover of stones, boulders or bedrock.





• *PRB* – Palustrine rock bottom wetlands includes all wetlands and deepwater habitats with substrates having an aerial cover of stones, boulders, or bedrock 75 percent or greater and vegetative cover of less than 30 percent. Rock bottom wetlands and deepwater habitats are characterized by substrates predominantly made up of stones, boulders, or bedrock.

For some wetlands, multiple Cowardin classifications may be present where more than one classification's vegetation is dominant (vegetation covers 30 percent or more of the substrate). Where multiple Cowardin classifications are present, the Cowardin classification of the plants that constitute the uppermost layer of vegetation is listed.

2.1.5 Ohio Rapid Assessment Method v. 5.0

The OEPA *Ohio Rapid Assessment Method for Wetlands* v. 5.0 (*ORAM*) was developed to determine the relative ecological quality and level of disturbance of a particular wetland in order to meet requirements under Section 401 of the Clean Water Act. Wetlands are scored on the basis of hydrology, upland buffer, habitat alteration, special wetland communities, and vegetation communities. Each of these subject areas is further divided into subcategories under *ORAM* resulting in a score that describes the wetland using a range from 0 (low quality and high disturbance) to 100 (high quality and low disturbance). Wetlands scored from 0 to 29.9 are grouped into "Category 1", 30 to 59.9 are "Category 2" and 60 to 100 are "Category 3". Transitional zones exist between "Categories 1 and 2" from 30 to 34.9 and between "Categories 2 and 3" from 60 to 64.9. However, according to the OEPA, if the wetland score falls into the transitional range, it must be given the higher Category unless scientific data can prove it should be in a lower Category (Mack 2001).

Category 1 Wetlands

Category 1 wetlands support minimal wildlife habitat, hydrological and recreational functions, and do not provide for or contain critical habitats for threatened or endangered species. In addition, Category 1 wetlands are often hydrologically isolated and have some or all of the following characteristics: low species diversity, no significant habitat for wildlife use, limited potential to achieve wetland functions, and/or a predominance of non-native species. These limited quality wetlands are considered to be a resource that has been severely degraded or has a limited potential for restoration or is of low ecological functionality.

Category 2 Wetlands

Category 2 wetlands "...support moderate wildlife habitat, or hydrological or recreational functions," and as wetlands which are "...dominated by native species but generally without the presence of, or habitat for, rare, threatened or endangered species; and wetlands which are





degraded but have a reasonable potential for reestablishing lost wetland functions." Category 2 wetlands constitute the broad middle category of "good" quality wetlands, and can be considered a functioning, diverse, healthy water resource that has ecological integrity and human value. Some Category 2 wetlands are lacking in human disturbance and considered to be naturally of moderate quality; others may have been Category 3 wetlands in the past but have been degraded to Category 2 status.

Category 3 Wetlands

Wetlands that are assigned to Category 3 have "...superior habitat, or superior hydrological or recreational functions." They are typified by high levels of diversity, a high proportion of native species, and/or high functional values. Category 3 wetlands include wetlands which contain or provide habitat for threatened or endangered species, are high quality mature forested wetlands, vernal pools, bogs, fens, or which are scarce regionally and/or statewide. A wetland may be a Category 3 wetland because it exhibits one or all of the above characteristics. For example, a forested wetland located in the flood plain of a river may exhibit "superior" hydrologic functions (e.g., flood retention, nutrient removal), but not contain mature trees or high levels of plant species diversity.

2.2 STREAM CROSSINGS

Regulatory activities under the Clean Water Act provide authority for states to issue water quality standards and "designated uses" to all waters of the U.S. upstream to the highest reaches of the tributary streams. In addition, the Federal Water Pollution Control Act of 1972 and its 1977 and 1987 amendments require knowledge of the potential fish or biological communities that can be supported in a stream or river, including upstream headwaters. Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high water mark (OHWM). The USACE defines OHWM as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (USACE 2005).

Stream assessments were conducted using the methods described in the OEPA's *Methods for Assessing Habitat in Flowing Waters: Using OEPA's Qualitative Habitat Evaluation Index* (Rankin 2006) and *Field Methods for Evaluating Primary Headwater Streams in Ohio, Version 4.1* (Ohio EPA 2020).





2.2.1 OEPA Qualitative Habitat Evaluation Index

The qualitative habitat evaluation index (QHEI) is designed to provide a rapid determination of habitat features that correspond to those physical factors that most affect fish communities and which are generally important to other aquatic life (e.g., macroinvertebrates). The quantitative measure of habitat used to calibrate the QHEI score are Indices (or Index) of Biotic Integrity (IBI) for fish. In most instances the QHEI is sufficient to give an indication of habitat quality, and the intensive quantitative analysis used to measure the IBI is not necessary. It is the IBI, rather than the QHEI, that is directly correlated with the aquatic life use designation for particular surface water.

The QHEI method is generally considered appropriate for waterbodies with drainage basins greater than one square mile, if natural pools are greater than 15.75 inches, or if the water feature is shown as blue-line waterways on USGS 7.5-minute topographic quadrangle maps. In order to convey general stream habitat quality to the regulated public, the OEPA has assigned narrative ratings to QHEI scores. The ranges vary slightly for headwater streams (H are those with a watershed area less than or equal to 20 mi²) versus larger streams (L are those with a watershed area greater than 20 mi²). The Narrative Rating System includes: Very Poor (<30 H and L), Poor (30 to 42 H, 30 to 44 L), Fair (43 to 54 H, 45 to 59 L), Good (55 to 69 H, 60 to 74 L) and Excellent (70+ H, 75+ L) (Rankin 2006).

2.2.2 OEPA Primary Headwater Habitat Evaluation Index

Headwater streams are typically considered to be first-order and second-order streams, meaning streams that have no upstream tributaries (or "branches") and those that have only first-order tributaries, respectively. The stream order concept can be problematic when used to define headwater streams because stream-order designations vary depending upon the accuracy and resolution of the stream delineation. Headwater streams are generally not shown on USGS 7.5minute topographic quadrangles and are sometimes difficult to distinguish on aerial photographs. Nevertheless, headwater streams are now recognized as useful monitoring units due to their abundance, widespread spatial scale and landscape position (Fritz et al. 2006). Impacts to headwater streams can have a cascading effect on the downstream water quality and habitat value. The headwater habitat evaluation index (HHEI) is a rapid field assessment method for physical habitat that can be used to appraise the biological potential of most Primary Headwater Habitat (PHWH) streams. The HHEI was developed using many of the same techniques as used for QHEI, but has criteria specifically designed for headwater habitats. To use HHEI, the stream must have a "defined bed and bank, with either continuous or periodically flowing water, with watershed area less than or equal to 1.0 mi2 (259ha), and a maximum depth of water pools equal to or less than 15.75 inches" (Ohio EPA 2020).





Headwater streams are scored on the basis of channel substrate composition, bankfull width, and maximum pool depth. Assessments result in a score (0 to 100) that is converted to a specific PHWH stream class. Streams that are scored from 0 to 29.9 are typically grouped into "Class 1 PHWH Streams", 30 to 69.9 are "Class 2 PHWH Streams", and 70 to 100 are "Class 3 PHWH Streams". Technically, a stream can score relatively high, but actually belong in a lower class, and vice-versa. According to the OEPA, if the stream score falls into a class and the scorer feels that based on site observations that score does not reflect the actual stream class, a decision-making flow chart can be used to determine appropriate PHWH stream class using the HHEI protocol (Ohio EPA 2020). Evidence of anthropogenic alterations to the natural channel will result in a "Modified" qualifier for the stream.

Class 1 PHWH Streams: Class 1 PHWH Streams are those that have "normally dry channels with little or no aquatic life present" (Ohio EPA 2020). These waterways are usually ephemeral, with water present for short periods of time due to infiltration from snowmelts or rainwater runoff.

Class 2 PHWH Streams: Class 2 PHWH Streams are equivalent to "warm-water habitat" streams. This stream class has a "moderately diverse community of warm-water adapted native fauna either present seasonally or on an annual basis" (Ohio EPA 2020). These species communities are composed of vertebrates (fish and salamanders) and/or benthic macroinvertebrates that are considered pioneering, headwater temporary, and/or temperature facultative species.

Class 3 PHWH Streams: Class 3 PHWH Streams usually have perennial water flow with coolcold water adapted native fauna. The community of Class 3 PHWH Streams is comprised of vertebrates (either cold water adapted species of headwater fish and or obligate aquatic species of salamanders, with larval stages present), and/or a diverse community of benthic cool water adapted macroinvertebrates present in the stream continuously (on an annual basis).

2.2.3 401 Eligibility Watersheds

Under the 401 Water Quality Certification for the 2017 Nationwide Permits (NWP), OEPA has limited the use of the expedited permits for impacts to high quality streams in Ohio. OEPA has developed a map/shapefile which designates Ohio watersheds into three categories:

Ineligible Areas: If any stream proposed to be impacted is located in an ineligible area, then impacts to that stream are not eligible for coverage under the NWPs and an individual 401 WQC will be required from OEPA.

Possibly Eligible Areas: Any stream proposed to be impacted which is located in a possibly eligible area will require additional field screenings. The pH value must be collected, or assumed





to be greater than 6.5, and a QHEI or HHEI assessment must be performed on the stream. Flow charts provided in the OEPA Final Signed WQC NWP 2017 (OEPA 2017) will then be used to determine if stream impacts will be eligible for coverage under the NWP or if an individual 401 WQC is required.

Eligible Areas: Any impacts to streams located in eligible areas are eligible for coverage under the NWP.

3.0 RESULTS

AECOM identified a total of 32 wetland complexes, 35 streams, and no ponds within the entire Project's survey boundary that includes the proposed common route, preferred route, and alternative route. The individual resources identified within the survey boundary associated with the proposed common route, preferred route, and alternative route includes: 11 wetlands and 2 streams, 11 wetlands and 23 streams, and 10 wetlands and 12 streams, respectively. Furthermore, three upland data points were collected within the survey area associated with the expansion area of Riverbend Substation without the identification of any wetlands and/or streams. The wetlands, streams, and ponds identified within the Project's survey boundary are further discussed in the following sections.

3.1 WETLAND DELINEATION

3.1.1 Preliminary Soils Evaluation

Soils within each wetland were observed and documented as part of the delineation methodology. According to the USDA/NRCS Web Soil Surveys of Mahoning County, Ohio (NRCS 2018c) and the NRCS Hydric Soils Lists of Ohio, fourteen soil series are mapped within the Project's survey boundary (NRCS 2018a). Of these soil series, five soil map units are listed as hydric. Table 1 provides a detailed overview of all soil series and soil map units within the Project's survey boundary. Soil map units located within the Project's survey boundary are shown on Figure 2.

TABLE 1
SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE LINCOLN PARK-RIVERBEND 138 kV
TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Soil Series	Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component
Bogart	BgB	Bogart loam, 2 to 6 percent slopes	Terraces	No	NA
	BtB	Bogart loam, till substratum, 2 to 6 percent slopes	Terraces	No	NA





TABLE 1 SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE LINCOLN PARK-RIVERBEND 138 kV TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Soil Series	Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component
Chagrin	Ck	Chagrin loam	Flood Plains	No	NA
	ClD	Chili gravelly loam, 12 to 18 percent slopes	Terraces	No	NA
	CmC	Chili loam, 6 to 12 percent slopes	Terraces	No	NA
Chili	СоВ	Chili-Urban land complex, undulating	Terraces	No	NA
	СоС	Chili-Urban land complex, rolling	None Listed	Unranked	NA
Dekalb	DkF	Dekalb very stony loam, 25 to 50 percent slopes	Hills	No	NA
Fitchville	FcB	Fitchville silt loam, 2 to 6 percent slopes	Lake Plains, Lakebeds (Relict), Terraces on Valleys	No	NA
	FhB	Fitchville silt loam, till substratum, 2 to 6 percent slopes	Lake Plains, Terraces	No	NA
	JtB	Jimtown loam, 2 to 6 percent slopes	Terraces	No	NA
Jimtown	JuB	Jimtown loam, till substratum, 2 to 6 percent slopes	Terraces	No	NA
Lorain	Lc	Lorain silty clay loam	Depressions	Yes	Lorain (100)
Loudonville	LdE2	Loudonville loam, 18 to 25 percent slopes, moderately eroded	Hills	No	NA
Ravenna	RaB	Ravenna silt loam, 2 to 6 percent slopes	Till Plains on Uplands	No	NA
Rittman-Urban land complex	RuB	Rittman-Urban land complex, 2 to 6 percent slopes	Till Plains on Uplands	No	NA
Sebring	Sb	Sebring silt loam, 0 to 2 percent slopes	Lake Plains, Terraces on Valleys	Yes	Sebring (85)
Scoring	Se	Sebring silt loam, till substratum, 0 to 2 percent slopes	Till Plains, Terraces on Valleys	Yes	Sebring (85)





TABLE 1
SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE LINCOLN PARK-RIVERBEND 138 kV
TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Soil Series	Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component
	Sg	Sebring-Urban land complex, 0 to 2 percent slopes	Urban Land on Uplands	Unranked	NA
Udorthents	Ua	Udorthents, loamy, 2 to 25 percent slopes	None Listed	No	NA
Wadsworth-Urban land complex	WbB	Wadsworth-Urban land complex, 2 to 6 percent slopes	Till Plains on Uplands	No	NA
Wayland	Wc	Wayland silt loam	Flood Plains	Yes	Wayland (95)
-	W	Water	-	Yes	-

USDA NRCS. 2017 Soil Survey Geographic (SSURGO) Database. Available online at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm USDA NRCS. 2017. National Hydric Soils List by State. Available online at: http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/

3.1.2 National Wetland Inventory Map Review

According to NWI maps of the Campbell and Youngstown, Ohio quadrangles, the Project's survey boundary contains seven mapped NWI wetlands: one palustrine forested broad-leaved deciduous/emergent, persistent, seasonally flooded system (PFO1/EM1C), two palustrine scrubshrub broad-leaved deciduous, seasonally flooded system (PSS1C), two riverine, lower perennial, unconsolidated bottom, semi-permanently flooded systems (R2UBFx), one riverine, intermittent, streambed, seasonally flooded system (R4SBC), one riverine, lower perennial, unconsolidated bottom, intermittently exposed system (R2UBG), and one riverine, upper perennial, unconsolidated bottom, permanently flooded system (R3UBH). The mapped NWI features that were delineated in the field are described in Table 2. Locations of the NWI mapped wetlands are shown on Figure 2.

The NWI mapped wetlands that were identified within the Project's survey boundary were field verified during wetland delineation and stream assessment. The field verified NWI mapped resources includes:

- PFO habitat associated with Wetland RLP-20 (PFO1/EM1C),
- PFO habitat associated with Wetland RLP-19b (PSS1C),
- PSS habitat associated with Wetland RLP-16b (PSS1C),
- Perennial stream named Crab Creek associated with Stream RLP-02 (R2UBFx),
- Intermittent stream of an unnamed tributary to Dry Run associated with Stream RLP-15 (R4SBC),
- Perennial stream named Mahoning River associated with Stream RLP-01 (R2UBG), and





Perennial stream named Dry Run associated with Stream RLP-04 and RLP-29 (R3UBH).

3.1.3 Delineated Wetlands

During the delineation, AECOM identified a total of 32 wetland complexes, ranging in size from less than 0.01 acre to 3.5 acres within the Project's survey boundary. Some wetland boundaries extend beyond these areas, but only what was identified within the Project survey boundary were assessed. The 32 wetland complexes that were identified within the Project survey boundary are of seven different wetland habitat types and includes: 13 PEM wetlands, five PSS wetlands, five PFO wetlands, three PEM/PFO wetland complexes, three PEM/PSS wetland complexes, two PSS/PFO wetland complexes, and one PEM/PSS/PFO wetland complex. Table 2 provides a summary of the delineated wetlands within the Project's survey boundary broken out by each survey route (i.e. common route, preferred route, and alternative route). Acreage values provided in Table 2 have been rounded to up to two decimal places.

The locations and approximate extent of the wetlands identified within the Project's survey boundary is shown on Figure 3. Completed USACE and ORAM wetland delineation forms are provided in Appendix A and B, respectively. Color photographs taken of selected wetlands are provided in Appendix D.





TABLE 2
DELINEATED WETLANDS WITHIN THE LINCOLN PARK-RIVERBEND 138 kV TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Wetland Name	Latitude	Longitude	Cowardin Classification ¹	NWI Classification	ORAM Score	ORAM Category ²	Acreage within Survey Boundary	Acreage within 65-ft ROW
			C	ommon Route				
Wetland RLP-08a	41.0974343	-80.6018492	PEM	NA	26	G-1	0.05	0.02
Wetland RLP-08b	41.0973107	-80.6016080	PFO	NA	36	Category 2	0.24	0.01
Wetland RLP-09a	41.0976884	-80.5996523	PSS	NA	22	G	0.05	0.05
Wetland RLP-09b	41.0976884	-80.5996523	PEM	NA	33	Category 2	0.02	0.02
Wetland RLP-10	41.0978772	-80.5983081	PSS	NA	41	Category 2	0.19	0.06
Wetland RLP-11	41.0978210	-80.5975803	PEM	NA	37	Category 2	0.02	0.01
Wetland RLP-12	41.0981300	-80.5962091	PEM	NA	28	Category 1	0.04	0.04
Wetland RLP-13	41.0984196	-80.5966553	PSS	NA	37	Category 2	0.31	0.00
Wetland RLP-14	41.0997248	-80.5961294	PFO	NA	45	Category 2	0.37	0.16
Wetland RLP-15a	41.1015129	-80.5959436	PEM	NA	37	Cata = 2 = 2	0.08	0.00
Wetland RLP-15b	41.1007034	-80.5962000	PSS	NA	37	Category 2	0.17	0.00
Wetland RLP-16a	41.1006504	-80.5969034	PFO	PSS1C			4.39	0.00
Wetland RLP-16b	41.1014287	-80.5970648	PSS	PSS1C	40	Category 2	0.60	0.00
Wetland RLP-16c	41.1013430	-80.5964515	PSS	NA			1.07	0.00
Wetland RLP-17a	41.1026005	-80.5951044	PEM	NA			0.47	0.05
Wetland RLP-17b	41.1027066	-80.5946721	PSS	NA	45.5	Category 2	0.11	0.03
Wetland RLP-17c	41.1021188	-80.5950172	PFO	NA			1.54	0.07
Wetland RLP-28	41.100863	-80.594352	PFO	NA	31	Category 2	0.09	0.00
Sub-Total: 11	PEN	M: 2, PSS: 2, PF	FO:2, PSS/PFO: 1 PEM/PSS/		PEM/PSS:2	z, and	9.81	0.52
			P	referred Route				
Wetland RLP-01	41.0864987	-80.6279460	PEM	NA	7	Category 1	0.17	0.00
Wetland RLP-02	41.0957284	-80.6107813	PFO	NA	38	Category 2	0.08	0.00
Wetland RLP-03	41.0968282	-80.6088334	PSS	NA	25	Category 1	1.36	< 0.013
Wetland RLP-04	41.0968767	-80.6069102	PEM	NA	21	Category 1	0.04	0.00
Wetland RLP-05	41.0978844	-80.6047620	PEM	R4SBC	24.5	Category 1	0.15	0.00
Wetland RLP-06	41.0977737	-80.6039703	PSS	NA	26	Category 1	0.04	0.00
Wetland RLP-07	41.0979288	-80.6029135	PSS	NA	31	Category 2	0.56	0.00





TABLE 2
DELINEATED WETLANDS WITHIN THE LINCOLN PARK-RIVERBEND 138 kV TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Wetland Name	Latitude	Longitude	Cowardin Classification ¹	NWI Classification	ORAM Score	ORAM Category ²	Acreage within Survey Boundary	Acreage within 65-ft ROW
Wetland RLP-29a	41.09655	-80.611437	PSS	NA	43.5	Category 2	0.16	0.00
Wetland RLP-29b	41.096412	-80.611821	PEM	NA	43.5	Category 2	0.03	0.00
Wetland RLP-30	41.095433	-80.612788	PEM	R4SBC	31	Category 2	0.04	0.00
Wetland RLP-31	41.094916	-80.613035	PEM	NA	31	Category 2	0.04	0.00
Wetland RLP-32	41.094476	-80.613944	PFO	NA	32	Category 2	0.09	0.00
Sub-Total: 11		PEM	: 5, PSS: 3, PFO:	2, and PEM/PSS	5:1		2.76	<0.01 ³
				Alternate Route				
Wetland RLP-18a	41.0922675	-80.6029678	PFO	NA	39	Category 2	0.98	0.40
Wetland RLP-18b	41.0926057	-80.6031446	PEM	NA	39	Category 2	0.08	0.04
Wetland RLP-19a	41.0914440	-80.6023820	PSS	NA	41	Catagory	0.45	0
Wetland RLP-19b	41.0919480	-80.6023280	PFO	PSS1C	41	Category 2	0.73	0
Wetland RLP-20	41.0910272	-80.6091075	PFO	NA	42	Category 2	0.31	0
Wetland RLP-21a	41.0909485	-80.6098513	PEM	NA	34.5	Catagory	0.15	0.01
Wetland RLP-21b	41.0908724	-80.6101750	PFO	NA	34.3	Category 2	0.11	0.07
Wetland RLP-22	41.0902141	-80.6108262	PEM	NA	26	Category 1	0.13	0.04
Wetland RLP-23	41.0822853	-80.6107501	PEM	NA	35.5	Category 2	0.13	0.07
Wetland RLP-24	41.0818870	-80.6111817	PEM	NA	30.5	Category 2	0.08	0.04
Wetland RLP-25	41.0814969	-80.6114122	PEM	NA	19.5	Category 1	0.03	0.03
Wetland RLP-26	41.0815714	-80.6130651	PEM	NA	8	Category 1	0.04	0
Wetland RLP-27	41.0886039	-80.6381854	PEM	NA	19	Category 1	< 0.01	0
Sub-Total: 10		3.22	0.71					
Grand Total: 32	15.79	1.23						

^{1.} Cowardin Classification: PEM = palustrine emergent, PSS= Palustrine shrub/scrub, and PFO=palustrine forested



^{2.} ORAM Category: The Ohio Rapid Assessment Method for Wetlands v. 5.0, User's Manual and Scoring Forms state that if a wetland score falls into the transitional range, the wetland must be given the higher Category unless scientific data can prove it should be in a lower Category. Therefore, AECOM has assigned the identified wetlands to the higher category level and are indicated with an asterix (*) following the category classification.

^{3.} Acreage of a wetland that was calculated as being less than one hundredth were rounded up to one-hundredth of an acre and included within the sub-totals and grand totals.

^{4.} No wetlands were identified within the survey area associated with the Riverbend Substation expansion.



3.1.4 Delineated Wetlands ORAM V5.0 Results

Within the Project's survey boundary, 10 wetlands are identified as Category 1 and 21 wetlands as Category 2. Wetland RLP-01 received the lowest ORAM score, 7, while Wetland RLP-17 had the highest score, 45.5. A breakdown of ORAM scores can be found in Table 2 and Table 3, below. Completed ORAM forms are provided in Appendix B.

TABLE 3
SUMMARY OF DELINEATED WETLANDS WITHIN THE LINCOLN PARK-RIVERBEND
138 kV TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Cowardin Wetland Type ¹	ORAM Category 1	ORAM Category 2	ORAM Category 3	Number of Wetlands	Acreage within Project's Survey Boundary	Acreage within 65-Foot ROW
			Common Rout	e		
PEM	1	1	0	2	0.06	0.05
PSS	0	2	0	2	0.5	0.06
PFO	0	1	0	1	0.46	0.16
PEM/PFO	0	2	0	2	0.29	0.03
PEM/PSS	0	2	0	2	0.32	0.07
PSS/PFO	0	1	0	1	6.06	0.00
PEM/PSS/PFO	0	1	0	1	2.12	0.15
Sub-Total	1	10	0	11	7.35	0.52
]	Preferred Rout	e		
PEM	3	2	0	5	0.44	0.00
PSS	2	1	0	3	1.96	< 0.01
PFO	0	2	0	2	0.17	0.00
PEM/PSS	0	0	0	1	0.19	0.00
Sub-Total	5	6	0	11	2.76	<0.01
		A	Iternative Rou	te		
PEM	4	2	0	6	0.40	0.19
PFO	0	1	0	1	0.31	0.00
PSS/PFO	0	1	0	1	1.19	0.00
PEM/PFO	0	2	0	2	1.32	0.52
Sub-Total	4	6	0	10	3.22	0.71
			Grand-Total			
PEM	8	5	0	13	0.90	0.22
PSS	2	3	0	5	2.46	0.06
PFO	0	5	0	5	0.94	0.15
PEM/PFO	0	3	0	3	1.61	0.53
PEM/PSS	0	2	0	3	0.51	0.07
PSS/PFO	0	2	0	2	7.25	0.00
PEM/PSS/PFO	0	1	0	1	2.12	0.13
Total	10	21	0	32	15.79	1.23

^{1.} Cowardin classification: PFO = palustrine forested, PSS = palustrine scrub/shrub, PEM = palustrine emergent

^{2.} No wetlands were identified within the survey area associated with the Riverbend Substation expansion.





Category 1 Wetlands

Category 1 wetlands delineated within the Project's survey boundary consist of eight PEM wetlands and two PSS wetlands. The lowest scoring Category 1 wetland was Wetland RLP-01, with a score of 7, and the highest scoring Category 1 wetlands was Wetland RLP-12, with a score of 28.0. The wetlands exhibited very narrow to medium upland buffers and a range of low (e.g., shrubland, old field, or young second growth forest) to high intensive surrounding land use (residential, urban, and industrial). The wetlands also exhibited poor to fair plant community development with a moderate to extensive percentage of invasive species, and characteristically had habitat and hydrology in the early stages of recovering from previous manipulation due to mowing, clear cutting, selective cutting and other disturbances.

Category 2 Wetlands

Category 2 wetlands delineated within the Project's survey boundary consist of five PEM wetlands, five PFO wetlands, three PSS wetlands, two PSS/PFO wetland complexes, three PEM/PSS wetland complexes, and one PEM/PSS/PFO wetland complex. The lowest scoring Category 2 wetland was Wetland RLP-24 with a score of 30.5 and the highest scoring Category 2 wetland was Wetland RLP-17 with a score of 45.5. These wetlands generally exhibited narrow to medium upland buffers and very low (old field, shrubland, and second growth forest) to high land use (residential and urban). These wetlands also exhibited poor to fair habitat development with an absent to sparse coverage of invasive species. These wetlands characteristically had habitat and hydrology recovering or recovered from previous manipulation due to mowing, clearcutting, sedimentation, and other likely disturbances.

Category 3 Wetlands

No Category 3 wetlands were identified during the field surveys within the Project's survey boundary.

3.2 STREAM CROSSINGS

AECOM identified 35 streams, totaling 23,937 linear feet, within the Project's survey boundary, as listed in Table 4. The flow regimes are composed of 20 ephemeral, 9 intermittent, and 6 perennial streams. The locations of the streams identified within the Project's survey boundary are shown on Figure 3. Table 4 provides a summary of the delineated streams within the Project's survey boundary.

AECOM acknowledges that the identified ephemeral stream would no longer be considered a jurisdictional water of the U.S. under the Navigable Waters Protection Rule, which became





effective June 22, 2020. However, ephemerals streams are likely to be considered a water of the state and only the USACE can make final determinations as to jurisdiction of a "Waters of the U.S.".

Water use designations within the Mahoning River drainage basin are listed under OAC-3745-1-25. Within the Project's survey boundary, Crab Creek and Mahoning River have an existing aquatic use designation of WWH. Dry Run is listed as both WWH and CWH with thin Project area and the CWH portion of the stream is only located between Oak Street (RM 1.42) to Wilson Avenue (RM 0.31) (OAC 2018).

HHEI evaluations were conducted on 31 streams within the Project's survey boundary. QHEI evaluations were conducted on four streams in the Project's survey boundary (Mahoning River, two crossings of Dry Run, and Crab Creek). Due to its limited access, the Mahoning River was evaluated in conjunction with data available on the Ohio 2018 Integrated Water Quality Monitoring and Assessment Report (OEPA 2018b) with visible characteristics that were documented from banks during field reconnaissance. AECOM evaluations were conducted at or near the proposed transmission line crossing or access road crossing of each stream. These streams were identified using USGS topographic maps, aerial photography, and field reconnaissance.





TABLE 4
DELINEATED STREAMS WITHIN THE LINCOLN PARK-RIVERBEND 138 KV TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Report Name	Latitude	Longitude	Waterbody	Flow Regime	Form Used ^{1,2}	Score ³	Class or Narrative Description ³	Bankfull Width (feet)	Maximum Pool Depth (inches)	OEPA 401 WQC Eligibility for NWP ⁴	Linear Feet within Survey Boundary	Linear Feet within 65-ft ROW
						Comm	on Route					
Stream RLP-01	41.09473	-80.64371	Mahoning River	Perennial	QHEI	83.50	Warmwater Habitat	NA	NA	Eligible	717	158
Stream RLP-17	41.09788	-80.59839	UNT to Dry Run	Intermittent	HHEI	49	Modified Class 2	4	0.3	Eligible	270	52
	Sub-Total (2	2)			Pe	erennial:	1 and Intermitter	nt: 1			987	210
						Prefer	ed Route					
Stream RLP-01	41.09473	-80.64371	Mahoning River	Perennial	QHEI	83.50	Warmwater Habitat	145	NA	Eligible	3,420	70
Stream RLP-02	41.09540	-80.64404	Crab Creek	Perennial	QHEI	22	Warmwater Habitat	10	20	Eligible	351	93
Stream RLP-03	41.08684	-80.62860	UNT to Mahoning River	Ephemeral	ННЕІ	25	Modified Class 1	0.5	0.25	Eligible	156	0
Stream RLP-04	41.08719	-80.61995	Dry Run	Perennial	QHEI	51	Coldwater Habitat	18	20	Eligible	482	70
Stream RLP-05	41.08960	-80.61948	UNT to Dry Run	Intermittent	ННЕІ	39	Modified Class 2	4	1	Eligible	366	68
Stream RLP-06	41.08992	-80.61911	UNT to Dry Run	Ephemeral	ННЕІ	19	Modified Class 1	1	1	Eligible	210	0
Stream RLP-07	41.09164	-80.61846	UNT to Dry Run	Ephemeral	HHEI	25	Class 1	2.4	25	Eligible	87	0
Stream RLP-08	41.09278	-80.61581	UNT to Dry Run	Ephemeral	ННЕІ	27	Class 1	1.5	1	Eligible	534	155
					Prefe	rred Ro	ute (Continued)					



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TABLE 4
DELINEATED STREAMS WITHIN THE LINCOLN PARK-RIVERBEND 138 KV TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Report Name	Latitude	Longitude	Waterbody	Flow Regime	Form Used ^{1,2}	Score ³	Class or Narrative Description ³	Bankfull Width (feet)	Maximum Pool Depth (inches)	OEPA 401 WQC Eligibility for NWP ⁴	Linear Feet within Survey Boundary	Linear Feet within 65-ft ROW
Stream RLP-09	41.09403	-80.61313	UNT to Dry Run	Ephemeral	ННЕІ	23	Modified Class 1	3	1	Eligible	241	0
Stream RLP-10	41.09443	-80.61286	UNT to Dry Run	Intermittent	ННЕІ	67	Modified Class 2	7	4	Eligible	214	0
Stream RLP-11	41.09460	-80.61212	UNT to Dry Run	Ephemeral	HHEI	27	Modified Class 1	1.5	0	Eligible	475	0
Stream RLP-12	41.09533	-80.61094	UNT to Dry Run	Ephemeral	HHEI	27	Modified Class 1	2	0	Eligible	320	0
Stream RLP-13	41.09591	-80.61050	UNT to Dry Run	Perennial	HHEI	65	Modified Class 2	7	6	Eligible	1,695	0
Stream RLP-14	41.09648	-80.60866	UNT to Dry Run	Intermittent	HHEI	41	Modified Class 2	2.5	2	Eligible	931	0
Stream RLP-15	41.09723	-80.60422	UNT to Dry Run	Intermittent	HHEI	47	Modified Class 2	3	3	Eligible	326	70
Stream RLP-16	41.09797	-80.60343	UNT to Dry Run	Intermittent	HHEI	30	Modified Class 1	2	2	Eligible	294	0
Stream RLP-29	41.096492	-80.61180	Dry Run	Perennial	QHEI	56	Good Warmwater	30	18	Eligible	4,521	153
Stream RLP-30	41.094173	-80.613996	UNT to Dry Run	Ephemeral	HHEI	14	Modified Class 1	3	0	Eligible	163	0
Stream RLP-31	41.096385	-80.611233	UNT to Dry Run	Ephemeral	HHEI	12	Modified Class 1	3	0	Eligible	81	48
Stream RLP-32	41.097274	-80.609703	UNT to Dry Run	Ephemeral	ННЕІ	15	Modified Class 1	3	0	Eligible	95	0
Stream RLP-33	41.097412	-80.609366	UNT to Dry Run	Ephemeral	ННЕІ	14	Modified Class 1	3	0	Eligible	67	0
Stream RLP-34	41.09746	-80.609144	UNT to Dry Run	Ephemeral	HHEI	15	Modified Class 1	3	0	Eligible	33	0





TABLE 4
DELINEATED STREAMS WITHIN THE LINCOLN PARK-RIVERBEND 138 KV TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Report Name	Latitude	Longitude	Waterbody	Flow Regime	Form Used ^{1,2}	Score ³	Class or Narrative Description ³	Bankfull Width (feet)	Maximum Pool Depth (inches)	OEPA 401 WQC Eligibility for NWP ⁴	Linear Feet within Survey Boundary	Linear Feet within 65-ft ROW
Stream RLP-35	41.096695	-80.610562	UNT to Dry Run	Ephemeral	ННЕІ	17	Modified Class 1	3	0	Eligible	69	0
5	Sub-Total (2	3)			Perennial	:5, Intern	nittent: 5, and Ep	hemeral: 13			15,131	727
						Alterna	ate Route					
Stream RLP-01	41.09473	-80.64371	Mahoning River	Perennial	QHEI	0	Warmwater Habitat	NA	NA	Eligible	4,070	688
Stream RLP-18	41.09686	-80.60297	UNT to Dry Run	Intermittent	HHEI	26	Modified Class 1	2	0.5	Eligible	314	58
Stream RLP-19	41.09623	-80.60281	UNT to Dry Run	Ephemeral	ННЕІ	19	Modified Class 1	0.5	0.5	Eligible	309	65
Stream RLP-20	41.09471	-80.60326	UNT to Dry Run	Perennial	ННЕІ	69	Modified Class 2	5	10	Eligible	296	51
					Alter	nate Ro	ute (Continued)					
Stream RLP-21	41.09329	-80.60297	UNT to Dry Run	Intermittent	ННЕІ	25	Modified Class 1	2	0.5	Eligible	186	57
Stream RLP-22	41.09023	-80.61075	UNT to Mahoning River	Ephemeral	HHEI	19	Modified Class 1	0.5	0.5	Eligible	56	25
Stream RLP-23	41.08970	-80.61098	UNT to Mahoning River	Ephemeral	ННЕІ	19	Class 1	1	0.5	Eligible	308	0





TABLE 4
DELINEATED STREAMS WITHIN THE LINCOLN PARK-RIVERBEND 138 KV TRANSMISSION LINE PROJECT'S SURVEY BOUNDARY

Report Name	Latitude	Longitude	Waterbody	Flow Regime	Form Used ^{1,2}	Score ³	Class or Narrative Description ³	Bankfull Width (feet)	Maximum Pool Depth (inches)	OEPA 401 WQC Eligibility for NWP ⁴	Linear Feet within Survey Boundary	Linear Feet within 65-ft ROW
Stream RLP-24	41.08944	-80.61077	UNT to Mahoning River	Ephemeral	ННЕІ	13	Class 1	5	0	Eligible	139	66
Stream RLP-25	41.0895	-80.61109	UNT to Mahoning River	Ephemeral	ННЕІ	18	Class 1	0.5	0.5	Eligible	45	0
Stream RLP-26	41.08281	-80.61053	UNT to Mahoning River	Intermittent	ННЕІ	26	Modified Class 1	3	1	Eligible	1,178	420
Stream RLP-27	41.08326	-80.61038	UNT to Mahoning River	Ephemeral	ННЕІ	28	Class 1	3	0.5	Eligible	87	0
Stream RLP-28	41.09229	-80.64333	UNT to Mahoning River	Ephemeral	ННЕІ	26	Modified Class 1	2	0.5	Eligible	114	7
	Sub-Total (1	2)	Perennial: 2, Intermittent: 3, and Ephemeral: 7									1,437
Gı	rand-Total (35) ⁵		P	Perennial:	6 ⁵ , Intern	mittent: 9, and Ep	ohemeral: 2	0		23,937	2,374

- 1. QHEI = Qualitative Habitat Evaluation Index, HHEI = Headwater Habitat Evaluation Index,
- 2. NA = Not Assessed (default to the State of Ohio's aquatic use designation)
- Class or Narrative Description provides the designated beneficial uses for assessed resources identified within the Ohio Administrative Code Chapter 3745-1 Water Quality Standards. In
 absence of a listed designation for a resource, AECOM included the Category assessment identify by the OEPA's Qualitative Habitat Evaluation Index (Rankin 2006) or Field Evaluation
 Manual for Ohio's Primary Headwater Habitat Streams, Version 4.1 (Ohio EPA 2020).
- As defined by OEPA Division of Surface Water Stream Eligibility Map. Available online at: http://oepa.maps.arcgis.com/apps/webappviewer/index.html?id=e6b46d29a38f46229c1eb47deefe49b6
- 5. Due to Stream RLP-01 being present within the survey boundary and ROW of the common route, preferred route, and alternative route, the grand total number of streams identified within the combined survey area is 35 and not the summation of the number of stream within each sub-total of these alternatives.
- 6. No streams were identified within the survey area associated with the Riverbend Substation expansion.





3.2.1 Qualitative Habitat Evaluation Index

Four streams identified within the Project's survey boundary were assessed using the QHEI methodology. The QHEI streams totaled 13,559 linear feet within the Project's survey boundary. The completed QHEI data forms are provided in Appendix C. Representative color photographs were taken during the field survey and are provided in Appendix D.

Warmwater Habitat Stream -

Stream RLP-01 (Mahoning River), totaling 8,207 linear feet within the Project's survey boundary, is designated as a Warmwater Habitat stream, with a QHEI score of 83.5 (OEPA 2018b). Substrates of the Mahoning River were not assessed due to limited accessibility and visual obstruction. The stream generally showed evidence of little bank erosion, high stability, no channel sinuosity, poor channel development, and recovering channelization. Instream cover generally consisted of moderate amounts of overhanging vegetation, rootmats, and rootwads, with sparse amounts of logs and woody debris. Maximum pool depth was estimated greater than one meter and the average bankfull width is approximately 175 feet.

Stream RLP-02, totaling 351 linear feet within the Project's survey boundary, is designated as a Warmwater Habitat stream, with a QHEI score of 22. The substrate of this stream generally consisted of concrete with smaller amounts of silt. The stream generally showed evidence of little bank erosion, no channel sinuosity, poor channel development. Maximum pool depth was 20 inches and the average bankfull width was 10 feet.

Stream RLP-29, totaling 4,521 linear feet within the Project Survey boundary, is designated as a Warmwater Habitat stream, with a QHEI score of 56. The substrate of the stream generally consisted of cobble and boulder. Several areas in the stream had garbage and/or foam draining into the stream. The stream showed no evidence of bank erosion, moderate sinuosity, and good channel development. The maximum pool depth was 18 inches and the average bankfull width was 30 feet.

Coldwater Habitat Stream -

Stream RLP-04, totaling 482 linear feet within the Project's survey boundary, is designated as a Coldwater Habitat stream, with a QHEI score of 51. The substrate of this stream generally consisted of sand, gravel and silt with smaller amounts of cobble, bedrock, and boulder and slabs. The stream generally showed evidence of little bank erosion, low channel sinuosity, and fair channel development. Instream cover generally consisted of sparse amounts of logs or woody debris, and overhanging vegetation. The maximum pool depth was 20 inches and the average bankfull width was 18 feet.





3.2.2 Primary Headwater Habitat Evaluation Index

Thirty-one headwater streams, totaling 9,657 linear feet, were identified within the Project's survey boundary. These streams were categorized as six Class 1 PHWM streams, 18 Modified Class 1 PHWM streams, six Modified Class 2 PHWM streams, and one Class 2 PHWM streams. Completed HHEI forms for each stream are provided in Appendix C. Representative color photographs of selected streams were taken during the field survey and are provided in Appendix D.

Class 1 PHWH Streams – Six streams, totaling 1,200 linear feet within the Project's survey boundary, with scores ranging from 13 to 28 were identified during the field investigations. All exhibited ephemeral flow regime. The substrates primarily consisted of gravel, sand, silt, and leaf pack/woody debris with lesser amounts of fine detritus and clay or hardpan. The maximum pool depth for the streams ranged from 0 to 1 inch, and average bankfull widths ranged from 0.5 to 5 feet.

Modified Class 1 PHWH Streams – Eighteen streams, totaling 4,361 linear feet within the Project's survey boundary, with scores ranging from 12 to 30 were identified during the field investigations. Eight of these streams exhibited ephemeral flow regime and four exhibited intermittent flow regimes. The substrates primarily consisted of silt, gravel, and leaf pack/woody debris, with lesser amounts of cobble, sand, artificial, and clay or hardpan. The streams showed evidence of stream channel modification (e.g., channelization, culverting, etc.) that resulted in the Modified designation. The maximum pool depth for the streams ranged from 0 to 2 inches, and average bankfull widths ranged from 0.5 to 3 feet.

Class 2 PHWH Streams – One stream, totaling 987 linear feet within the Project's survey boundary, with a score of 46 was identified during the field investigations. The stream, Stream RLP-17, was identified as having an intermittent flow regime with a substrate composed of gravel and silt, with lesser amounts of sand and leaf pack/woody debris. The maximum pool depth for the stream was 3 inches and average bankfull width was 4.1 feet.

Modified Class 2 PHWH Streams – Six streams, totaling 3,828 linear feet within the Project's survey boundary, with scores ranging from 39 to 69 were identified during the field investigations. Two exhibited perennial flow regime and four exhibited intermittent flow regime. The substrates primarily consisted of gravel, silt, and cobble, with lesser amounts of sand, artificial, and leaf pack/woody debris. The streams showed evidence of stream channel modification (e.g., channelization, culverting, etc.) that resulted in the streams receiving a Modified designation. The maximum pool depth ranged from 1 to 10 inches, and average bankfull widths ranged from 2.5 to 7 feet.





Class 3 PHWH Stream - No Class 3 streams were identified within the Project survey boundary.

3.3 PONDS

No ponds were delineated within the Project's survey boundary.

4.0 SUMMARY

The ecological survey of the Project's survey boundary identified a total of 32 wetland complexes, and 35 streams. No ponds were delineated within the Project's survey boundary. The 35 wetland complexes that were identified as either ORAM Category 1 or Category 2 wetlands within the Project's survey boundary and were composed of seven different wetland habitat types including: 13 PEM wetlands, five PSS wetlands, five PFO wetlands, three PEM/PFO wetland complexes, three PEM/PSS wetland complexes, two PSS/PFO wetland complexes, and one PEM/PSS/PFO wetland complex. No ORAM Category 3 wetlands were identified within the Project's survey boundary.

The 35 streams identified within the Project's survey boundary include 20 ephemeral streams, nine intermittent streams, and six perennial streams. Thirty-one streams were assessed using the HHEI methodology (drainage area less than 1 mi²) and four streams were assessed using the QHEI methodology (drainage area greater than 1 mi²). Crab Creek (RLP-02) and Mahoning River (RLP-01) have an existing OEPA aquatic use habitat designation of WWH. Dry Run (RLP-04), located between Oak Street (RM 1.42) to Wilson Avenue (RM 0.31), has an existing OEPA aquatic use habitat designation of CWH and Dry Run (RLP-29) is listed as a WWH.

No ponds were delineated within the Project's survey boundary.

On June 22, 2020, the Navigable Waters Protection Rule under the Clean Water Act (CWA) was modified and in most cases, excluded ephemeral stream as being jurisdictional waters of the United States. Therefore, the jurisdictional status of ephemeral streams shall be left to the federal review, if required, and AECOM has preliminarily determined that all assessed streams and wetlands within the AECOM survey area are jurisdictional (i.e., waters of the U.S.). The locations of the streams and wetlands identified within the survey area are shown on Figure 3. As the ephemeral stream identified within the Project Survey Area would likely be considered non-jurisdictional by the USACE, only the USACE through a jurisdictional determination could evaluate the resource as a "water of the U.S". Additionally, ephemeral streams would likely still be considered a state water and applicable isolated waters permitting and conditions could apply if determined not a "waters of the U.S".





AECOM has preliminarily determined that all assessed streams and wetlands within the Project's survey boundary appear to be jurisdictional (i.e., Waters of the U.S.), as they all appear to be tributaries or wetlands that flow into or combine with other streams (waters of the U.S). The locations of the streams and wetlands identified within the Project's survey boundary are shown on Figure 3.

The information contained in this wetland delineation report is for a survey boundary that may be much larger than the actual Project limits-of-disturbance; therefore, lengths and acreages listed in this report may not constitute the actual impacts of the Project defined in subsequent permit applications. If necessary, a separate report that identifies the actual Project impacts will be provided with agency submittals.

The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond the control of AECOM.





5.0 REFERENCES

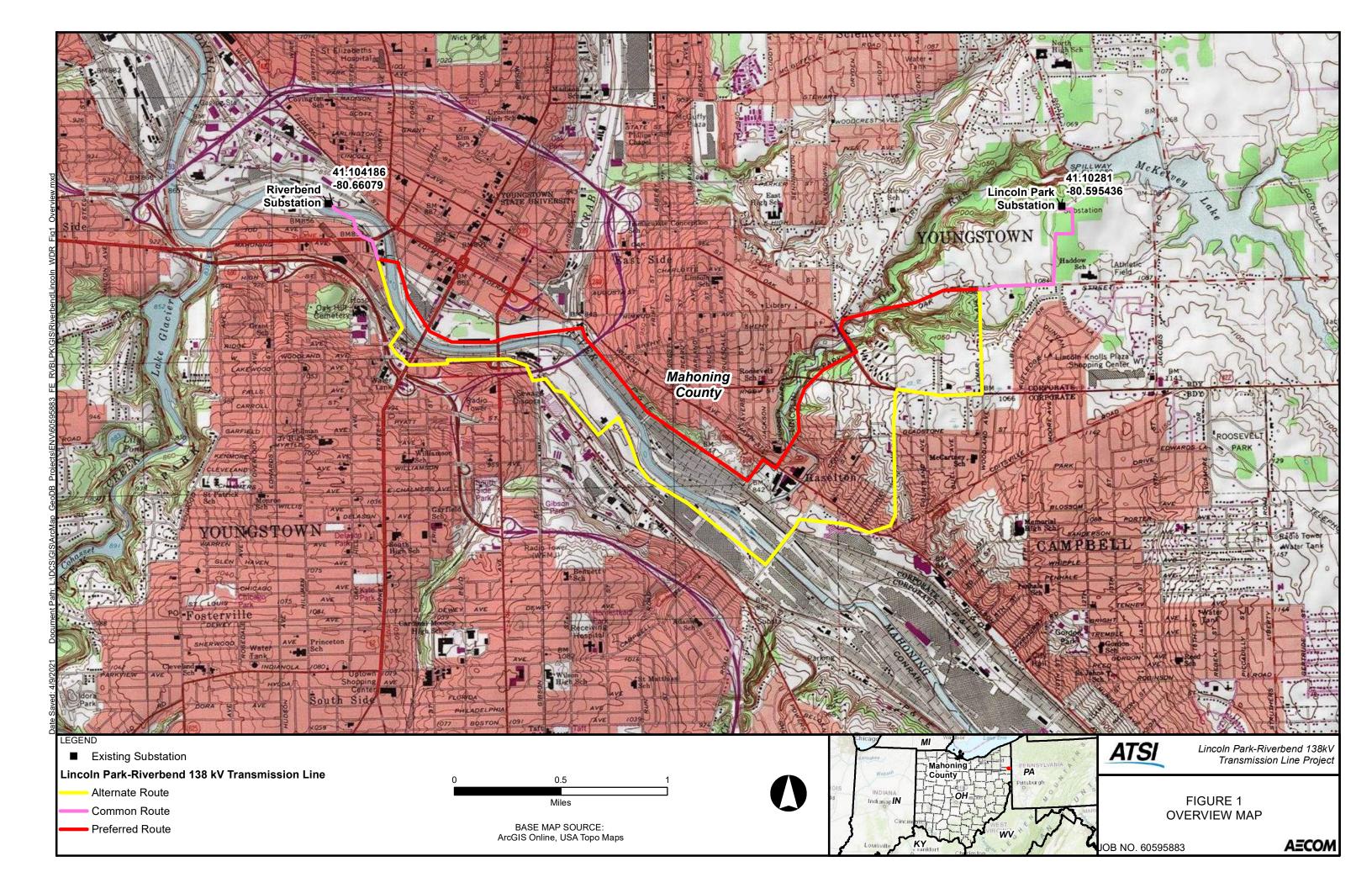
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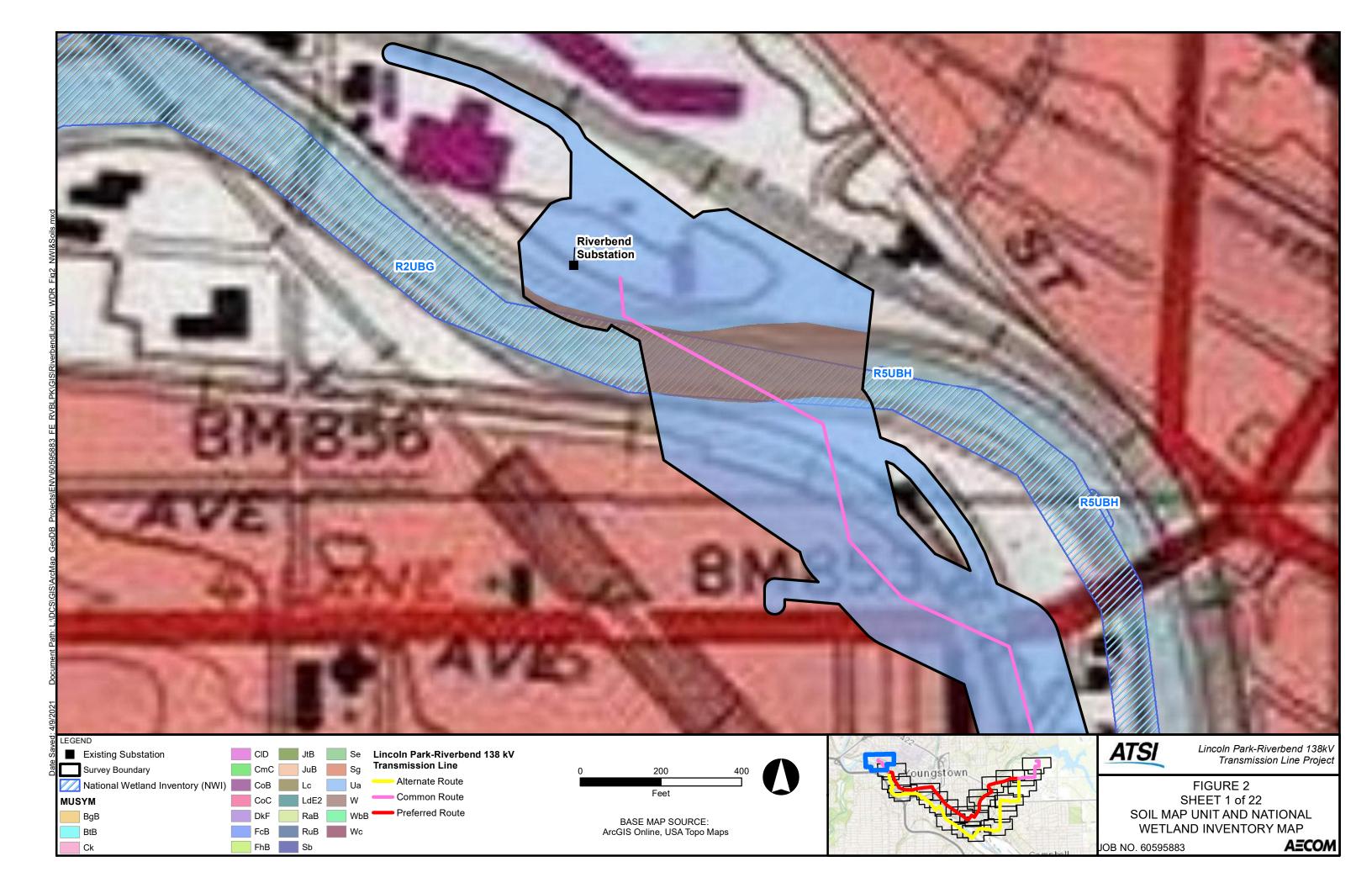


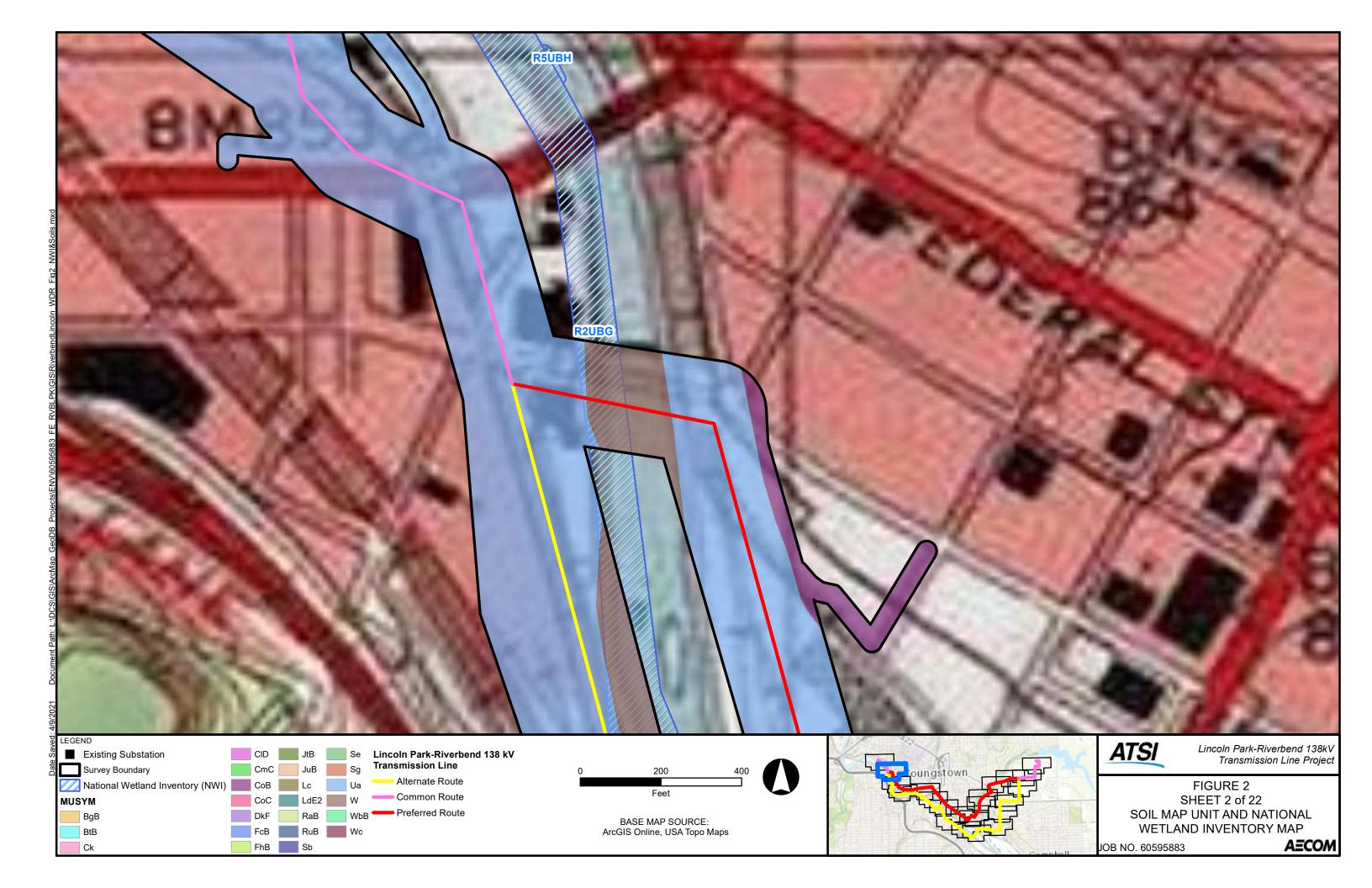


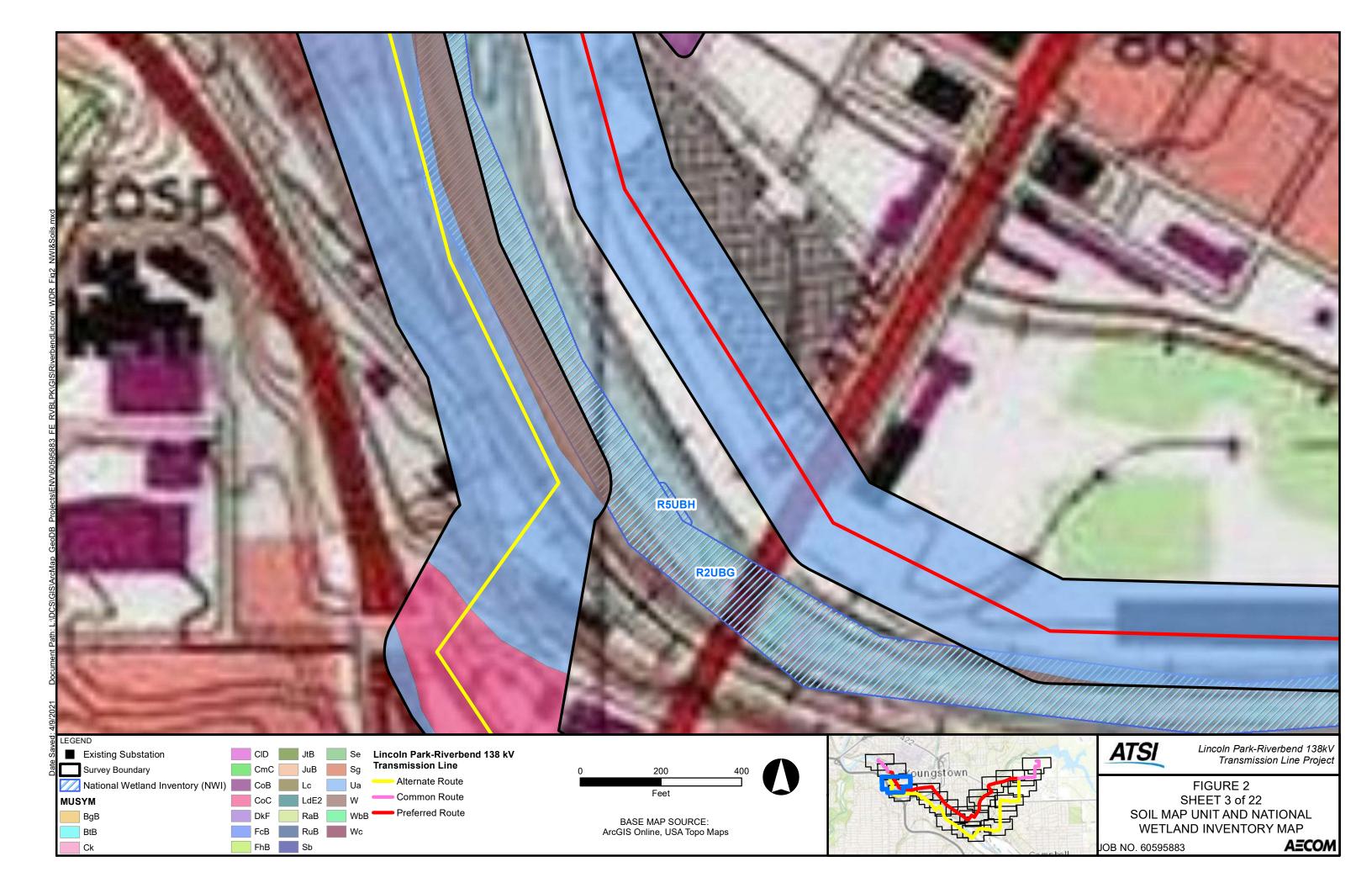
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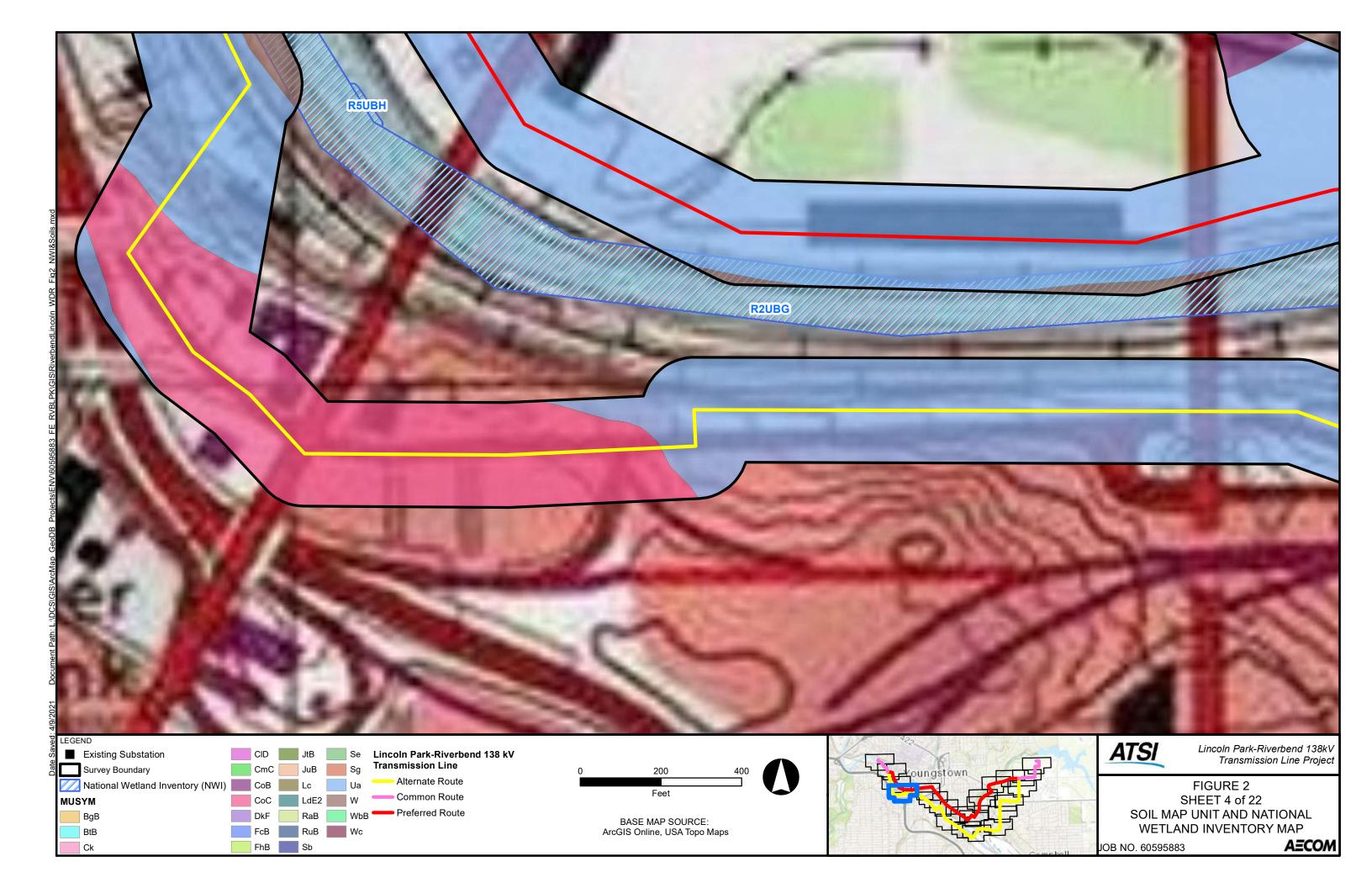


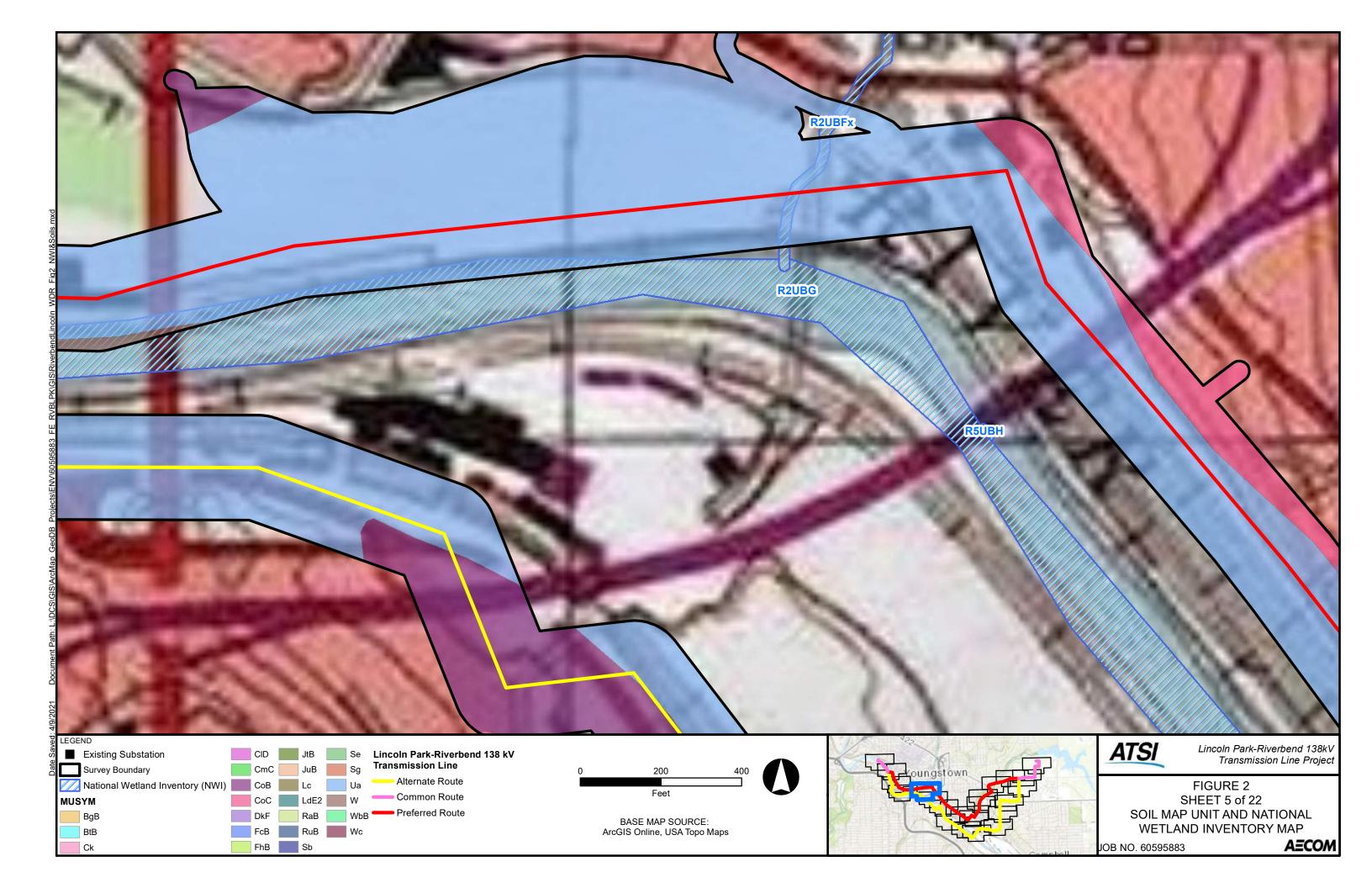


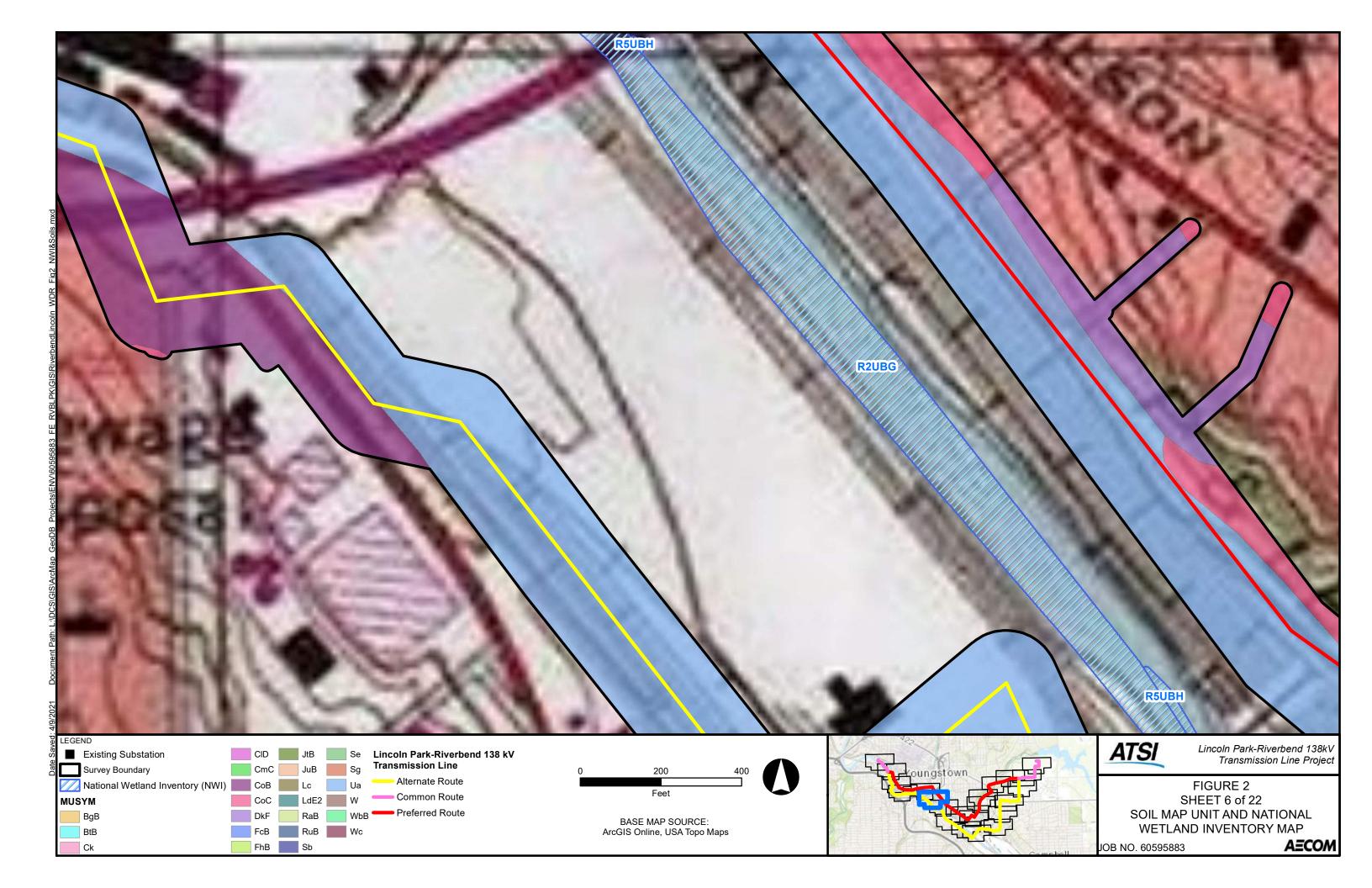


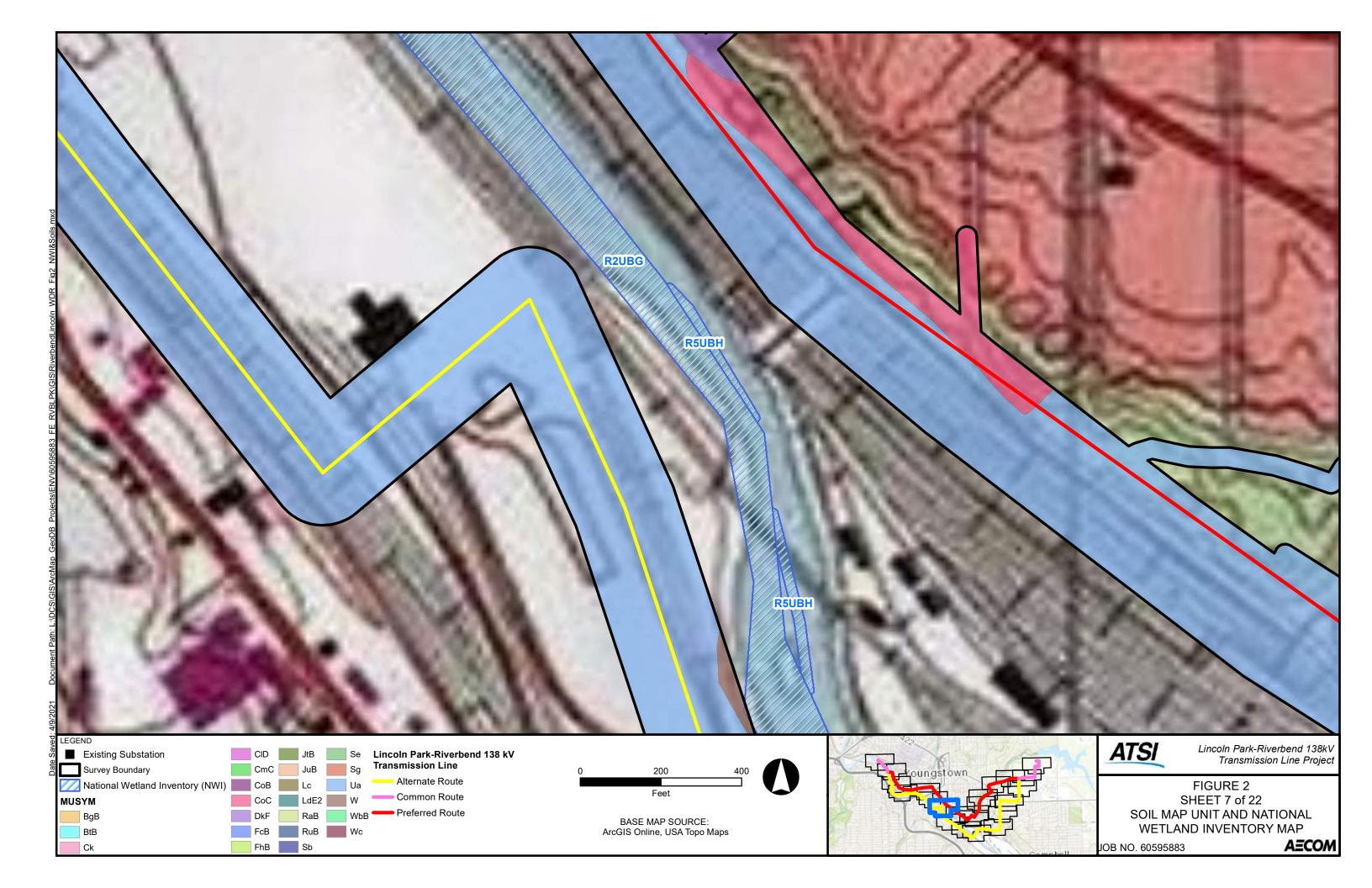


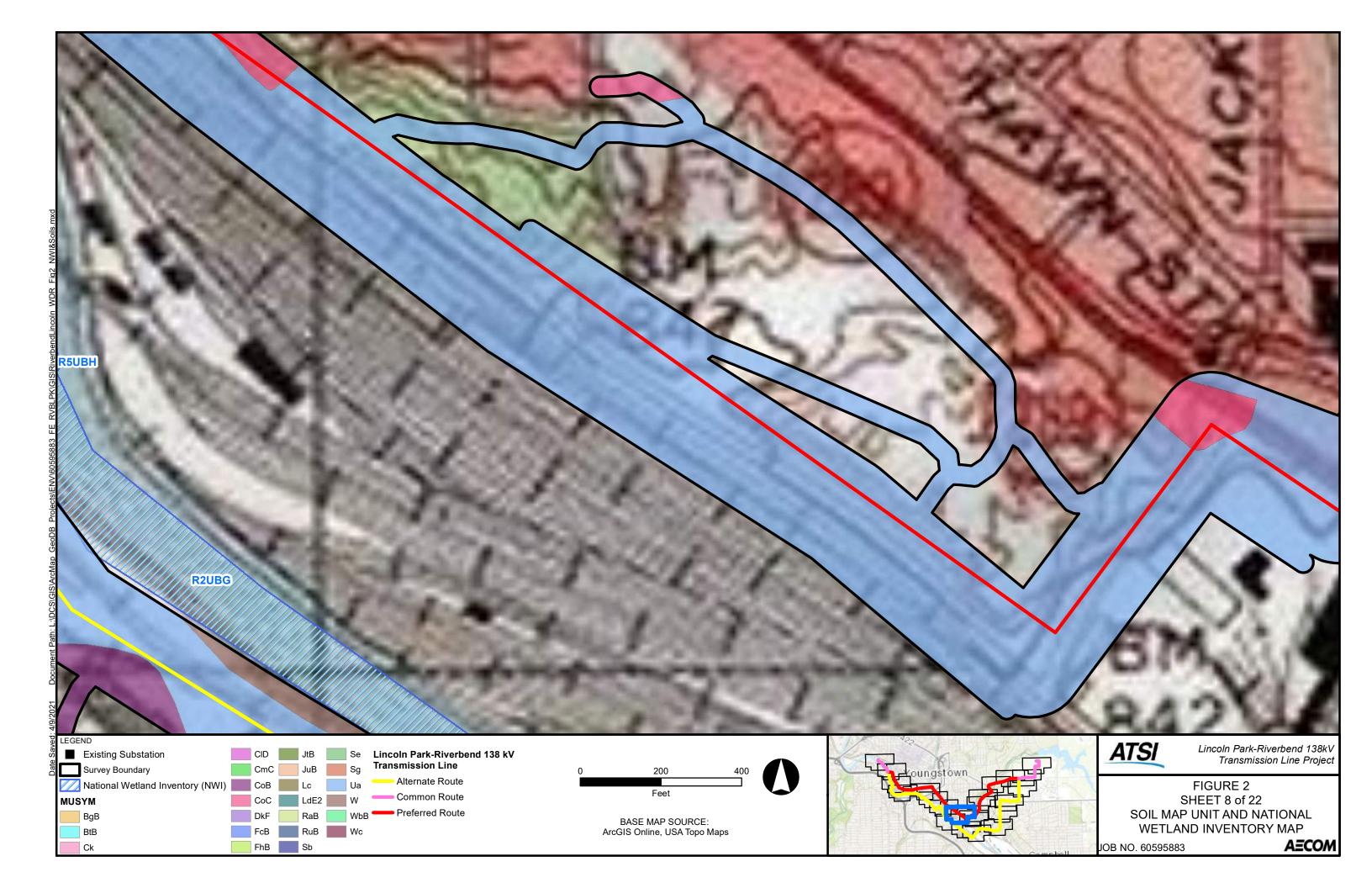


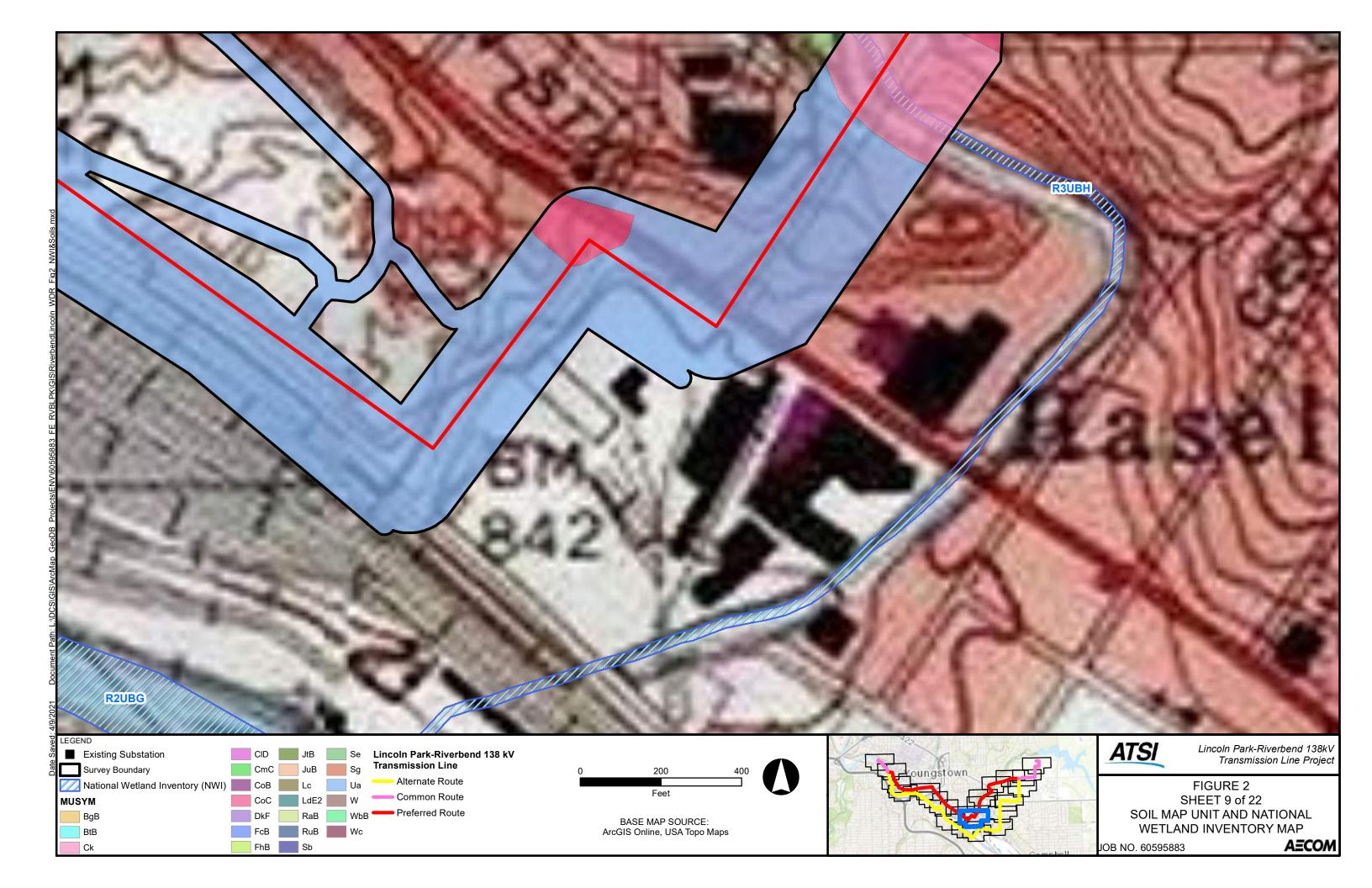


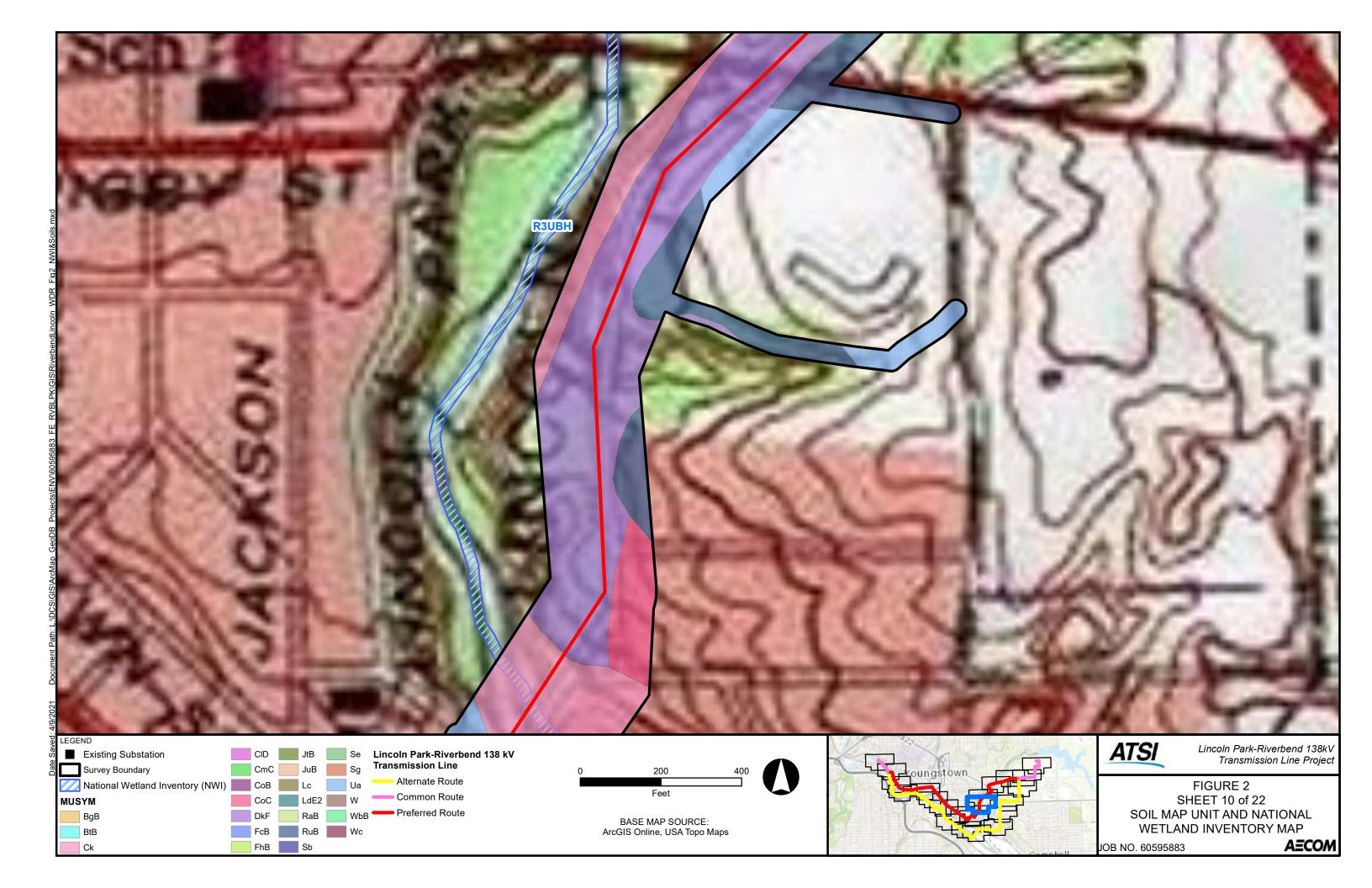


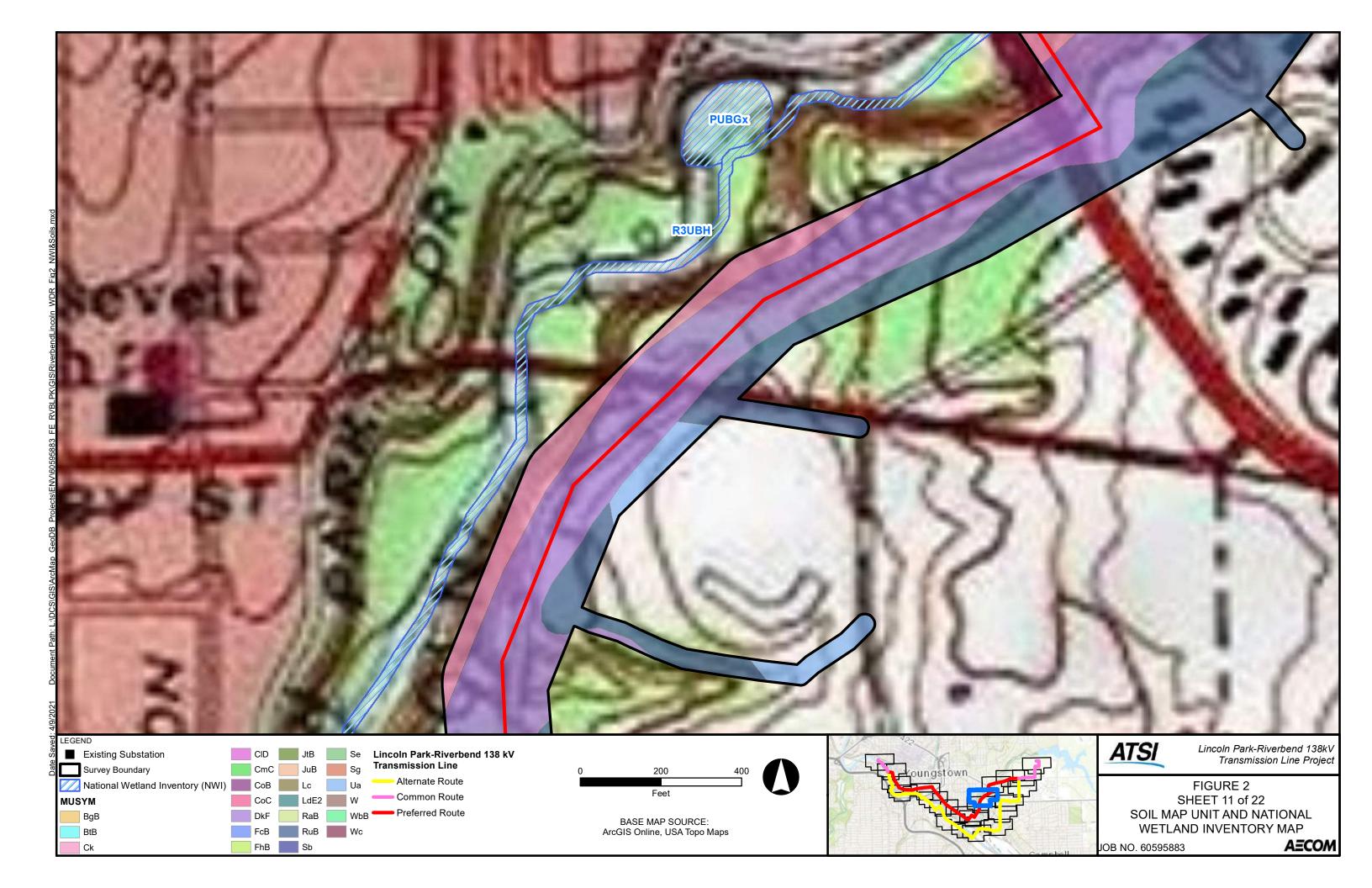


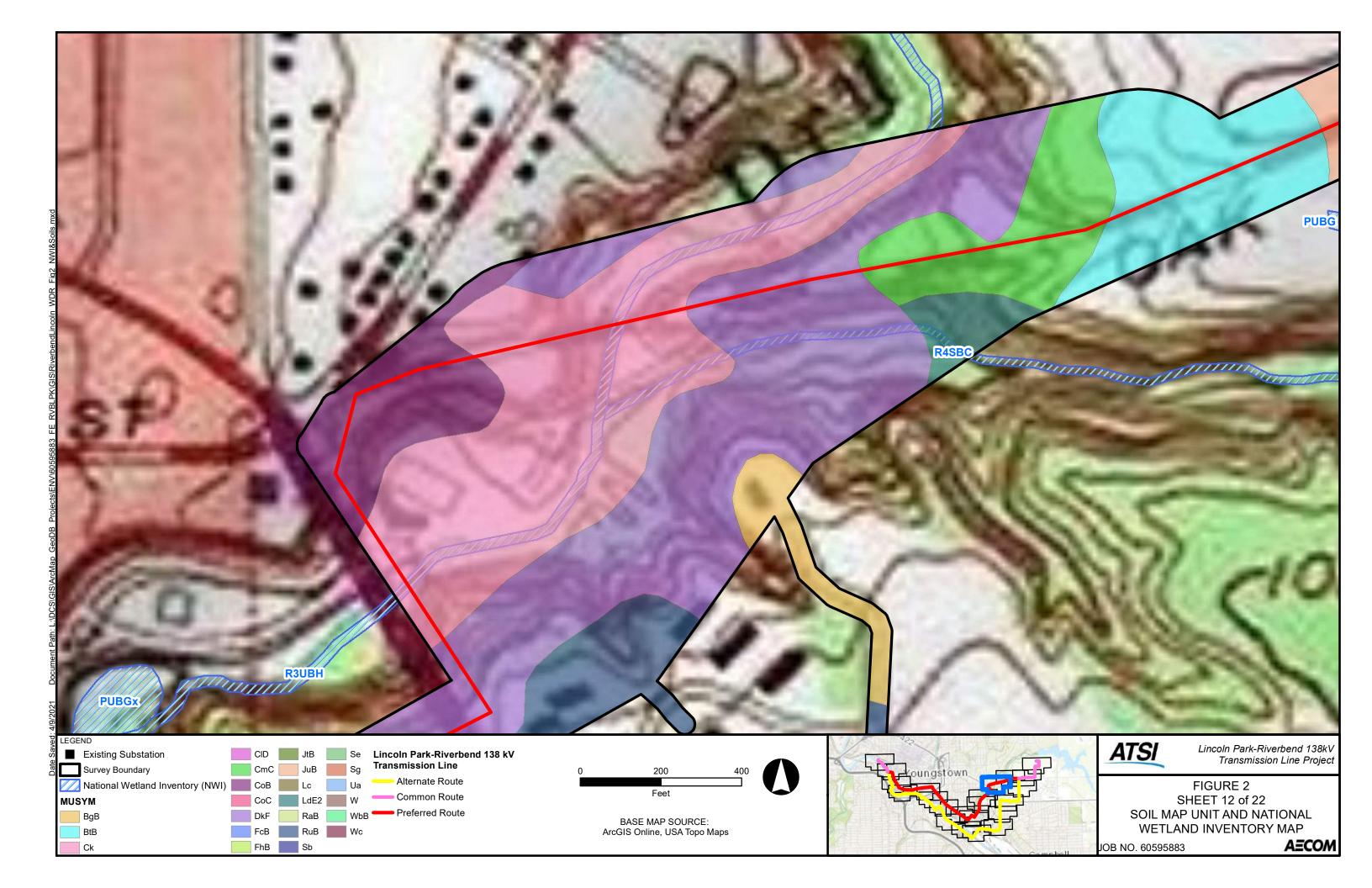


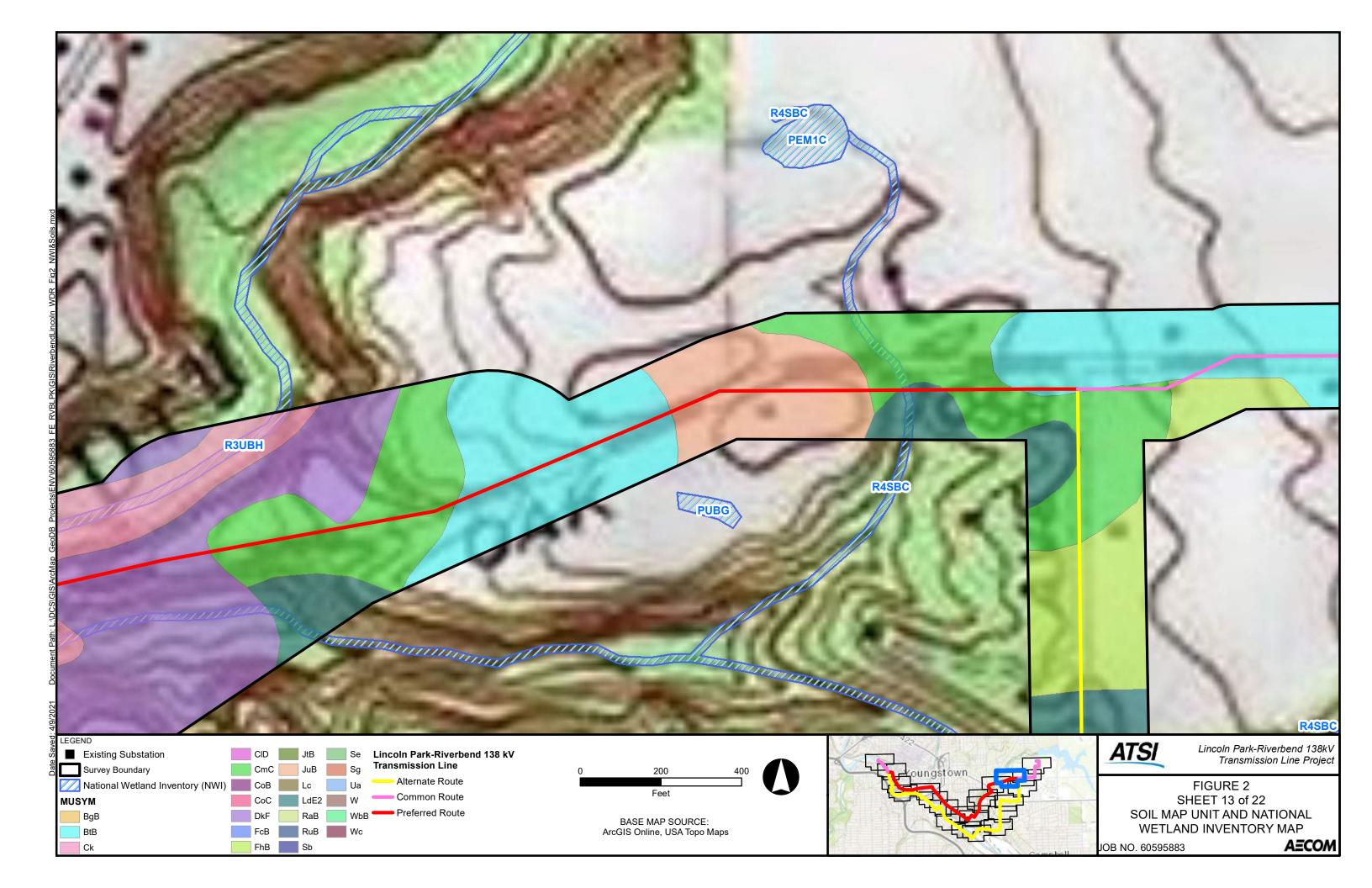


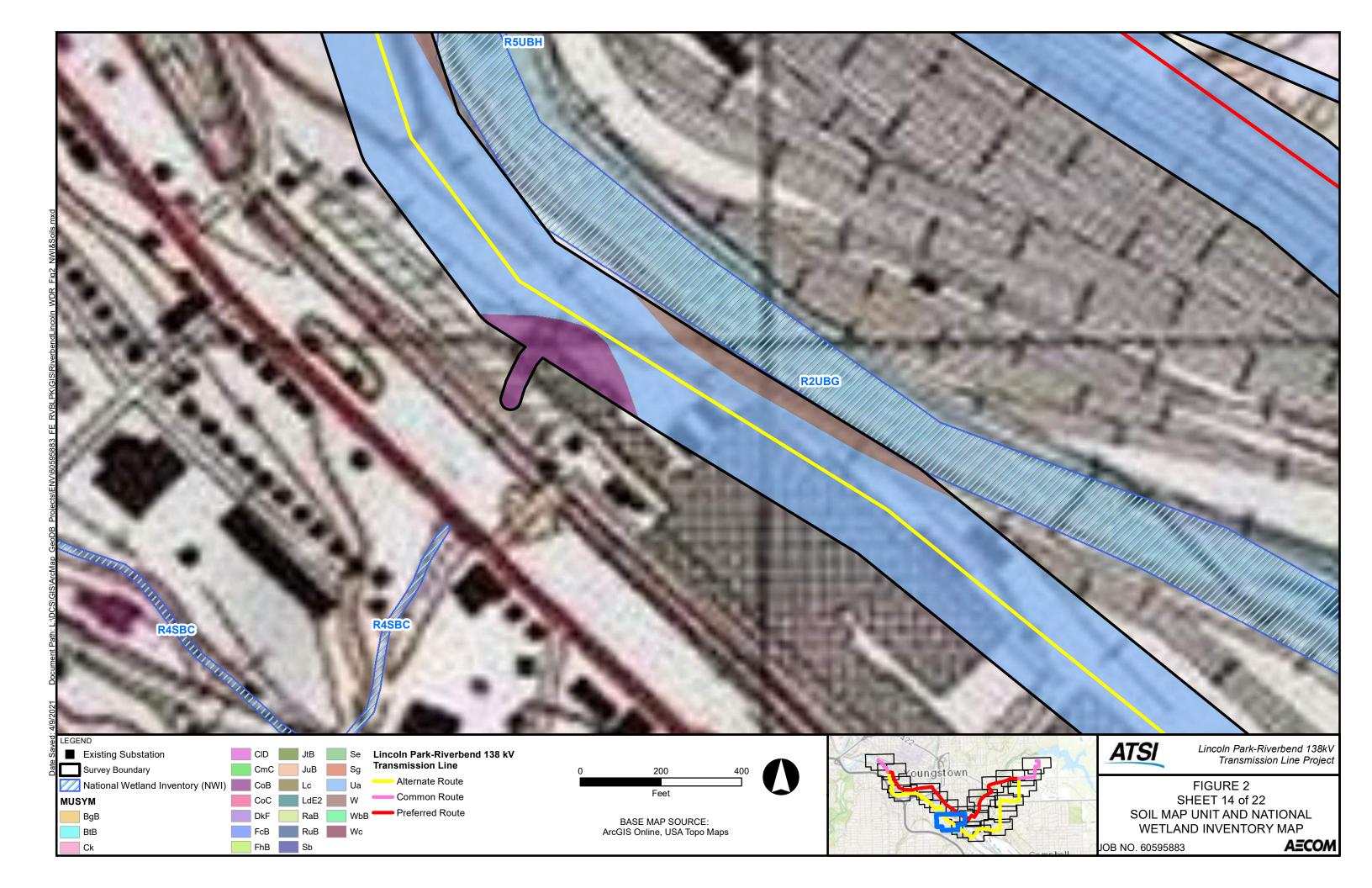


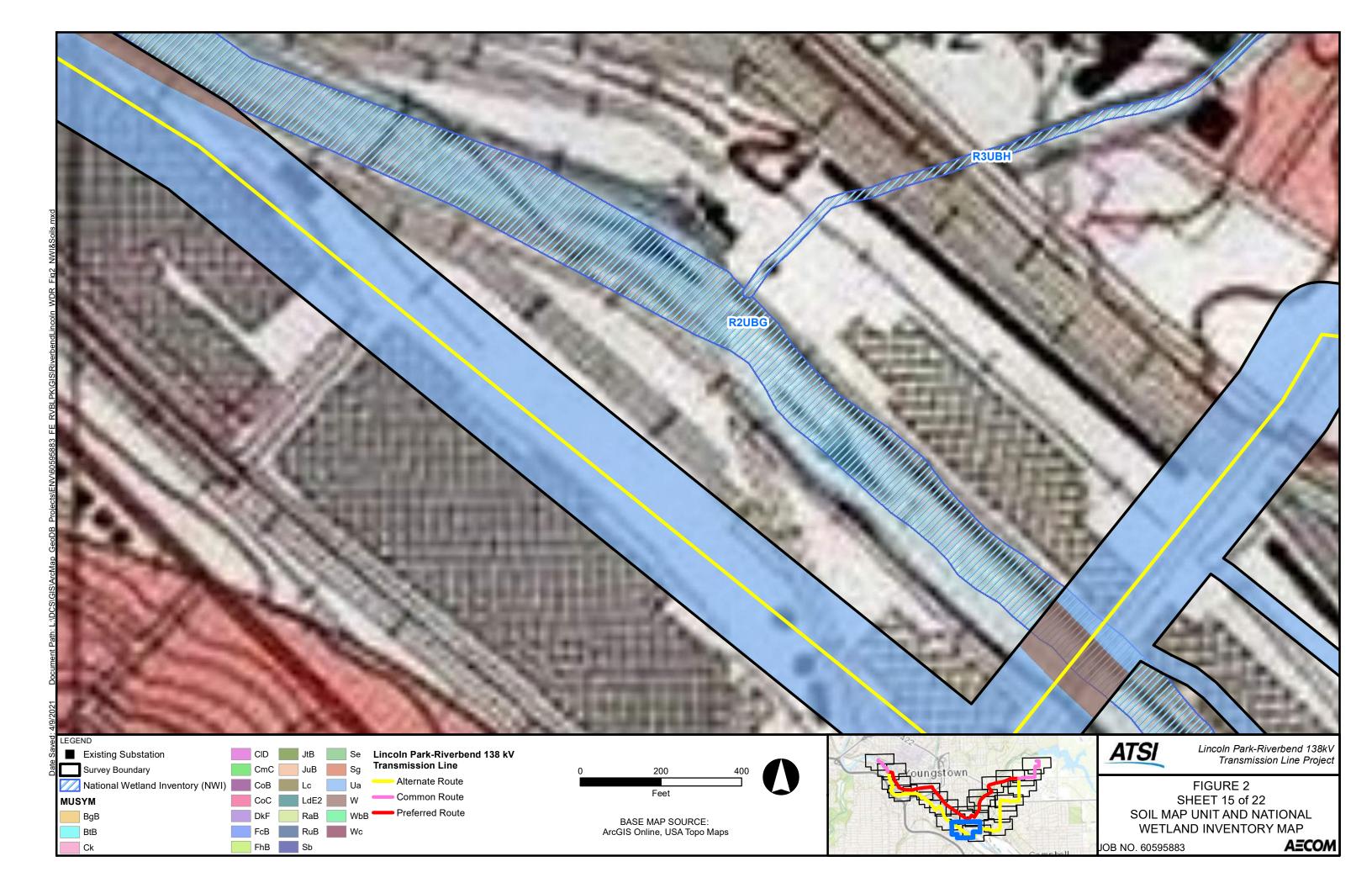


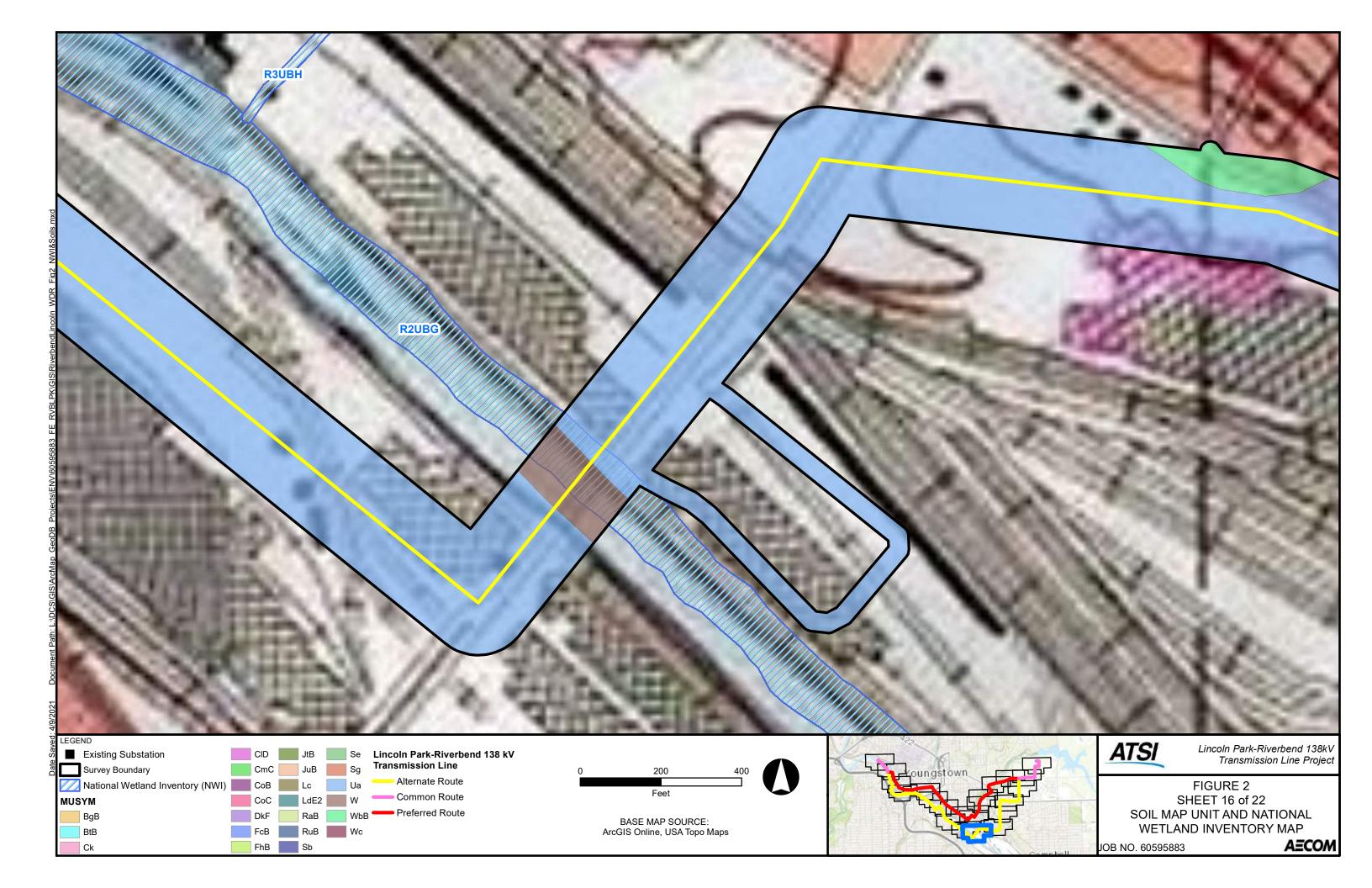


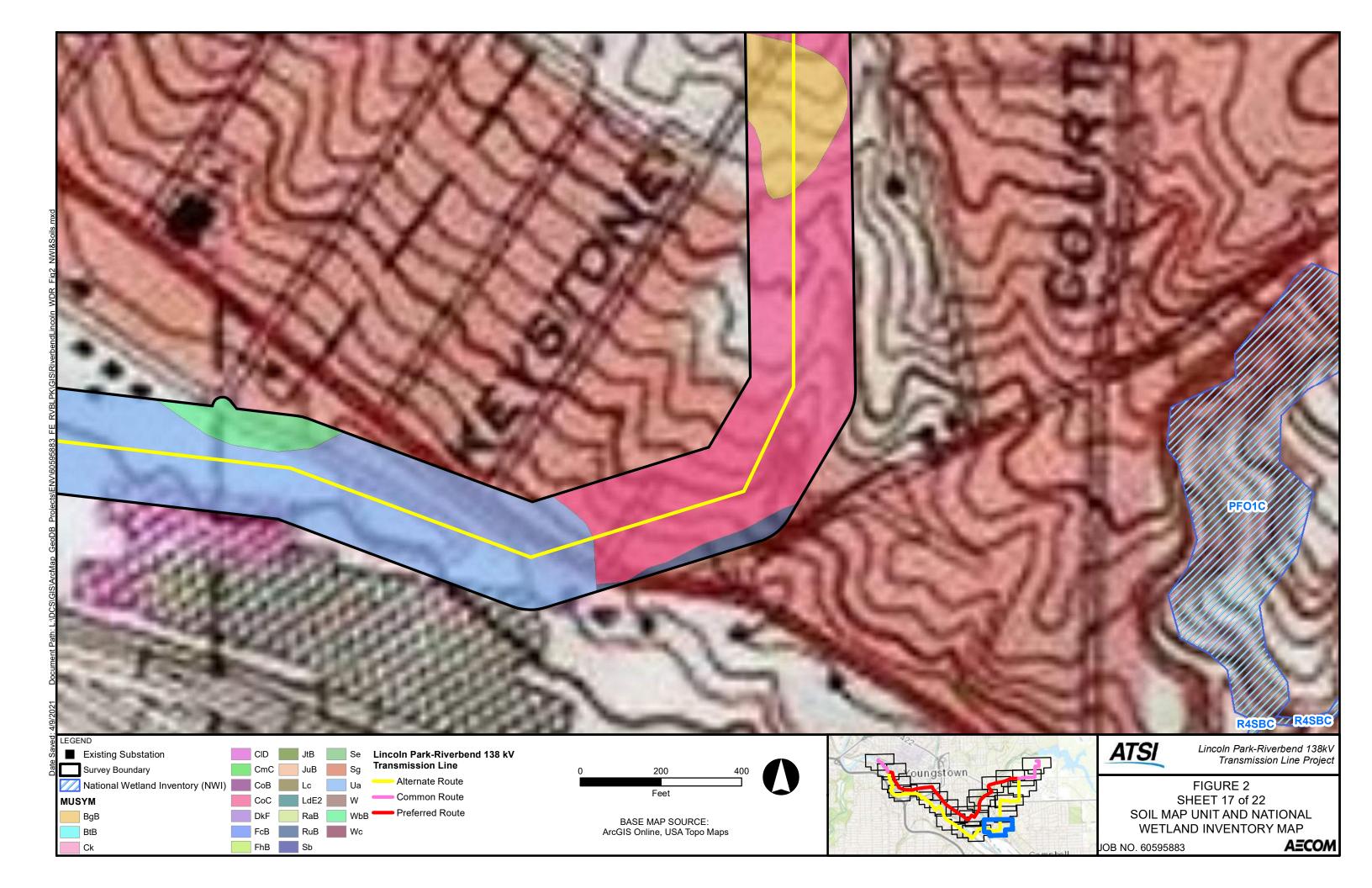


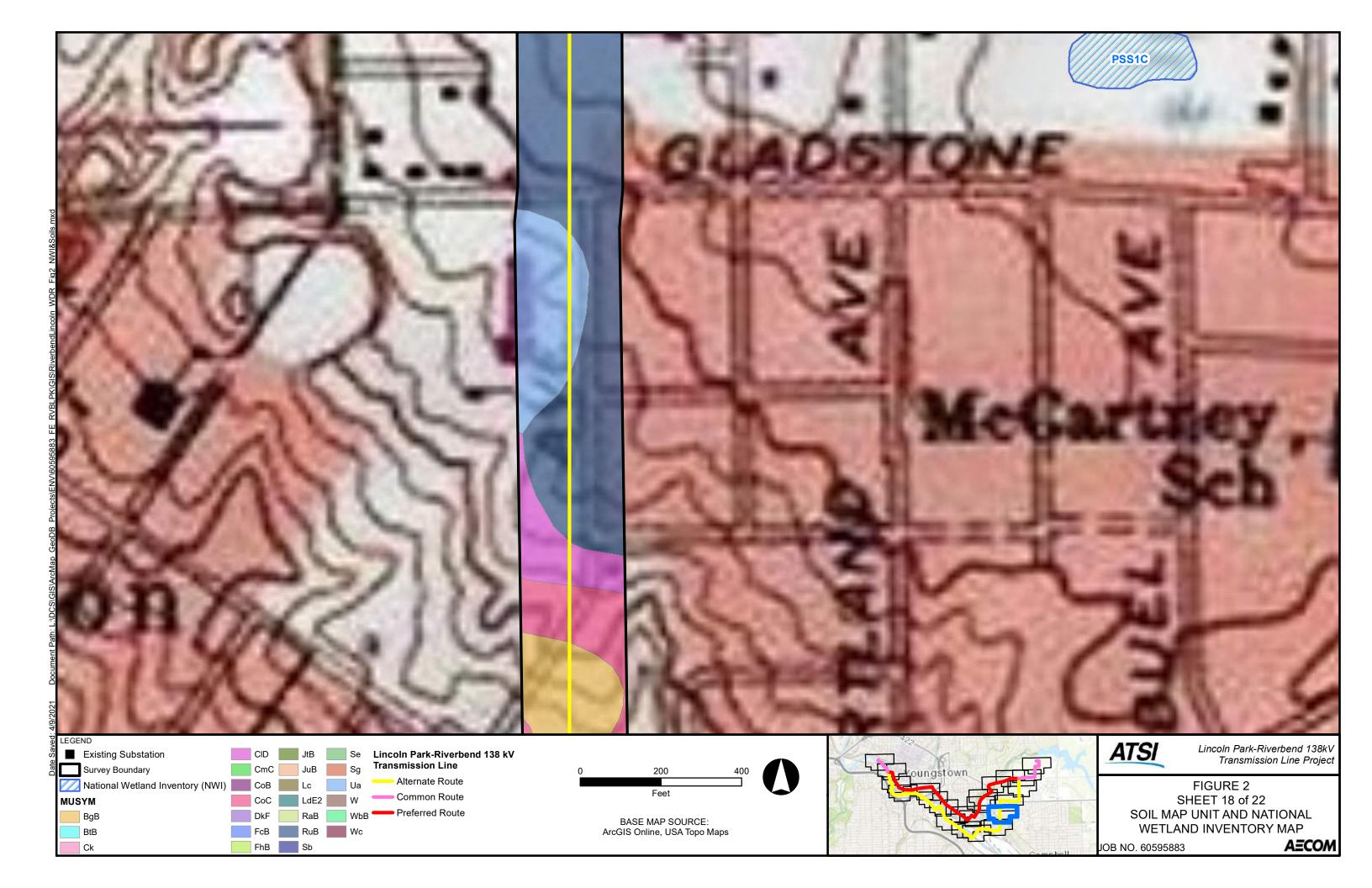


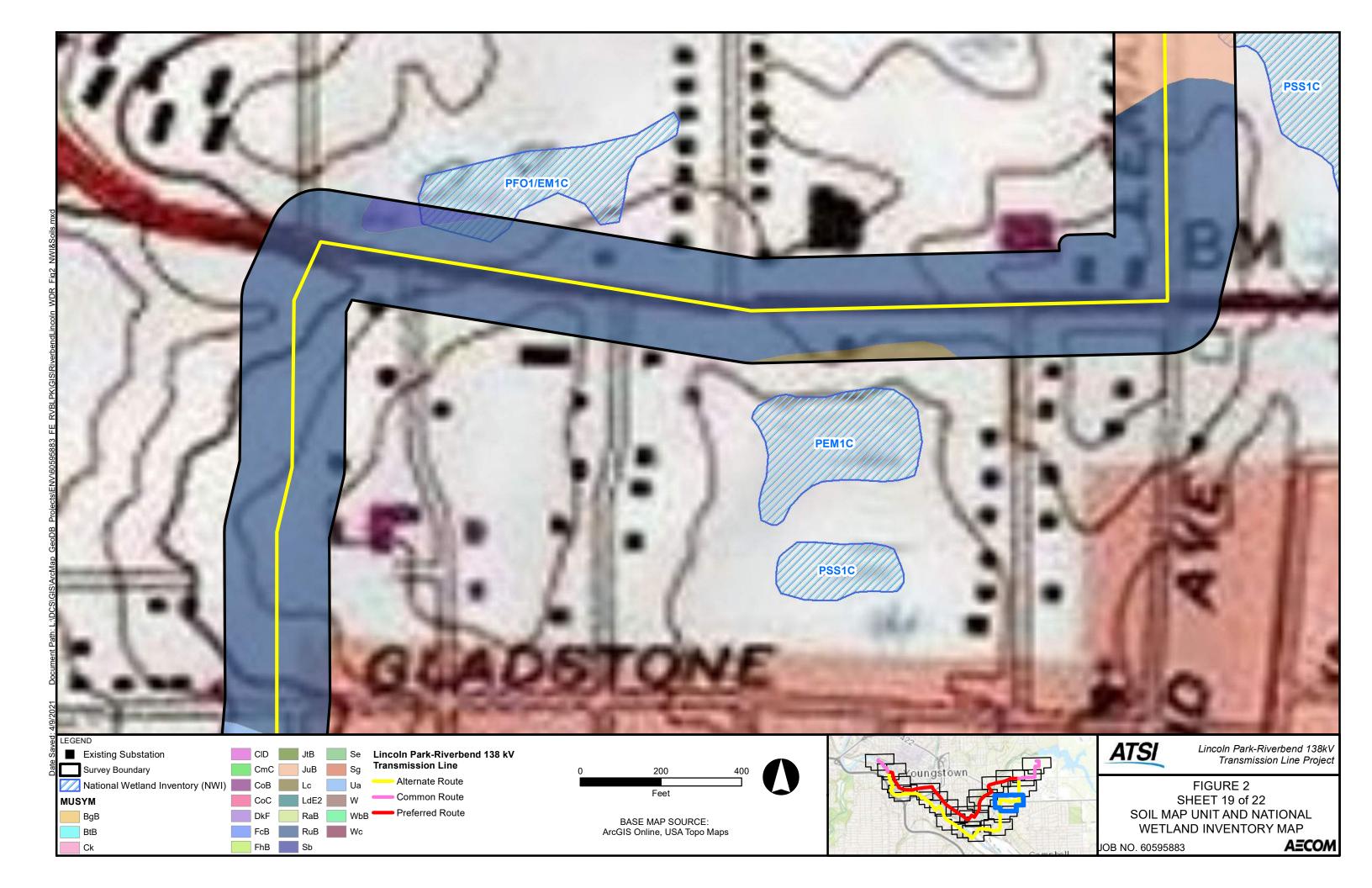


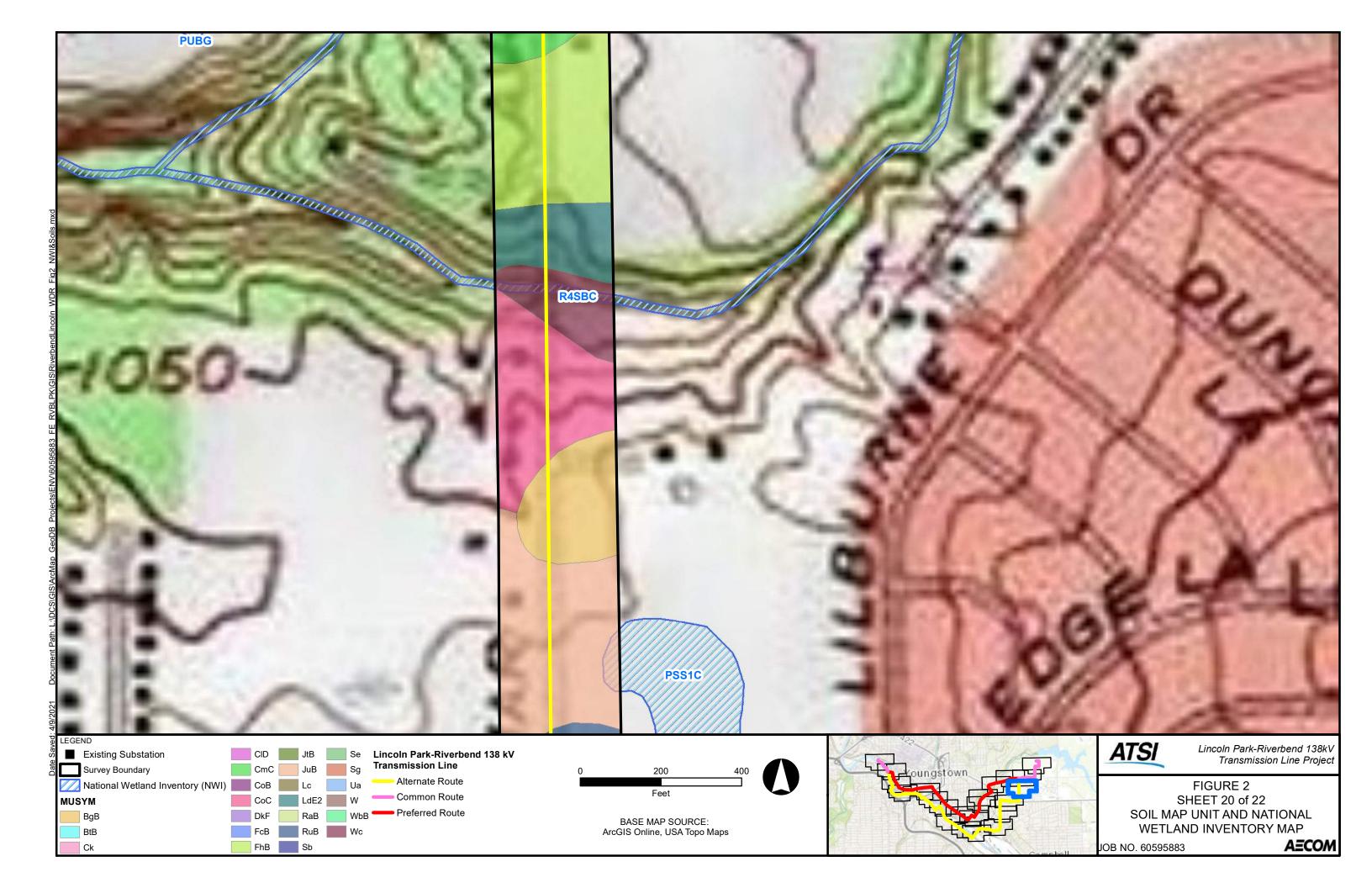


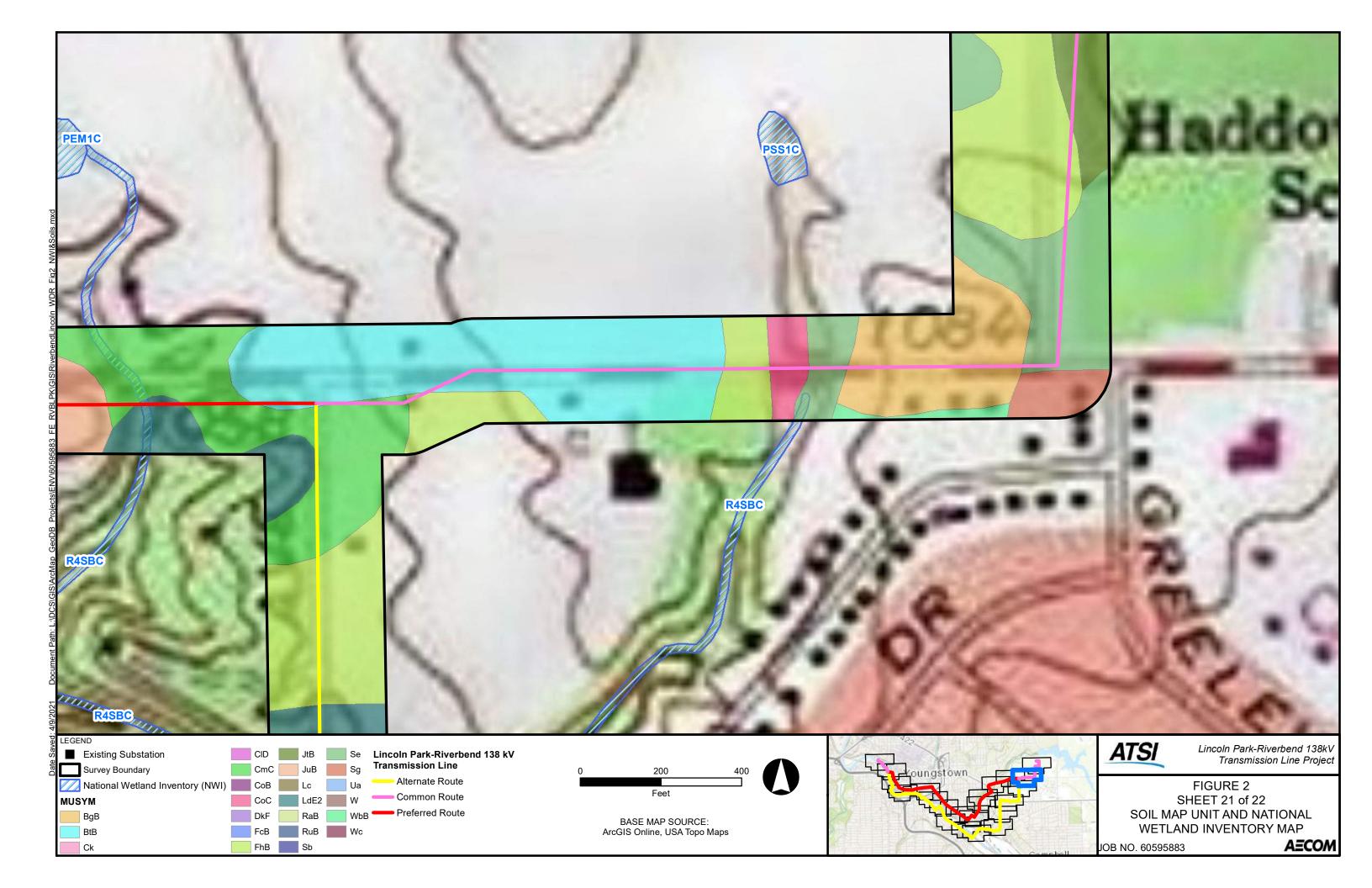


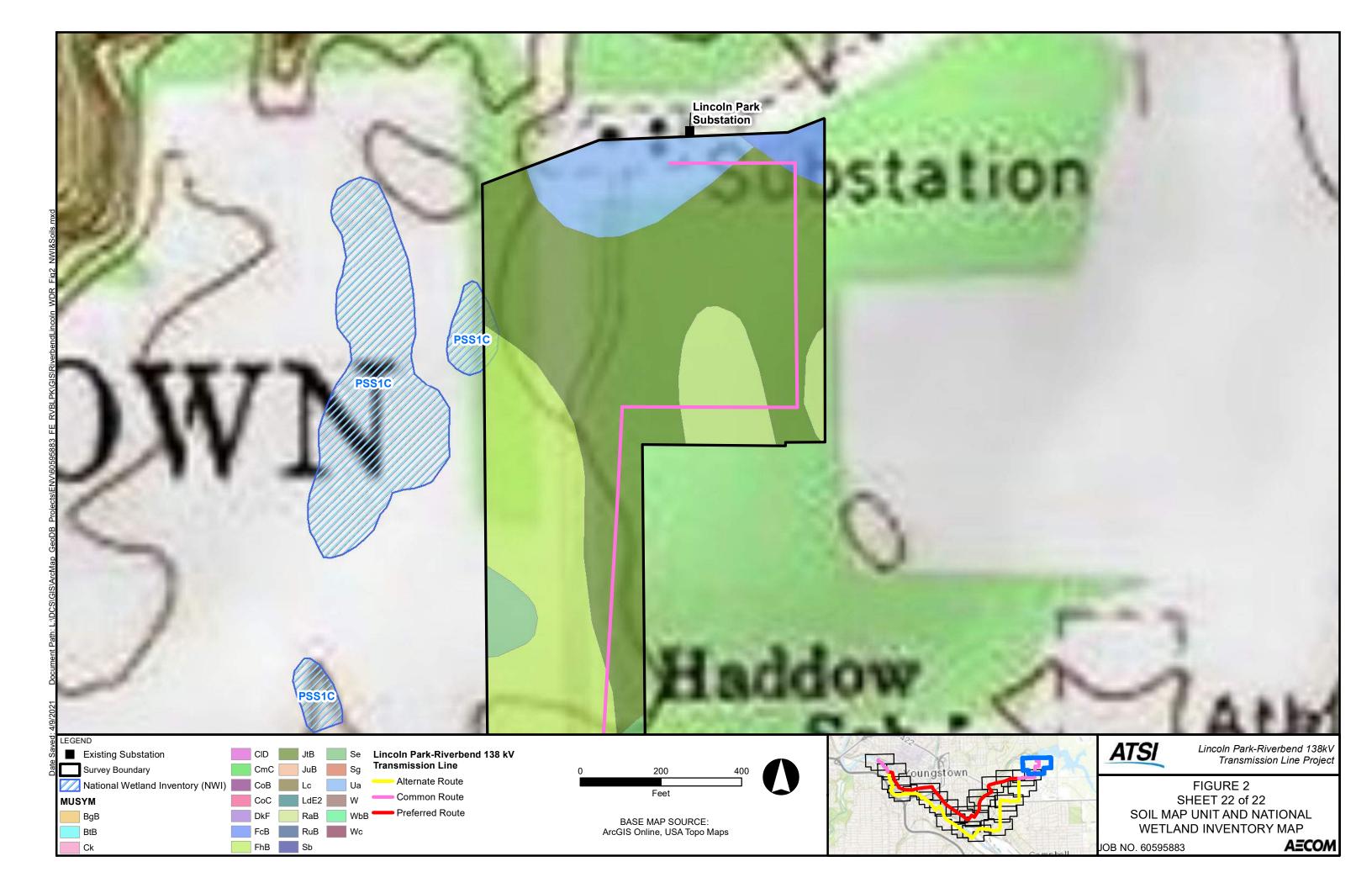


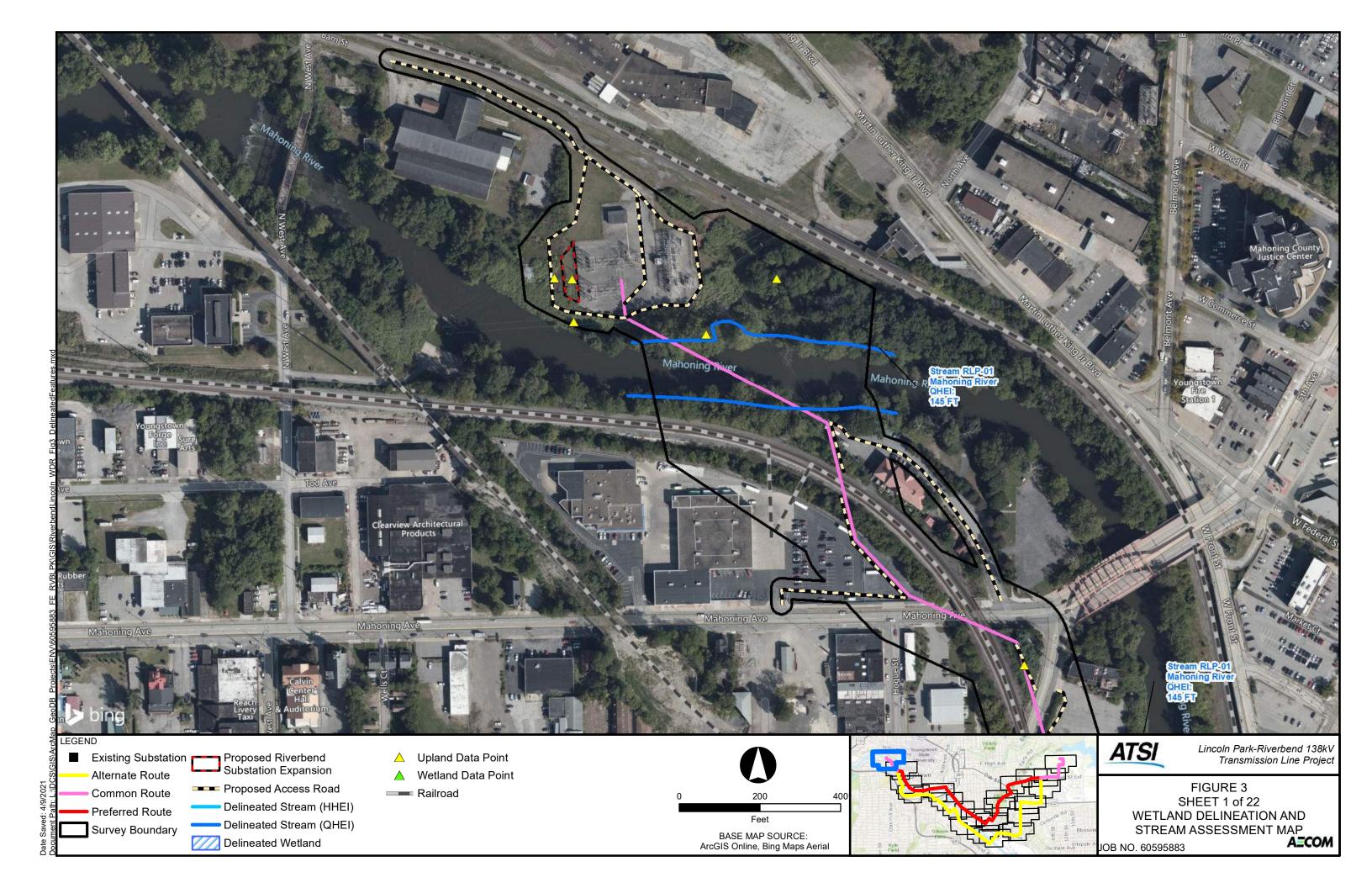


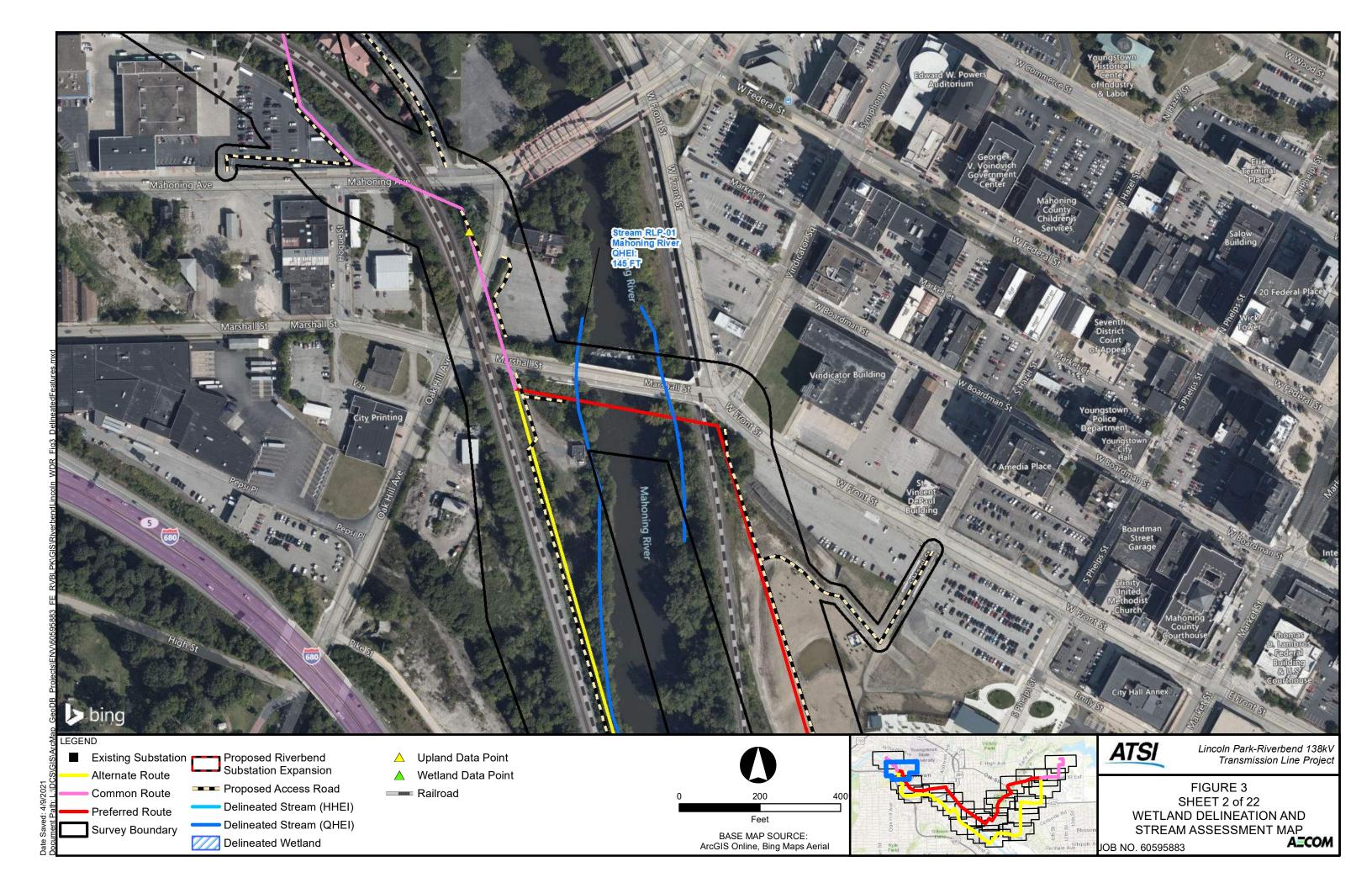


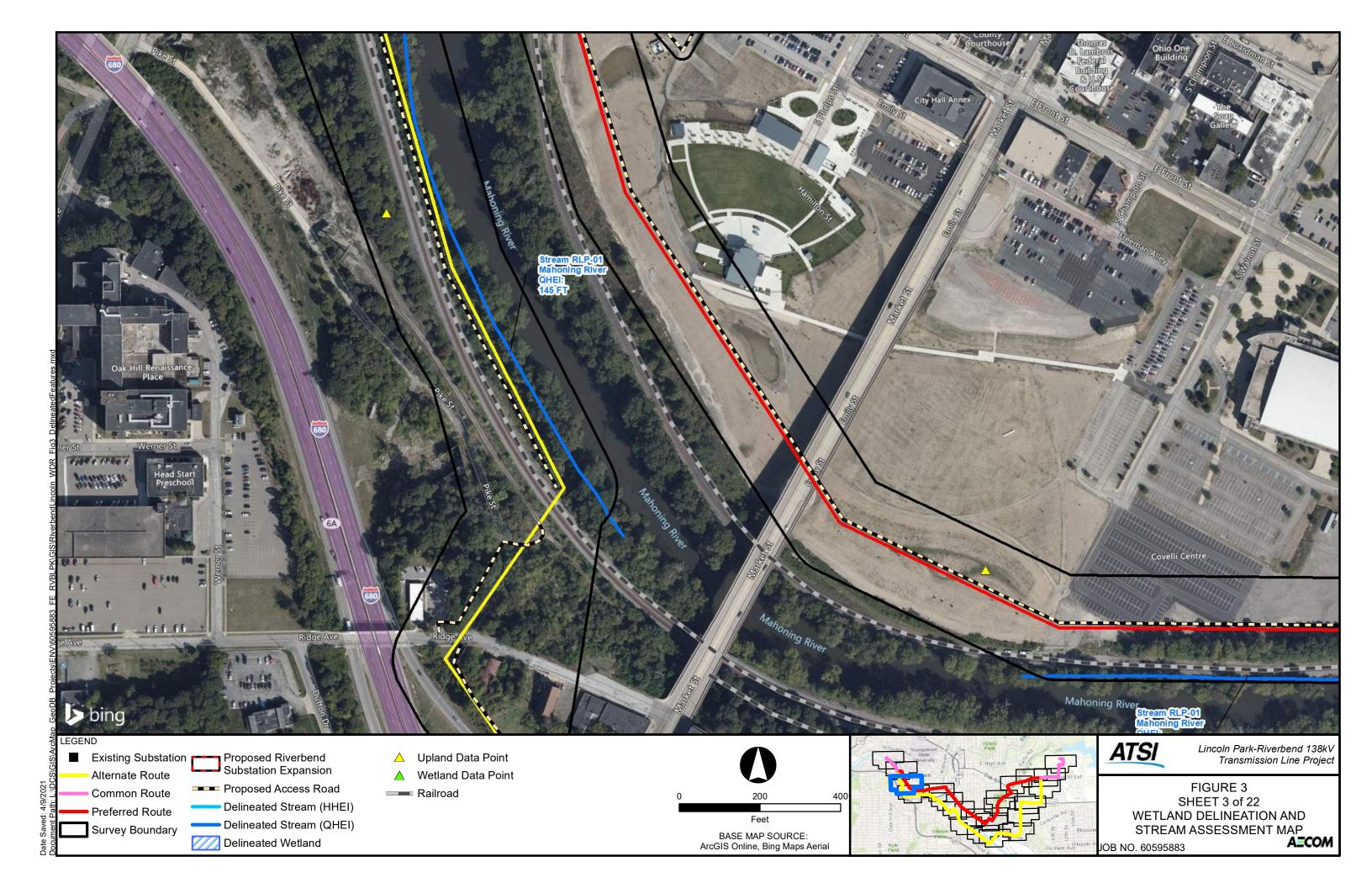


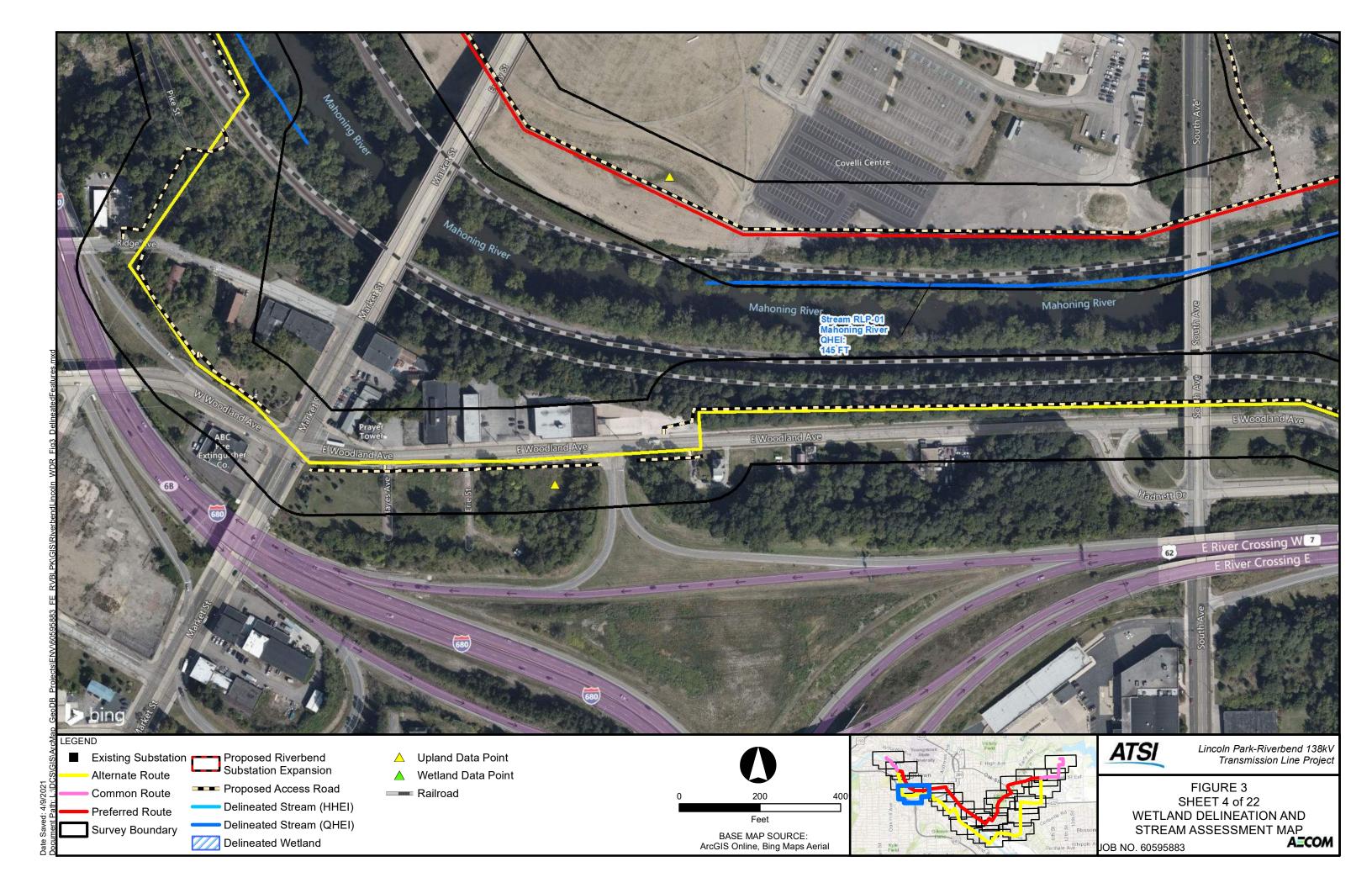


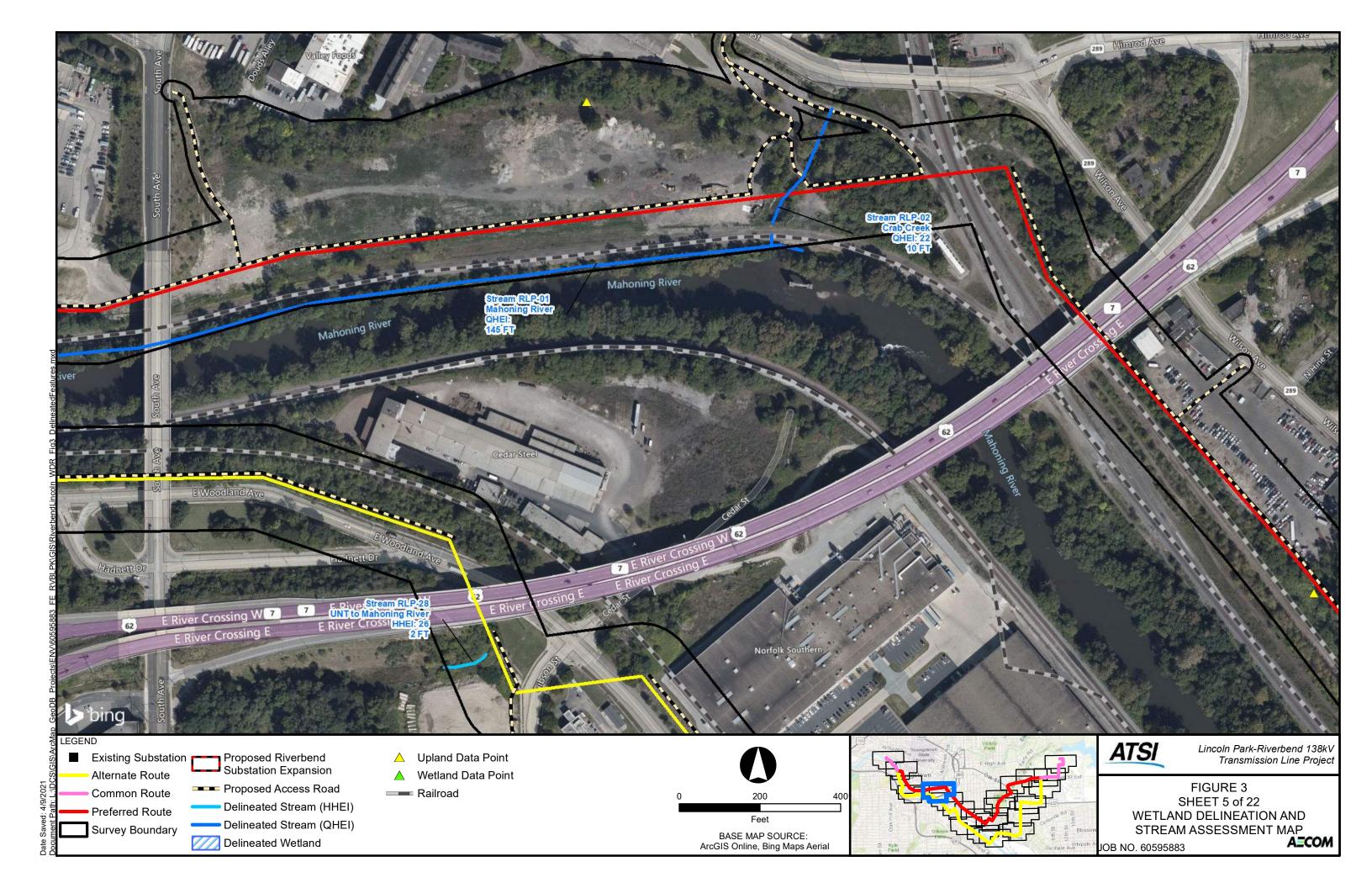


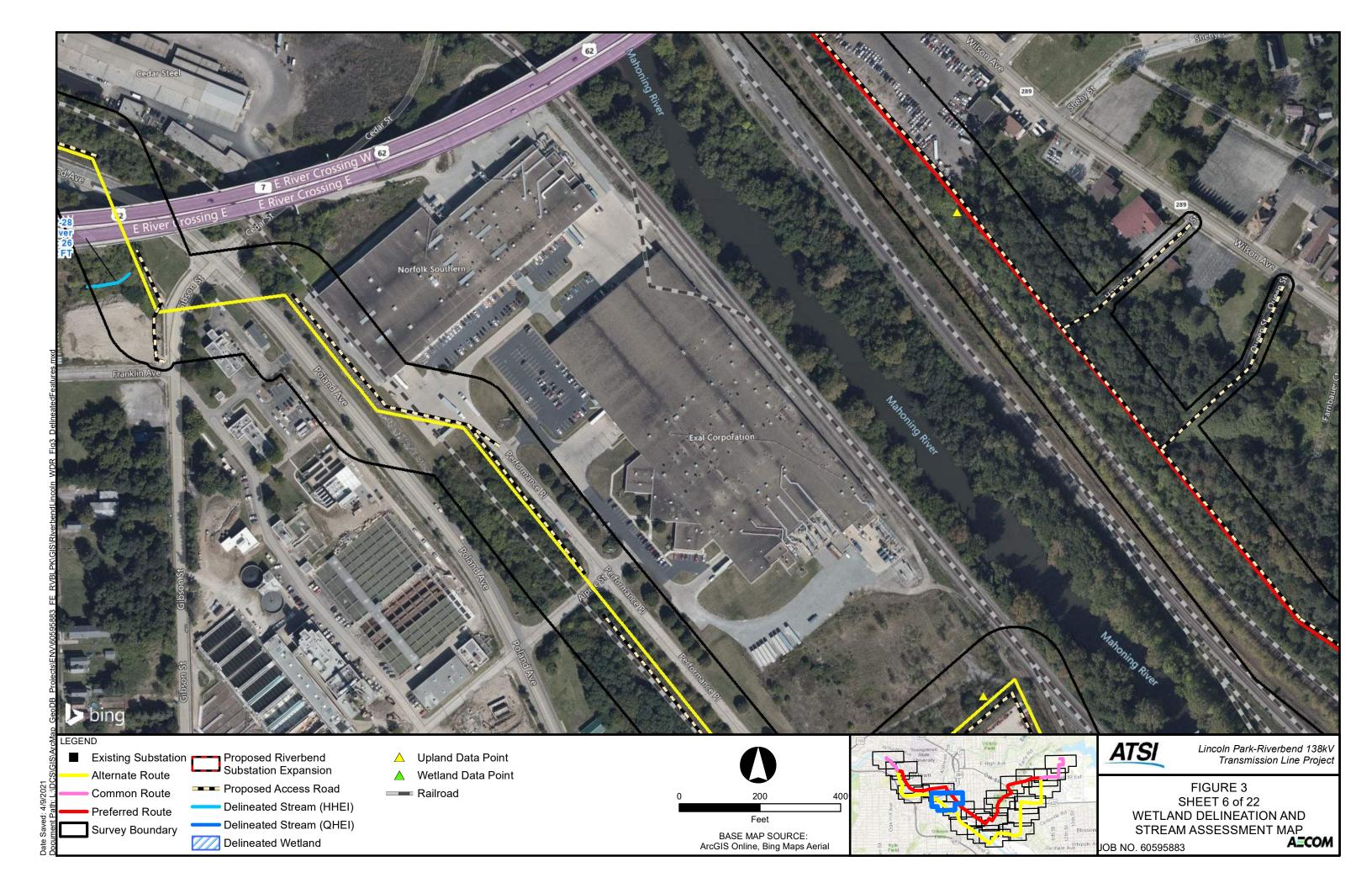


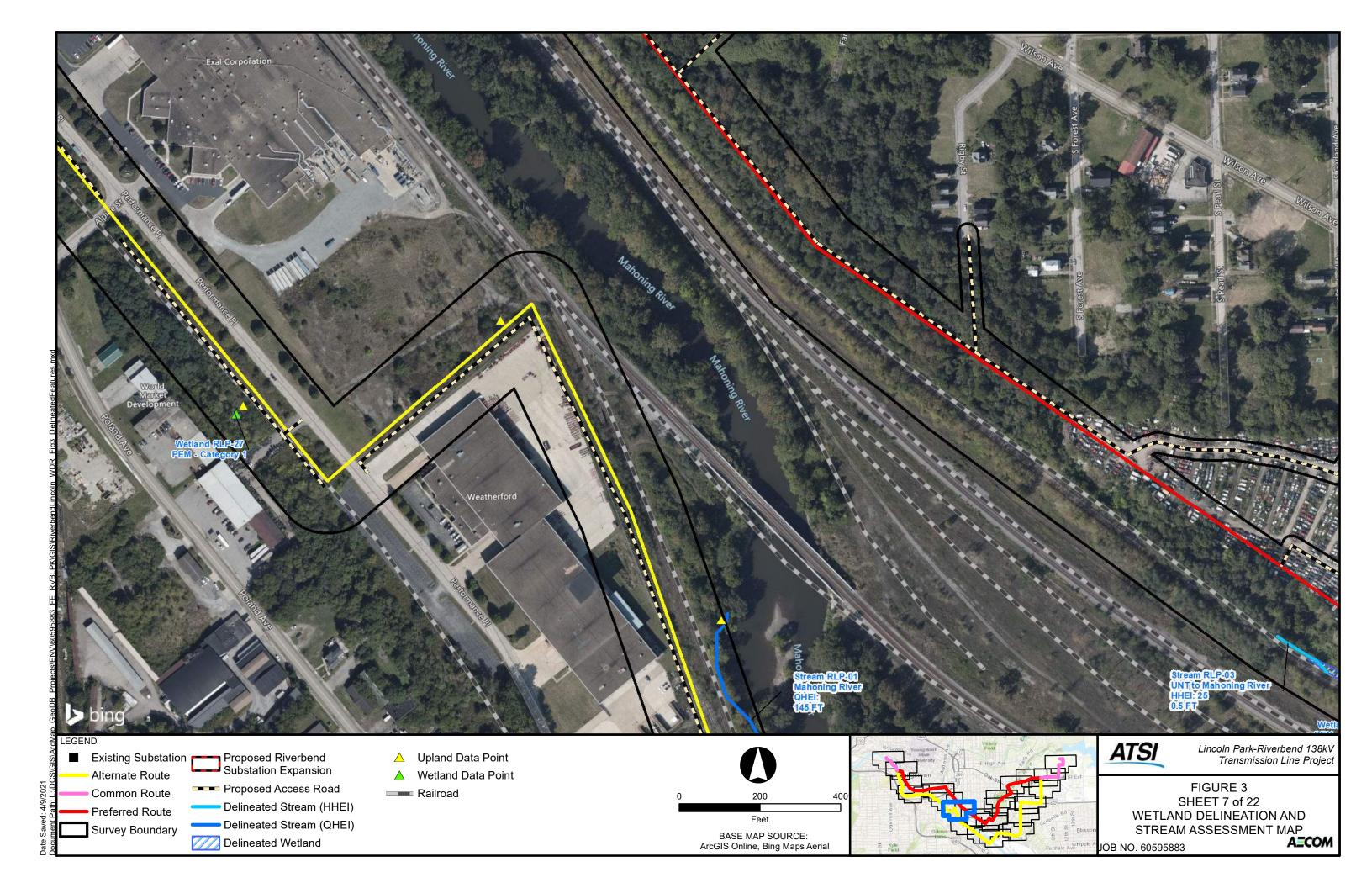


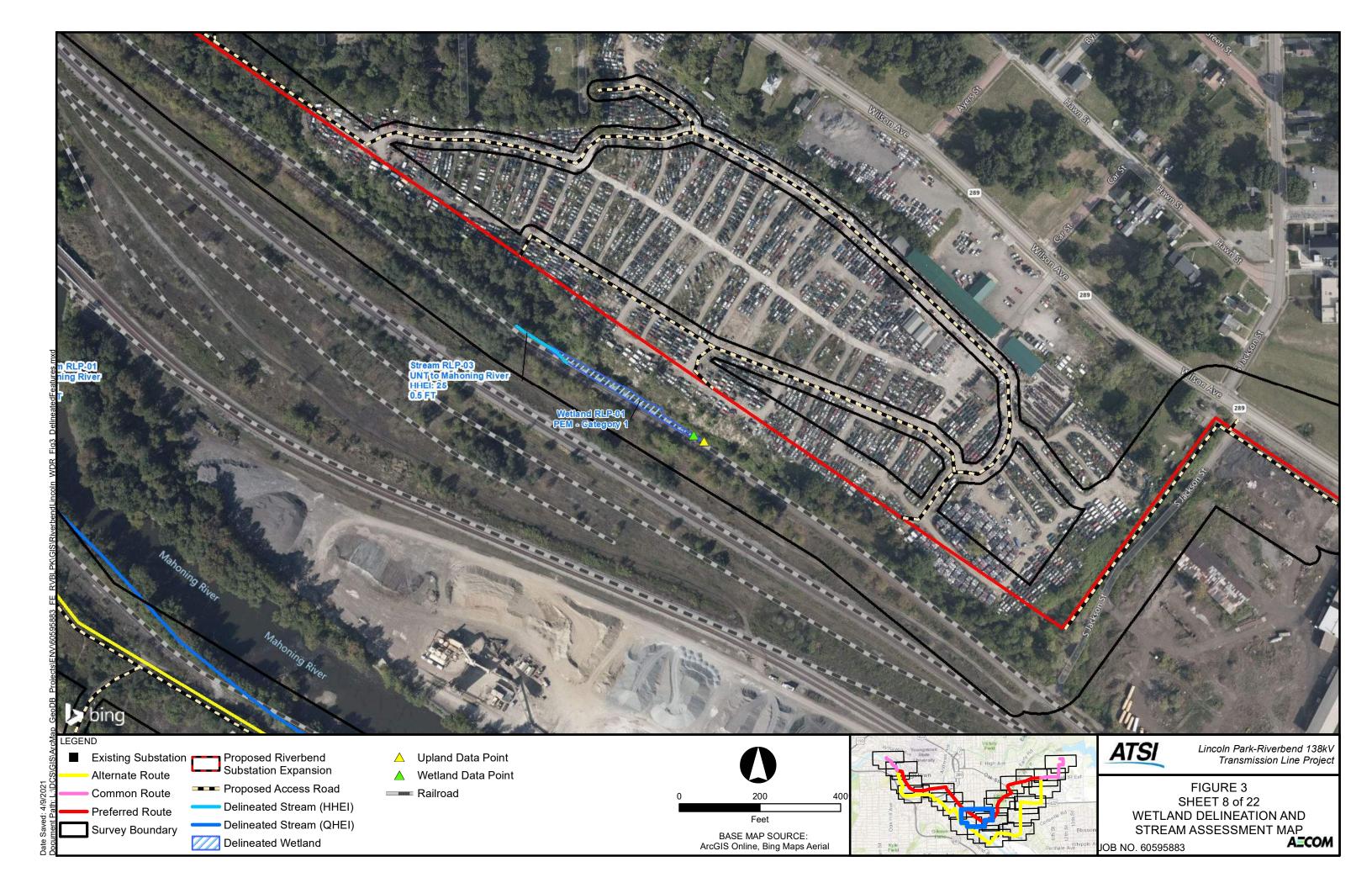


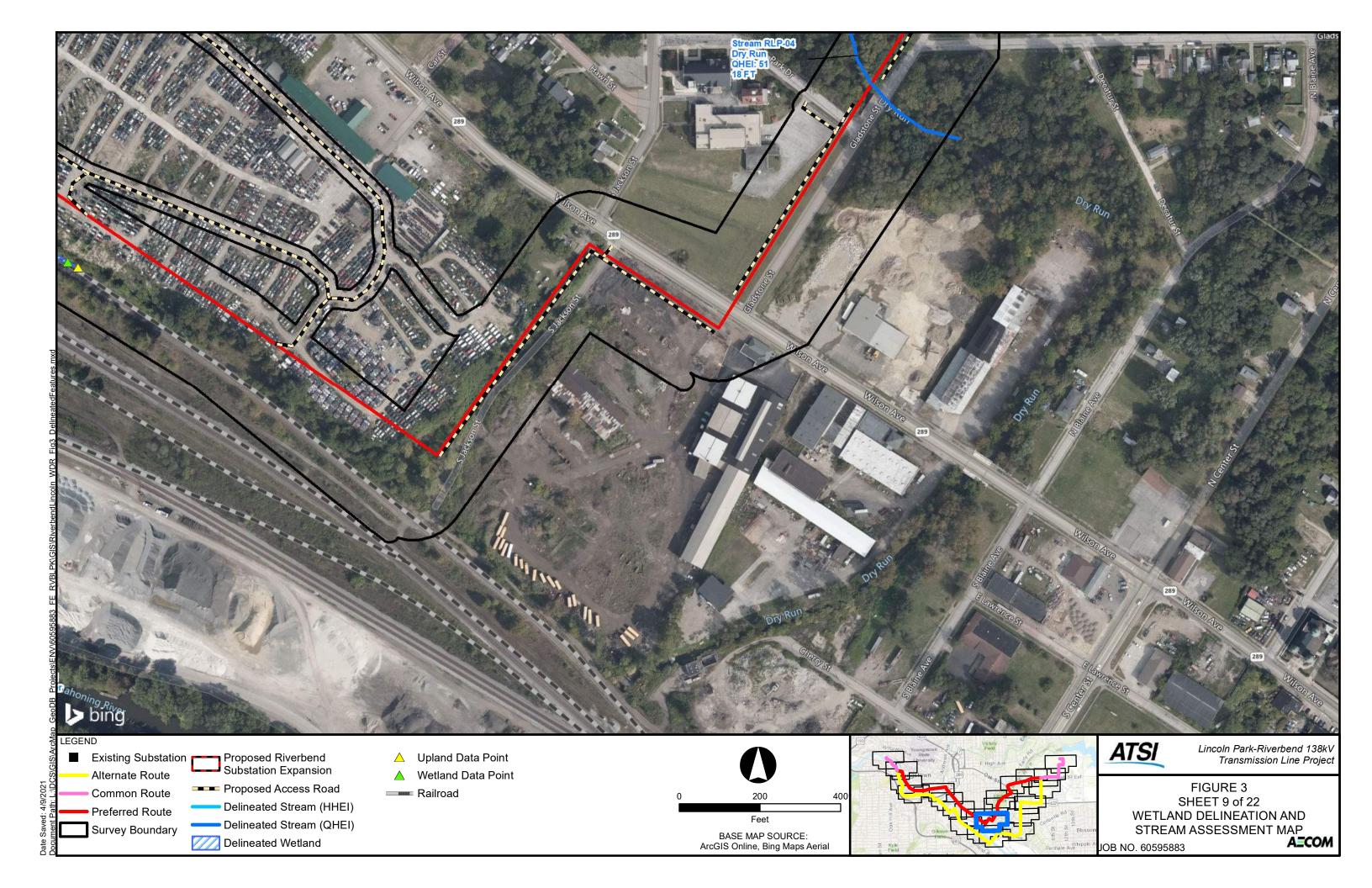


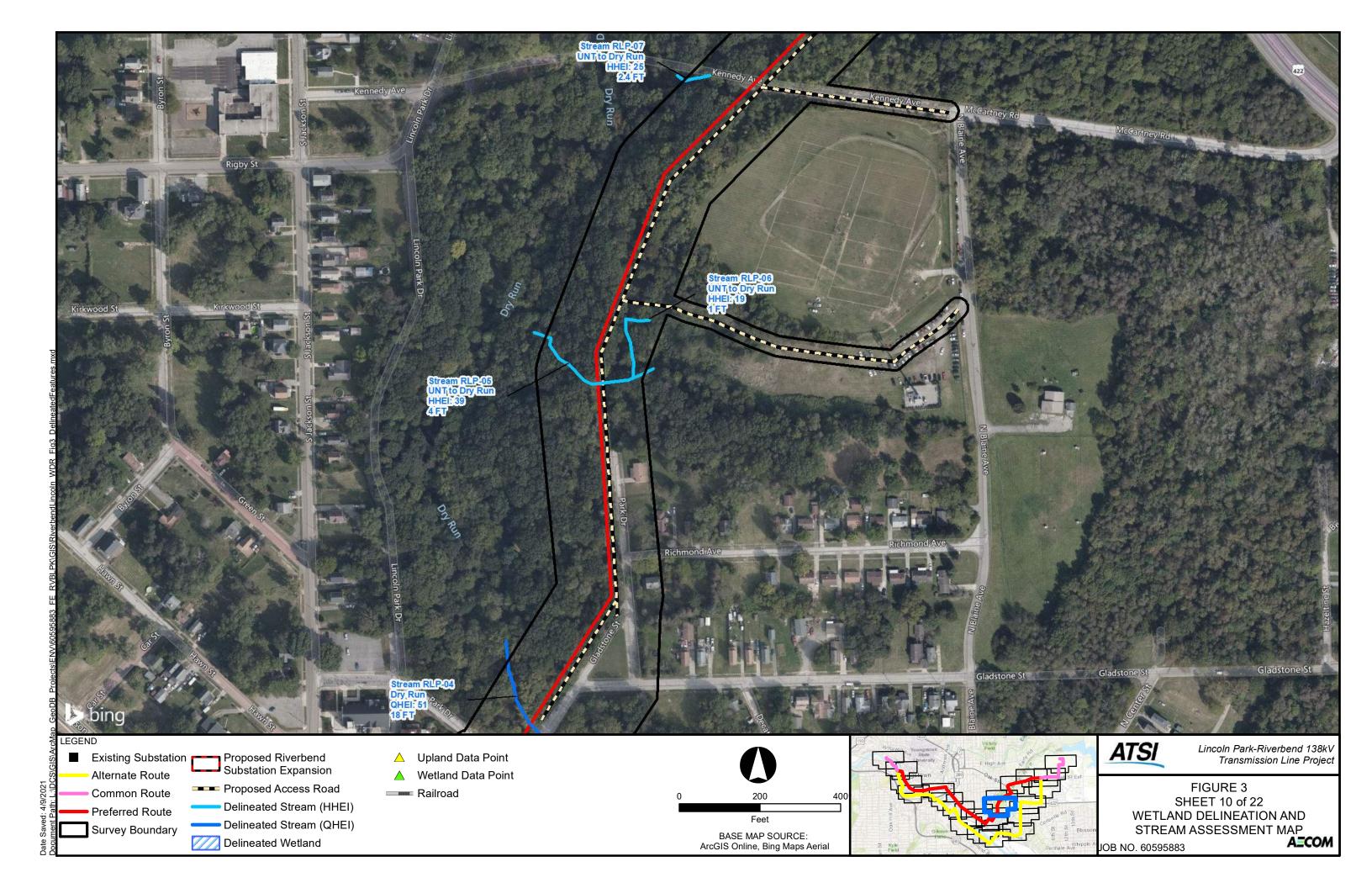


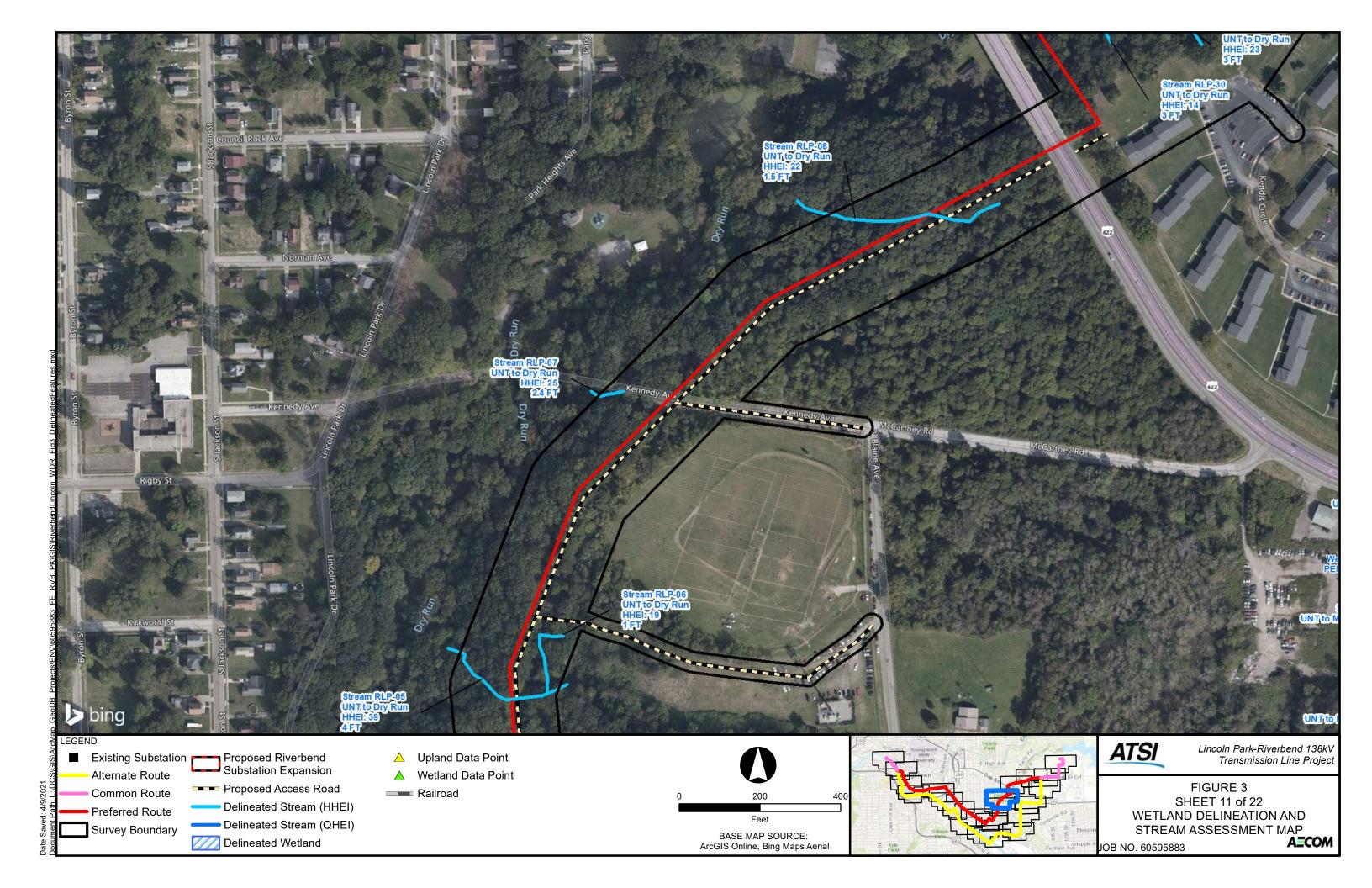


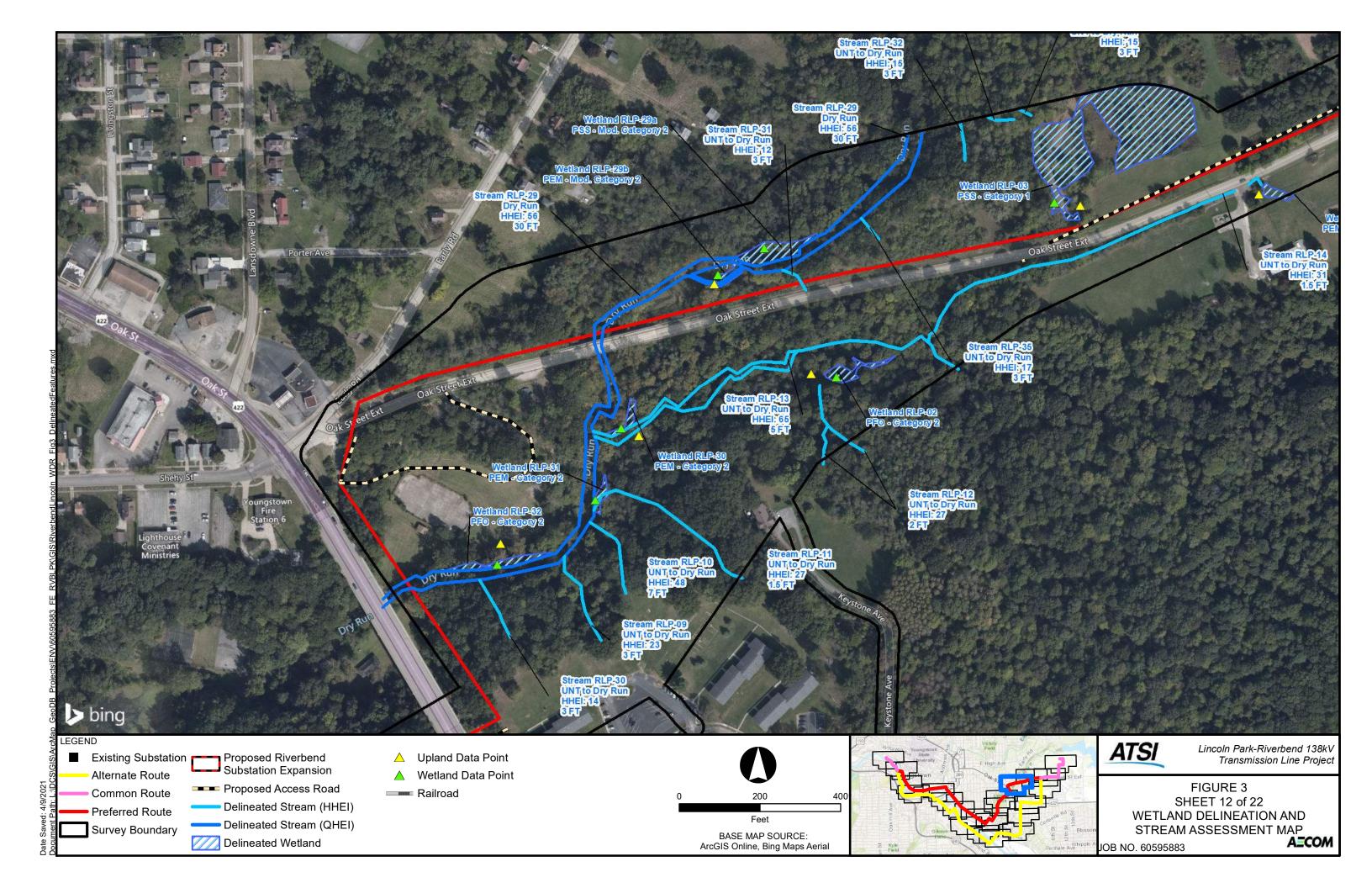


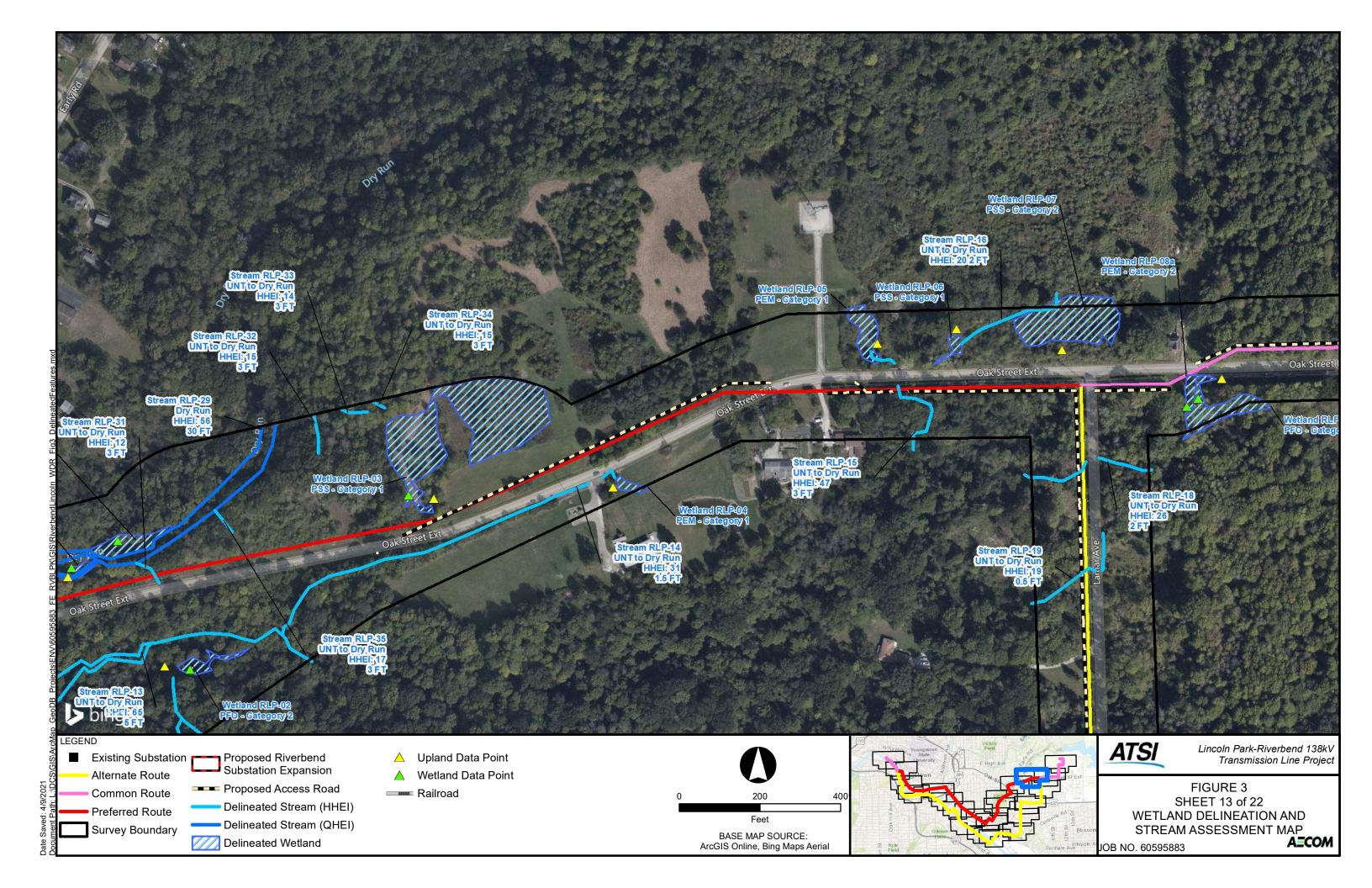


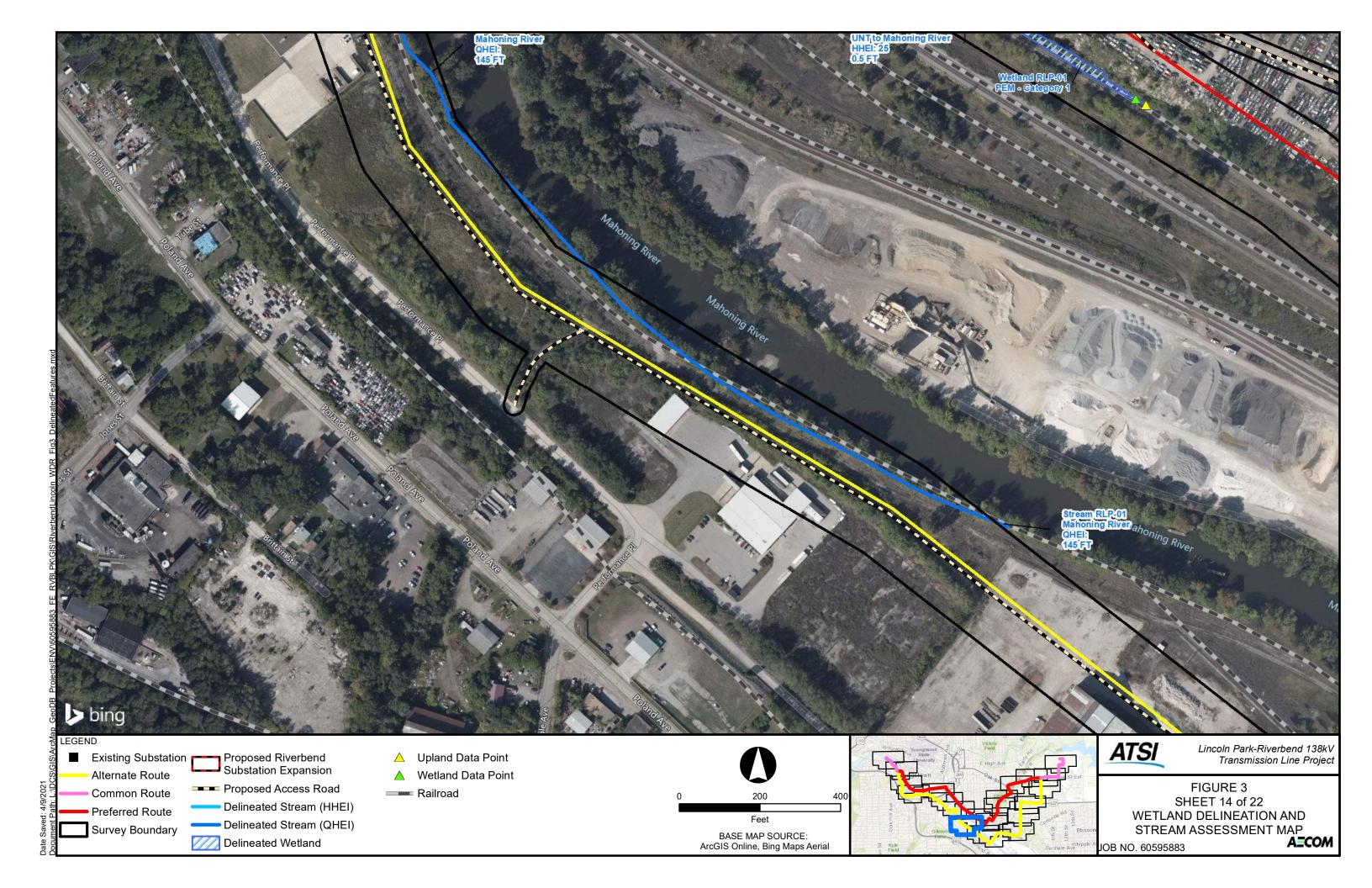


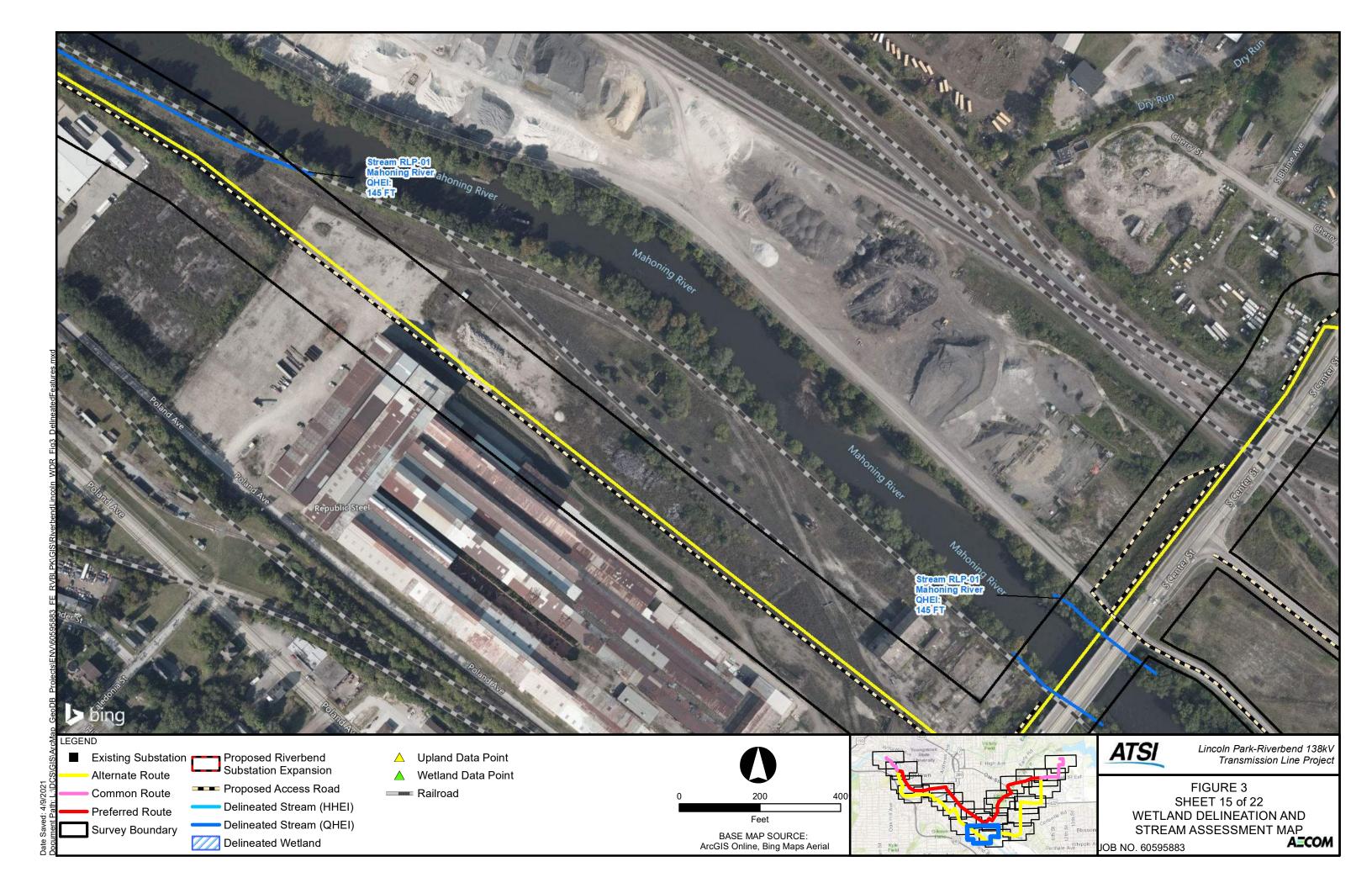


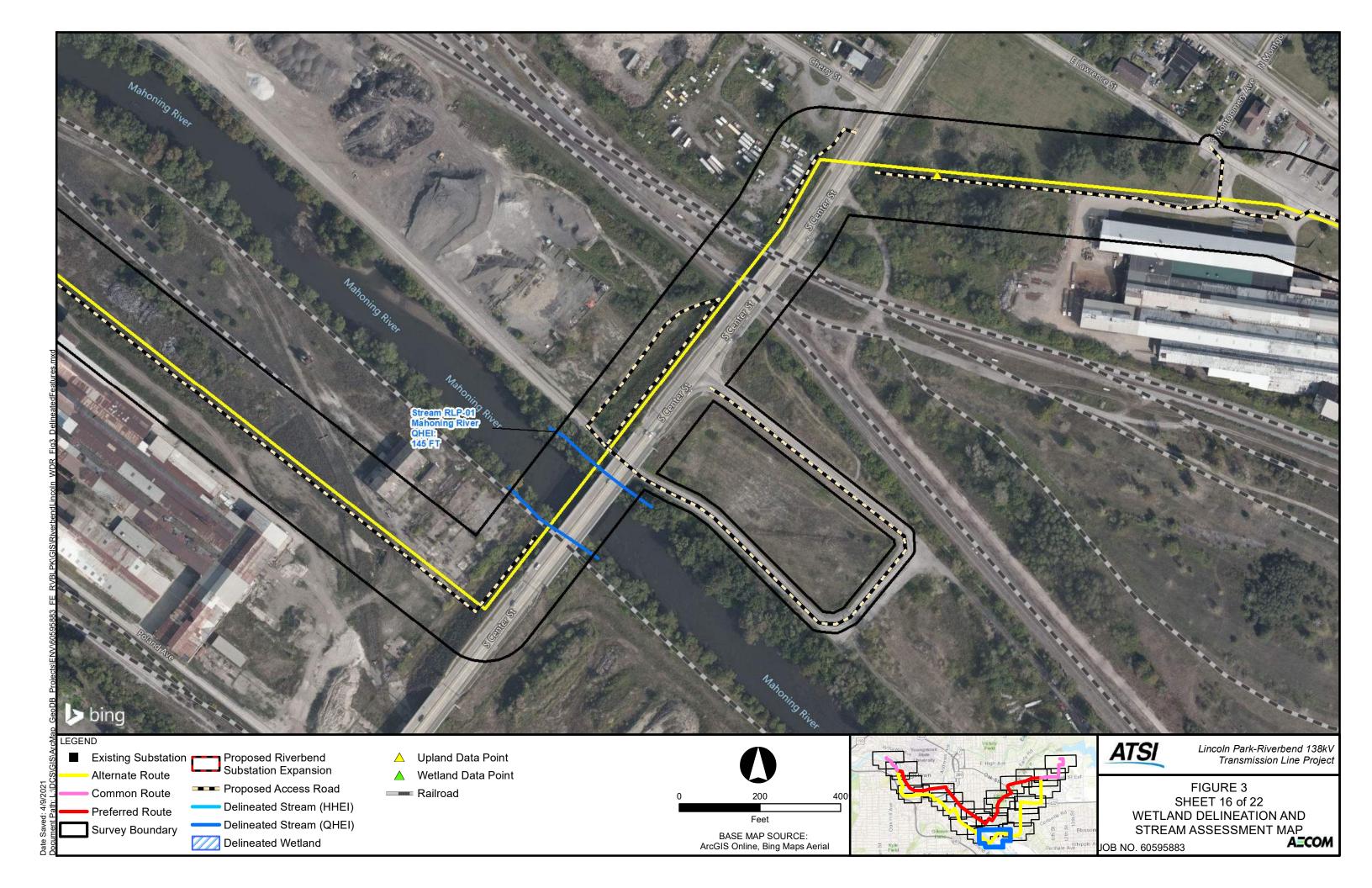


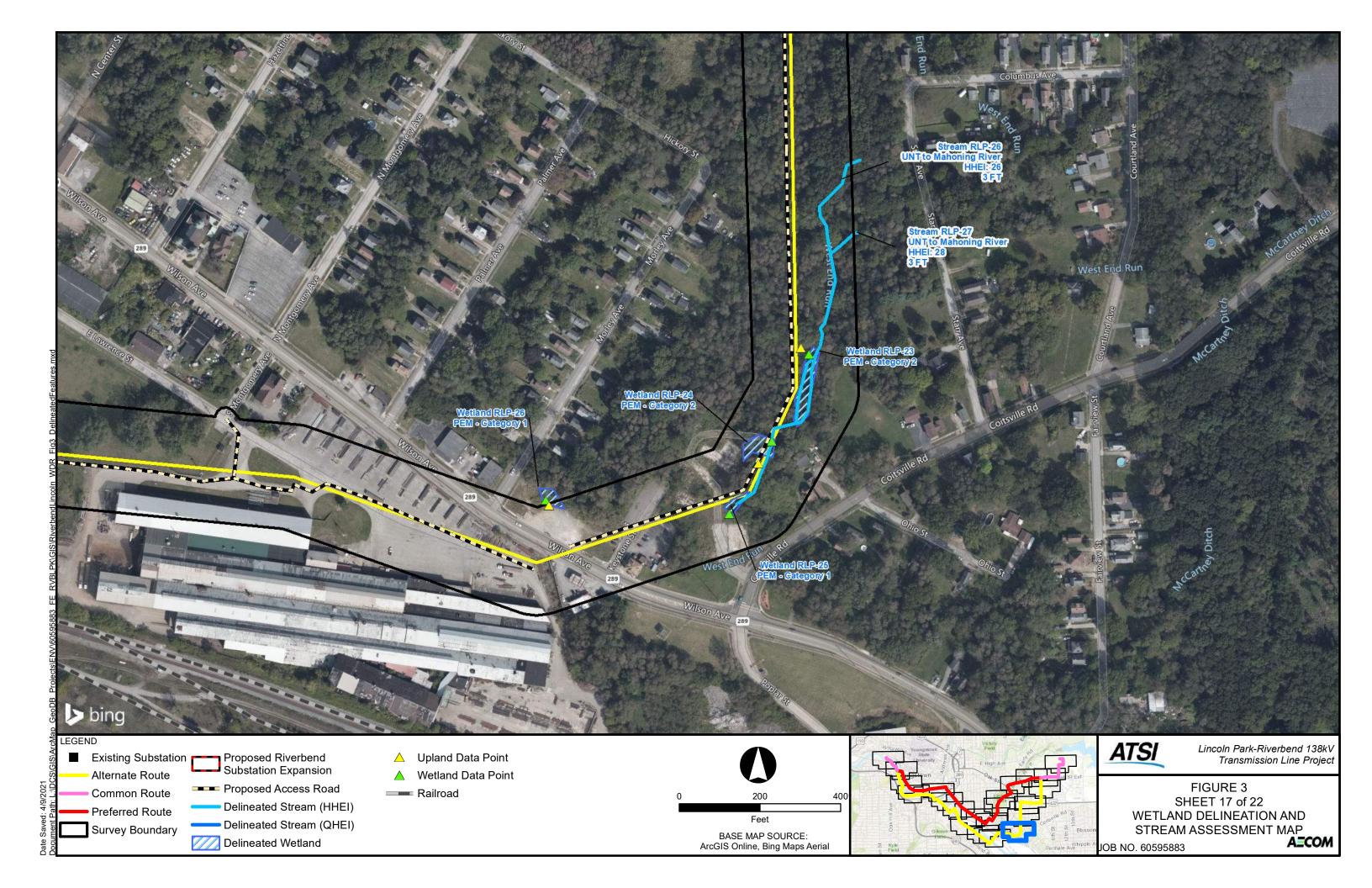


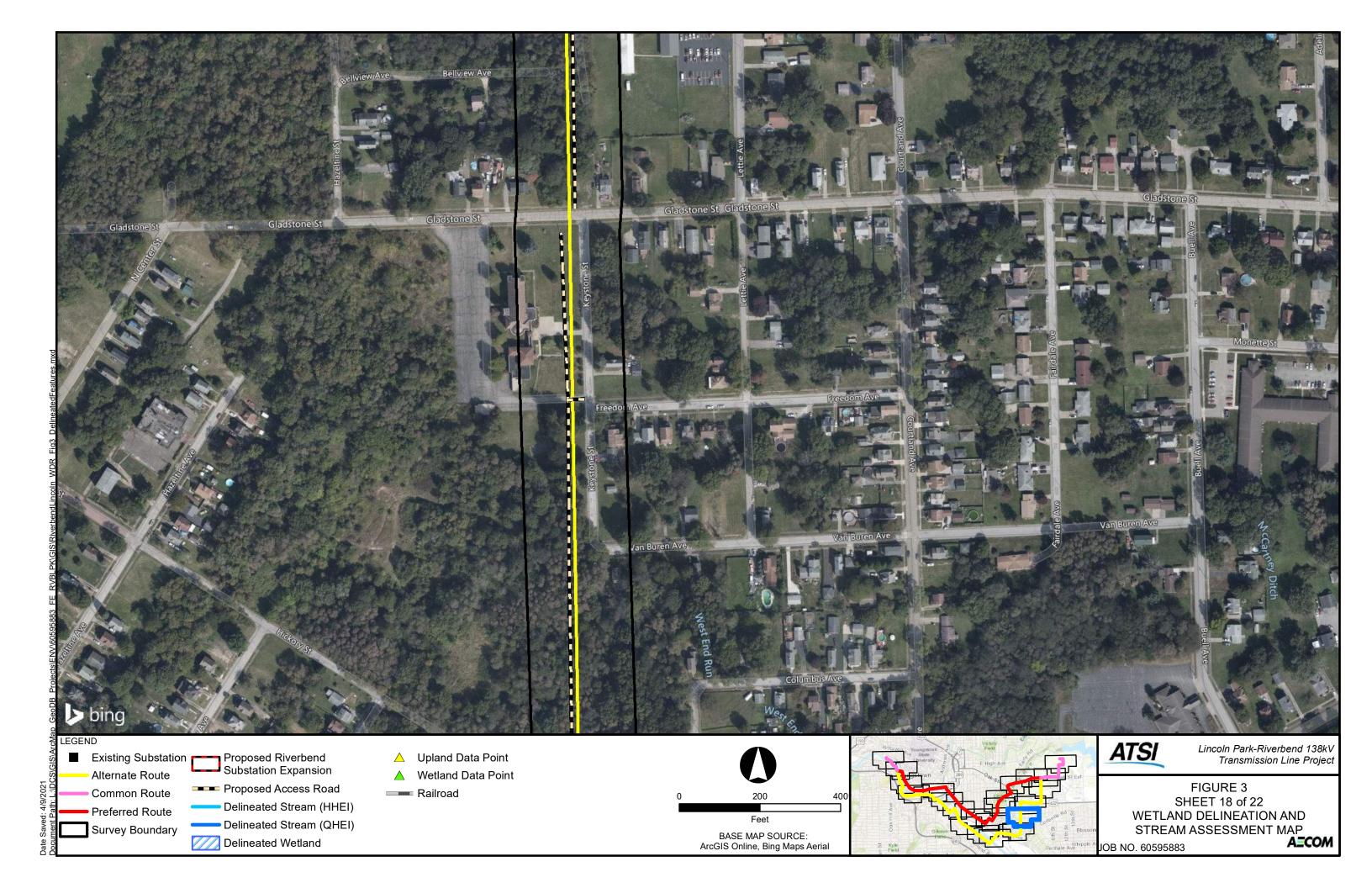


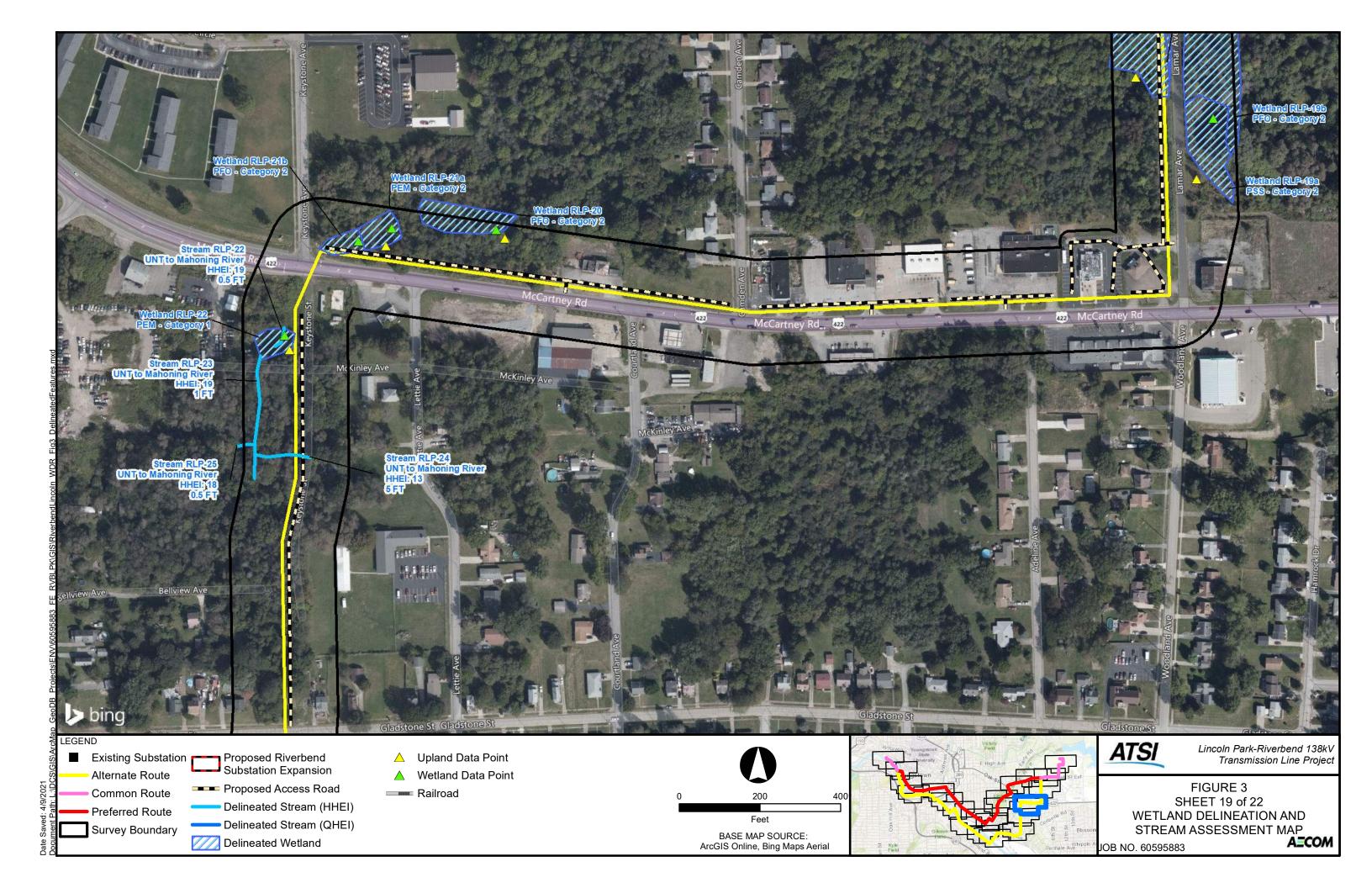


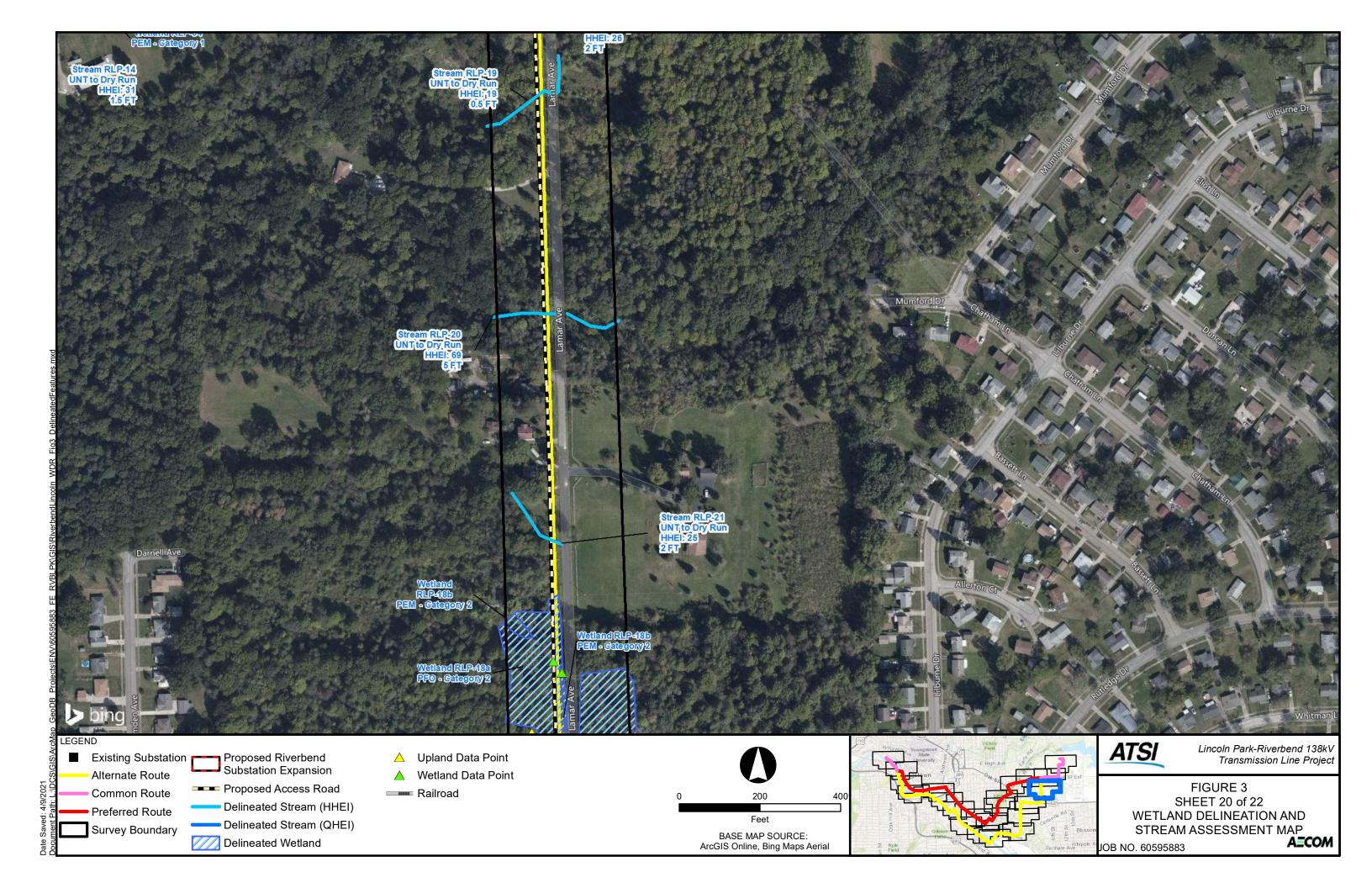


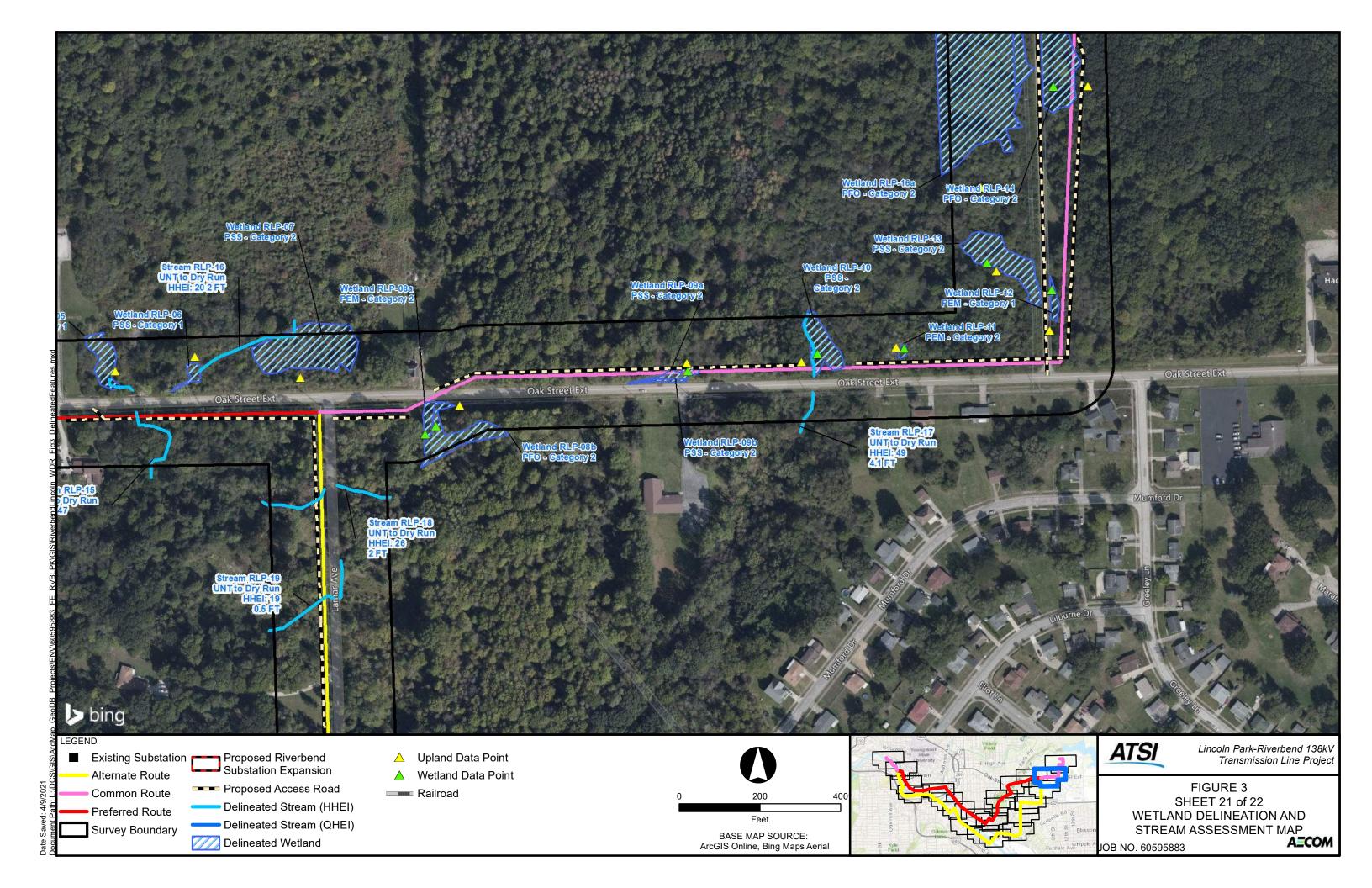


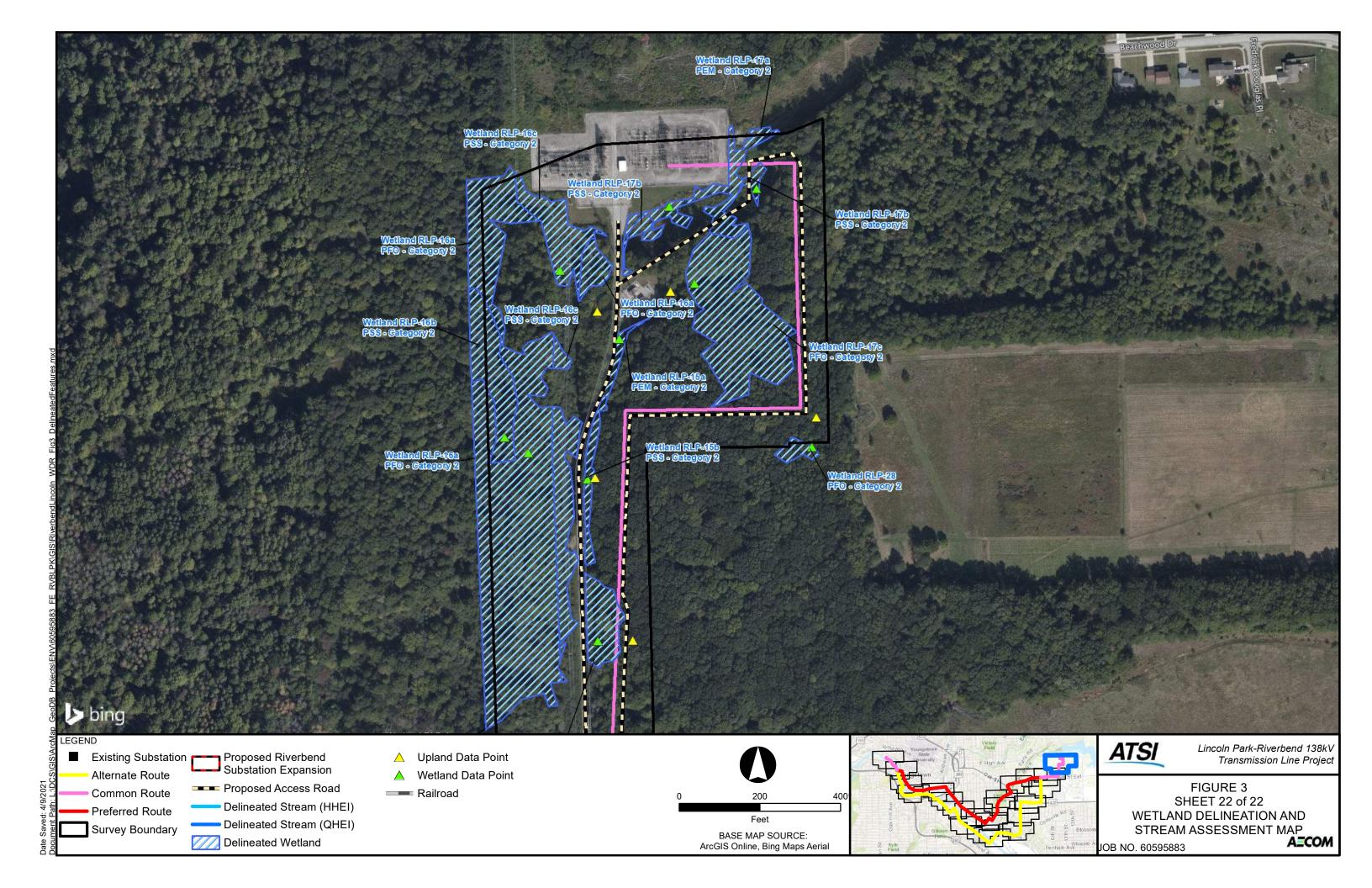














APPENDIX A

U.S. ARMY CORPS OF ENGINEERS WETLAND FORMS



Wetland RLP-01

Project/Site: Lincoln Park-Riverbend	138KV Transmiss	ion Line Ci	ity/County: Manoning County	Samplii	ng Date: 08-Jan-20
Applicant/Owner: ATSI, . a FirstEne	rgy Company		State: Of	Sampling Point:	w-aeh-20200108-01
Investigator(s): AEH, SKM			Section, Township, Range:	s. T. T2N	R. R2W
Landform (hillslope, terrace, etc.):	Footslope	Lo	ocal relief (concave, convex,	none): concave	Slope: 2.0 % / 0.0
Subregion (LRR or MLRA): LRR k	(Lat.: 4	1.086180 Lon	g.: -80.627305	Datum: WGS 84
Soil Map Unit Name: Ua-Udorthen	a m north			NWI classification:	
Are climatic/hydrologic conditions	on the site ty	pical for this time of yea	ar? Yes No	(If no, explain in Remark	zs.)
Are Vegetation, Soil	, or Hydrold			I Circumstances" present?	Vac (a) Na (
Are Vegetation , Soil	, or Hydrold				
Summary of Findings - A	5.5	25 fi	ž 6	explain any answers in Re	353
Hydrophytic Vegetation Present?	Yes •	No O		,	
Hydric Soil Present?	Yes •	No O	Is the Sampled Area	Yes ● No ○	
STATE OF STA	Yes •	No O	within a Wetland?	Yes 💌 No 🔾	
Wetland Hydrology Present? Remarks: (Explain alternative pr					
Hydrology					
Wetland Hydrology Indicators:				Secondary Indicators (minin	num of 2 required)
Primary Indicators (minimum of c	ne required; o	check all that apply)		Surface Soil Cracks (B6)	
✓ Surface Water (A1)		Water-Stained Leaves	s (B9)	Drainage Patterns (B10)
High Water Table (A2)		Aquatic Fauna (B13)		Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B15)	(45.52)	Dry Season Water Table	e (C2)
Water Marks (B1) Sediment Deposits (B2)		Hydrogen Sulfide Odd		Crayfish Burrows (C8)	wiel Images (CO)
Drift deposits (B3)		Oxidized Rhizosphere Presence of Reduced	es along Living Roots (C3)	Saturation Visible on Ae Stunted or Stressed Pla	20. TO 10. TO 10. THE SEC 10.
Algal Mat or Crust (B4)		Recent Iron Reduction		Geomorphic Position (D	
Iron Deposits (B5)		Thin Muck Surface (C	AND SOME THE PROPERTY OF THE P	Shallow Aquitard (D3)	2)
Inundation Visible on Aerial Image	ery (B7)	Other (Explain in Ren	50 ₀₀₀₀₀₀₀	Microtopographic Relief	(D4)
Sparsely Vegetated Concave Surfa				✓ FAC-neutral Test (D5)	
Field Observations:					
Surface Water Present? Yes	● No ○	Depth (inches):	1		
Water Table Present? Yes	○ No •	Depth (inches):		888	
Saturation Present? (includes capillary fringe) Yes	○ No •	Depth (inches):	Wetland Hyd	rology Present? Yes	● No ○
Describe Recorded Data (stream g	auge, monitor	ing well, aerial photos, p	previous inspections), if availa	able:	
Remarks:					
Wetland recieves water from preci	pitation and r	unoff from surrounding a	areas.		

VEGETATION - Use scientific names of plants

101-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3	0			Species Across All Strata:2(B)
4	0_			MMA. W E)
5	0			Percent of dominant Species That Are OBL FACW or FAC: 100.0% (A/B)
6	_ 0			That Are OBL, FACW, or FAC: 100.0% (A/B)
7	0_			Prevalence Index worksheet:
		= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)				OBL species
1 Platanus occidentalis	4		FACW	FACW species 34 x 2 = 68
2	0			No. of the state o
3	0			FAC species $0 \times 3 = 0$
4	22			FACU species $0 \times 4 = 0$
5				UPL species $0 \times 5 = 0$
6			-	Column Totals: <u>104</u> (A) <u>138</u> (B)
				Prevalence Index = B/A = 1.327
7	-	= Total Cover		Prevalence Index = B/A = 1.327
Herb Stratum (Plot size: 5ft)	4_ =	= Total Cover		Hydrophytic Vegetation Indicators:
	70	~	OBL	Rapid Test for Hydrophytic Vegetation
- n/ //	20			✓ Dominance Test is > 50%
2. Phragmites australis		~	FACW	✓ Prevalence Index is ≤3.0 ¹
3,				Morphological Adaptations ¹ (Provide supporting
4		님		data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7	0			Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9		П		Definitions of Vegetation Strata:
10		H		
				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				at breast neight (DBH), regardless or neight.
12	3			Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: _30ft)	100_ =	= Total Cover		greater than 3.28 ft (1m) tall
	0			Llow All book access (non-woods) plants, rewardings of
1		H		Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2		H		oled, and woody planto lood than oled it tall.
3		님	3	Woody vine - All woody vines greater than 3.28 ft in
4	0	\Box		height.
	0 =	= Total Cover		
				Hydrophytic
				Vegetation Present? Yes • No
				Present? Yes No O
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed fo	or positive	identification of the species observed within the wetland
area. Photographs of the wetland habitat are located in App			553	20

Sampling Point: w-aeh-20200108-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-01

Sampling Point: w-aeh-20200108-01

Profile Descrip	otion: (De	scribe to	the depth	needed to	document	the indic	ator or c	onfirm the	absence of indicators	.)	
Depth _		Matrix				dox Featu					
(inches)	Color (100	Color	(moist)		Type 1	Loc ²	Texture	Remarks 40% fill	_
0-5		3/2	100						Silty Clay Loam	40% fill	
5-18	10YR	3/1	95	10YR	5/6		C		Silty Clay Loam	40% IIII	
							-	-			
											_
											_
											_
											_
¹ Type: C=Conce	ntration. D	=Depletion	n. RM=Red	uced Matrix,	CS=Covere	d or Coated	d Sand Gra	ains ² Loca	tion: PL=Pore Lining. M=	=Matrix	
Hydric Soil In	dicators:								Indicators for Pro	oblematic Hydric Soils: 3	
Histosol (A1	1)					w Surface (S8) (LRR F	₹,		0) (LRR K, L, MLRA 149B)	
Histic Epipe	don (A2)				A 149B)					edox (A16) (LRR K, L, R)	
Black Histic	(A3)			-		ace (S9) (L			The second second second	at or Peat (S3) (LRR K, L, R)	
Hydrogen S						Mineral (F1)	LRR K, L)			57) (LRR K, L, M)	
Stratified La					ny Gieyed i leted Matrix	Matrix (F2)			Polyvalue Belov	w Surface (S8) (LRR K, L)	
Depleted Be			11)		ox Dark Su				Thin Dark Surfa	ace (S9) (LRR K, L)	
Thick Dark S						Surface (F7	")		Iron-Manganes	e Masses (F12) (LRR K, L, R)	
Sandy Muck Sandy Gleye				10	ox Depress		•			dplain Soils (F19) (MLRA 149B)	
Sandy Redo		54)			167	5.5% (5				TA6) (MLRA 144A, 145, 149B)	
Stripped Ma									Red Parent Mar		
Dark Surfac		R R. MLRA	149B)							ark Surface (TF12)	
27			De Corver de la Corver						Other (Explain	in Remarks)	
³ Indicators of h			n and wetta	ina nyarology	must be p	resent, uni	ess disturt	bea or proble	ematic.		
Restrictive Lay	er (if obs	erved):									
Type:	¥								Hydric Soil Present	? Yes • No O	
Depth (inche	es):								,	163 0 110 0	
Remarks:											
Redox dark sur	face was	present v	vithin wetl	and area.							
Based on the si	ite investi	gations.	AECOM ide	entified that	the wetla	and met a	II three c	riteria and	classified this area as	a wetland. The wetland is	
represented by											

Wetland RLP-02

Project/Site: Lincoln Park-Riverbend	138kV Transmiss	ion Line	City/County:	Mahoning County	Samplin	ng Date: 06-Jan-20
Applicant/Owner: ATSI, , a FirstEnd	ergy Company			State: OH	Sampling Point:	w-jbl-20200106-01
Investigator(s): JBL, JTT			Section, To	ownship, Range: S		R. 1W
Landform (hillslope, terrace, etc.):	Toeslope		Local relief (co	oncave, convex, no	ne): concave	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR		Lat.:	41.095694		-80.610871	Datum: NAD 83
	55 5-7 1-7			Long	NWI classification:	
Soil Map Unit Name: DkF-Dekalb	very stony loan	n, 25 to 50 percent si			- NWI Classification:	NA
Are climatic/hydrologic conditions	on the site typ	pical for this time of	year? Ye	s ● No ○ (:	If no, explain in Remark	
Are Vegetation, Soil	, or Hydrolo	ogy 🗌 significant	ly disturbed?	Are "Normal C	ircumstances" present?	Yes ● No ○
Are Vegetation , Soil	, or Hydrolo	naturally	problematic?	(If needed, ex	plain any answers in Re	marks.)
Summary of Findings - A	Attach site	map showing	sampling p	5 0 1	AL A	
Hydrophytic Vegetation Present?	Yes	No O	100			
Hydric Soil Present?	Yes	No O		Sampled Area n a Wetland?	Yes No	
Wetland Hydrology Present?	Yes	No O	wich.	i a wedana:		
Remarks: (Explain alternative p	ocedures here	or in a constate ren	net)			
Hydrology						
SP STATE OF THE ST						
Wetland Hydrology Indicators:		lands all that and N			Secondary Indicators (minim	
Primary Indicators (minimum of	one requirea; c				Surface Soil Cracks (B6)	
✓ Surface Water (A1) ✓ High Water Table (A2)		Water-Stained Lea	3 3). I	✓ Drainage Patterns (B10) Moss Trim Lines (B16))
✓ Saturation (A3)		Marl Deposits (B1			Dry Season Water Table	a (C2)
Water Marks (B1)		Hydrogen Sulfide		i.	Crayfish Burrows (C8)	. (C2)
Sediment Deposits (B2)		Oxidized Rhizosph		Roots (C3)	Saturation Visible on Ae	erial Imagery (C9)
Drift deposits (B3)		Presence of Reduc	1 1 1 1 1 1 1 1 1 1	[Stunted or Stressed Plan	
Algal Mat or Crust (B4)		Recent Iron Reduc		s (C6)	✓ Geomorphic Position (D	2)
Iron Deposits (B5)		Thin Muck Surface	e (C7)		✓ Shallow Aquitard (D3)	
☐ Inundation Visible on Aerial Imag	ery (B7)	Other (Explain in I		[Microtopographic Relief	(D4)
Sparsely Vegetated Concave Surf	ace (B8)	, ,	**************************************	Ę	✓ FAC-neutral Test (D5)	
Field Observations:						
Surface Water Present? Yes	O No 💿	Depth (inches):				
Water Table Present? Yes	No ○	Depth (inches):	8			
Saturation Present? (includes capillary fringe) Yes	● No ○	Depth (inches):	200	Wetland Hydro	logy Present? Yes	● No ○
(includes capillary fringe)				actions) if available		
Describe Recorded Data (stream of	jauge, monitori	ing well, aerial photo	s, previous insp	ecuons), ii availabi	e.	
Remarks:						
Soils are saturated and water tabl flow/drainage, and flood events.	e is present up	to the surface of the	soil pit. The s	ource of hydrology	is derived from precipita	ition, surface

VEGETATION - Use scientific names of plant

(0)	Absolute	Dominant English	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'	% Cover	Species?	Status	Number of Dominant Species
1 Fraxinus pennsylvanica	35	✓	FACW	That are OBL, FACW, or FAC:5(A)
2. Quercus palustris	GE CONTRACTOR		FACW	Total Number of Dominant
3				Species Across All Strata:6(B)
4	0_			
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B)
6	0			That Are Obc, FACW, OF FAC.
7	0_			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15')	40 =	Total Cover	į.	Total % Cover of: Multiply by:
		3 <u></u> V		OBL species <u>40</u> x 1 = <u>40</u>
1 Fraxinus pennsylvanica		✓	FACW	FACW species <u>110</u> x 2 = <u>220</u>
2. Acer saccharum		~	FACU	FAC species 35 x 3 = 105
3 Acer saccharinum	00	님	FACW	FACU species
4				UPL species
5				STATE AND ADDRESS STATE
6		H		Column Totals: <u>200</u> (A) <u>425</u> (B)
7				Prevalence Index = B/A =2.125_
Herb Stratum (Plot size: _5')	40 =	Total Cover		Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
1. Epilobium coloratum	2000	~	OBL	✓ Dominance Test is > 50%
2. Cyperus esculentus	55436	~	FACW	✓ Prevalence Index is ≤3.0 ¹
3. Geum canadense			FAC	Morphological Adaptations ¹ (Provide supporting
4. Solidago gigantea		H	FACW	data in Remarks or on a separate sheet)
5. Lysimachia nummularia		H	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
6				,
7	0_			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9				Definitions of Vegetation Strata
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
W L M C (District 20)	110=	Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30')	50 Since			
1. Vitis riparia		<u>~</u>	FAC	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2	0_	H		size, and woody plants less than 5.20 it tall.
3.—			5	Woody vine - All woody vines greater than 3.28 ft in
4	0	Ш.		height.
	15 =	Total Cover		
				Hydrophytic Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate she	eet.)			
Dominant stratum obserevd to be PFO based on 40% cover.		notweed (Po	lvaonum c	cuspidatum) covers an area northwest of wetland between
the stream. Photographs of this wetland habitat can be four			,,	

Sampling Point: w-jbl-20200106-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-02

Sampling Point: w-jbl-20200106-01

Profile Descr	ription: (Des	cribe to	the depth	needed to	documen	t the indic	cator or c	onfirm the	absence of indicato	ors.)		
Depth		Matrix				dox Featu			- <u>-</u> .		_	
(inches)	Color (n		%		(moist)	%	Type 1	Loc²	Texture		Rema	
<u>0-11</u>	10YR	4/1	90	5YR	4/4	_ 10	C		Clay Loam		Predominant re	edox concentrations
1 Type: C=Cond	centration D=	:Depletion	RM=Redi	rced Matrix	CS=Covere	ed or Coate	d Sand Gra	ins 21 ocat	tion: PL=Pore Lining.	M=Mat	riv	
Hydric Soil 1		Беріссіої	i. Kri–Kcu	accu matrix,	C5-C0 VC1C	ed or could	a Sana Gre	iii Locat				3
Histosol (Pol	aralua Polo	w Surface (CO) /I DD D	ii.	Indicators for	Proble	matic Hydric	Soils:
	pedon (A2)				RA 149B)	w Surface (30) (LKK F	4			.RR K, L, MLRA	
Black Hist				Thi	n Dark Surf	ace (S9) (L	RR R, MLR	A 149B)	Coast Prairie	Redox	(A16) (LRR K,	L, R)
	Sulfide (A4)			Loa	my Mucky I	Mineral (F1)) LRR K, L)		5 cm Mucky	Peat or	Peat (S3) (LR	R K, L, R)
	Layers (A5)					Matrix (F2)					LRR K, L, M)	9
	Below Dark Su	urfaco (A1	1)	✓ Der	leted Matri	x (F3)			Polyvalue Be	elow Su	rface (S8) (LRF	R K, L)
The second second	k Surface (A12	na manananan di Banana	1)		ox Dark Su				Thin Dark S	urface (S9) (LRR K, L))
	ick Mineral (S1					Surface (F7	7)				asses (F12) (LR	
	eyed Matrix (S	50			ox Depress						n Soils (F19) (f	59
Sandy Re	. B	+)			9.5	10,200 193			The same of the same of the same of		(MLRA 144A, 1	145, 149B)
—									Red Parent I	Material	(F21)	
	Matrix (S6)	D MIDA	140P)						☐ Very Shallov	v Dark S	Surface (TF12))
	ace (S7) (LRR		er-verious.						Other (Expla	ain in Re	emarks)	
³ Indicators of	f hydrophytic v	egetation/	and wetla	nd hydrolog	y must be p	oresent, uni	less disturt	ed or proble	ematic.			
Restrictive L	ayer (if obse	rved):										
Type: _ar	ravel	3										
Depth (inc	hes): 11								Hydric Soil Prese	ent?	Yes	No O
Remarks:									<u>L</u>			
	la indicated t	ha nrac	ones of the	a budria sa	il indicate	ve that av	a likabu at	tributad ta	the frequent seture	ation o	f the wetlend	I. Craval was
found at 11in	ches deep in	ne prese npedina	further die	o nyaric sa aaina.	n murcaco	irs triat ar	e likely at	tributed to	the frequent satura	auon o	i the wettand	i. Gravei was
Sample point	was observe	ed to me	et the veg	etation, hy	drology a	nd soils in	dicators t	o classify t	this area as a wetla	nd.		
				en terretario en esta en el entre el en el entre								

Project/Site: Lincoln Park-Riverbend 138k	V Transmission Line		City/Count	ty: Mahoning Co	unty	Sampli	ng Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy	Company			State:	ОН	Sampling Point:	w-jbl-20200107-02
Investigator(s): JBL, JTT			Section	n, Township, Ran	ige: S.	т. 2N	R. 1W
Landform (hillslope, terrace, etc.):	Indulating		Local relie	f (concave, conv	ex, none): concave	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K	544	Lat.:	41.09684		Long.:	-80.6089	Datum: NAD 83
Soil Map Unit Name: CmC - Chili loan	n, 6 to 12 percent	slopes				NWI classification:	N/A
Are climatic/hydrologic conditions on	the site typical for	r this time of y	ear?	Yes No	(If	no, explain in Remark	is.)
Are Vegetation , Soil ,	or Hydrology	significant	ly disturbed	d? Are "No	rmal Circ	cumstances" present?	Yes No
Are Vegetation , Soil ,	or Hydrology	naturally p	oroblematic	? (If need	led. expl	ain any answers in Re	emarks.)
Summary of Findings - Atta	1929 - 2000	157 (651):		2010 100000 20			
Hydrophytic Vegetation Present?	Yes No)			350 	~ ~	
	Yes No			the Sampled Are ithin a Wetland?		es No	
Wetland Hydrology Present?	Yes No).	6.03				
Hydrology							
Wetland Hydrology Indicators:	14.000-00-000-00				Sec	condary Indicators (minin	num of 2 required)
Primary Indicators (minimum of one	required; check a	all that apply)			_ [Surface Soil Cracks (B6)
Surface Water (A1)		Vater-Stained Lea				Drainage Patterns (B10)
✓ High Water Table (A2)		quatic Fauna (B1				Moss Trim Lines (B16)	700 Y 00 Y
✓ Saturation (A3) Water Marks (B1)		Marl Deposits (B15	rom. Roma di Principo de Roma De Roma.			Dry Season Water Table	e (CZ)
Sediment Deposits (B2)		lydrogen Sulfide ()xidized Rhizosph	0.000 0.000	ina Boots (C3)		Crayfish Burrows (C8) Saturation Visible on Ae	orial Imagen/ (CQ)
Drift deposits (B3)		resence of Reduc				Stunted or Stressed Pla	
Algal Mat or Crust (B4)		ecent Iron Reduc			~	Geomorphic Position (D	
☐ Iron Deposits (B5)		hin Muck Surface		555 (55,		Shallow Aquitard (D3)	<i>=</i> 4
☐ Inundation Visible on Aerial Imagery	(07)	ther (Explain in F				Microtopographic Relief	f (D4)
Sparsely Vegetated Concave Surface					✓	FAC-neutral Test (D5)	
Field Observations:							
Surface Water Present? Yes		Depth (inches):	-				
Water Table Present? Yes •	No O	Depth (inches):	4			- va Vac	● No ○
Saturation Present? (includes capillary fringe) Yes	No O	Depth (inches):	0	Wetland	Hydrolog	gy Present? Yes	NO C
Describe Recorded Data (stream gau	ge, monitoring we	ell, aerial photo	os, previous	inspections), if	available	2:	
Remarks:							
Primary and secondary hydrology ind about 3 days ago.	icators present. P	recipitation is s	source of h	ydrology. The so	oil is very	saturated at surface.	Recent precipitation =

VEGETATION - Use scientific names of plants

vegeration - ose scientific flames of pla	iits			Sampling Point: w-jbl-20200107-02
Tree Stratum (Plot size: 30')	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1 Fraxinus pennsylvanica		~	FACW	That are OBL, FACW, or FAC:6(A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
1,				
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6	0			That are OBL, FACW, or FAC.
7.,	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15')	5_=	Total Cove		Total % Cover of: Multiply by: OBL species 40 x 1 = 40
Cornus alba	35	~	FACW	FACW species $65 \times 2 = 130$
Rhamnus cathartica		~	FAC	
Rosa setigera	10		FACU	FAC species 45 x 3 = 135
Cornus obliqua	40		FACW	FACU species 20 x 4 = 80
				UPL species $0 \times 5 = 0$
5.				Column Totals: <u>170</u> (A) <u>385</u> (B)
	0 bit 70 50			Prevalence Index = B/A =
lerb Stratum (Plot size: 5')	85 =	Total Cove	r	Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
_ Epilobium coloratum	2 5:	~	OBL	✓ Dominance Test is > 50%
Phalaris arundinacea	57.07	~	FACW	✓ Prevalence Index is ≤3.0 ¹
Symphyotrichum lateriflorum		~	FAC	Morphological Adaptations ¹ (Provide supporting
Juncus effusus	10		OBL	data in Remarks or on a separate sheet)
Typha angustifolia	10		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
Poa pratensis	10		FACU	
•	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			ANS SECURIOR CARROL SECURIORS OF THE
),	0			Definitions of Vegetation Strata:
)	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
ſ <u>.</u>	0			at breast height (DBH), regardless of height.
2	0			Carling (about Manda alasta Inna About Cin DDI I and
Noody Vine Stratum (Plot size: 30')	80=	= Total Cove	r	Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
N 25.	0	H		size, and woody plants less than 3.28 ft tall.
2	0	Ħ		
3,	0			Woody vine - All woody vines greater than 3.28 ft in height.
1				neight.
	=	= Total Cove	r	
				Hydrophytic Vegetation
				Present? Yes No
)	3 Warthage Sandoens
emarks: (Include photo numbers here or on a separate sh	eet)			
ydrophytic vegetation indicators present. PSS with mixed		acludina con	amon buck	thorn and dogwood. Climbing rose presenting in shrub
rowth form, not climbing vine. Photos of wetland data poi				thorn and dogwood. Climbing rose presenting in shrub
rower form, not cambring vine. Thous or wedaria data por	ne can be ro	ana in Appe	idix D.	

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: w-jbl-20200107-02

Depth		Matrix			Redox Feat			absence of indicators.)				
(inches)	Color (%_	Color (mois		Type 1	_Loc2	Texture	Remarks			
0-5	10YR	4/2	95	10YR 4	/6 5	С	М	Clay Loam				
5-16	10YR	4/2	75	10YR 4	/6 15	С	М	Clay Loam				
				7.5YR 4	/4 10	с		Clay Loam	1.			
						-						
Type: C=Con	centration. D	=Depletion	n. RM=Red	uced Matrix, CS=C	overed or Coat	ed Sand Gr	ains 2Loca	tion: PL=Pore Lining. M=I	Matrix			
Hydric Soil I		э оргосто.			010100 01 0000			DATE COLUMN DE COMO COMO DECO	3			
Histosol (Polyvalue	Below Surface	(S8) (LRR I	₹.		iematic Hyuric Sons .			
	pedon (A2)			MLRA 149		, , ,			(LRR K, L, MLRA 149B)			
Black Hist	ic (A3)				Surface (S9) (lox (A16) (LRR K, L, R) : or Peat (S3) (LRR K, L, R)			
Hydrogen	Sulfide (A4)				icky Mineral (F)	Dark Surface (S7				
Stratified	Layers (A5)				eyed Matrix (F2	2)			Surface (S8) (LRR K, L)			
	Below Dark S		11)		Matrix (F3) rk Surface (F6)				e (S9) (LRR K, L)			
	k Surface (A	1000			Dark Surface (F6)			☐ Iron-Manganese	Masses (F12) (LRR K, L, R)			
_	ick Mineral (S			-	pressions (F8)	7)		Piedmont Floodp	lain Soils (F19) (MLRA 149B)			
	eyed Matrix (54)		Lilia (No.				Mesic Spodic (TA	6) (MLRA 144A, 145, 149B)			
Stripped N	dox (SS) Matrix (S6)							Red Parent Mater				
	ace (S7) (LRI	R. MIRA	149B)					☐ Very Shallow Dar				
	1025 (AUL)	(5)	- 6			a tarangan at atau a		Other (Explain in	Remarks)			
-Indicators of	nyaropnytic	vegetation	and wetia	nd hydrology mus	be present, ur	niess disturi	bea or proble	ematic.				
Restrictive L	ayer (if obs	erved):										
Type:								Hydric Soil Present?	Yes ● No ○			
Depth (inc	hes):							Tryane Son Fresence	165 © 140 ©			
emarks:												
oil profile in	dicated the	presence	of hydric	soil indicators t	hat are likely	due to th	e frequenc	y of saturation from pre	ecipitation.			
ased on site	investigati	ons this v	vetland m	eets the three v	etland criteri	a and is c	lassified as	a wetland. The wetlan	d is comprised of predominantly			
nrub/sapling	vegetation	over an	herbaceo	us layer with inc	leterminant h	ydrologica	al connectiv	vity to a swale/stream r	north of the survey area. The			
etland bour	dary exten	ds to the	north bey	ond the survey	area as show	n on Figu	re 3.					

Project/Site: Lincoln Park-Riverbend 138kV Transmission L	ine City	/County: Ma	honing County	Samplin	g Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company		-	State: OH	Sampling Point:	w-jbl-20200107-01
Investigator(s): JBL, JTT		Section, Town	ship, Range: S.	T. 2N	R. 1W
Landform (hillslope, terrace, etc.): Swale	Loca	al relief (conca	ave, convex, none	e): concave	Slope: 1.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K	Lat.: 41.0	09692	Long.:	-80.607	Datum: NAD 83
Soil Map Unit Name: BtB - Bogart loam, till substrate	um, 2 to 6 percent slop	pes		NWI classification:	N/A
Are climatic/hydrologic conditions on the site typical	for this time of year?	Yes •	No O (If	no, explain in Remarks	s.)
Are Vegetation , Soil , or Hydrology	significantly dis	sturbed?		cumstances" present?	Yes ○ No ●
Are Vegetation , Soil , or Hydrology	naturally proble			lain any answers in Ren	narks.)
Summary of Findings - Attach site ma	157 0650			E 2009A	
Hydrophytic Vegetation Present? Yes No				12 22	
Hydric Soil Present? Yes No	0	Is the Sai	mpled Area Wetland?	∕es ● No ○	
Wetland Hydrology Present? Yes No	0				
swale. Wetland subject to regular mowing activitie	s (atypical), though ve	getation grow	vtn was sumcient	to allow for identificati	on.
Hydrology			91	VI 8-00 68 CON 50 70 X	DEFO: 80 95
Wetland Hydrology Indicators:	1 1111 1 15		Se	condary Indicators (minim	um of 2 required)
Primary Indicators (minimum of one required; ched	1			Surface Soil Cracks (B6)	
Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (E Aquatic Fauna (B13)	B9)	<u> </u>	Drainage Patterns (B10) Moss Trim Lines (B16)	
✓ Saturation (A3)	Marl Deposits (B15)			Dry Season Water Table	(C2)
Water Marks (B1)	Hydrogen Sulfide Odor ((C1)		Crayfish Burrows (C8)	(C2)
Sediment Deposits (B2)	Oxidized Rhizospheres a		ots (C3)	Saturation Visible on Aer	rial Imagery (C9)
Drift deposits (B3)	Presence of Reduced Iro			Stunted or Stressed Plan	
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (Co	6)	Geomorphic Position (D2	2)
Iron Deposits (B5)	Thin Muck Surface (C7)			Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar			Microtopographic Relief	(D4)
Sparsely Vegetated Concave Surface (B8)		1.53	V	FAC-neutral Test (D5)	
Field Observations:	2002				
Surface Water Present? Yes No •	Depth (inches):				
Water Table Present? Yes No	Depth (inches):	8		P Voc (No O
Saturation Present? (includes capillary fringe) Yes No	Depth (inches):	0	Wetland Hydrolo		NO C
Describe Recorded Data (stream gauge, monitoring Remarks: Primary and secondary hydrology indicators present saturated at surface. Recent precipitation = about 3	t. Precipitation and ove	tilen St	~ ~ ~	100 W	rology. The soil is very

VEGETATION - Use scientific names of plants

vegeration - use scientific names of pi	ants			Sampling Point: w-jbl-20200107-01
Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1			Status	Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)
2				That are ODL, FACW, OF FAC.
3				Total Number of Dominant
4				Species Across All Strata: (B)
5		H		Percent of dominant Species
6.	8233	П		That Are OBL, FACW, or FAC: 100.0% (A/B)
7	- A- (S			Prevalence Index worksheet:
		= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 10')	2			OBL species
1				FACW species
2				FAC species x 3 =
3.				FACU species $0 \times 4 = 0$
4				UPL species $0 \times 5 = 0$
5				Column Totals: 100 (A) 200 (B)
6				
7				Prevalence Index = B/A = 2.000
Herb Stratum (Plot size: 10')	=	= Total Cover	ī)	Hydrophytic Vegetation Indicators:
1 Poa palustris	100	~	FACW	Rapid Test for Hydrophytic Vegetation
2		Ä		✓ Dominance Test is > 50%
3		Ħ		✓ Prevalence Index is ≤3.0 ¹
4				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				Problematic nytrophytic vegetation (Explain)
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9.				Definitions of Vegetation Strata:
10				Too. Woods plants 2 in (7.6 cm) or many in disposits
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
12		H		
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: _10')				greater than 5.25 k (111) tail
1,				Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3				Woody vine - All woody vines greater than 3.28 ft in
4.				height.
	=	= Total Cover	•	
				II. deserted a
				Hydrophytic Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate s	heet.)			
Plot confined to approxs 10ft wide swale, restricted to he				
	nt material wa	s sufficient to	provide i	dentification. Photos of wetland data point can be found in
Appendix D.				

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: w-jbl-20200107-01

Profile Descr	iption: (Des	cribe to	the depth	needed to	document	the indi	cator or c	onfirm the	absence of indicators.)				
Depth		Matrix			Redox Features								
(inches)	Color (%_			%	Type	-	Texture	Remarks			
0-7	7.5YR	4/1	95 	5YR	4/4		C		Clay Loam				
7-16	7.5YR	4/1	85	5YR	4/4	15	C		Clay Loam				
		-											
¹ Type: C=Con	centration. D	=Depletio	n. RM=Red	duced Matrix,	CS=Covere	ed or Coat	ed Sand G	rains ² Loca	ation: PL=Pore Lining. M=	Matrix			
Hydric Soil I	indicators:	3/2		100					Indicators for Prob	lematic Hydric Soils: 3			
Histosol (A1)					w Surface	(S8) (LRR	R,) (LRR K, L, MLRA 149B)			
Histic Epip	pedon (A2)				A 149B)	(50) (11 DD D 141	DA 140D)		lox (A16) (LRR K, L, R)			
Black Hist							LRR R, ML			or Peat (S3) (LRR K, L, R)			
	Sulfide (A4)				ny Mucky I ny Gleyed		1) LRR K, L	.)	Dark Surface (S7				
	Layers (A5)				leted Matri		.)		Polyvalue Below	Surface (S8) (LRR K, L)			
	Below Dark S		11)		ox Dark Su	0.011.00.000.000.000			Thin Dark Surfac	e (S9) (LRR K, L)			
	k Surface (A1 ick Mineral (S				leted Dark					Masses (F12) (LRR K, L, R)			
	eyed Matrix (S			✓ Red	ox Depress	ions (F8)				lain Soils (F19) (MLRA 149B)			
Sandy Re		, ,								6) (MLRA 144A, 145, 149B)			
	Matrix (S6)								Red Parent Mate				
	ace (S7) (LRF	R R, MLRA	149B)						Other (Explain in	rk Surface (TF12)			
³ Indicators of	f hydronhytic	vegetatio	n and wetl	and hydrology	must he r	resent ur	nless distur	hed or probl		Remarks)			
			ii dila wee	una myarolog	mast be p	or eservey an	ness distar	bed of prob					
Restrictive L	ayer (IT obs	ervea):											
Type: Depth (inc	hoc):								Hydric Soil Present?	Yes ● No ○			
	iles)									1000 F 1000 F 1			
Remarks:					n				, , , , , , , , , , , , , , , , , , ,				
Soil profile in	dicated the	presenc	e or nyarı	c soil indica	ors that a	are likely	attribute	a to the fre	equency of saturation.				
										d is comprised of herbaceous			
vegetation ar the southeast	nd is indirect	tly hydro	ologically of	connected to	a stream	n feature	(roadsid	e ditch) flo	wing to the southwest.	The wetland boundary extends to			
une southeasi	t beyond th	e survey	area as s	SHOWII OH FI	gure 3.								

Project/Site: Lincoln Park-Riverbend	138kV Transmissi	ion Line	City/County:	Mahoning County	Sampli	ng Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEr	nergy Company			State: OH	Sampling Point:	w-jbl-20200107-03
Investigator(s): JBL,JTT			Section, To	ownship, Range: S.	т. 2N	R. 1W
Landform (hillslope, terrace, etc.)	Lowland		Local relief (co	oncave, convex, non	ne): concave	Slope: 1.0 % / 0.0 °
Subregion (LRR or MLRA): LRR	K	Lat.:	41.09781	Long.:	-80.60471	Datum: NAD 83
Soil Map Unit Name: CmC - Chili	loam, 6 to 12 r	percent slopes			NWI classification:	R4SBC
Are climatic/hydrologic condition	s on the site typ	pical for this time of y	year? Yes	s • No C	f no, explain in Remark	
Are Vegetation, Soil	, or Hydrolo	ogy significan	tly disturbed?	Are "Normal Ci	rcumstances" present?	Yes No
Are Vegetation, Soil	, or Hydrolo	ogy 🗌 naturally	problematic?	(If needed, exp	plain any answers in Re	marks.)
Summary of Findings -	Attach site	map showing	sampling po	oint locations,	transects, impo	rtant features, etc.
Hydrophytic Vegetation Present?		No O				
Hydric Soil Present?	10000	No O		Sampled Area n a Wetland?	Yes No	
Wetland Hydrology Present?	Yes	No O	905000000			
Hydrology						
Wetland Hydrology Indicators:				S	econdary Indicators (minin	num of 2 required)
Primary Indicators (minimum of	one required;	check all that apply)			Surface Soil Cracks (B6	5)
Surface Water (A1)		Water-Stained Lea		<u> </u>	✓ Drainage Patterns (B10)
✓ High Water Table (A2)		Aquatic Fauna (B1		L	Moss Trim Lines (B16)	700V
✓ Saturation (A3) Water Marks (B1)		Marl Deposits (B1	I DE TROUT - VERSTEN VON		Dry Season Water Table	e (C2)
Sediment Deposits (B2)		Hydrogen Sulfide Ovidized Phizosph	Odor (C1) neres along Living	Danta (C2)	Crayfish Burrows (C8) Saturation Visible on Ae	avial Imagon (CO)
Drift deposits (B3)		Presence of Redu		Roots (C3)	Stunted or Stressed Pla	
Algal Mat or Crust (B4)			iction in Tilled Soils	e (C6)	✓ Geomorphic Position (D	
☐ Iron Deposits (B5)		Thin Muck Surface		[Shallow Aquitard (D3)	= <u>/</u>
☐ Inundation Visible on Aerial Ima	gery (B7)	Other (Explain in			Microtopographic Relief	f (D4)
Sparsely Vegetated Concave Sur	face (B8)		Normania,		FAC-neutral Test (D5)	0.000
Field Observations:	^ 0					
Surface Water Present? Yes		Depth (inches):	0			
Water Table Present? Yes	● No ○	Depth (inches):	2	we should the deal.	ogy Present? Yes	● No ○
Saturation Present? (includes capillary fringe) Yes	● No ○	Depth (inches):	0	Wetland Hydrolo	ogy Present? Tes	● NO ○
Describe Recorded Data (stream	gauge, monito	ring well, aerial phot	os, previous ins	pections), if availab	ole:	
Remarks:						
Primary and secondary hydrolog waters outside of survey area (N						

VEGETATION - Use scientific names of plants

vegeration - ose scientific names of plan	11.5			Sampling Point: w-jbl-20200107-03
(6)	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20')	% Cover	Species?	Status	Number of Dominant Species
1,		Ц		That are OBL, FACW, or FAC:3(A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				B
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6				That Are ODE, TACW, OF TAC.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15'	0 =	= Total Cover		Total % Cover of: Multiply by:
1	0			OBL species60 x 1 =60
2				FACW species $20 \times 2 = 40$
				FAC species <u>25</u> x 3 = <u>75</u>
3	2	H .		FACU species $0 \times 4 = 0$
4		H .		UPL species $0 \times 5 = 0$
5 6				Column Totals: <u>105</u> (A) <u>175</u> (B)
7				Prevalence Index = B/A = 1.667
		= Total Cover		Supplied and desired that a provide and a subsect of the anathon.
Herb Stratum (Plot size: 5')				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation
1. Typha angustifolia	25	✓	OBL	
2. Leersia oryzoides	35	✓	OBL	
3. Agrimonia parviflora	25	✓	FAC	✓ Prevalence Index is ≤3.0 ¹
4. Onoclea sensibilis			FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Continuo / abanita Manda alanda laga than 2 in DDU and
Woody Vine Stratum (Plot size: 20')		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	0	H		size, and woody plants less than 3.28 ft tall.
2	0	a di		
1	0			Woody vine - All woody vines greater than 3.28 ft in height.
4.	-	= Total Cover		
				Hydrophytic Vegetation
				Present? Yes • No
Remarks: (Include photo numbers here or on a separate she	et.)			
Tree and woody vine strata plots confined to valley bottom	and not adj	jacent hillsides	s. Hydropl	hytic vegetation indicators present. Photos of wetland data
point can be found in Appendix D.				MANUFACTOR OF THE PROPERTY OF

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: w-jbl-20200107-03

Depth	Matrix			edox Featu			absence of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type 1	Loc2	Texture	Remarks
0-16	2.5Y 5/1	80	7.5YR 4/4	20	С	М	Silty Clay Loam	
								
				_				
vne: C=Con	centration D=Denletion	RM=Reduc	ed Matrix CS=Cover	red or Coate	ed Sand Gr	ains 21 oca	tion: PL=Pore Lining. M=	Matrix
12		. INIT-INEGUC	ed Madix, C3=Cover	eu or coate	a Sana Gre	iiii Loca		3
	Indicators:				(50) (155 5		Indicators for Prob	olematic Hydric Soils: 3
Histosol (:000.e		Polyvalue Belo MLRA 149B)	w Surface	(S8) (LRR F	,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
-	pedon (A2)		Thin Dark Sur	face (S9) (IRR R MIR	Δ 149R)	Coast Prairie Rec	dox (A16) (LRR K, L, R)
Black Hist			Loamy Mucky				5 cm Mucky Pea	t or Peat (S3) (LRR K, L, R)
	Sulfide (A4)						Dark Surface (S	7) (LRR K, L, M)
	Layers (A5)		Loamy Gleyed)		Polyvalue Below	Surface (S8) (LRR K, L)
	Below Dark Surface (A1)	1)	Depleted Matr					te (S9) (LRR K, L)
Thick Dar	k Surface (A12)		Redox Dark S		71		The state of the s	Masses (F12) (LRR K, L, R)
Sandy Mu	ick Mineral (S1)		Depleted Dark		/)		The state of the s	plain Soils (F19) (MLRA 149B)
Sandy Gle	eyed Matrix (S4)		✓ Redox Depres	sions (F8)				A6) (MLRA 144A, 145, 149B)
Sandy Red	dox (S5)						Red Parent Mate	
Stripped N	Matrix (S6)							rk Surface (TF12)
Dark Surfa	ace (S7) (LRR R, MLRA 1	L49B)					Other (Explain in	
Indicators of	f hydrophytic vegetation	and wetland	t hydrology must be	nrecent un	loce dicturk	ed or proble		, remaine,
		una mediane	injurcing induction	present, an	icoo diotari	cu or proble		
	ayer (if observed):							
Type:							Undria Cail Dracant?	V 0 N- 0
Depth (incl	hes):						Hydric Soil Present?	Yes ● No ○
ng area. Re sed on site d is directly	edox features present investigations this w	etland mee ected to a	in matrix with sma	all amount and criteria	s in pore a and is cl	inings. assified as	a wetland. The wetlar	and evidence of ponding in low- nd is PEM within the survey area tinues to the north outside of the

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County:	Mahoning County	Sampling	g Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company		State: OH	Sampling Point:	w-jbl-20200107-04
Investigator(s): JBL,JTT	Section, To	wnship, Range: S.	т. 2N	R. 1W
Landform (hillslope, terrace, etc.): Lowland	Local relief (co	ncave, convex, none)	concave	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K	Lat.: 41.09779	Long.: -	80.60393	Datum: NAD 83
Soil Map Unit Name: CmC - Chili loam, 6 to 12 percent slopes		9	NWI classification:	N/A
Are climatic/hydrologic conditions on the site typical for this ti	me of year? Yes	● No ○ (If n	o, explain in Remarks	.)
	nificantly disturbed?		imstances" present?	Yes No
	curally problematic?		in any answers in Ren	narks)
Summary of Findings - Attach site map show	50000 - 5000 1	rea ulia: ree ⁽ⁱ⁾ re	₹f1 == 06F0.	
Hydrophytic Vegetation Present? Yes • No O		100		~
Hydric Soil Present? Yes No		Sampled Area a Wetland? Ye	s No	
Wetland Hydrology Present? Yes No				
rubus/rosa spp. In adjcent upland area. Wetland drains to a	culvert which extends	underneath Oak Stre	et Ext and discharges	into hh-JBL-20200107-01.
Hydrology				
Wetland Hydrology Indicators:		_Seco	ondary Indicators (minimu	um of 2 required)
Primary Indicators (minimum of one required; check all that	apply)		Surface Soil Cracks (B6)	
	ined Leaves (B9)		Drainage Patterns (B10)	
	auna (B13)		Moss Trim Lines (B16)	****
	osits (B15)		Dry Season Water Table Crayfish Burrows (C8)	(C2)
	Sulfide Odor (C1)		Saturation Visible on Aeri	ial Imagon (CO)
	Rhizospheres along Living of Reduced Iron (C4)		Stunted or Stressed Plan	
	on Reduction in Tilled Soils		Geomorphic Position (D2	
	Surface (C7)		Shallow Aquitard (D3)	7
Town detical Visible on Assist Townson (97)	plain in Remarks)	F-1	Microtopographic Relief ((D4)
Sparsely Vegetated Concave Surface (B8)	plain in Remarks)		FAC-neutral Test (D5)	•
Field Observations:				
Surface Water Present? Yes No Depth (i	nches):			
Water Table Present? Yes • No O Depth (i	nches):4			
Saturation Present? (includes capillary fringe) Yes No Depth (i	nches):0	Wetland Hydrology	y Present? Yes	No O
Describe Recorded Data (stream gauge, monitoring well, aeric Remarks: Primary and secondary hydrology indicators present. Wetland upstream. Wetland drains to culvert under Oak St Ext to the s	receives hydrology fro	m stream hh-jbl-2020	00107-02 and wetland	

VEGETATION - Use scientific names of plants

(0)-1	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'	% Cover	Species?	Status	Number of Dominant Species
1 Salix nigra	10	✓	OBL	That are OBL, FACW, or FAC:5(A)
2				Total Number of Dominant
3	0			Species Across All Strata:7 (B)
4	0			97 10 10 10 10 10 10 10 10 10 10 10 10 10
5	0			Percent of dominant Species That Are OBL FACW or FAC: 71.4% (A/B)
6	0			That Are OBL, FACW, or FAC: 71.4% (A/B)
7	0_			Prevalence Index worksheet:
(District 15)	10 =	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15'	94801		Westing-	OBL species
1 Rhamnus cathartica	30	✓	FAC	FACW species65 x 2 =130
2 Fraxinus pennsylvanica	35	✓	FACW	FAC species 45 x 3 = 135
3 Rosa multiflora	30	~	FACU	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
4	0			
5	0			UPL species x 5 =
6				Column Totals: <u>205</u> (A) <u>495</u> (B)
7	0_			Prevalence Index = B/A = 2.415
	95 =	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5')				Rapid Test for Hydrophytic Vegetation
1 Epilobium coloratum	25	✓	OBL	
2 Solidago gigantea	30	✓	FACW	✓ Dominance Test is > 50%
3 Carex vulpinoidea			OBL	✓ Prevalence Index is ≤3.0 ¹
4. Symphyotrichum lateriflorum			FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				
6				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must
7		H	-	be present, unless disturbed or problematic.
8	A 2000			Definitions of Vegetation Strata:
9		H		A SOURCE THE STANDARD RESIDENCE TO A SOURCE TO A SOURCE WAS TO COME A SOURCE AND A
10		Ш		Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'	85 =	= Total Cover		greater than 3.28 ft (1m) tall
	15	~	FACU	Harb. All barbassaus (non woody) plants, regardless of
· · · · · · · · · · · · · · · · · · ·	-		FACU	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2				, , , , , , , , , , , , , , , , , , , ,
3	0	H		Woody vine - All woody vines greater than 3.28 ft in
4				height.
	15=	= Total Cover		
				100 to 2000 to 2000
				Hydrophytic Vegetation
				Present? Yes • No O
Remarks: (Include photo numbers here or on a separate she	et)			
Hydrophytic vegetation indicators present. Photos of wetlan		it can be foun	d in Anne	ndiv D
Trydrophytic vegetation indicators present. Photos of wedan	u uata poiri	it can be roun	u III Appe	IIIIX D.

Sampling Point: w-jbl-20200107-04

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: w-jbl-20200107-04

Depth	Matrix		Redox Feature			bsence of indicators.)	
(inches) Color (Color (moist)		Type 1	Loc2	Texture	Remarks
0-16 10YR	4/2 97	7.5YR 4/6	3	С	М	Sandy Clay Loam	
							-
							1
							-
							-
pe: C=Concentration, D	=Depletion, RM=Rec	duced Matrix, CS=Cov	ered or Coated	Sand Grai	ns ² Locat	tion: PL=Pore Lining. M=N	
dric Soil Indicators:		,					2793
Histosol (A1)		Polyvalue Be	low Surface (St	R) (IRR R.			ematic Hydric Soils: 3
Histic Epipedon (A2)		MLRA 149B)	iow surface (se	o) (Litterty			(LRR K, L, MLRA 149B)
Black Histic (A3)		Thin Dark Su	ırface (S9) (LR	R R, MLRA	149B)		ox (A16) (LRR K, L, R)
Hydrogen Sulfide (A4)		Loamy Muck	y Mineral (F1)	LRR K, L)			or Peat (S3) (LRR K, L, R)
Stratified Layers (A5)		Loamy Gleye	ed Matrix (F2)			Dark Surface (S7	
Depleted Below Dark S	Surface (A11)	✓ Depleted Ma	trix (F3)				Surface (S8) (LRR K, L)
Thick Dark Surface (A	12)	Redox Dark	Surface (F6)			Thin Dark Surface	
Sandy Muck Mineral (S		Depleted Da	rk Surface (F7)				Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (Redox Depre	essions (F8)				ain Soils (F19) (MLRA 149B) 5) (MLRA 144A, 145, 149B)
Sandy Redox (S5)						Red Parent Mater	
Stripped Matrix (S6)						Very Shallow Dark	
Dark Surface (S7) (LRI	R R, MLRA 149B)					Other (Explain in	20 07
Indicators of hydrophytic	vegetation and wetl	and hydrology must b	nresent unle	ss disturbe	d or proble		nemarks)
		and mydrology mast b	present unio	oo diotarbe	a or proble	That is	
estrictive Layer (if obs	erved):						
Type:						Hydric Soil Present?	Yes No
Depth (inches):						riyane son Fresence	res 🙂 NO 🖰
emarks:							
(1800) 180 전 전 183 2 C. (1800) 180 (1800) 180 (1800) 180 (1800) 180 (1800) 180 (1800) 180 (1800) 180 (1800) 180	() '	d matrix with high v	alue and low	chroma	with redo	x features. Wetland is	not within a closed depression
avidance of panding	was observed.						
evidence or ponding	one this watland -	neets the three wet	land criteria	and is cla	ssified as	a wetland. The wetland	d is dominated by shrub/saplin
12 ASS	uns uns wetland h						
sed on site investigati		illiected to a stream		villig to th	e south.	The Wedaria boundary	was rully delificated within the
sed on site investigati getation and is directly	y hydrologically co	illiected to a stream		villig to th	e south.	The Wedana Boandary	was rully delineated within the
12 NES	y hydrologically co	infected to a stream		ving to th	e south.	The Wedana Boandary	was runy demieated within the
sed on site investigati getation and is directl	y hydrologically co	illiected to a stream		ving to th	e south.	The Westaria boundary	was runy defineated within the
sed on site investigati getation and is directl	y hydrologically co	innected to a screan		ving to th	e south.	The victoria soundary	was runy defineated within the
sed on site investigati getation and is directl	y hydrologically co	innected to a stream		ving to th	e south.	The victoria soundary	was runy demineated within the
sed on site investigati getation and is directl	y hydrologically co	innected to a stream		ving to an	e south.	The victoria soundary	was runy demieated within the
sed on site investigati getation and is directl	y hydrologically co	innected to a stream		ving to an	e south.	The vicual a soundary	was runy demieated within the
sed on site investigati getation and is directly	y hydrologically co	innected to a stream		ving to an	e south.	The vicual a soundary	was runy demieated within the
sed on site investigati getation and is directly	y hydrologically co	innected to a stream		ving to an	e south.	The victorial boardary	was runy demieated within the
sed on site investigati getation and is directl	y hydrologically co	innected to a stream		ving to an	e soudi.		was runy demieated within the
sed on site investigati getation and is directl	y hydrologically co	innected to a stream		ving to an	e soudi.		was runy demieated within the
sed on site investigati getation and is directl	y hydrologically co	innected to a stream		ving to an	e soudi.		was runy demineated within the
sed on site investigati getation and is directl	y hydrologically co	innected to a stream		ving to an	e south.		was runy demieated within the
sed on site investigati getation and is directl	y hydrologically co	innected to a stream		ving to an	e south.		was runy demieated within the

Project/Site: Lincoln Park-Riverbend 138kV Transmission L	Line City/County: Mahoning Cou	unty Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State:	OH Sampling Point: w-jbl-20200107-05
Investigator(s): JBL, JTT	Section, Township, Rang	ge: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Hillside	Local relief (concave, conve	ex, none): concave Slope: 1.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K	Lat.: 41.09791 L	Long.: -80.60283 Datum: NAD 83
Soil Map Unit Name: BtB - Bogart loam, till substrat	tum, 2 to 6 percent slopes	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical	If for this time of year? Yes No	(If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology		mal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology		ed, explain any answers in Remarks.)
765 457 (1757 - 1757 -	er om men men interes	ions, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No		
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland?	Yes No
Wetland Hydrology Present? Yes No	0	
Hydrology		
Wetland Hydrology Indicators:	d. all that and N	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; cher	7	Surface Soil Cracks (B6)
✓ High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16)
✓ Saturation (A3)	Marl Deposits (B15)	Dry Season Water Table (C2)
☐ Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	✓ Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	
Sparsery vegetated concave surface (50)		FAC-neutral lest (D3)
Field Observations: Surface Water Present? Yes No •	Depth (inches):	
	V6 1400 70 000 000 000 000 000 000 000 000 0	
	Depth (inches): 0 Wetland H	Hydrology Present? Yes No
Saturation Procent/		PERMITTING AND STATEMENT OF THE STATE OF THE STATEMENT OF
Saturation Present? (includes capillary fringe) Yes No	Depth (inches):0	- W 3000
YAC (♥/ NO (/		available:
(includes capillary fringe) Yes No		available:

VEGETATION - Use scientific names of plants

vegeration - ose scientific names of plan	113			Sampling Point: w-jbl-20200107-05
(Disk size) 201	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species
1				That are OBL, FACW, or FAC: 4 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				Percent of dominant Species
5				That Are OBL, FACW, or FAC: 100.0% (A/B)
6	-			Prevalence Index worksheet:
7		= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15'		= Total Cover		OBL species
1 Frangula alnus	50	~	FAC	FACW species $50 \times 2 = 100$
2 Cornus amomum	30	~	FACW	FAC species $50 \times 3 = 150$
3 Rosa multiflora	15		FACU	
4	0_			
5	0_			ore species x y =
6	0			Column Totals: <u>135</u> (A) <u>330</u> (B)
7	0			Prevalence Index = B/A = 2.444
Herb Stratum (Plot size: 5')	95 =	= Total Cover	9	Hydrophytic Vegetation Indicators:
	20		FACIL	Rapid Test for Hydrophytic Vegetation
1. Onoclea sensibilis		~	FACW	✓ Dominance Test is > 50%
2. Juncus effusus		~	OBL	✓ Prevalence Index is ≤3.0 ¹
3. Typha angustifolia	-		OBL	Morphological Adaptations ¹ (Provide supporting
4. Epilobium coloratum		H	OBL	data in Remarks or on a separate sheet)
5				☐ Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must
7 8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10		H		Total Manda della Cin (7.0 and annual in diameter
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
12				
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30')				greater than 5.20 ft (1111) tall
1,	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3				Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	=	= Total Cover	9	
			8	
				Understadie
				Hydrophytic Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate she	et.)			
Hydrophytic vegetation indicators present. PSS with mixed v	egetation i	ncluding euro	pean buck	kthorn and dogwood. Photos of wetland data point can be
found in Appendix D.				

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: w-jbl-20200107-05

2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
PL=Pore Lining. M=Ma Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Indicators for Proble 2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	matic Hydric Soils: 3 LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat or Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat or Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	LRR K, L, MLRA 149B) (A16) (LRR K, L, R) r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
5 cm Mucky Peat of Dark Surface (S7) Polyvalue Below Su Thin Dark Surface Iron-Manganese M	r Peat (S3) (LRR K, L, R) (LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Dark Surface (S7) Polyvalue Below Starthin Dark Surface Iron-Manganese M	(LRR K, L, M) rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
Polyvalue Below Su Thin Dark Surface Iron-Manganese M	rface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)
☐ Thin Dark Surface ☐ Iron-Manganese M	(S9) (LRR K, L) (asses (F12) (LRR K, L, R)
☐ Iron-Manganese M	asses (F12) (LRR K, L, R)
Piedmont Floodplai	n Soils (F19) (MLRA 149R)
	(MLRA 144A, 145, 149B)
Red Parent Materia	
Very Shallow Dark	
Other (Explain in R	emarks)
ic.	
lydric Soil Present?	Yes No
,,	163 0 160 0
urface. Wetland is not	within a closed depression,
	is dominated by shrub/saplir ry extends to the north beyo
The wedand bounds	ry exterios to the north beyo

Wetland RLP-08a

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mal	honing County	Samplin	og Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company		State: OH	Sampling Point:	w-jbl-20200107-06a
Investigator(s): JTT, JBL	Section, Towns	ship, Range: S.		R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (conca		e): concave	Slope: 0.0 % / 0.0 °
				Datum: NAD83
	41.097318	Long.: -	-80.601879	
Soil Map Unit Name: FhB-Fitchville silt loam, till substratum, 2 to 6 pe	V. 2000 10 C. 11 C. 11 C. 10 C		NWI classification:	N/A
Are climatic/hydrologic conditions on the site typical for this time of y	year? Yes ●	No O (If	no, explain in Remarks	
Are Vegetation . , Soil . , or Hydrology significant	ly disturbed?	Are "Normal Cir	cumstances" present?	Yes ● No O
Are Vegetation , Soil , or Hydrology naturally	problematic?	(If needed evn	lain any answers in Re	marke)
Summary of Findings - Attach site map showing				353
Hydrophytic Vegetation Present? Yes • No O		•	Western	=====================================
Hydric Soil Present? Yes • No O	Is the Sar within a V	npled Area	res ● No ○	
Wetland Hydrology Present? Yes No	within a v	wettand?		
Remarks: (Explain alternative procedures here or in a separate repo				
Hydrology				
Wetland Hydrology Indicators:		_Se	condary Indicators (minim	ium of 2 required)
Primary Indicators (minimum of one required; check all that apply)			Surface Soil Cracks (B6)	
✓ Surface Water (A1) ✓ Water-Stained Lea	ives (B9)		Drainage Patterns (B10)	
✓ High Water Table (A2)	3)		Moss Trim Lines (B16)	
✓ Saturation (A3) Marl Deposits (B15	5)	<u>_</u>	Dry Season Water Table	: (C2)
Water Marks (B1) Hydrogen Sulfide (Crayfish Burrows (C8)	201200
[eres along Living Roo	ts (C3)	Saturation Visible on Ae	
Drift deposits (B3) Presence of Reduc			Stunted or Stressed Plan	
The Benedit (BE)	tion in Tilled Soils (Co	5)	Geomorphic Position (D2)	2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface ☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Evolution in E		_	Shallow Aquitard (D3)	(D4)
Inundation Visible on Aerial Imagery (B7) Other (Explain in F Sparsely Vegetated Concave Surface (B8)	Remarks)		Microtopographic Relief FAC-neutral Test (D5)	(04)
Sparsely vegetated contaive surface (50)			TAC-fleddal Test (D3)	
Field Observations: Surface Water Present? Yes No Depth (inches):	0			
	8			
Water Table Present? Yes No Depth (inches):	,	Wetland Hydrolo	gy Present? Yes	● No ○
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	16	veciana riyarolo	gy Fresent: 165	- NO
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspection	ons), if available:		
Remarks:				
Hydrology primarily from precipitation. Standing water present. Wetla Extension. Wetland complex extends south of the survey corridor.	and complex may re	eceive some hydi	rology from roadside dt	ich along Oak Street

VEGETATION - Use scientific names of plant

Tree Stratum (Plot size: 30')	Absolute		Indicator	Dominance Test worksheet:
	% Cover	opecies.	Status	Number of Dominant Species
1. Salix nigra		Ш	OBL	That are OBL, FACW, or FAC:
2				Total Number of Dominant
3	0_			Species Across All Strata: 3 (B)
4	0_			
5				Percent of dominant Species
6	7528	Ħ		That Are OBL, FACW, or FAC: 50.0% (A/B)
7		Ħ		Prevalence Index worksheet:
		= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15'	=	- Total Cover		OBL species
1,	0			No. 10 10 10 10 10 10 10 10 10 10 10 10 10
2		H		FACW species <u>40</u> x 2 = <u>80</u>
3	3.5	H		FAC species $0 \times 3 = 0$
Wg 1	- <u> </u>	H	-	FACU species $35 \times 4 = 140$
4		H		UPL species $0 \times 5 = 0$
5		H		Column Totals:112 (A)257 (B)
6	92	H		PROPERTY OF THE PROPERTY OF TH
7				Prevalence Index = B/A = 2.295
Herb Stratum (Plot size: _5')	0 =	= Total Cover		Hydrophytic Vegetation Indicators:
		_		Rapid Test for Hydrophytic Vegetation
1. Muhlenbergia frondosa	40	~	FACW	Dominance Test is > 50%
2. Poa pratensis	25	✓	FACU	✓ Prevalence Index is ≤3.0 ¹
3. Typha angustifolia	25	✓	OBL	10.000000000000000000000000000000000000
4. Epilobium coloratum	15		OBL	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata
		H		
10			-	Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: _15')	105 =	= Total Cover		greater than 3.28 ft (1m) tall
	0			Llow All borbossous (non woods) plants, regardless of
1	-	H		Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2			-	ones, and needy plante isse triain ones it tain
3	0_	H	3	Woody vine - All woody vines greater than 3.28 ft in
4		Ш		height.
	0 =	= Total Cover		
				Hydrophytic
				Vegetation Present? Yes No
Remarks: (Include photo numbers here or on a separate sho				
Vegetation meets the Dominance test and the Prevalence Inc	aex. Photos	of this resou	rce can be	e rouna in Appendix D.

Sampling Point: w-jbl-20200107-06a

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-08a

Sampling Point: w-jbl-20200107-06a

Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains *Location: PL=Pore Lining. M=Matrix *Indicators:
1 Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains 2 Location: PL=Pore Lining. M=Matrix Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F7) Sandy Muck Mineral (S1) Redox Dark Surface (F7) Sandy Muck Mineral (S1) Redox Dark Surface (F7) Sandy Redox (S5) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
1 Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains 2 Location: PL=Pore Linling. M=Matrix Hydric Soil Indicators: Histosoi (A1)
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Straiped Matrix (S4) Straped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Milka 149B) Milka 149B, Mesic Spodic (TA6) (MLRA 149B, 149B) Milka 149B, Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Milka 149B, Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Milka 149B, Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Milka 149B, Milka 1
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Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if observed):
Type:
Depth (inches): Hydric Soil Present? Yes • No •
separ (maies).
Remarks:
soils uniform throughout. Soil profile indicated the presence of hydric soil indicators that are likely due to the frequency of saturation from precipitation.
Passed on site investigations this wetland mosts the three wetland criteria and is classified as a wetland. The wetland is comprised of prodominantly
Based on site investigations this wetland meets the three wetland criteria and is classified as a wetland. The wetland is comprised of predominantly PEM vegetation with and adjcent PFO dominanted wetland area located to the south/east. Wetland complex has hydrological connectivity to a stream
south of the survey area. The wetland boundary extends to the south beyond the survey area as shown on Figure 3.

Wetland RLP-08b

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: N	1ahoning County	Sampling	Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company	_	State: OH	Sampling Point:	w-jbl-20200107-06b
Investigator(s): JTT, JBL	Section, Tow	nship, Range: S.	т. 2N	R. 1W
Landform (hillslope, terrace, etc.): Flat		cave, convex, none)	: none	Slope: 1.0 % / 0.6
Subregion (LRR or MLRA): LRR R	Lat.: 41.097367	Long: -	80.601776	Datum: NAD83
Soil Map Unit Name: FhB-Fitchville silt loam, till substra			NWI classification:	N/A
Are climatic/hydrologic conditions on the site typical for	r this time of year? Yes	● No ○ (If n	io, explain in Remarks	
Are Vegetation , Soil , or Hydrology	significantly disturbed?	Are "Normal Circ	umstances" present?	Yes ● No O
Are Vegetation , Soil , or Hydrology	naturally problematic?	(If needed, expla	in any answers in Ren	narks.)
Summary of Findings - Attach site map	showing sampling po	int locations,	transects, impo	rtant features, et
Hydrophytic Vegetation Present? Yes • No	500000000000000000000000000000000000000	EU 2007		
Hydric Soil Present? Yes ● No ○		Sampled Area a Wetland? Ye	es 💿 No 🔾	
Wetland Hydrology Present? Yes ● No ○	\$2.00000 Michael 80			
Remarks: (Explain alternative procedures here or in a	separate report.)			
Hydrology				
Wetland Hydrology Indicators:		_Secr	ondary Indicators (minimu	um of 2 required)
Primary Indicators (minimum of one required; check al	I that apply)		Surface Soil Cracks (B6)	
Surface Water (A1)	ater-Stained Leaves (B9)		Drainage Patterns (B10)	
	quatic Fauna (B13)		Moss Trim Lines (B16)	
	arl Deposits (B15)	님	Dry Season Water Table	(C2)
	/drogen Sulfide Odor (C1)		Crayfish Burrows (C8)	-1.7(00)
	kidized Rhizospheres along Living Ro	oots (C3)	Saturation Visible on Aeri Stunted or Stressed Plant	
	esence of Reduced Iron (C4) ecent Iron Reduction in Tilled Soils ((CE)	Geomorphic Position (D2	
	nin Muck Surface (C7)	,co)	Shallow Aquitard (D3)	,
	ther (Explain in Remarks)		Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	are (Explain in Remarks)	•	FAC-neutral Test (D5)	
Field Observations:				
	Depth (inches):			
Water Table Present? Yes • No [Depth (inches):6			
Saturation Present?	Depth (inches):1	Wetland Hydrolog	y Present? Yes	No O
Describe Recorded Data (stream gauge, monitoring well	l, aerial photos, previous inspec	tions), if available:		
Remarks:				
Hydrology primarily from precipitation. Wetland comples south of the survey corridor.	ex may receive some hydrology	from roadside dtich	along Oak Street Exte	nsion. Wetland extends

VEGETATION - Use scientific names of plant

(0)	Absolute	Dominant	ziidicaco.	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	20 maring	Status	Number of Dominant Species
1 Acer saccharinum	30	✓	FACW	That are OBL, FACW, or FAC:
2. Quercus palustris	20	✓	FACW	Tatal Number of Description
3	0_			Total Number of Dominant Species Across All Strata: 3 (B)
4.				5 (5)
5		H	8	Percent of dominant Species
6		H		That Are OBL, FACW, or FAC: 40.0% (A/B)
7		H		Prevalence Index worksheet:
T.i	5000			PVS PSALESS ACCOUNTS ACCOUNTS TO FOREST AND ACCOUNTS ACCOUNTS AND ACCOUNTS
Sapling/Shrub Stratum (Plot size: 15')	50=	= Total Cove	r.	Total % Cover of: Multiply by:
1 Rosa multiflora	20	~	FACU	OBL species 0 x 1 = 0
2.				FACW species
3		H		FAC species $0 \times 3 = 0$
	2	H		FACU species $20 \times 4 = 80$
4		H		UPL species $0 \times 5 = 0$
5		H	-	Column Totals: 70 (A) 180 (B)
6		H		
7				Prevalence Index = B/A = 2.571
Herb Stratum (Plot size: 5')	20 =	= Total Cove	•	Hydrophytic Vegetation Indicators:
ner b Stratum				Rapid Test for Hydrophytic Vegetation
1	0_			Dominance Test is > 50%
2				✓ Prevalence Index is ≤3.0 ¹
3	0			
4	0			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0			Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
				Definitions of Vegetation Strata
9				
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 15')	0_=	= Total Cove	Ī	greater than 3.28 ft (1m) tall
	0			Llank All bank account (san wand) alonks according of
1		H		Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2		H		oled, and woody planto lood than oled it tail.
3		\Box	-	Woody vine - All woody vines greater than 3.28 ft in
4		Ш		height.
	0 =	= Total Cove	r I	
				Hydrophytic
				Vegetation Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	ieet.)			

Sampling Point: w-jbl-20200107-06b

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-08b

Sampling Point: w-jbl-20200107-06b

Profile Descr	iption: (De	scribe to	the depth	needed to d	locumen	t the indi	cator or c	onfirm the	absence of indicators.)				
Depth		Matrix				dox Featu			-				
(inches)	Color (%	Color (%_	Type ¹		Texture	Rem	arks		
0-10	10YR	4/2	98	10YR	5/6		C		Clay Loam				
10-16	10YR	5/2	90	10YR	6/8	10	c	_M	Clay Loam				
										·			
¹ Type: C=Cond	centration. D	=Depletio	n. RM=Red	uced Matrix. C	S=Covere	d or Coate	ed Sand Gra	ains ² Loca	tion: PL=Pore Lining, M=Ma	 atrix			
Hydric Soil I		2 Spiceo			557616	0. 00010	50.10 510				3		
Histosol (Polya	ralue Relo	u Surface /	(S8) (LRR F)	Indicators for Probl				
	pedon (A2)				149B)	N Surface ((30) (1311)	·/	2 cm Muck (A10) ((LRR K, L, MLRA	A 149B)		
Black Hist				Thin	Dark Surfa	ace (S9) (I	LRR R, MLF	RA 149B)	Coast Prairie Redo		H-14-7		
	Sulfide (A4)			Loam	y Mucky N	Mineral (F1) LRR K, L)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
	Layers (A5)			Loam	y Gleyed	Matrix (F2))		Dark Surface (S7) (LRR K, L, M)				
	Below Dark S	Surface (A	11)	✓ Deple	eted Matri	x (F3)			Polyvalue Below Surface (S8) (LRR K, L)				
	k Surface (A1		/	Redo	x Dark Su	rface (F6)			Thin Dark Surface (S9) (LRR K, L)				
	ick Mineral (S			Depleted Dark Surface (F7)					Iron-Manganese Masses (F12) (LRR K, L, R)				
	eyed Matrix (S			Redo	x Depress	ions (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy Red	ili	<i>-</i> .,									145, 149B)		
- Fig. 1	Matrix (S6)								Red Parent Materi				
	ace (S7) (LRF	R. MLRA	149B)						☐ Very Shallow Dark)		
									Other (Explain in I	Remarks)			
Indicators of	f hydrophytic	vegetatio	n and wetla	and hydrology	must be p	resent, un	less disturt	ed or proble	ematic.				
Restrictive L	ayer (if obs	erved):											
Туре:											\sim		
Depth (inc	hes):								Hydric Soil Present?	Yes	No O		
Remarks:									- 5)				
Soil profile in	ndicated the	presence	e of hydri	soil indicate	or (denle	ted matri	x) that ar	e likely due	e to the frequency of satu	ration from n	recipitation.		
Son prome ii	raicatea eric	, present	c or riyari	o John Marcae	or (acpic	ted matri	x) that ar	e intery dut	o to the frequency or succ	aradon nom p	лестриссоп		
									a wetland. The wetland is				
									complex has hydrologica own on Figure 3.	I connectivity	to a stream south		
or the survey	area. The v	vedana b	ouridary c	action to the	e south i	beyond th	ie sui vey	area as sire	own on rigure 3.				
											ĺ		

Wetland RLP-09a

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

City/County: Mahoning County

Applicant/Owner: ATCL a	EirctEnorgy	Company	-	-	State: OU	iii	Campling Boints	bl 20200100 02-		
Applicant/Owner: ATSI, , a		Сопрану			State: OH		Sampling Point:	w-bl-20200108-02a		
Investigator(s): B Leopold,	R Massa			Section, To	wnship, Range:	s	T. 2N	R. 1W		
Landform (hillslope, terrace	, etc.): M	lound		Local relief (co	ncave, convex, n	one):	flat	Slope:0.0 % /0.0		
Subregion (LRR or MLRA):	LRR K		Lat.:	41.09771	Long	.: -80	0.59951	Datum: NAD83		
Soil Map Unit Name: FhB -	Fitchville s	ilt loam, ti	II substratum, 2 to 6 r	percent slopes		-	NWI classification:	n/a		
3 				· · ·	● No ○		31	CO. 14 CO.		
Are climatic/hydrologic con							, explain in Remarks	yes ● No ○		
Are Vegetation, Soi	ı 🗀 ,	or Hydrol	ogy 🗌 significant	ly disturbed?	Are "Normal	Circur	nstances" present?	res 🖭 No 🔾		
Are Vegetation , Soi	ı 🗌 ,	or Hydrol	ogy naturally p	problematic?	(If needed, e	explair	any answers in Re	marks.)		
Summary of Finding	gs - Att	ach site	map showing	sampling p	oint location	ns, t	ransects, impo	ortant features, et		
Hydrophytic Vegetation Pro	esent?	Yes	No O	I						
		Yes •	No O	Is the	Sampled Area		● No ○			
Hydric Soil Present?		Yes •	No O	within	a Wetland?	Yes	● No ∪			
Wetland Hydrology Presen	t?	res 🕓	NO O							
Remarks: (Explain alterna								n a non-maintained roadside		
ditch along the north side runoff to accumulate and within and along the ditch boundary. This wetland re connected to a roadside di	persist with edge. Evic ceives hyd	hin the roa dence of hy rology fror	dside ditch and overflowdrology and absence on precipitation, both a	owing to the adj of facultative up across the flat lan	acent PSS area. land herbaceous ndscape to the n	Lack o veget	f maintenance has le ation were utilized to	ed to scrub-shrub growth o determine the wetland		
Hydrology										
Wetland Hydrology Indicat						Secon	darv Indicators (minim	um of 2 required)		
Primary Indicators (minim	um of one	required;	check all that apply)			s	urface Soil Cracks (B6)			
✓ Surface Water (A1)			✓ Water-Stained Lea			✓ Drainage Patterns (B10)				
✓ High Water Table (A2)			Aquatic Fauna (B1			Moss Trim Lines (B16)				
Saturation (A3)			Marl Deposits (B1			Dry Season Water Table (C2)				
Water Marks (B1)			Hydrogen Sulfide		Crayfish Burrows (C8)					
Sediment Deposits (B2)			Section in the second control of the second		res along Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Structured on Structured Plants (D1)					
Drift deposits (B3)			Presence of Reduc							
Algal Mat or Crust (B4)			Recent Iron Reduc							
Iron Deposits (B5)	al Imagon	(D7)	Thin Muck Surface	. T		_	hallow Aquitard (D3)	(54)		
Inundation Visible on AeriSparsely Vegetated Conca	les compositores established	*	Other (Explain in F	Remarks)			licrotopographic Relief	(04)		
Sparsely vegetated conta	ve surrace (D0)				V	AC-neutral Test (D5)			
Field Observations:										
Surface Water Present?	Yes	No O	Depth (inches):	1						
Water Table Present?	Yes	No O	Depth (inches):	7						
Saturation Present?	Yes	No O		6	Wetland Hydr	ology	Present? Yes	● No ○		
(includes capillary fringe)			Depth (inches):							
Describe Recorded Data (st	ream gaug	e, monitor	ring well, aerial photos	s, previous inspe	ections), if availa	ble:				
Remarks:										
This wetland includes a nor	n-maintain	ed roadsid	e ditch retaining preci	pitation and prov	viding the primar	v and	secondary hydrology	v indicators observed.		
			comming proof	pro	Gree printer	,				

Sampling Date: 08-Jan-20

VEGETATION - Use scientific names of plant

vegetation - use scientific names of pla	Sampling Point: w-bl-20200108-02a			
(6)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' r)	% Cover	Species?	Status	Number of Dominant Species
1 Crataegus crus-galli	20	✓	FAC	That are OBL, FACW, or FAC: 9 (A)
2. Rhamnus cathartica	Carrier Control	~	FAC	Total Number of Dominant
3		Ш		Species Across All Strata:11(B)
4				Devent of deminant Capping
5				Percent of dominant Species That Are OBL, FACW, or FAC: 81.8% (A/B)
6				
7	0_	Ш		Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	25=	Total Cove	r	Total % Cover of: Multiply by: OBL species 15 x 1 = 15
1 Rhamnus cathartica	25	✓	FAC	OBL species 15 x 1 = 15 FACW species 25 x 2 = 50
2. Viburnum lentago	10	✓	FAC	20 March 19
3 Cornus alba	10	✓	FACW	FAC species $90 \times 3 = 270$
4 Rosa multiflora	5		FACU	FACU species $30 \times 4 = 120$
5. Betula alleghaniensis	10	✓	FAC	UPL species $0 \times 5 = 0$
6	0			Column Totals: <u>160</u> (A) <u>455</u> (B)
7	0			Prevalence Index = B/A =
Herb Stratum (Plot size: 5' r)	60 =	Total Cove	·	Hydrophytic Vegetation Indicators:
	10		OBL	Rapid Test for Hydrophytic Vegetation
1. Scirpus atrovirens	10 No. 10	V	OBL	✓ Dominance Test is > 50%
2. Phalaris arundinacea		H	FACW	✓ Prevalence Index is ≤3.0 ¹
3. Epilobium coloratum		V	OBL	☐ Morphological Adaptations ¹ (Provide supporting
4. Dichanthelium dichotomum	-		FAC	data in Remarks or on a separate sheet)
5. Symphyotrichum pilosum	-	H	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Solidago canadensis	40	✓	FACU	¹ Indicators of hydric soil and wetland hydrology must
7 Lysimachia nummularia	0.220		FACW	be present, unless disturbed or problematic.
8. Geum canadense	22		FACU	Definitions of Vegetation Strata
9 Lonicera japonica	1500	✓	FACU	
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12		Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)		- rotal cove	¥3	greater than 3.28 ft (1m) tall
1 Lonicera japonica	5	✓	FACU	Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0_			Woody vine - All woody vines greater than 3.28 ft in
4				height.
	5 =	Total Cove	r	
				Hydrophytic
				Vegetation No. O. No.
				Present? Yes No
Domanica (Tueludo ubete mumbaro baro arra a sarra trata				
Remarks: (Include photo numbers here or on a separate she Photos included in Appendix D.	et.)			
92.020				
Hydrophytic vegetation indicators present. Data point taken of the wetland. Emergent/herbaceous growth not present as a				
the wedgha. Emergent/herbaceous growth not present as a	uistirictively	unreient we	uanu wini	JOHEH.

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-09a

Sampling Point: w-bl-20200108-02a

Profile Descr	iption: (De	scribe to	the depth	needed to d	ocumen	t the indi	cator or c	onfirm the	e absence of indicators.)				
Depth (inches)		Matrix				dox Featu							
(inches)		(moist)	<u> </u>	Color (1			Type ¹		Texture Remarks				
0-9	10YR	4/2	95	10YR	4/6		C	PL	Sandy Clay Loam	_			
9-16	2.5y	5/3	80	2.5Y	4/4		C	M	Silty Clay	_			
										_			
										_			
										_			
										_			
1 Type: C=Cond	entration. D	=Depletion	n. RM=Red	uced Matrix. C	S=Covere	ed or Coate	ed Sand Gra	ains ² Loca	ration: PL=Pore Lining. M=Matrix				
Hydric Soil I		Боргосто											
Histosol (Polyv	alue Belov	w Surface ((S8) (LRR F	ε.	Indicators for Problematic Hydric Soils: 3				
	pedon (A2)				149B)		(00) (=	4	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
☐ Black Hist				Thin	Dark Surfa	ace (S9) (I	LRR R, MLF	RA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)				
Hydrogen	Sulfide (A4)			Loam	y Mucky N	Mineral (F1) LRR K, L)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
Stratified	Layers (A5)					Matrix (F2))		Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L)				
Depleted	Below Dark S	Surface (A:	11)	✓ Deple					Thin Dark Surface (S9) (LRR K, L)				
Thick Dark	k Surface (A:	12)				rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)				
Sandy Mu	ck Mineral (S	51)				Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Gle	yed Matrix (S4)		✓ Redo	x Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy Red	dox (S5)								Red Parent Material (F21)				
	4atrix (S6)								Very Shallow Dark Surface (TF12)				
Dark Surfa	ace (S7) (LRI	R R, MLRA	149B)						Other (Explain in Remarks)				
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology	must be p	resent, un	less distur	ed or probl	olematic.				
Restrictive La	aver (if obs	served):											
Type:													
Depth (incl	hes):								Hydric Soil Present? Yes ● No ○				
Remarks:									1				
- 170 TANICES - 1775						6		وورية والمراط					
hydrological c									value in upper layer of soil profile, consistent with				
,							(
Based on site	investigati	ons this v	vetland m	eets the thre	e criteria	and is ic	dentified a	s a wetlan	nd comprised of PSS vegetation. This wetland was fully				
stream featur				o intermittei	nt strean	n s-bi-202	200108-01	to the eas	ast via overflow to a roadside ditch (non-wetland, non-				
Stream reator	c), us snot	vii oii rig	uic 5.										

Wetland RLP-09b

oject/Site: Lincoln Park-Riverbend 138kV Transmission Line		City/County:	Mahoning County	Samplin	ng Date: 09-Jan-20	
Applicant/Owner: ATSI, , a FirstEnerg	y Company			State: OH	Sampling Point:	w-bl-20200108-02b
Investigator(s): B Leopold, R Massa			Section, To	ownship, Range: S.		R. 1W
Landform (hillslope, terrace, etc.):	Mound		100020000000000000000000000000000000000	oncave, convex, non	e): concave	Slope: 1.0 % / 0.6
Subregion (LRR or MLRA): LRR K		lat	41.09767	Long:	-80.59973	Datum: NAD83
	700 1 2				47470074747600076	
Soil Map Unit Name: BtB - Bogart lo	am, till substr	atum, 2 to 6 percent			NWI classification:	n/a
Are climatic/hydrologic conditions o	n the site typ	ical for this time of y	year? Yes	s ● No ○ (II	f no, explain in Remark	
Are Vegetation , Soil	, or Hydrolog	gy 🗌 significant	tly disturbed?	Are "Normal Cir	rcumstances" present?	Yes ● No ○
Are Vegetation , Soil	, or Hydrolog	gy naturally r	problematic?	(If needed, exp	olain any answers in Re	marks.)
Summary of Findings - At	tach site	map showing	sampling p		S	
Hydrophytic Vegetation Present?	Yes 💿 1	No O			741	
Hydric Soil Present?	Yes 💿 1	No O		Sampled Area n a Wetland?	Yes No	
Wetland Hydrology Present?	Yes 1	No O	Within	i a wedana:		
Remarks: (Explain alternative pro	cedures here	or in a senarate reno	ort)			
Hydrology						
Wetland Hydrology Indicators:				_Se	econdary Indicators (minim	ium of 2 required)
Primary Indicators (minimum of on	e required; ch	neck all that apply)			Surface Soil Cracks (B6)	
Surface Water (A1)		Water-Stained Lea	3 5	L	Drainage Patterns (B10)	
✓ High Water Table (A2)		Aquatic Fauna (B1		_	Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B15	AMERICAN AMERICAN	L	Dry Season Water Table	e (C2)
Water Marks (B1)		Hydrogen Sulfide (Crayfish Burrows (C8)	±-1 7 (CO)
Sediment Deposits (B2) Drift deposits (B3)		Oxidized Rhizosph		Roots (C3)	Saturation Visible on Ae	
Algal Mat or Crust (B4)		Presence of Reduc		(00)	Stunted or Stressed PlanGeomorphic Position (D.	
Iron Deposits (B5)		Recent Iron Reduc		s (C6)	Shallow Aguitard (D3)	2)
Inundation Visible on Aerial Imager	v (B7)	Thin Muck Surface	. 3 4		Microtopographic Relief	(D4)
Sparsely Vegetated Concave Surface		Other (Explain in F	kemarks)		FAC-neutral Test (D5)	(51)
Field Observations:						
Surface Water Present? Yes	No 💿	Depth (inches):				
Water Table Present? Yes •	No O					
		Depth (inches):	200	Wetland Hydrolo	ogy Present? Yes	● No ○
(includes capillary fringe) Yes	No 🔾	Depth (inches):	0	Y		
Describe Recorded Data (stream ga	uge, monitorir	ng well, aerial photos	s, previous insp	ections), if available		
Remarks:						
This wetland includes a non-maintai	ned roadside	ditch retaining precip	pitation and pro	oviding the primary a	and secondary hydrolog	y indicators observed.

401.401	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 10'x40')	% Cover	Species?	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC:1 (A)
2.	0_			Total Number of Demisers
3	0_			Total Number of Dominant Species Across All Strata: 2 (B)
4				
5.	0	Ē	5	Percent of dominant Species
6	7000	Ħ		That Are OBL, FACW, or FAC: 50.0% (A/B)
7		H		Prevalence Index worksheet:
<i>1</i> .	1000			
Sapling/Shrub Stratum (Plot size: 10'x20')	=	= Total Cove	9	Total % Cover of: Multiply by:
1 Rosa multiflora	10	~	FACU	OBL species <u>15</u> x 1 = <u>15</u>
2.				FACW species <u>55</u> x 2 = <u>110</u>
		H		FAC species <u>5</u> x 3 = <u>15</u>
3	-	H		FACU species 25 x 4 = 100
4		H		UPL species $0 \times 5 = 0$
5		H	-	Column Totals: 100 (A) 240 (B)
6	0_	H		Column locals: 100 (A) 240 (5)
7	0			Prevalence Index = B/A =
(Plot size: 5'r	10 =	= Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' r)				Rapid Test for Hydrophytic Vegetation
1. Phalaris arundinacea	50	✓	FACW	Dominance Test is > 50%
2. Epilobium anagallidifolium	5_		FACW	
3. Scirpus atrovirens	15		OBL	✓ Prevalence Index is ≤3.0 ¹
4. Euthamia graminifolia			FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. Solidago canadensis			FACU	
6			77.00	☐ Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9	0			Definitions of Vegetation Strata
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11	0			breast height (DBH), regardless of height.
12	0			Continue to Manda plants land than 2 in DRH and
200 00000000000000000000000000000000000	90 =	= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 10'x40')	.5			S (,
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0_			size, and woody plants less than 3.28 ft tall.
3	0		- 57	Woody vine - All woody vines greater than 3.28 ft in
1	0			height.
T.	0 =	= Total Cove		
		- Total Cove	2	
				Hydrophytic
				Vegetation
				Present? Yes • No ·
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos included in Appendix D.	0.77.77			
Friotos included in Appendix D.				
Hydrophytic vegetation indicator present as Prevalence Inde	x is less than	n 3. Vegetati	on was dis	urbed by seasonal (winter) conditions, though remnant
plant materials allowed for positive identification of the spec				
of PEM wetland component.				
				l

Sampling Point: w-bl-20200108-02b

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-09b

Sampling Point: w-bl-20200108-02b

	ription: (Des		the depth	needed to				onfirm the	absence of indicators.)	
Depth (inches)	Color (Matrix moist)	%	Color	Re (moist)	dox Featu %	ıres Type_ ¹	Loc²		Remarks
0-16	10YR	4/2	95	10YR	5/6	5	C	<u></u> М	Silty Clay Loam	Kemarks
		-,,_							Sity day Loam	
		-								
¹ Type: C=Con	centration. D	=Depletio	n. RM=Red	uced Matrix,	CS=Covere	ed or Coate	d Sand Gra	ins ²Loca	ition: PL=Pore Lining. M=Ma	atrix
Hydric Soil 1	Indicators:								Indicators for Probl	ematic Hydric Soils: 3
Histosol (A1)			Poly	value Belo	w Surface ((S8) (LRR F	٤,		(LRR K, L, MLRA 149B)
Histic Epi	pedon (A2)				A 149B)					ox (A16) (LRR K, L, R)
Black Hist	tic (A3)			Thin	Dark Surf	ace (S9) (I	LRR R, MLR	RA 149B)	THE PARTY NAMED IN TAXABLE IN	
Hydrogen	Sulfide (A4)			Loar	ny Mucky I	Mineral (F1) LRR K, L)			or Peat (S3) (LRR K, L, R)
Stratified	Layers (A5)			Loar	ny Gleyed	Matrix (F2))		Dark Surface (S7)	organistic control of the control of
Depleted	Below Dark S	Surface (A:	11)	✓ Dep	leted Matri	ix (F3)				Surface (S8) (LRR K, L)
Thick Dar	k Surface (A1	2)	000.00	Redo	ox Dark Su	ırface (F6)			Thin Dark Surface	
Sandy Mu	ick Mineral (S	1)		Dep	leted Dark	Surface (F	7)			Masses (F12) (LRR K, L, R)
	eyed Matrix (S			Redo	ox Depress	sions (F8)				ain Soils (F19) (MLRA 149B)
Sandy Re	. B	15								5) (MLRA 144A, 145, 149B)
	Matrix (S6)								Red Parent Materi	and the state of t
	ace (S7) (LRR	R, MLRA	149B)						Very Shallow Dark	
20									Other (Explain in	Remarks)
³ Indicators o	r nyaropnytic	vegetatio	n and wetia	ana nyarology	must be p	present, un	iess disturt	ea or probl	ematic.	
Restrictive L	ayer (if obs	erved):								
Туре:										
Depth (inc	hes):								Hydric Soil Present?	Yes No
Remarks:									5)	
Hydric soil inc	dicator pres	ent havin	na redox f	eatures with	in matrix	of low ch	nroma and	l higher va	lue in upper layer of soil	profile, consistent with
										tions evident in pore linings.
Based on site	investigation	ons this v	wetland m	eets the thr	ee criteria	a and is id	dentified a	s a wetlan I to interm	id comprised of PEM vege	etation as part of a larger PEM/SS 108-01 to the east via overflow to
a roadside dit								i to interm	itterit strediri 5-bi-20200.	100-01 to the east via overnow to
a roughue an	(ciaria, rio				ga				

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County:	Mahoning County	Samplin	ng Date: 08-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company		State: OH	Sampling Point:	w-bl-20200108-01
Investigator(s): B Leopold, R Massa	Section, To	wnship, Range: S.	т. 2N	R. 1W
Landform (hillslope, terrace, etc.): Terrace		ncave, convex, none)	: concave	Slope: 2.0 % / 1.1 °
				20.
Subregion (LRR or MLRA): LRR K Lat.:	41.09781	Long.:	74T-02T-747474 (K)	Datum: NAD83
Soil Map Unit Name: Se - Sebring silt loam, till substratum, 0 to 2 per	No. 10 Company of Comments		NWI classification:	n/a
Are climatic/hydrologic conditions on the site typical for this time of	year? Yes	s ● No ○ (If r	o, explain in Remark	**************************************
Are Vegetation , Soil , or Hydrology significant	tly disturbed?	Are "Normal Circ	umstances" present?	Yes ○ No ●
Are Vegetation , Soil , or Hydrology naturally	problematic?	(If needed, expla	in any answers in Re	marks.)
Summary of Findings - Attach site map showing	sampling p		5	
Hydrophytic Vegetation Present? Yes No				
Hydric Soil Present? Yes No		Sampled Area a Wetland? Ye	es No	
Wetland Hydrology Present? Yes ● No ○	Widin	a wedanu:		
Remarks: (Explain alternative procedures here or in a separate repo	ort \			
principally back up during high flow events caused by culvert under (boundary extending up from the toe of slope in the area receiving the Wetland has a significant herbaceous growth component underneath	is runoff.			ist as evidenced by wetiand
Hydrology				
Wetland Hydrology Indicators:		_Seco	ondary Indicators (minim	num of 2 required)
Primary Indicators (minimum of one required; check all that apply)			Surface Soil Cracks (B6)	
Surface Water (A1) Water-Stained Lea	aves (B9)	✓	Drainage Patterns (B10))
High Water Table (A2) Aquatic Fauna (B1	l3)		Moss Trim Lines (B16)	
Saturation (A3) Marl Deposits (B1)	5)		Dry Season Water Table	e (C2)
Water Marks (B1) Hydrogen Sulfide	Odor (C1)		Crayfish Burrows (C8)	entrove entropy
	neres along Living	Roots (C3)	Saturation Visible on Ae	rial Imagery (C9)
Drift deposits (B3)	ced Iron (C4)	닏	Stunted or Stressed Plan	
	ction in Tilled Soils	s (C6)	Geomorphic Position (D	2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	≥ (C7)	닐	Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7) Other (Explain in	Remarks)	님	Microtopographic Relief	(D4)
Sparsely Vegetated Concave Surface (B8)			FAC-neutral Test (D5)	
Field Observations:	3250			
Surface Water Present? Yes No Depth (inches):	0			
Water Table Present? Yes No Depth (inches):	0			● No ○
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	9	Wetland Hydrolog	y Present? Yes	9 No ∪
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspe	ections), if available:		
Remarks:				
Primary and secondary hydrology indicators present. Hydrology provio to south, abutting intermittent stream s-bl-20200108-01. Soils satura			adside and hillside dra	ainage from east. Drains

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1. Ulmus americana		✓	FACW	That are OBL, FACW, or FAC: 4 (A)
2. Populus tremuloides		~	FACU	Total Number of Dominant
3				Species Across All Strata:7(B)
4	0_			Book of device of Consider
5				Percent of dominant Species That Are OBL, FACW, or FAC:57.1% (A/B)
6				mat Are obt., racw, or rac.
7	0_			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	10=	Total Cover	Ġ.	Total % Cover of: Multiply by:
4. Danislas kannalaidas	10		FACU	OBL species <u>55</u> x 1 = <u>55</u>
1 Populus tremuloides		~	FACU	FACW species $10 \times 2 = 20$
2 Rhamnus cathartica		✓	FAC	FAC species $40 \times 3 = 120$
3 Rosa multiflora		~	FACU	FACU species 35 x 4 = 140
4. Viburnum lentago			FAC	UPL species $0 \times 5 = 0$
5. Cornus racemosa	10	✓	FAC	
6	0	H		Column Totals: <u>140</u> (A) <u>335</u> (B)
7				Prevalence Index = B/A =
Herb Stratum (Plot size: 5'r)	55 =	Total Cover		Hydrophytic Vegetation Indicators:
F 82.8	117			Rapid Test for Hydrophytic Vegetation
1. Epilobium coloratum			OBL	✓ Dominance Test is > 50%
2. Glyceria striata	40	✓	OBL	✓ Prevalence Index is ≤3.0 ¹
3. Solidago altissima	10		FACU	Morphological Adaptations ¹ (Provide supporting
4. Geum canadense	5_	\perp	FAC	data in Remarks or on a separate sheet)
5. Leersia oryzoides	10		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Onoclea sensibilis	5		FACW	
7				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8				The Control of the Co
9				Definitions of Vegetation Strata
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12	0_	Ē		0 - 1:- /- - - - - - - - - - - - - -
20 Sept 2	75 =	Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30'r)	5			g
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0_	Ц		size, and woody plants less than 3.28 ft tall.
3	0_		- 5	Woody vine - All woody vines greater than 3.28 ft in
4	0_			height.
	0 =	Total Cover		
				Hydrophytic
				Vegetation Present? Yes ● No ○
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos included in Appendix D.	,			
Priotos included in Appendix D.				
Hydrophytic vegetation indicators present including Dominar	nce Test and	Prevalence 1	ndex. All v	regetation identified in undisturbed conditions.
10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (

Sampling Point: w-bl-20200108-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: w-bl-20200108-01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)												
Depth	Matrix			lox Featu			_					
(inches)	Color (moist)		Color (moist)	%	Type 1	Loc2	Texture	Remarks				
0-14	10YR3/1		10YR 5/8		C		Silt Loam	redox in pore linings also				
¹ Type: C=Conc	entration. D=Depletion	n. RM=Reduc	ced Matrix, CS=Covered	d or Coate	d Sand Gra	ins ² Loca	tion: PL=Pore Lining. M=1	Matrix				
Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 3												
Histosol (A	A1)		Polyvalue Belov	Surface ((S8) (LRR R	,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Histic Epip	edon (A2)		MLRA 149B)	co (CO) (I	DD D MID	A 140P)		dox (A16) (LRR K, L, R)				
Black Histi			Thin Dark Surfa			A 149b)	The second of the second of	t or Peat (S3) (LRR K, L, R)				
_	Sulfide (A4)		Loamy Mucky M				Dark Surface (S7	7) (LRR K, L, M)				
	Layers (A5)	1742	Depleted Matrix		l)		Polyvalue Below Surface (S8) (LRR K, L)					
1	Below Dark Surface (A	11)	✓ Redox Dark Sur				Thin Dark Surface	e (S9) (LRR K, L)				
	Surface (A12)		Depleted Dark S		7)		☐ Iron-Manganese	Masses (F12) (LRR K, L, R)				
_	ck Mineral (S1)		Redox Depressi		• •		Piedmont Flood	olain Soils (F19) (MLRA 149B)				
_	yed Matrix (S4)			0.10 (1.0)				A6) (MLRA 144A, 145, 149B)				
Sandy Red							Red Parent Mate	rial (F21)				
Stripped M	**************************************	140P)						rk Surface (TF12)				
	ace (S7) (LRR R, MLRA	Min Convertible					✓ Other (Explain in	Remarks)				
³ Indicators of	hydrophytic vegetation	n and wetlan	d hydrology must be p	resent, un	less disturb	ed or proble	ematic.					
Restrictive La	yer (if observed):											
Туре:							1170 1700 Sections					
Depth (inch	nes):						Hydric Soil Present?	Yes ● No ○				
Remarks:												
Hydric soil ind	licator present as p	rominent red	dox features in matr	ix of low	value and	low chror	ma: redox features pres	ent in both matrix and pore linings.				
							45 09-0 46 000-000-000-000-000-000-000-000-000-00	2002/80400 accepted to the to the to				
								etation. This wetland extends to				
the north outs	side the survey area	ana is nyar	ologically abutting i	ntermitte	nt stream	S-DI-2020	10108-01 flowing to the	south, as shown on Figure 3.				

Project/Site: Lincoln Park-Riverbend 138	City/County:	Mahoning County	Samp	Sampling Date: 07-Jan-20		
Applicant/Owner: ATSI, , a FirstEnergy	Company			State: OH	Sampling Point	w-bl-20200107-05
Investigator(s): B Leopold, R Massa			Section, To	wnship, Range: 5	T. 2N	R. 1W
Landform (hillslope, terrace, etc.):	Saddle		Local relief (co	oncave, convex, no	one): concave	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K		Lat.:	41.09783	Long	: -80.59756	Datum: NAD83
Soil Map Unit Name: BgB - Bogart loa	am 2 to 6 t		11.05705		NWI classification	
0.				0 O		D
Are climatic/hydrologic conditions on	the site ty	pical for this time of y	year? Ye	s • No O	(If no, explain in Rema	
Are Vegetation, Soil	, or Hydrold	ogy significant	tly disturbed?	Are "Normal (Circumstances" presen	_{it?} Yes 💿 No 🔾
Are Vegetation , Soil	, or Hydrold	ogy naturally p	problematic?	(If needed, e	xplain any answers in	Remarks.)
Summary of Findings - Att	ach site	map showing	sampling p	oint location	s, transects, im	portant features, etc
Hydrophytic Vegetation Present?		No O				
Hydric Soil Present?	Yes	No O		Sampled Area a Wetland?	Yes No	
Wetland Hydrology Present?	Yes	No O	175667160			
utilized to determine the wetland bo isolated in a scrubby, wooded area.	,					on, and is hydrologically
Hydrology Wetland Hydrology Indicators:	980 9840				Secondary Indicators (mi	nimum of 2 required)
Primary Indicators (minimum of one	required; o	check all that apply)			Surface Soil Cracks (B6)
Surface Water (A1)		✓ Water-Stained Lea	3 3		Drainage Patterns (B	
High Water Table (A2)		Aquatic Fauna (B1			Moss Trim Lines (B16	
Saturation (A3) Water Marks (B1)		Marl Deposits (B15	A STATE OF THE STA		Dry Season Water Ta	
Sediment Deposits (B2)		Hydrogen Sulfide		Poets (C3)	Crayfish Burrows (C8 Saturation Visible on	An expressed surrescen
Drift deposits (B3)		Oxidized Rhizosph Presence of Reduc		Roots (C3)	Stunted or Stressed	
Algal Mat or Crust (B4)		Recent Iron Reduc		c (C6)	✓ Geomorphic Position	
☐ Iron Deposits (B5)		Thin Muck Surface		3 (CO)	Shallow Aquitard (D3	0.500,00.50
☐ Inundation Visible on Aerial Imagery	(B7)	Other (Explain in F			☐ Microtopographic Re	5 6 0
Sparsely Vegetated Concave Surface	34.003041	Other (Explain in F	Kendiks)		✓ FAC-neutral Test (D5	
Field Observations:						
Surface Water Present? Yes	No 💿	Depth (inches):	0			
Water Table Present? Yes	No 💿	Depth (inches):			100	0 0
Saturation Present? (includes capillary fringe) Yes	No •	Depth (inches):		Wetland Hydro	ology Present? Yes	s • No O
Describe Recorded Data (stream gauge Remarks: Wetland is located in a closed depress the local landform. No obvious outflo	ssion receivi	ing precipitation from	a small portion			or the highest elevation of

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?		Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1				That are OBL, FACW, or FAC:
2				Total Number of Dominant
3	0	Ш		Species Across All Strata: 3 (B)
4	0			
5	0			Percent of dominant Species That Are OBL FACW or FAC: 66.7% (A/B)
6	0			That Are OBL, FACW, or FAC: 66.7% (A/B)
7	0_			Prevalence Index worksheet:
(6)	0 =	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' r	5750500			OBL species
1 Rhus typhina	10	✓	UPL	FACW species
2 Cornus alba	10	✓	FACW	FAC species5 x 3 =15
3	0			FACU species $0 \times 4 = 0$
4	0_			3.00
5	0			UPL species x 5 =
6	0			Column Totals: <u>100</u> (A) <u>165</u> (B)
7				Prevalence Index = B/A = 1.650
		= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' r)				Rapid Test for Hydrophytic Vegetation
1 Scirpus atrovirens	_70_	✓	OBL	ATT 820 85 (FETT) SEA OF RESERVE
2 Symphyotrichum racemosum	-		FACW	✓ Dominance Test is > 50%
3. Agrimonia parviflora			FAC	✓ Prevalence Index is ≤3.0 ¹
4.				Morphological Adaptations ¹ (Provide supporting
5				data in Remarks or on a separate sheet)
6	722			Problematic Hydrophytic Vegetation ¹ (Explain)
	-	П		¹ Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9		님		
10		니		Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: _30'r)	80=	= Total Cover		greater than 3.28 ft (1m) tall
	0			Herb - All herbaceous (non-woody) plants, regardless of
1		H		size, and woody plants less than 3.28 ft tall.
2	0	H		And the control of th
3	-	H	5	Woody vine - All woody vines greater than 3.28 ft in
4		ш.		height.
	0 =	= Total Cover		
				H. dan da da
				Hydrophytic Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos included in Appendix D.				
Hydrophytic vegetation indicators present, predominantly he	erbaceous ve	getation cove	er.	

Sampling Point: w-bl-20200107-05

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: w-bl-20200107-05

Profile Descri	ption: (De	scribe to	the depth	needed to	document	the indic	ator or c	onfirm the	absence of indicators.)			
Depth		Matrix				lox Featu			-	-			
(inches)		(moist)		Color (moist)	%	Type 1	Loc ²	Texture	Remarks			
0-3	10YR	3/2	100						Silt Loam				
3-15	10YR	4/1	85	10YR	6/4	15	С	М	Silt Loam	redox matrix and pore linings			
						-							
¹ Type: C=Cono	entration. D	=Depletio	n. RM=Red	uced Matrix, (CS=Covered	d or Coate	d Sand Gra	ains ² Locat	tion: PL=Pore Lining. M=	Matrix			
Hydric Soil I	ndicators:								Indicators for Pro	blematic Hydric Soils: 3			
Histosol (A	A1)			Poly	alue Belov	v Surface (S8) (LRR I	٦,					
Histic Epip	edon (A2)			MLR	A 149B)		0.0)) (LRR K, L, MLRA 149B)			
Black Histi				Thin	Dark Surfa	ce (S9) (L	RR R, MLF	RA 149B)	THE RESERVE TO SERVE THE PROPERTY OF THE PROPE	dox (A16) (LRR K, L, R)			
					ny Mucky M	lineral (F1)	LRR K, L			at or Peat (S3) (LRR K, L, R)			
					ny Gleyed N	/latrix (F2)			Dark Surface (S7) (LRR K, L, M)				
Depleted Below Dark Surface (A11)				✓ Depl	eted Matrix	(F3)				Surface (S8) (LRR K, L)			
Thick Dark Surface (A12)					x Dark Sur	face (F6)			Thin Dark Surfa	ce (S9) (LRR K, L)			
Thick Dark Surface (A12)				☐ Depl	eted Dark S	Surface (F7	7)		Iron-Manganese	Masses (F12) (LRR K, L, R)			
				✓ Redo	x Depressi	ons (F8)	8		Piedmont Flood	plain Soils (F19) (MLRA 149B)			
	yed Matrix (54)		200	95				Mesic Spodic (T	A6) (MLRA 144A, 145, 149B)			
Sandy Red									Red Parent Mate	erial (F21)			
Stripped M									Very Shallow Dark Surface (TF12)				
Dark Surfa	ce (S7) (LR	R R, MLRA	149B)						Other (Explain i	n Remarks)			
³ Indicators of	hydrophytic	: vegetatio	n and wetla	and hydrology	must be p	resent, unl	ess distur	bed or proble	ematic.				
Restrictive La									7				
Type:	iyei (ii ob.	sci veuj.											
									Hydric Soil Present	Yes No			
Depth (inch	ies)												
Remarks:													
	lower laye	er of soil	profile, co	nsistent wit	h hydrolog	gical char				ations present in matrix and ontained depression area.			
001010101010			me accern	orang to and		promor							
										getation. This wetland was fully			
delineated and	is not ob	viously hy	/drological	lly connecte	d to any o	ther surfa	ace featu	re, as show	vn on Figure 3.				

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

City/County: Mahoning County

Applicant/Owner: ATSI, , a l	FirstEnergy Company		_	State: OH	Sampling Point:	w-bl-20200107-04
Investigator(s): B Leopold, I	R Massa		Section, Tow	nship, Range: S	. т. 2N	R. 2W
Landform (hillslope, terrace,	etc.): Swale		Local relief (cond	ave, convex, no	one): concave	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA):	LRR K	Lat.:	41.09821	Long.	: -80.59622	Datum: NAD83
Soil Map Unit Name: Se - Se	ebring silt loam, till s	substratum, 0 to 2 perc	ent slopes		NWI classification:	n/a
Are climatic/hydrologic cond			V /	● No ○ ((If no, explain in Remarks	- 1
Are Vegetation, Soil		_	y disturbed?	es municipality se		Yes No
	_				Circumstances" present?	
Are Vegetation, Soil Summary of Finding		25 f.	roblematic? sampling po	8 8	xplain any answers in Rei IS, transects, impo	353
Hydrophytic Vegetation Pre	sent? Yes •	No O				
Hydric Soil Present?	Yes	No O		mpled Area Wetland?	Yes No	
Wetland Hydrology Present	? Yes ●	No O		Wedana.		
Wetland w-bl-20200107-02 area. Topography and evid adjacent upland areas and the west, or to the south a hydric soil (component 85° An existing utility easemen	ence of hydrology w retains such runoff. long the gravel drive % on terraces, consis	ere utilized to determing No obvious hydrologic to a roadside ditch dra stent with this wetland	ne the wetland be connectivity was aining to the east setting).	oundary. This we present to wetl along Oak Stree	etland receives precipitati and w-bl-20200106-01 ac et Extension,though Sebri	on runoff from the cross the gravel drive to ing silt loam is listed as a
Hydrology						
Wetland Hydrology Indicate	ors:				Secondary Indicators (minim	um of 2 required)
Primary Indicators (minimu	m of one required;	check all that apply)			Surface Soil Cracks (B6)	
Surface Water (A1)		✓ Water-Stained Leav	/es (B9)		Drainage Patterns (B10)	
High Water Table (A2)		Aquatic Fauna (B13	3)		Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B15)		Dry Season Water Table	(C2)
Water Marks (B1)		Hydrogen Sulfide C	odor (C1)		Crayfish Burrows (C8)	
Sediment Deposits (B2)		Oxidized Rhizosphe	eres along Living Ro	ots (C3)	Saturation Visible on Ae	rial Imagery (C9)
Drift deposits (B3)		Presence of Reduce	ed Iron (C4)		Stunted or Stressed Plan	nts (D1)
Algal Mat or Crust (B4)		Recent Iron Reduct	ion in Tilled Soils (26)	✓ Geomorphic Position (D2	2)
Iron Deposits (B5)		Thin Muck Surface	(C7)		Shallow Aquitard (D3)	
Inundation Visible on Aeria	al Imagery (B7)	Other (Explain in R	emarks)		Microtopographic Relief	(D4)
Sparsely Vegetated Concar	e Surface (B8)				✓ FAC-neutral Test (D5)	
Field Observations:						
Surface Water Present?	Yes O No 💿	Depth (inches):				
Water Table Present?	Yes O No 💿	Depth (inches):			33. P	
Saturation Present? (includes capillary fringe)	Yes ● No ○	Depth (inches):	4	Wetland Hydro	ology Present? Yes	● No ○
Describe Recorded Data (str	eam gauge, monitor	ring well, aerial photos	, previous inspec	ions), if availab	le:	
Remarks:						
The wetland is located in ar indicators observed.	d adjacent to a cons	tructed drainage swale	e with no apparer	t outflow, provi	ding the primary and seco	ondary hydrology

Sampling Date: 07-Jan-20

respectively 2015	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30' r)	% Cover	Species?	Status	Number of Dominant Species
1	0_			That are OBL, FACW, or FAC: 4 (A)
2				Total Number of Deminant
3	0_			Total Number of Dominant Species Across All Strata: 4 (B)
4.	-			
5	0	ī	8	Percent of dominant Species
6.	75 NO.	H		That Are OBL, FACW, or FAC: 100.0% (A/B)
7	-	H		Prevalence Index worksheet:
<i>1</i>	10000			The state of the s
Sapling/Shrub Stratum (Plot size: 15' r)	=	= Total Cove	ē .	Total % Cover of: Multiply by:
1 Cornus alba	15	~	FACW	OBL species <u>45</u> x 1 = <u>45</u>
2 Betula alleghaniensis	-	✓	FAC	FACW species <u>40</u> x 2 = <u>80</u>
				FAC species <u>10</u> x 3 = <u>30</u>
3	2	H		FACU species $10 \times 4 = 40$
4		H		UPL species $0 \times 5 = 0$
5		H		Column Totals:105 (A)195 (B)
6		H		Column locals: 105 (A) 195
7				Prevalence Index = B/A =
Herb Stratum (Plot size: _5' r)	20 =	= Total Cove	•	Hydrophytic Vegetation Indicators:
Herb Stratum_ (Flot size. 5 1				Rapid Test for Hydrophytic Vegetation
1 Cinna arundinacea	15	✓	FACW	✓ Dominance Test is > 50%
2. Juncus effusus	10		OBL	✓ Prevalence Index is ≤3.0 ¹
3. Scirpus atrovirens	30	✓	OBL	
4. Symphyotrichum racemosum	10		FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. Epilobium coloratum	-		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Symphyotrichum lateriflorum	-		FAC	Froblematic Hydrophytic Vegetation - (Explain)
	-		FACU	Indicators of hydric soil and wetland hydrology must
* * * * * * * * * * * * * * * * * * *		Ħ	TACO	be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9		님		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11	0_			breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
(0)-1	85 =	Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30'r)				
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0_			size, and woody plants less than 3.28 ft tall.
3	0_			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cover		V.800
				Hydrophytic
				Vegetation Present? Yes ● No ○
				Present? Yes V NO C
Remarks: (Include photo numbers here or on a separate she	eet.)			
Photos included in Appendix D.				
95.50				
Hydrophytic vegetation indicators present. Infrequent, period		nce of utility	line and d	rainage swale along gravel drive may provide for
maintenance of predominantly herbaceous vegetation comm	unity.			

Sampling Point: w-bl-20200107-04

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: w-bl-20200107-04

Profile Descri	ption: (De	scribe to	the depth	needed to d	locument	the indi	cator or c	onfirm the	absence of indicators.)				
Depth		Matrix				dox Featu			_				
(inches)	Color	(moist)	%	Color (moist)	%_	Type ¹	Loc2	Texture	Remarks			
0-4	10YR	2/1	100						Silt Loam				
4-9	10YR	5/1	95	10YR	4/1	5	RM	М	Silt Loam				
9-15	10YR	4/1	90	10YR	4/4	10	C	М	Silt Loam				
1 Tymor C—Cons	ontration C	- Doplotio	n DM-Dad	used Matrix C	`C_Co. 1010	d or Coato	d Cand Cr	ing 21 oct	tion: PL=Pore Lining, M=Ma	ntuit.			
		=Depletio	n. RM=Reu	uceu Matrix, C	S=Covere	u or coate	a Sana Gra	iiiis -Locai					
Hydric Soil I				П.,	_		(00) (100		Indicators for Probl	ematic Hydric Soils: ³			
Histosol (A	S				alue Belov A 149B)	v Surface ((S8) (LRR F	₹,	2 cm Muck (A10)	(LRR K, L, MLRA 149B)			
Histic Epip				-		ro (SO) (I	LRR R, MLF	Λ 140R)	Coast Prairie Redo	ox (A16) (LRR K, L, R)			
Black Histi								8	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)			
Hydrogen	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L)								Dark Surface (S7)				
Stratified L	ayers (A5)				y Gleyed N				Polyvalue Below Surface (S8) (LRR K, L)				
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)								Thin Dark Surface	NOV DOUD SHOW OF STREET AND CONTINUES OF AND				
Thick Dark	Surface (A	12)			x Dark Sur	10 100				Masses (F12) (LRR K, L, R)			
Sandy Muc	k Mineral (51)			eted Dark :		7)		F Thomas and a second second	ain Soils (F19) (MLRA 149B)			
Sandy Gley	ed Matrix (S4)		✓ Redo	x Depressi	ons (F8)				i) (MLRA 144A, 145, 149B)			
Sandy Red	ox (S5)								Red Parent Materi	500 to 50 to			
Stripped M	latrix (S6)												
Dark Surfa	ce (S7) (LR	R R, MLRA	149B)						☐ Very Shallow Dark				
				ouer#m#19000#1000#1011000#10	00000000000000000000000000000000000000			with the second of the second	Other (Explain in I	Remarks)			
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology	must be p	resent, un	less disturt	ed or proble	ematic.				
Restrictive La	yer (if obs	served):											
Туре:									1000 5000 Section (1999 1999 - 1999 1				
Depth (inch	es):								Hydric Soil Present?	Yes ● No ○			
Remarks:									150				
	icatore pre	scopt have	ing rodov i	footures with	oin matrix	of law o	hroma an	d biab valu	up in lower layer of soil n	rafile consistent with			
hydrological cl									ue in lower layer of soil p	nome, consistent with			
, a. o. og.oa. o.	iai accorio				a correan	.ou dop. c							
										etation. This wetland was fully			
delineated and	is not ob	viously h	ydrological	ly connected	to any o	ther surf	ace featu	re, as show	vn on Figure 3.				

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County Sampling Date: 06-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: OH Sampling Point: w-bl-20200106-01
Investigator(s): B Leopold, R Massa	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1
Subregion (LRR or MLRA): LRR K Lat.:	41.0984 Long.: -80.5968 Datum: NAD83
Soil Map Unit Name: Se - Sebring silt loam, till substratum, 0 to 2 pe	003300
	<u> </u>
Are climatic/hydrologic conditions on the site typical for this time of y	V A N- C
Are Vegetation, Soil, or Hydrology significan	tly disturbed? Are "Normal Circumstances" present? Yes No
	problematic? (If needed, explain any answers in Remarks.)
Summary of Findings - Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes • No O	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes ● No ○	
Remarks: (Explain alternative procedures here or in a separate repo	ort.)
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1) ✓ Water-Stained Le	
✓ High Water Table (A2) Aquatic Fauna (B:	
✓ Saturation (A3)	
Water Marks (B1) Hydrogen Sulfide	
	heres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3) Presence of Redu	
	iction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface ☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	
Inundation visible on Aerial Imagery (B7) Other (Explain in Sparsely Vegetated Concave Surface (B8)	Remarks)
Sparsery regulated contains surface (50)	TACHEUU TESC (D3)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	1
Water Table Present? Yes No Depth (inches):	
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	
794A-791314-025-021	centration of precipitation. Not isolated, drains to west outside study area.

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover	Species:	Status	Number of Dominant Species
1. Crataegus crus-galli	-		FAC	That are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3		Ш		Species Across All Strata:3(B)
4				2
5	0_			Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)
6				That are obt, racw, or rac.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	3 =	= Total Cover		Total % Cover of: Multiply by:
		_	F1611	OBL species 63 x 1 = 63
1. Lonicera morrowii		~	FACU	FACW species0 x 2 =0
2. Viburnum lentago		✓	FAC	FAC species <u>48</u> x 3 = <u>144</u>
3. Rhamnus cathartica	St. 10.		FAC	FACU species 25 x 4 = 100
4. Betula alleghaniensis		님	FAC	UPL species $0 \times 5 = 0$
5				
6	0			Column Totals: <u>136</u> (A) <u>307</u> (B)
7	0			Prevalence Index = B/A = 2.257
Herb Stratum (Plot size: 5' r)	60 =	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Flot size. 3 1				Rapid Test for Hydrophytic Vegetation
1. Glyceria striata	60	✓	OBL	✓ Dominance Test is > 50%
2. Festuca rubra	5		FACU	✓ Prevalence Index is ≤3.0 ¹
3. Epilobium coloratum	3		OBL	
4. Solidago altissima	5		FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7	0			1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10		Ħ		Tree Weeds plants 2 in /7 6 and as many in diameter
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
12				
12.		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)		- Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	0.20			size, and woody plants less than 3.28 ft tall.
3	0			Weeds vine All weeds vines greater than 2.29 ft in
1	0		8	Woody vine - All woody vines greater than 3.28 ft in height.
T.	0 =	= Total Cover		
		- Total Cover	i n	
				Hydrophytic
				Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	neet.)			
Photos included in Appendix D.				
Tree layer does not apply for dominance (<5% cover). Po	rtion of wetla	and has been	recently c	cleared/mowed. Remnant vegetation material dominated
by sapling/shrub similar to non-cleared area.				

Sampling Point: w-bl-20200106-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: w-bl-20200106-01

	iption: (De		the depth	needed to d				onfirm the	absence of indicators.)				
Depth (inches)	Color (Matrix moist)	%	Color (the filter of the transfer of the	dox Feati %	Type 1	Loc2	Texture	Remarks			
0-4	2.5Y	3/1	95	7.5YR	4/6	5	C	PL	Silty Clay Loam	Nemarko			
4-16	5YR	4/1	80	7.5YR	4/6	20	С	M	Silty Clay Loam				
					/-0				Silty Clay Loan				
									· · · · · · · · · · · · · · · · · · ·				
¹ Type: C=Cond	centration. D	=Depletio	n. RM=Red	luced Matrix, (CS=Covere	ed or Coat	ed Sand Gr	ains ²Loca	ation: PL=Pore Lining. M=Mat	trix			
Hydric Soil I	ndicators:			Det = 171					Indicators for Problem	natic Hydric Soils: 3			
Histosol (A	A1)					w Surface	(S8) (LRR I	₹,		RR K, L, MLRA 149B)			
Histic Epip	edon (A2)			The second	A 149B)				Coast Prairie Redox	anna an talah an			
Black Histi	☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (LRR R, MLRA 149E							31.57		Peat (S3) (LRR K, L, R)			
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L) Stratified Layors (A5) Loamy Gleyed Matrix (F2))	Dark Surface (S7) (I					
	Substituted Matrix (E2)								Polyvalue Below Surface (S8) (LRR K, L)				
Podev Park Surface (ATI)									Thin Dark Surface (5	S9) (LRR K, L)			
	Deploted Dark Surface (A12)								☐ Iron-Manganese Ma	sses (F12) (LRR K, L, R)			
	Peday Depressions (FS)								Piedmont Floodplain	1 Soils (F19) (MLRA 149B)			
	Sandy Gleyed Matrix (S4) Sandy Redox (S5)							Mesic Spodic (TA6)	(MLRA 144A, 145, 149B)				
	ox (SS) Aatrix (S6)								Red Parent Material	1673			
	ace (S7) (LRI	D D MIDA	140R)							☐ Very Shallow Dark Surface (TF12) ☐ Other (Fig. In Present A)			
			040.070.070.000						Other (Explain in Re	marks)			
³ Indicators of	hydrophytic	vegetatio	n and wetla	and hydrology	must be p	oresent, ur	nless disturi	oed or probl	ematic.				
Restrictive La	ayer (if obs	erved):											
Type:	021								Hydric Soil Present?	Yes ● No ○			
Depth (inch	nes):								Hydric Soil Present?	Yes ♥ No ∪			
Remarks:													
Prominent rec	dox concen	trations v	vith low c	hroma and	alue pre	sent seve	eral hydrid	soil indica	ators consistent with hydro	ology characteristics.			
Daned on alta		46:					:			tation with a mouton manually			
									ature to the west of the su	tation with a portion recently			
jurisdictional	wet weathe	er convey	ance, as	shown on Fi	gure 3.		J						

Project/Site: Lincoln Park-River	bend 138kV Transmis	sion Line	City/County: Mahoning County Sampling Date: 07-Jan-20						
Applicant/Owner: ATSI, , a Fi	rstEnergy Company			State: OH	Sampling Point:	w-bl-20200107-03			
Investigator(s): B Leopold, R	Massa		Section, To	wnship, Range: S.	т. 2N	R. 1W			
Landform (hillslope, terrace,	etc.): Flat		Local relief (co	ncave, convex, non	e): concave	Slope: 0.0 % / 0.0 °			
Subregion (LRR or MLRA):	I RR K	Lat.:	41.09959	Long.:	-80.59617	Datum: NAD83			
	200500000 20 ES 1000 1000 VES 100	2007 145 007 105 107 107 107 107 107 107 107 107 107 107			NWI classification:				
Soil Map Unit Name: FhB - Fi), a ben'ny tanàna mandritry ny taona 2008–2014.		171	<u> </u>		-			
Are climatic/hydrologic condi	tions on the site ty	pical for this time of	year? Yes	● No ○ (If	f no, explain in Remarl				
Are Vegetation, Soil	, or Hydrol	ogy significan	tly disturbed?	Are "Normal Cir	rcumstances" present?	Yes No			
Are Vegetation , Soil	, or Hydrol	ogy naturally	problematic?	(If needed, exp	lain any answers in Re	emarks.)			
Summary of Findings	s - Attach site	e map showing	sampling po	oint locations	, transects, imp	ortant features, etc			
Hydrophytic Vegetation Pres		No O							
Hydric Soil Present?	Yes	No O		Sampled Area a Wetland?	Yes 💿 No 🔾				
Wetland Hydrology Present?	Yes	No O							
Remarks: (Explain alternation Wetland w-bl-20200107-03			l 3						
constructed drainage swale morphological adaptations of from precipitation, and is hy	on trees were utilize	ed to determine the w	vetland boundary.	This wetland is in	a geomorphic position	that will concentrate flow			
Hydrology									
Wetland Hydrology Indicato	rs:			_Se	econdary Indicators (minir	mum of 2 reauired)			
Primary Indicators (minimur	n of one required;	check all that apply)			Surface Soil Cracks (B6)			
Surface Water (A1)		✓ Water-Stained Le	aves (B9)	•	Drainage Patterns (B10	0)			
High Water Table (A2)		Aquatic Fauna (B	CONTRACT CON	L	Moss Trim Lines (B16)				
Saturation (A3)		Marl Deposits (B1	200 AND		Dry Season Water Tabl	le (C2)			
Water Marks (B1)		Hydrogen Sulfide		× 25 (WeSSE)	Crayfish Burrows (C8)	100/55/20 <u>9/2/2</u> 9/0			
Sediment Deposits (B2)			heres along Living F	Roots (C3)	Saturation Visible on A				
Drift deposits (B3)		Presence of Redu			Stunted or Stressed Pla				
Algal Mat or Crust (B4)		- Manager Green March	iction in Tilled Soils	(C6)	Geomorphic Position (I	02)			
☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial	Imagen (P7)	Thin Muck Surface		_	Shallow Aquitard (D3)	£ /D 4)			
Sparsely Vegetated Concave		Other (Explain in	Remarks)		Microtopographic Relie	f (D4)			
Sparsely vegetated concave	: Surface (Bo)			•	FAC-neutral Test (D5)				
Field Observations:	0 0								
Surface Water Present?	Yes ○ No •	Depth (inches):	-						
Water Table Present?	Yes O No 💿	Depth (inches):				O O			
Saturation Present? (includes capillary fringe)	Yes O No •	Depth (inches):		Wetland Hydrolo	ogy Present? Yes	● No ○			
Describe Recorded Data (stre	am gauge, monito	ring well, aerial photo	os, previous inspe	ctions), if available	:				
Demodes									
Remarks:	•					e decidence attractor of considerations of			
This wetland is located in a c	lepression area cor	icentrating precipitation	on and providing	the primary and se	condary hydrology indi	cators observed.			

(0) 20 20 20 20 20 20 20 20 20 20 20 20 20	Absolute	Dominant Species 2	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30' r	% Cover	Species?	Status	Number of Dominant Species		
1 Acer rubrum	60	✓	FAC	That are OBL, FACW, or FAC:4 (A)		
2. Quercus palustris	the same of the sa	~	FACW	Total Number of Dominant		
3	0_			Species Across All Strata: 4 (B)		
4	0_					
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)		
6	0			That Are Obt., FACW, OF FAC.		
7	0_			Prevalence Index worksheet:		
Sapling/Shrub Stratum (Plot size: 15' r)	90 =	Total Cover		Total % Cover of: Multiply by:		
		3 <u></u> 01		OBL species <u>0</u> x 1 = <u>0</u>		
1 Acer rubrum		✓	FAC	FACW species <u>40</u> x 2 = <u>80</u>		
2. Ulmus americana		✓	FACW	FAC species		
3. Smilax glauca	0.0		FACU	FACU species 3 x 4 = 12		
4	0_			UPL species $0 \times 5 = 0$		
5			-	AND THE STATE OF T		
6	0_	H		Column Totals:113 (A)302 (B)		
7	0			Prevalence Index = B/A = 2.673		
Herb Stratum (Plot size: 5'r)	23 =	= Total Cove		Hydrophytic Vegetation Indicators:		
Herb Stratum (1100 3120 31				Rapid Test for Hydrophytic Vegetation		
1,				✓ Dominance Test is > 50%		
2		Ш		✓ Prevalence Index is ≤3.0 ¹		
3	0_			Morphological Adaptations ¹ (Provide supporting		
4	0_			data in Remarks or on a separate sheet)		
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)		
6	0_					
7	0_			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
8	0			PROPERTY MONTHS AND ADMINISTRATION OF THE PROPERTY		
9				Definitions of Vegetation Strata		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at		
11				breast height (DBH), regardless of height.		
12		Ħ				
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall		
Woody Vine Stratum (Plot size: 30'r)				groutor train 0.20 ft (111) tail		
1				Herb - All herbaceous (non-woody) plants, regardless of		
2	0_			size, and woody plants less than 3.28 ft tall.		
3	0_			Woody vine - All woody vines greater than 3.28 ft in		
4	0_			height.		
	0 =	= Total Cove		V-000		
				Hydrophytic		
				Vegetation Present? Yes No ○		
Remarks: (Include photo numbers here or on a separate sh	oot \					
	eet.)					
Photos included in Appendix D.						
Hydrophytic vegetation indicators present. Infrequent, period						
composition of the wetland so was not called out specifically	/. Herbaceou	is vegetation	present lin	mited to an unidentified Carex sp. of very limited		
absolute cover.						

Sampling Point: w-bl-20200107-03

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: w-bl-20200107-03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicator													
Depth		Matrix				dox Featı							
(inches)		(moist)		Color (Type 1		Texture	Remarks			
0-5	10YR	4/2	80	10YR	4/6		C	M/PL	Silt Loam				
5-11	10YR	6/1	80	10YR	5/8		C		Silty Clay				
11-16	10YR	6/1	50						Silty Clay Loam				
	10YR	5/8	50										
1 Type: C=Conc	entration D	=Denletio	n RM=Red	uced Matrix C	S=Covere	d or Coate	ed Sand Gra	ains 2l ocal	tion: PI =Pore Lining M=M:	etrix			
¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ² Location: PL=Pore Lining. M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: ³													
Histosol (A				Polyv	alue Belov	v Surface ((S8) (LRR F	₹.		A THOUGHT AND A SHARE SHOW THE SHOW ON THE SHARE SHOW OF THE SHARE SHARE SHOW OF THE SHARE SHARE SHOW OF THE SHARE SHOW			
Histic Epip					149B)	V Surface ((50) (2333)	' /		(LRR K, L, MLRA 149B)			
Black Histi	Thin	Dark Surfa	ace (S9) (I	LRR R, MLF	RA 149B)	There was a way of	ox (A16) (LRR K, L, R)						
	Sulfide (A4)			Loam	y Mucky N	1ineral (F1) LRR K, L)			or Peat (S3) (LRR K, L, R)			
Stratified Layers (A5) Loamy Gleyed Matrix (F2)								Dark Surface (S7)	Page Control of the C				
	Below Dark S	Surface (A	11)	✓ Deple	ted Matrix	k (F3)			Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)				
	Surface (A		/	Redo	x Dark Sur	rface (F6)							
	k Mineral (S			Deple	ted Dark	Surface (F	7)			Masses (F12) (LRR K, L, R)			
	yed Matrix (✓ Redo	x Depress	ions (F8)				ain Soils (F19) (MLRA 149B)			
Sandy Red	Samuel S	,								(MLRA 144A, 145, 149B)			
Stripped M									Red Parent Materi	and the state of the second of			
	ce (S7) (LRI	R R, MLRA	149B)						☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks)				
			Missing National							Remarks)			
³ Indicators of			n and wetta	ana nyarology	must be p	resent, un	iess disturi	bea or proble	ematic.				
Restrictive La	yer (if obs	served):											
Type:	83								Hydric Soil Present?	Yes ● No ○			
Depth (inch	nes):								Hydric Son Fresents	res © No O			
Remarks:													
Hydric soil ind	icators pre	sent hav	ing redox	features with	in matrix	x of low o	chroma ar	nd value in	upper layers of soil profi	le, consistent with hydrological			
characteristics	observed.	. Wetland	l is within	a depression	area of	an otherv	wise flat p	lain.					
Raced on site	invecticati	one this v	wetland m	oots the thre	e criteria	and is in	lentified a	s a wetlan	d comprised of DEO year	etation. This wetland was fully			
										ale, as shown on Figure 3.			
		,								•			

Wetland RLP-15a

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

City/County: Mahoning County

Applicant/Owner: ATSI, , a FirstEner	gy Company			State: OF	4	Sampling Point:	w-bl-20200107-02a		
Investigator(s): B Leopold, R Massa			Section, To	wnship, Range:	s.	T. 2N	R. 1W		
Landform (hillslope, terrace, etc.):	Swale			oncave, convex, r): concave	Slope: 1.0 % / 0.6 °		
Subregion (LRR or MLRA): LRR K		Lat.:	41.10164	Lone	q.: -	80.59592	Datum: NAD83		
Soil Map Unit Name: JtB - Jimtown	200200 25		11.10101		_	NWI classification:			
35-	2010/05/2010 10 to 20 00 00 00 00 00 to 10 00 to	0.00 (Va	s • No O	_	0 1			
Are climatic/hydrologic conditions	100			S • NO ·	(If r	no, explain in Remarks	"		
Are Vegetation, Soil	, or Hydrolog	gy significant	ly disturbed?	Are "Normal	l Circ	umstances" present?	Yes ● No ○		
Are Vegetation , Soil	, or Hydrolog	gy naturally p	problematic?	(If needed,	expla	in any answers in Rer	marks.)		
Summary of Findings - A	ttach site	map showing	sampling p	oint locatio	ns,	transects, impo	rtant features, etc		
Hydrophytic Vegetation Present?	Yes 💿 I	No O							
Hydric Soil Present?	Yes 💿 1	No O		Sampled Area a Wetland?	Ye	es 💿 No 🔾			
Wetland Hydrology Present?	Yes 💿 1	No O	170/17/100						
PEM component of w-bl-20200107-02, a PEM/SS wetland complex. The PEM component is limited to a constructed drainage swale around a cellular tower site and gravel drive, draining to the south to the PSS component (w-bl-20200107-02b) that extends into the adjoining scrub-shrub community. Topography and evidence of hydrology were utilized to determine the wetland boundary. This wetland receives hydrology from the adjacent wetland w-bl-20200107-01 to the north via roadside drainage swales, and is hydrologically connected to wetland w-bl-20200106-02 to the west via two culverts under the gravel drive. An existing utility easement parallels the gravel drive along this wetland, likely providing the PSS component as distinguished from the adjacent wooded upland.									
Hydrology									
Wetland Hydrology Indicators:					Seco	ondary Indicators (minim	um of 2 required)		
Primary Indicators (minimum of o	ne required; ch	neck all that apply)				Surface Soil Cracks (B6)	diff of 2 readired?		
Surface Water (A1)		Water-Stained Lea	ives (B9)		~	Drainage Patterns (B10)			
✓ High Water Table (A2)		Aquatic Fauna (B1	3)		Moss Trim Lines (B16)				
Saturation (A3)		Marl Deposits (B1	5)		Dry Season Water Table (C2)				
Water Marks (B1)		Hydrogen Sulfide	Odor (C1)		Crayfish Burrows (C8)				
Sediment Deposits (B2)		Oxidized Rhizosph	eres along Living	Roots (C3)		Saturation Visible on Aer	ial Imagery (C9)		
Drift deposits (B3)		Presence of Reduc	ced Iron (C4)		Ц	Stunted or Stressed Plan	ts (D1)		
Algal Mat or Crust (B4)		Recent Iron Reduc	ction in Tilled Soil	s (C6)	~	Geomorphic Position (D2	2)		
☐ Iron Deposits (B5)		Thin Muck Surface	(C7)			Shallow Aquitard (D3)			
Inundation Visible on Aerial Image		Other (Explain in F	Remarks)			Microtopographic Relief	(D4)		
Sparsely Vegetated Concave Surface	e (B8)				~	FAC-neutral Test (D5)			
Field Observations:									
Surface Water Present? Yes	○ No •	Depth (inches):							
Water Table Present? Yes	No O	Depth (inches):	7						
Saturation Present? (includes capillary fringe)	No O	Depth (inches):	5	Wetland Hyd	rolog	y Present? Yes	No O		
Describe Recorded Data (stream ga	uge, monitorii	ng well, aerial photos	s, previous insp	ections), if availa	able:				
Remarks:									
This wetland component is mostly hydrology indicators observed. This									
_									

Sampling Date: 07-Jan-20

(0)	Absolute	Dominant		Dominance Test worksheet:		
Tree Stratum (Plot size: 30' r)	% Cover	Species?	Status	Number of Dominant Species		
1	0			That are OBL, FACW, or FAC:3 (A)		
2.	0_			Total Number of Demisers		
3	0_			Total Number of Dominant Species Across All Strata: 3 (B)		
4						
5.	N	П	8	Percent of dominant Species		
6.	To Name	H		That Are OBL, FACW, or FAC: 100.0% (A/B)		
		H		Prevalence Index worksheet:		
7	1000					
Sapling/Shrub Stratum (Plot size: 15' r)	=	Total Cove	r:	Total % Cover of: Multiply by:		
1 Acer rubrum	15	~	FAC	OBL species <u>65</u> x 1 = <u>65</u>		
2 Cornus racemosa	-	V	FAC	FACW species		
		_	1710	FAC species <u>40</u> x 3 = <u>120</u>		
3		H	-	FACU species $0 \times 4 = 0$		
4		H		UPL species $0 \times 5 = 0$		
5		H	-	AN CONTROL OF THE PROPERTY OF		
6	0	님		Column Totals: <u>105</u> (A) <u>185</u> (B)		
7	0			Prevalence Index = B/A = 1.762		
(Plot size: 5' r	20 =	Total Cove	r	Hydrophytic Vegetation Indicators:		
Herb Stratum (Plot size: 5' r)	1.70			Rapid Test for Hydrophytic Vegetation		
1. Carex frankii	5_		OBL	FTT 470 M (FTT) 3M (FTT)		
2. Scirpus atrovirens	_60_	✓	OBL			
3. Symphyotrichum lateriflorum	5		FAC	✓ Prevalence Index is ≤3.0 ¹		
4. Carex blanda	-		FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
5. Dichanthelium dichotomum	-		FAC			
			1710	Problematic Hydrophytic Vegetation ¹ (Explain)		
6				¹ Indicators of hydric soil and wetland hydrology must		
7		H		be present, unless disturbed or problematic.		
8				Definitions of Vegetation Strata		
9		Ц		Definitions of Vegetation Strata		
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at		
11	0_			breast height (DBH), regardless of height.		
12	0			Continue to Manda plants loss than 2 in DBU and		
2017 20200 20	85 =	Total Cove	•	Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall		
Woody Vine Stratum (Plot size: 30'r)				ground that old it (1111) tall		
1	0			Herb - All herbaceous (non-woody) plants, regardless of		
2	1000			size, and woody plants less than 3.28 ft tall.		
3	0			Woody vine - All woody vines greater than 3.28 ft in		
4	0		3	height.		
T.	0 =	Total Cove				
		- Total Cove	<u>.</u>			
				Hadambarta		
				Hydrophytic Vegetation		
				Present? Yes • No O		
Remarks: (Include photo numbers here or on a separate sh	eet.)					
Photos included in Appendix D.						
PEM component of wetland did not have any recent vegetati	ion disturban	ices present.	Hydrophyl	tic vegetation indicators present including presence of		
obligate wetland species.		F. 000.10	.,			

Sampling Point: w-bl-20200107-02a

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-15a **Soil**

Sampling Point: w-bl-20200107-02a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth Matrix Redox Features											
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc2	Texture Remarks		
0-3	10YR	4/2	85	7.5YR	5/6	5	С	PL	Silt Loam		
				10YR	6/6	10	С	М			
3-10		4/1	60	10YR	6/8	30	С		Silty Clay Loam		
				10YR	6/1	10	D		5.1.y 5.1.y 5.5.1.		
10.16	2.57								Cile Co.		
10-16	2.5Y	6/4	75	10YR	4/3		D		Silty Clay		
				10YR	5/8	_ 5	C				
1- 0.0		5 1									
		=Depletio	n. RM=Red	uced Matrix, C	S=Covere	ed or Coate	d Sand Gr	ains ² Loca	ation: PL=Pore Lining. M=Matrix		
Hydric Soil				Пъ	alus C. I	C£ 1	(0) (155		Indicators for Problematic Hydric Soils: 3		
Histosol (alue Belo (149B)	w Surface (S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
	pedon (A2)					ace (S9) (L	RR R, ML	RA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)		
	Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L)						S 87	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Mucky Mineral (F1) LKK K, L) Loamy Gleyed Matrix (F2)							Dark Surface (S7) (LRR K, L, M)				
Stratified Layers (AS)							Polyvalue Below Surface (S8) (LRR K, L)				
Depleted Below Dark Surface (A11) □ Thick Dark Surface (A12) □ Redox Dark Surface (F6)							Thin Dark Surface (S9) (LRR K, L)				
Sandy Muck Mineral (S1) Sandy Muck Mineral (S1) Depleted Dark Surface (F7)							Iron-Manganese Masses (F12) (LRR K, L, R)				
Bodov Poprossions (F9)							Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Gleyed Matrix (S4) Sandy Redox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
	Matrix (S6)								Red Parent Material (F21)		
	face (S7) (LRF	R. MLRA	149B)						Very Shallow Dark Surface (TF12)		
21			Market State (Mark						Other (Explain in Remarks)		
Indicators o	f hydrophytic	vegetatio	n and wetla	and hydrology	must be p	present, uni	less distur	bed or probl	olematic.		
Restrictive L	ayer (if obs	erved):									
Туре:											
Depth (inc	:hes):								Hydric Soil Present? Yes ● No ○		
Remarks:											
Hydric soil in	dicators pre	sent hav	ing redox	features with	nin matri	x of low c	hroma a	nd value in	n upper layers of soil profile, consistent with hydrological		
characteristic	s observed.	Wetland	l is within	a depressior	area (d	rainage sv	vale).				
Raced on cite	invecticatio	one thic s	wetland m	oats the thre	o critori:	a and ic id	entified	ac a wotlar	nd comprised of PEM vegetation as part of a larger		
PEM/SS wetla	and complex	c. This w	etland was	s fully deline	ated and	l is hydrolo	ogically o	onnected t	to wetland w-bl-20200106-02 to the west, as shown on		
Figure 3.						353	(A)		•		

Wetland RLP-15b

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

City/County: Mahoning County

Applicant/Owner: ATSI, , a FirstEnergy Company		State: OH	Sampling Point:	w-bl-20200107-02b					
Investigator(s): B Leopold, R Massa	Section	, Township, Range: S.	T. 2N	R. 1W					
Landform (hillslope, terrace, etc.): Swale	Local relie	f (concave, convex, none)	: concave	Slope: 1.0 % / 0.6					
Subregion (LRR or MLRA): LRR K	Lat.: 41.10069	Long.: -	80.59623	Datum: NAD83					
Soil Map Unit Name: FhB - Fitchville silt loam,	till substratum, 2 to 6 percent slop	es	NWI classification:	n/a					
Are climatic/hydrologic conditions on the site			no, explain in Remarks	`					
Are Vegetation , Soil , or Hydr	<u> </u>	14.	umstances" present?	Yes ● No ○					
Are Vegetation , Soil , or Hydr	ology naturally problematic	? (If needed expla	in any answers in Rem	narks)					
Summary of Findings - Attach si	355 S		@	353					
Hydrophytic Vegetation Present? Yes •	No O	200							
Hydric Soil Present? Yes •		the Sampled Area Yea	es 💿 No 🔾						
Wetland Hydrology Present? Yes ●	No O								
Remarks: (Explain alternative procedures here or in a separate report.) PSS component of w-bl-20200107-02, a PEM/SS wetland complex. The PSS component includes a constructed drainage swale along the gravel drive and adjoining low-lying area, draining the PEM component to the north (w-bl-20200107-02a). Topography and evidence of hydrology were utilized to determine the wetland boundary. This wetland receives hydrology from the adjacent wetland w-bl-20200107-01 to the north via roadside drainage swales, and is hydrologically connected to wetland w-bl-20200106-02 to the west via two culverts under the gravel drive. An existing utility easement parallels the gravel drive along this wetland, likely providing the PSS component as distinguished from the adjacent wooded upland.									
Hydrology									
Wetland Hydrology Indicators:		Secr	ondary Indicators (minimu	m of 2 required)					
Primary Indicators (minimum of one required	; check all that apply)		Surface Soil Cracks (B6)	in or 2 reduired?					
✓ Surface Water (A1)	✓ Water-Stained Leaves (B9)	v	Drainage Patterns (B10)						
✓ High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)						
✓ Saturation (A3)	Marl Deposits (B15)		Dry Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide Odor (C1)		Crayfish Burrows (C8)	33 - 131 					
Sediment Deposits (B2)	✓ Oxidized Rhizospheres along Li	ving Roots (C3)	Saturation Visible on Aeri	al Imagery (C9)					
Drift deposits (B3)	Presence of Reduced Iron (C4)		Stunted or Stressed Plant	s (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled	Soils (C6)	Geomorphic Position (D2))					
☐ Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)						
☐ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	_ out (Explain in Notice)	✓	FAC-neutral Test (D5)						
Field Observations:									
Surface Water Present? Yes No	Depth (inches): 1								
Water Table Present? Yes • No C	Depth (inches):6								
Saturation Present? (includes capillary fringe) Yes • No	Depth (inches): 2	Wetland Hydrolog	y Present? Yes •	No O					
Describe Recorded Data (stream gauge, monitorial Remarks: This wetland component includes a constructed indicators observed. This wetland also received.	ed drainage swale concentrating pre	cipitation and providing t							

Sampling Date: 07-Jan-20

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1. Acer rubrum	15	✓	FAC	That are OBL, FACW, or FAC:6(A)
2 Ulmus americana		~	FACW	Total Number of Dominant
3		Ш		Species Across All Strata:7 (B)
4	0_			Book of device of Consider
5	0_			Percent of dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)
6	0			That Are Obe, FACW, OF FAC.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	20=	Total Cover		Total % Cover of: Multiply by:
- x - x - x - x - x - x - x - x - x - x	10		FACW	OBL species <u>0</u> x 1 = <u>0</u>
	20	~	FACW FAC	FACW species <u>25</u> x 2 = <u>50</u>
2 Acer rubrum	-	✓		FAC species <u>50</u> x 3 = <u>150</u>
3. Cornus racemosa	40		FAC	FACU species $5 \times 4 = 20$
4. Lindera benzoin		V	FACW	UPL species
5. Carpinus caroliniana		~	FAC	Column Totals: <u>80</u> (A) <u>220</u> (B)
6		H		Column locals: 80 (A) 220 (5)
7				Prevalence Index = B/A =
Herb Stratum (Plot size: 5' r)	55 =	Total Cover		Hydrophytic Vegetation Indicators:
	-		EACH	Rapid Test for Hydrophytic Vegetation
• • • • • • • • • • • • • • • • • • • •		V	FACU	✓ Dominance Test is > 50%
2	OF ASSESSED	H		✓ Prevalence Index is ≤3.0 ¹
3		H		Morphological Adaptations ¹ (Provide supporting
4		H	-	data in Remarks or on a separate sheet)
5	Gr. Sarah	H		$oxedsymbol{oxed}$ Problematic Hydrophytic Vegetation 1 (Explain)
6				1
7	0_			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0_		-	
9				Definitions of Vegetation Strata:
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11	0_			at breast height (DBH), regardless of height.
12	0_			Sapling/shrub - Woody plants less than 3 in. DBH and
(0)-1-1-20	5 _ =	Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30'r)	828			
1				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2	0			size, and woody plants less than 3.20 ft tall.
3		H		Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	Total Cover		
				Hydrophytic
				Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate she	eet.)			
Photos included in Appendix D.				
DCC assessment of mothered did not have any assessment assessment	مرموان بامثام م	-	ر الما من الما الما الما الما الما الما ا	to constable indicators support Tofes would be
PSS component of wetland did not have any recent vegetatio maintenance of utility line along gravel drive may maintain the				
,	3		THE STREET	entropalent per capetal T1707011.

Sampling Point: w-bl-20200107-02b

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-15b

Sampling Point: w-bl-20200107-02b

Profile Descri	ption: (De	escribe to	the depth	needed to d	ocument	the indi	cator or c	onfirm the	absence of indicators.)			
Depth		Matrix		Redox Features					_			
(inches)		(moist)	%	Color (%	Type ¹		Texture	Remarks		
0-8	10YR	2/1	90	10YR	4/6	10	C	PL	Silt Loam			
8-16	10YR	6/8	40	10YR	3/1	30	D	М	Silty Clay			
				10YR	6/2	30	D	М				
							_					
							-					
1 Type: C=Conc	ontration C)-Doplotio	n DM-Dod	ucod Matrix C	S-Covere	d or Coato	d Sand Gr	aine 2l oca	tion: DI – Poro Lining M – M:	atriv		
¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ² Location: PL=Pore Lining. M=Matrix												
Hydric Soil In				□ nete	alia Dala	· · · · · · ·	(CO) (LDD I		Indicators for Probl	ematic Hydric Soils: 3		
Histosol (A	S				aiue Beiov (149B)	v Surrace ((S8) (LRR I	Κ,	2 cm Muck (A10)	(LRR K, L, MLRA 149B)		
Histic Epipedon (A2)						ace (S9) (LRR R, MLI	RA 149B)	Coast Prairie Redo	ox (A16) (LRR K, L, R)		
Black Histi								. 8	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)		
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L)							!	Dark Surface (S7)	(LRR K, L, M)			
Stratified Layers (A5) Loamy Gleyed Matrix (F2)								Polyvalue Below Surface (S8) (LRR K, L)				
Depleted B	Depleted Below Dark Surface (A11) Depleted Matrix (F3)								Thin Dark Surface	(S9) (LRR K, L)		
Thick Dark	Thick Dark Surface (A12) ✓ Redox Dark Surface (F6) ☐ Depleted Dark Surface (F7)									Masses (F12) (LRR K, L, R)		
Sandy Muc	k Mineral (S1)					/)			ain Soils (F19) (MLRA 149B)		
Sandy Gley	ed Matrix ((S4)		Redo	x Depress	ions (F8)			The area was a second of the	6) (MLRA 144A, 145, 149B)		
Sandy Red	ox (S5)								Red Parent Materi	599,		
Stripped M	latrix (S6)								Very Shallow Dark Surface (TF12)			
Dark Surfa	ce (S7) (LR	R R, MLRA	149B)						Other (Explain in Remarks)			
³ Indicators of	hi idaa ahi di			and budualanu			lass district	الماميس بيم أمم		remarks)		
			iii aiiu weuc	ina nyarology	must be p	resent, un	iless distui	bed of proble	emauc.			
Restrictive La	yer (if ob:	served):										
Type:								_				
Depth (inch	es):								Hydric Soil Present?	Yes ● No ○		
Remarks:									90			
Hydric soil ind	icators nre	ecent hav	ina redov	features with	nin matri	v of low o	hroma ar	nd value in	upper layer of soil profile	e, consistent with hydrological		
characteristics								ia value iii	apper layer or son prome	c, consistent with hydrological		
					1.55	-	fi:					
									d comprised of PSS vege			
	nd comple	x. This w	etland was	s fully deline	ated and	is hydrol	ogically c	onnected to	o wetland w-bl-20200106	6-02 to the west, as shown on		
Figure 3.												

Wetland RLP-16a

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County Sampling Date: 06-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: OH Sampling Point: w-bl-20200106-02a
Investigator(s): B Leopold, R Massa	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): none Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K Lat.:	41.10088 Long.: -80.59675 Datum: NAD83
Soil Map Unit Name: FhB - Fitchville silt loam, till substratum, 2 to 6	percent slopes NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of	year? Yes No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significan	ntly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes • No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland?
Wetland Hydrology Present? Yes ● No ○	Within a Wettahu:
Remarks: (Explain alternative procedures here or in a separate rep	ort.)
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) ✓ Water-Stained Le	eaves (B9)
✓ High Water Table (A2)	
✓ Saturation (A3)	A service and the service and
Water Marks (B1) Hydrogen Sulfide	CANDIA MARKATAN AND AND AND AND AND AND AND AND AND A
	heres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3) Presence of Redu Alan Materia Graph (B4)	The state of the s
	uction in Tilled Soils (C6) Geomorphic Position (D2)
Invendation Visible on Aprial Imagens (P7)	
Sparsely Vegetated Concave Surface (B8)	Remarks)
Sparsely regented contains surface (50)	FAC-field at less (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes • No
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	tos, previous inspections), if available:
Remarks:	
770000000000000000000000000000000000000	on of precipitation. Additional sources of hydrology include surface drainge from two

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
<u></u>	% Cover		Status	Number of Dominant Species
1 Acer rubrum		V	FAC	That are OBL, FACW, or FAC:5(A)
2 Quercus palustris		~	FACW	Total Number of Dominant
3				Species Across All Strata:6(B)
4				Dougant of dominant Consider
5				Percent of dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B)
6				That the obly then, of the
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	60=	Total Cover		Total % Cover of: Multiply by:
E was a	10		FACW	OBL species 5 x 1 = 5
0 4	45	V	FAC	FACW species $40 \times 2 = 80$
2. Acer rubrum		~	FAC	FAC species <u>45</u> x 3 = <u>135</u>
3				FACU species $5 \times 4 = 20$
4		H		UPL species x 5 =0
5	2.55	H	- 2	Column Totals: 95 (A) 240 (B)
6	191	H		Column locals: _35 (A) _240 (5)
7				Prevalence Index = B/A = 2.526
Herb Stratum (Plot size: 5' r)	25 =	: Total Cover		Hydrophytic Vegetation Indicators:
	-		0.01	Rapid Test for Hydrophytic Vegetation
1. Carex frankii		V	OBL	✓ Dominance Test is > 50%
2. Solidago altissima		~	FACU	✓ Prevalence Index is ≤3.0 ¹
3		H		Morphological Adaptations ¹ (Provide supporting
4		H		data in Remarks or on a separate sheet)
5	0	H		Problematic Hydrophytic Vegetation ¹ (Explain)
6				4
7	0	님		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11	0			at breast height (DBH), regardless of height.
12	0			Sapling/shrub - Woody plants less than 3 in. DBH and
(0)	10=	: Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30'r)	22			
1	0.000			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2	0	H		Size, and woody plants loss than 5.20 it tall.
3		H	5	Woody vine - All woody vines greater than 3.28 ft in
4		Ш		height.
	0 =	: Total Cover		
				Hydrophytic Vegetation
				Present? Yes • No
Remarks: (Include photo numbers here or on a separate she	eet.)			
Photos included in Appendix D.				
505)				
PFO component of wetland did not have any recent disturb	ances preser	nt.		

Sampling Point: w-bl-20200106-02a

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-16a

Sampling Point: w-bl-20200106-02a

Depth (inches)								absence of indicators.)	
	Calar (Matrix	%	Calar (ma	Redox Fea	* The second sec	Loc ²	_ Touting D	
0-5	7.5YR	3/1	98	Color (mo 7.5YR	vist)	C Type	PL PL	Texture Re	emarks
5-11	10YR	3/2	95	7.5YR	4/6 5		PL	Silty Clay Loam	
11-16	10YR	6/1	60	7.511				Silty Clay Loam	
								Sitty Clay Loain	
	10YR	5/8	40						
						-			
¹ Type: C=Cond	entration. D	=Depletio	n. RM=Red	uced Matrix, CS=		oated Sand Gra	ains ² Loca	ation: PL=Pore Lining. M=Matrix	
Hydric Soil I								Indicators for Problematic Hyd	rio Seile . 3
Histosol (A				Polyvalu	e Below Surfac	ce (S8) (LRR F	,		
Histic Epip	edon (A2)			MLRA 14				2 cm Muck (A10) (LRR K, L, M Coast Prairie Redox (A16) (LR	
☐ Black Histi	ic (A3)				rk Surface (S9)	1000	37	5 cm Mucky Peat or Peat (S3)	
Hydrogen	Sulfide (A4)				Mucky Mineral (Dark Surface (S7) (LRR K, L, N	
	Layers (A5)			-	Gleyed Matrix (F2)		Polyvalue Below Surface (S8)	
	Below Dark S		11)		d Matrix (F3) Oark Surface (F	:6)		☐ Thin Dark Surface (S9) (LRR I	(, L)
	c Surface (A1				d Dark Surface			Iron-Manganese Masses (F12)	(LRR K, L, R)
	ck Mineral (S yed Matrix (S				epressions (F8	1574 W		Piedmont Floodplain Soils (F19	N4
Sandy Red	3 3	,,,						Mesic Spodic (TA6) (MLRA 144	łA, 145, 149B)
Stripped M								Red Parent Material (F21)	12)
Dark Surfa	ace (S7) (LRF	R, MLRA	149B)					✓ Very Shallow Dark Surface (TF✓ Other (Explain in Remarks)	12)
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology mu	st be present,	unless disturb	ed or probl		
Restrictive La				, , , ,				500 posterior M.	
Type:		,							
Depth (inch	nes):							Hydric Soil Present? Yes	No O
Remarks:									
			ina raday	2 5355	matriy of la				
Hydric soil ind				features withir thin a closed d			nd value i	n upper layer of soil profile, consiste	ent with hydrological
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	n upper layer of soil profile, consiste and comprised of PFO vegetation as appears to be contiguous with a larg	part of a larger
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three ry continues to	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	and comprised of PFO vegetation as	part of a larger
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three ry continues to	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	and comprised of PFO vegetation as	part of a larger
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three ry continues to	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	and comprised of PFO vegetation as	part of a larger
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three ry continues to	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	and comprised of PFO vegetation as	part of a larger
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three ry continues to	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	and comprised of PFO vegetation as	part of a larger
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three ry continues to	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	and comprised of PFO vegetation as	part of a larger
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three ry continues to	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	and comprised of PFO vegetation as	part of a larger
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three ry continues to	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	and comprised of PFO vegetation as	part of a larger
Hydric soil ind characteristics Based on site PFO/SS wetlan	investigation of complex	Wetland ons this	d is not wit wetland m nd bounda	thin a closed de eets the three ry continues to	epression are criteria and i west outside	ea. is identified e of survey a	as a wetla	and comprised of PFO vegetation as	part of a larger

Wetland RLP-16b

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County	Sampling Date: 06-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: OH	Sampling Point: w-bl-20200106-02b
Investigator(s): B Leopold, R Massa	Section, Township, Range:	s. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, n	none): none Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K Lat.:	41.10099 Long	g.: -80.59697
Soil Map Unit Name: FhB - Fitchville silt loam, till substratum, 2 to 6	10 (a.C.)	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of y	vear? Yes ● No ○	(If no, explain in Remarks.)
		Y (A) N- (
		explain any answers in Remarks.)
Summary of Findings - Attach site map showing s	sampling point location	is, transects, important reatures, etc.
	Is the Sampled Area	
11/2019-051111-05001	within a Wetland?	Yes ● No ○
Wetland Hydrology Present?		
Hydrology		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)		Surface Soil Cracks (B6)
☐ Surface Water (A1) ✓ Water-Stained Lea	aves (B9)	✓ Drainage Patterns (B10)
High Water Table (A2)	13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B1	5)	Dry Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide		Crayfish Burrows (C8)
	neres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3) Presence of Redu	AC 20	Stunted or Stressed Plants (D1)
	ction in Tilled Soils (C6)	Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface		Shallow Aquitard (D3)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Sparsely Vegetated Concave Surface (B8)	Remarks)	Microtopographic Relief (D4)
Sparsely vegetated concave surface (bo)		FAC-neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches):		
Water Table Present? Yes No Depth (inches):	Wetland Hydr	rology Present? Yes No
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	<u> </u>	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if avail	lable:
Remarks:		
Wetland located in slightly undulating flat plain allowing concentration wetlands located east of gravel drive through at least 2 culverts.	n of precipitation. Additional sou	urces of hydrology include surface drainge from two

201	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30' r)	% Cover	Species?	Status	Number of Dominant Species
1				That are OBL, FACW, or FAC:5(A)
2	0			Total Number of Descious
3	0			Total Number of Dominant Species Across All Strata: 5 (B)
4	_			
5	0			Percent of dominant Species
6	1 171	Ē		That Are OBL, FACW, or FAC: 100.0% (A/B)
7		Ē		Prevalence Index worksheet:
Notice and Assessment and		= Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' r)		- Total Cove		OBL species x 1 =
1 Acer rubrum	20	✓	FAC	
2. Cornus racemosa	10	~	FAC	
3. Cornus alba	40	~	FACW	FAC species <u>77</u> x 3 = <u>231</u>
4 Smilax glauca	2	Ē	FACU	FACU species $5 \times 4 = 20$
5. Rhamnus cathartica		~	FAC	UPL species $0 \times 5 = 0$
•		Ē	1710	Column Totals:97 (A)281 (B)
6		ā		Designation transfer and the second of the second of
7				Prevalence Index = B/A = 2.897
Herb Stratum (Plot size: 5' r)	55 =	= Total Cove		Hydrophytic Vegetation Indicators:
	30	✓	FAC	Rapid Test for Hydrophytic Vegetation
	_		-	✓ Dominance Test is > 50%
2. Dichanthelium dichotomum	50VIII		FAC	✓ Prevalence Index is ≤3.0 ¹
3. Phragmites australis			FACW	Morphological Adaptations ¹ (Provide supporting
4. Parathelypteris noveboracensis		H	FAC	data in Remarks or on a separate sheet)
5		H		Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7	0	Ш		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12		H	- 0	
		= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)		- Total cove		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.				size, and woody plants less than 3.28 ft tall.
3	0			W
4	0			Woody vine - All woody vines greater than 3.28 ft in height.
4.				noight.
	0 =	= Total Cove		
				Hydrophytic Vegetation
				Present? Yes • No
Remarks: (Include photo numbers here or on a separate sh	net \			
	,			
Photos included in Appendix D.				
Undisturbed PSS component of wetland appears to be in ar	n old, overgr	rown former	utility corri	idor passing north-south, directly connected to mapped-
NWI wetland (PSS1C).			0045 M 503	en attenue di teta suiste tra lestificial del Carrier 196 Stat 177

Sampling Point: w-bl-20200106-02b

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-16b

Sampling Point: w-bl-20200106-02b

Depth		Matrix				dox Feat			absence of indicators.)	
(inches)	Color (%	Color (moist)	%	Type 1	Loc2	Texture	Remarks
0-5	7.5YR	3/1	98	7.5YR	4/6	2	С	PL	Silt Loam	
5-11	10YR	3/2	95	7.5YR	4/6	5	С	PL	Silty Clay Loam	
11-16	10YR	6/1	60						Silty Clay Loam	
	10YR	 5/8	40							
		-7-								
									-	
1 Type: C=Con	contration D	-Doplotio	n PM-Poo	lucod Matrix (od or Coa	tod Sand Gr	aine 2l oc	ation: PL=Pore Lining, M=Matrix	
· · · · · · · · · · · · · · · · · · ·		-Depletio	iii. Ki*i–Kec	iuceu Mauix, C		— Coa	teu Sanu Gi	allis -Luca		2
Hydric Soil I				Polyo	zlue Belo	w Surface	(S8) (LRR F		Indicators for Problematic I	
	pedon (A2)				4 149B)	W Juliace	(30) (LKK I	7	2 cm Muck (A10) (LRR K, I	
Black Hist	L			Thin	Dark Surf	ace (S9)	(LRR R, MLF	RA 149B)	Coast Prairie Redox (A16)	
	Sulfide (A4)			Loan	ny Mucky	Mineral (F	1) LRR K, L)	5 cm Mucky Peat or Peat (
Stratified	Layers (A5)			Loan	ny Gleyed	Matrix (F2	2)		Dark Surface (S7) (LRR K,	20750 C. T. C.
Depleted	Below Dark S	Surface (A	11)	Deple	eted Matr	ix (F3)			Polyvalue Below Surface (S Thin Dark Surface (S9) (LF	
☐ Thick Dar	k Surface (A1	12)				urface (F6)			☐ Iron-Manganese Masses (F	
Sandy Mu	ick Mineral (S	51)				Surface (T		Piedmont Floodplain Soils (
Sandy Gle	eyed Matrix (S	54)		Redo	x Depres	sions (F8)			Mesic Spodic (TA6) (MLRA	
Sandy Re	dox (S5)								Red Parent Material (F21)	6) 6) 55
Stripped I	Matrix (S6)								Very Shallow Dark Surface	(TF12)
Dark Surf	ace (S7) (LRF	R R, MLRA	A 149B)						Other (Explain in Remarks)	30.00.000,000.000
³ Indicators of	f hydrophytic	vegetatio	n and wetla	and hydrology	must be	present, u	ınless disturl	oed or probl	lematic.	
Restrictive L	ayer (if obs	erved):								
Type:		- 2							NASS SHARE ASSESSMENT PROSESS SANSON	
Depth (inc	hes):								Hydric Soil Present? Yes	● No ○
Remarks:									1	
	dicators pre	sent hav	ina redox	features wit	thin mat	rix of low	chroma a	nd value i	n upper layer of soil profile, cons	sistent with hydrological
characteristic										
PFO/SS wetla	investigation	ons this k. Wetlar	wetiand n nd bounda	rv continues	ee criter to west	ia and is t outside	of survey	as a wetta area and a	and comprised of PSS vegetation appears to be contiguous with a	large NWI mapped
feature mapp	ed to the w	est of th	ne survey	area, as sho	wn on F	igure 3.	,			

Wetland RLP-16c

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: OH Sampling Point: w-bl-20200106-02c
Investigator(s): B Leopold, R Massa	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): none Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K Lat.:	41.10212 Long.: -80.59643 Datum: NAD83
Soil Map Unit Name: JtB - Jimtown loam, 2 to 6 percent slopes	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of you	
	Yes O No ®
	All Holling Brooks
	problematic? (If needed, explain any answers in Remarks.)
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	SSPS unique sizes con designations appropriate Appel
facultative wet species consistent with that identified in w-bl-202001	106-02b.
Hydrology	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (minimum of 2 required)
Surface Water (A1) Water-Stained Lea	Surface Soil Cracks (B6) Drainage Patterns (B10)
✓ High Water Table (A2) Aquatic Fauna (B1:	
Saturation (A3) Marl Deposits (B15)	
☐ Water Marks (B1) ✓ Hydrogen Sulfide (
	eres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift deposits (B3) ☐ Presence of Reduc	
Algal Mat or Crust (B4)	ction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	e (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in R	
Sparsely Vegetated Concave Surface (B8)	✓ FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	7
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	Wetland Hydrology Present? Yes • No O
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
Professional Contract of Contr	n of precipitation. Additional sources of hydrology include surface drainge from two

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?		Dominance Test worksheet:
	% Cover	opecies:	Status	Number of Dominant Species
1,				That are OBL, FACW, or FAC: 4 (A)
2				Total Number of Dominant
3		Ш		Species Across All Strata:5(B)
4				B 1 (1) 1 (1)
5				Percent of dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)
6				That are obt, racw, or rac.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	0 =	= Total Cover		Total % Cover of: Multiply by:
		_		OBL species55 x 1 =55
1 Betula alleghaniensis		~	FAC	FACW species <u>15</u> x 2 = <u>30</u>
2. Cornus alba		✓	FACW	FAC species
3. Lonicera morrowii		~	FACU	FACU species $15 \times 4 = 60$
4		님		UPL species $0 \times 5 = 0$
5				
6	0			Column Totals: <u>105</u> (A) <u>205</u> (B)
7				Prevalence Index = B/A = 1,952
(Plot size: 5'r	45 =	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' r)				Rapid Test for Hydrophytic Vegetation
1. Scirpus atrovirens	30	✓	OBL	✓ Dominance Test is > 50%
2. Carex frankii	20	✓	OBL	✓ Prevalence Index is ≤3.0 ¹
3. Agrimonia parviflora	5		FAC	
4. Scirpus cyperinus	5		OBL	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6	A			
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11		님	-	at breast height (BBH), regardless of height.
12		 - Total Cause		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)		= Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	-	F		size, and woody plants less than 3.28 ft tall.
2.	0	П		
J.	0		E	Woody vine - All woody vines greater than 3.28 ft in height.
4,				neight.
	0 =	= Total Cover		
				Hydronhytic
				Hydrophytic Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos included in Appendix D.				

Sapling/shrub vegetation identified from residual materials				
wetland data point w-bl-20200106-02 (PSS component un	-aisturbed). I	Herbaceous v	egetation/	readily identifiable from both live and remnant parts.

Sampling Point: W-bl-20200106-02c

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: w-bl-20200106-02c

Profile Descr	iption: (De	scribe to	the depth	needed to d	ocument	the indi	cator or c	onfirm the	absence of indicators.)	
Depth		Matrix	11240			dox Feat		r 1205007 <u>2</u> 0	_	
(inches)	Color (%_	Color (20000	%_	Type_1		Texture	Remarks
0-6	2.5Y	3/2	95	10YR	3/6	5	C	PL PL	Silty Clay Loam	
6-16	2.5Y	6/2	80	2.5Y	6/8	15	C		Clay	
				10YR	4/6	5	С	М		
¹ Type: C=Con	centration. D	=Depletio	n. RM=Redu	ıced Matrix, (CS=Covere	ed or Coat	ed Sand G	rains ² Loc	cation: PL=Pore Lining. M=Matrix	
Hydric Soil I	indicators:			142-111					Indicators for Problematic H	lydric Soils: 3
Histosol (A1)					w Surface	(S8) (LRR	R,	2 cm Muck (A10) (LRR K, L	
	pedon (A2)				A 149B)	nen (CO) (I DD D MI	DA 140D\	Coast Prairie Redox (A16) (LRR K, L, R)
Black Hist							LRR R, ML	, 3 3/	5 cm Mucky Peat or Peat (S	
	Sulfide (A4)			200000000			1) LRR K, L)	Dark Surface (S7) (LRR K, I	L, M)
Stratified	Layers (A5)				iy Gieyed eted Matri	Matrix (F2	.)		Polyvalue Below Surface (S	8) (LRR K, L)
	Below Dark S		11)	-		rface (F6)			☐ Thin Dark Surface (S9) (LR	R K, L)
	k Surface (A:	2000				Surface (F6)			☐ Iron-Manganese Masses (F	12) (LRR K, L, R)
	ck Mineral (S				x Depress		")		Piedmont Floodplain Soils (F19) (MLRA 149B)
	eyed Matrix (S4)		Redo	x Depress	sions (10)			Mesic Spodic (TA6) (MLRA	144A, 145, 149B)
Sandy Re									Red Parent Material (F21)	
	Matrix (S6)								Very Shallow Dark Surface	(TF12)
Dark Surf	ace (S7) (LR	R R, MLRA	149B)						Other (Explain in Remarks)	
³ Indicators of	f hydrophytic	vegetatio	n and wetlar	nd hydrology	must be p	oresent, ur	nless distur	bed or prob	olematic.	
Restrictive L	aver (if obs	erved):								
Type:										
Depth (inc	hes):							73	Hydric Soil Present? Yes	● No ○
Remarks:									<u>L</u>	
value in lowe this compone equipment ac Based on site clearing/mow	r layer of so that abutting tivity cleari investigati ing disturb	oil profile the existing veget ons this vance) as	, consistenting substation, indication, indication, wetland manager of a large state of a l	at with hydration (along cative of de eets the thrarger PFO/S	ological of north er ep, satur ee criteri SS wetlar	character nd of surv rated soils ia and is nd comple	ristics obs vey area) s. identified ex. Wetla	erved. Wet exhibited of as a wetland bounda	in upper layer of soil profile, and later than the second service of the second service of the second service of the second service of the se	ession area. Portion of from recent heavy egetation (prior to

Wetland RLP-17a

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

City/County: Mahoning County

Applicant/Owner: ATSI, , a FirstEnergy Company	State: OH Sampling Point: w-bl-20200107-02a
Investigator(s): B Leopold, R Massa Section	on, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Swale Local reli	ief (concave, convex, none): concave Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR K Lat.: 41.10164	
Soil Map Unit Name: JtB - Jimtown loam, 2 to 6 percent slopes	NWI classification: n/a
and the same of the same that	
Are climatic/hydrologic conditions on the site typical for this time of year?	V
Are Vegetation , Soil , or Hydrology significantly disturb	ed? Are "Normal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology naturally problemat	ic? (If needed, explain any answers in Remarks.)
Summary of Findings - Attach site map showing sampli	ng point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes No	
	Is the Sampled Area within a Wetland? Yes ● No ○
Wetland Hydrology Present? Yes ● No ○	
Remarks: (Explain alternative procedures here or in a separate report.) PEM component of w-bl-20200107-02, a PEM/SS wetland complex. The PEM component of w-bl-20200107-02, a PEM/SS wetland complex. The PEM component is tower site and gravel drive, draining to the south to the PSS component (w-bl-Topography and evidence of hydrology were utilized to determine the wetland bl-20200107-01 to the north via roadside drainage swales, and is hydrologicall under the gravel drive. An existing utility easement parallels the gravel drive along this wetland, likely upland.	20200107-02b) that extends into the adjoining scrub-shrub community. boundary. This wetland receives hydrology from the adjacent wetland wy connected to wetland w-bl-20200106-02 to the west via two culverts
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	✓ Drainage Patterns (B10)
✓ High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry Season Water Table (C2)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres along	Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3) Presence of Reduced Iron (C4	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tille	ed Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)	Shallow Aquitard (D3)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	✓ FAC-neutral Test (D5)
	8.8
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes • No Depth (inches):7	Wetland Hydrology Present? Yes ● No ○
Saturation Present? Yes No Depth (inches): 5	wettand nydrology Present? Tes S NO S
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	s inspections), if available:
Remarks:	
This wetland component is mostly limited to a constructed drainage swale concludingly indicators observed. This wetland also receives drainage from the adjusted of the control of the con	

Sampling Date: 07-Jan-20

(Plot size: 30'r	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size: 30' r)	% Cover	Species:	Status	Number of Dominant Species
1				That are OBL, FACW, or FAC:3(A)
2				Total Number of Dominant
3		Ш		Species Across All Strata: 3 (B)
4	0			
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6	0			That Are Obl., FACW, or FAC
7	0			Prevalence Index worksheet:
(District 15)	0 =	Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' r	10025	82-201	0.2592	OBL species <u>65</u> x 1 = <u>65</u>
1 Acer rubrum		✓	FAC	FACW species
2. Cornus racemosa	5	✓	FAC	FAC species 40 x 3 = 120
3	2 22 2	Ш		FACU species $0 \times 4 = 0$
4	0	Ц		UPL species $0 \times 5 = 0$
5	0			AND
6	0	닐		Column Totals: <u>105</u> (A) <u>185</u> (B)
7	0			Prevalence Index = B/A =1.762_
(District Fig.	20 =	Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' r				Rapid Test for Hydrophytic Vegetation
1. Carex frankii	5		OBL	✓ Dominance Test is > 50%
2. Scirpus atrovirens	60	✓	OBL	✓ Prevalence Index is ≤3.0 ¹
3. Symphyotrichum lateriflorum	_ 5		FAC	10.000000000000000000000000000000000000
4. Carex blanda	5		FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. Dichanthelium dichotomum	40		FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
6				Troblematic Hydrophytic Vegetation (Explain)
7		П		¹ Indicators of hydric soil and wetland hydrology must
8		Ē		be present, unless disturbed or problematic.
				Definitions of Vegetation Strata
9		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11			_	breast neight (DBH), regardless or neight.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)	85=	= Total Cove		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.		H		size, and woody plants less than 3.28 ft tall.
2.	0	H		
3		Ħ		Woody vine - All woody vines greater than 3.28 ft in
4				height.
	=	= Total Cove		
				Hadranbata
				Hydrophytic Vegetation
				Present? Yes • No
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos included in Appendix D.				
955.250				
PEM component of wetland did not have any recent vegetat	ion disturban	ices present.	Hydrophyt	tic vegetation indicators present including presence of
obligate wetland species.				

Sampling Point: w-bl-20200107-02a

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-17a **Soil**

Sampling Point: w-bl-20200107-02a

Profile Desc	ription: (De	scribe to	the depth	needed to d	locumen	t the indic	cator or o	onfirm the	e absence of indicators.)
Depth		Matrix		Redox Features					_
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc2	Texture Remarks
0-3	10YR	4/2	85	7.5YR	5/6	5	С	PL	Silt Loam
				10YR	6/6	10	С	М	
3-10		4/1	60	10YR	6/8	30	С	M	Silty Clay Loam
				10YR	6/1	10	D		5.1.y 5.1.y 5.5.1.
10.16	2.57								Cile Co.
10-16	2.5Y	6/4	75	10YR	4/3		D		Silty Clay
				10YR	5/8	_ 5	C		
1- 0.0		5 1							
		=Depletio	n. RM=Red	uced Matrix, C	S=Covere	ed or Coate	d Sand Gr	ains ² Loca	ation: PL=Pore Lining. M=Matrix
Hydric Soil				Пъ	alus C. I	C£ 1	(0) (155		Indicators for Problematic Hydric Soils: 3
Histosol (alue Belo (149B)	w Surface (S8) (LRR	R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	pedon (A2)					ace (S9) (L	RR R, ML	RA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black His						Mineral (F1)		S 87	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4) Layers (A5)				No. of the second second	Matrix (F2)		,	Dark Surface (S7) (LRR K, L, M)
	Below Dark S	Curfoco (A	11)	✓ Deple					Polyvalue Below Surface (S8) (LRR K, L)
100000000000000000000000000000000000000	k Surface (A1		11)			ırface (F6)			Thin Dark Surface (S9) (LRR K, L)
	uck Mineral (S					Surface (F7	7)		Iron-Manganese Masses (F12) (LRR K, L, R)
_	eyed Matrix (S			✓ Redo	x Depress	sions (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Re	. it	,,,							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Matrix (S6)								Red Parent Material (F21)
	face (S7) (LRF	R. MLRA	149B)						Very Shallow Dark Surface (TF12)
21			Market State (Mark						Other (Explain in Remarks)
Indicators o	f hydrophytic	vegetatio	n and wetla	and hydrology	must be p	present, uni	less distur	bed or probl	olematic.
Restrictive L	ayer (if obs	erved):							
Туре:									
Depth (inc	:hes):								Hydric Soil Present? Yes ● No ○
Remarks:									
Hydric soil in	dicators pre	sent hav	ing redox	features with	nin matri	x of low c	hroma a	nd value in	n upper layers of soil profile, consistent with hydrological
characteristic	s observed.	Wetland	l is within	a depressior	area (d	rainage sv	vale).		
Raced on cite	invectigatio	one thic s	wetland m	oats the thre	o critori:	a and ic id	entified	ac a wotlar	nd comprised of PEM vegetation as part of a larger
PEM/SS wetla	and complex	c. This w	etland was	s fully deline	ated and	l is hydrolo	ogically o	onnected t	to wetland w-bl-20200106-02 to the west, as shown on
Figure 3.						353	(A)		•

Wetland RLP-17b

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mah	oning County	Samplin	g Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company		State: OH	Sampling Point:	w-bl-20200107-01b
Investigator(s): B Leopold, R Massa	Section, Towns	hip, Range: S.	T. 2N	R. 1W
Landform (hillslope, terrace, etc.): Hillside	Local relief (concav		convex	Slope: 5.0 % / 2.9 °
Subregion (LRR or MLRA): LRR K Lat.:	41.10264	Long.: -80	0.59466	Datum: NAD83
Soil Map Unit Name: JtB - Jimtown loam, 2 to 6 percent slopes			NWI classification:	n/a
Are climatic/hydrologic conditions on the site typical for this time of	year? Yes •	0	, explain in Remarks	
		52. 3	mstances" present?	Yes ○ No •
			n any answers in Rer	marke)
Summary of Findings - Attach site map showing	53			
	Jampinia po	t locations, t.	ansects, impo	ortant reatures, etc
Hydrophytic Vegetation Present? Yes No	Is the Sam	ipled Area	0 0	
Hydric Soil Present? Yes No	within a W		i ● No ○	
Wetland Hydrology Present?				
Remarks: (Explain alternative procedures here or in a separate reposition with the control of the separate reposition with the separ				
20200107-01b, PSS) being formerly wooded and cleared 2+ years a bl-20200107-01c, PFO) is relatively undisturbed. Wetland boundary spp., Epilobium spp. And preponderance of Smilax spp. Wetland con substation edge and swale (draining to north), as well as to the sout outside survey area via ditch and to south along gravel drive via a roundary.	determined in parts volumes outside of sur theast (PFO compone	via topography, dar rvey area to north (ent) for a limited ex	rk/wet soils, presenc (PEM component) via xtent. Wetland hydro	e/absence of Scirpus a drainage ditch along
Hydrology				
Wetland Hydrology Indicators:		_Secon	ndary Indicators (minim	um of 2 reauired)
Primary Indicators (minimum of one required; check all that apply)			Surface Soil Cracks (B6)	
Surface Water (A1) Water-Stained Le		-	Orainage Patterns (B10)	
High Water Table (A2) Aquatic Fauna (B:			Moss Trim Lines (B16)	
✓ Saturation (A3) Marl Deposits (B1) Water Marks (B1)	2000 0 0000000		Ory Season Water Table	(C2)
Water Marks (B1) Hydrogen Sulfide Sediment Deposits (B2) Oxidized Rhizospl		Control Total	Crayfish Burrows (C8)	del terragon (CO)
	heres along Living Roots	, ,	Saturation Visible on Aer Stunted or Stressed Plan	
I	iced from (C4) action in Tilled Soils (C6)		Geomorphic Position (D2	
☐ Iron Deposits (B5) ☐ Thin Muck Surface		· 1	Shallow Aquitard (D3)	-)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in			Microtopographic Relief	(D4)
Sparsely Vegetated Concave Surface (B8)	Kenidiks)		AC-neutral Test (D5)	()
			= = = = = = = = = = = = = = = = = = = =	
Field Observations:				
Surface Water Present? Yes No Depth (inches):	-			
Water Table Present? Yes No Depth (inches):		Vetland Hydrology	Present? Yes	● No ○
Saturation Present? (includes capillary fringe) Yes No Depth (inches):		vetiand Hydrology	Present? Tes	9 140 0
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspection	ns), if available:		
Remarks:				
PSS component present across previously cleared hillside with primar vegetation provides for adequate retention of precipitation, as well as				otopography and

(5)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30' r)	% Cover	Species?	Status	Number of Dominant Species
1	0_			That are OBL, FACW, or FAC: 4 (A)
2				Total Number of Dominant
3	0_			Species Across All Strata: 5 (B)
4				Mark Market Mark
5	100	П	8	Percent of dominant Species
6.	75 No. 1	H		That Are OBL, FACW, or FAC: 80.0% (A/B)
	-	H		Prevalence Index worksheet:
7	1000			
Sapling/Shrub Stratum (Plot size: 15'r)	=	= Total Cove	ri e	Total % Cover of: Multiply by:
1 Betula alleghaniensis	25	~	FAC	OBL species <u>50</u> x 1 = <u>50</u>
2.5			FACU	FACW species <u>40</u> x 2 = <u>80</u>
Z grant management and	-			FAC species <u>25</u> x 3 = <u>75</u>
			UPL	FACU species $30 \times 4 = 120$
4 Rubus allegheniensis		_	FACU	UPL species5 x 5 =25
5. Smilax glauca	5		FACU	ACCURATION OF THE PROPERTY ACCURATION AND ACCURATIO
6	0_			Column Totals: <u>150</u> (A) <u>350</u> (B)
7	0			Prevalence Index = B/A =
AND FOR THE T	50 =	Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' r)				
1 Cinna arundinacea	30	~	FACW	Rapid Test for Hydrophytic Vegetation
2. Scirpus cyperinus	20	~	OBL	✓ Dominance Test is > 50%
3. Persicaria sagittata	20	~	OBL	✓ Prevalence Index is ≤3.0 ¹
1. G-lid	-10	Ē	FACU	☐ Morphological Adaptations ¹ (Provide supporting
	-	H		data in Remarks or on a separate sheet)
5. Panicum dichotomiflorum	Grand Control	H	FACW	☐ Problematic Hydrophytic Vegetation ¹ (Explain)
6. Epilobium coloratum			OBL	1
7. Symphyotrichum racemosum	5_		FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0_			
9	0_			Definitions of Vegetation Strata
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12		H		7
12.		= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)		- Total Cove		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
	0	H		size, and woody plants less than 3.28 ft tall.
2		H		
3		H	-	Woody vine - All woody vines greater than 3.28 ft in
4	0	ш		height.
	0 =	= Total Cove	ř I	
				Hydrophytic
				Vegetation Present? Yes ● No ○
				Present? 165 0 116 0
Remarks: (Include photo numbers here or on a separate she	eet.)			
Photos included in Appendix D.				
PSS component of wetland previously forested, cleared 2+ y	ears ago, w	ith extensive	felled timb	per remaining. Sapling/shrub vegetation actively
recovering, herbaceous vegetation growth extensive due to r	elatively red	ent increase	ın solar ex	posure.

Sampling Point: w-bl-20200107-01b

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-17b

Sampling Point: w-bl-20200107-01b

Profile Descr	iption: (De	scribe to	the depth	needed to do	cumen	t the indi	cator or c	onfirm the	e absence of indicators.)	
Depth		Matrix				dox Feati				
(inches)		(moist)		Color (m		%	Type 1		Texture Remarks	
0-8	10YR	3/1	95		3/4	_ 5	C		Silt Loam	
8-16	10YR	6/4	60	10YR	3/4	5	C	M	Silt Loam	
				10YR	3/1	25	D	_ M	_	
				7.5YR	5/6	15	С	М		
									_	
									_	
							_			
1 Type: C=Cond	entration D	=Denletio	n RM=Red	uced Matrix CS	=Covere	ed or Coate	ed Sand Gr	ains 2l oca	cation: PL=Pore Lining. M=Matrix	
Hydric Soil I		Беріспо	III III I I I I I		COVER		ou ourid or	2000		
Histosol (Polyva	lue Belo	w Surface	(S8) (LRR I	R	Indicators for Problematic Hydric Soils: 3	
	pedon (A2)			MLRA		W Daniace	(50) (1111)	· ·	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Black Hist				Thin D	ark Surf	ace (S9) (LRR R, MLI	RA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)	
	Sulfide (A4)	į		Loamy	Mucky I	Mineral (F1) LRR K, L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
	Layers (A5)			Loamy	Gleyed	Matrix (F2))		Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L)	
Depleted	Below Dark !	Surface (A	11)		ed Matri				Thin Dark Surface (S9) (LRR K, L)	
Thick Dark	Surface (A	12)		✓ Redox					Iron-Manganese Masses (F12) (LRR K, L, R)	
Sandy Mu	ck Mineral (S	51)				Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 1498)
Sandy Gle	yed Matrix (S4)		Redox	Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	6
Sandy Red	dox (S5)								Red Parent Material (F21)	
Stripped N	latrix (S6)								☐ Very Shallow Dark Surface (TF12)	
Dark Surfa	ace (S7) (LRI	R R, MLRA	149B)						Other (Explain in Remarks)	
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology n	nust be p	present, un	less distur	bed or probl	plematic.	
Restrictive La	ver (if obs	served):								
Type:	, (
Depth (incl	nes):								Hydric Soil Present? Yes ● No ○	
Remarks:									I.	
- 170 TANICS AND	P							ad and an In-		la ataut
characteristics	observed	Sent navi	ing redox i I data poin	t is not within	n matri n a clos	ed depres	cnroma ar ssion area	id value in	n upper layer of soil profile, consistent with hydrol	ogicai
						0.5				
Based on site	investigati	ons this v	wetland m	eets the three	criteria	a and is id	dentified a	as a wetlar	nd comprised of PSS vegetation as part of a large	r
continues to r								-2020010/	7-02 to the south via wet weather conveyance. We	etland
continues to r	iorur ana s	outricast	outside st	ii vey area as	SHOWIT	onrigure	. 3.			

Wetland RLP-17c

T. 2N R. 1W concave Slope: 1.0 % / 0.6 ° 39523 Datum: NAD83 VI classification: n/a explain in Remarks.) stances" present? Yes No onesects, important features, etc existing Oak Street substation. A portion of a, PEM), with the hillslope portion (w-bl-
Slope: 1.0 % / 0.6 ° 9523 Datum: NAD83 VI classification: n/a explain in Remarks.) stances" present? Yes • No • N
patum: NAD83 VI classification: n/a explain in Remarks.) stances" present? Yes No only answers in Remarks.) ensects, important features, etc. No only answers in Remarks.) expects important features are consistent in the constant in
explain in Remarks.) stances" present? Yes No name No
vi classification: n/a explain in Remarks.) stances" present? Yes • No only answers in Remarks.) ensects, important features, etc existing Oak Street substation. A portion of
explain in Remarks.) stances" present? Yes No
ny answers in Remarks.) Insects, important features, etc No No No existing Oak Street substation. A portion of
ny answers in Remarks.) Insects, important features, etc No existing Oak Street substation. A portion of
No Oexisting Oak Street substation. A portion of
No Oexisting Oak Street substation. A portion of
existing Oak Street substation. A portion of
existing Oak Street substation. A portion of
remy, with the fillistope portion (w-bi- laining portion of this wetland complex (w- potopographic relief, and preponderance of station edge and swale (draining to north), survey area via ditch and to south along
rv Indicators (minimum of 2 required)
face Soil Cracks (B6)
inage Patterns (B10)
s Trim Lines (B16)
Season Water Table (C2)
fish Burrows (C8)
uration Visible on Aerial Imagery (C9)
nted or Stressed Plants (D1)
morphic Position (D2)
llow Aquitard (D3)
rotopographic Relief (D4)
-neutral Test (D5)
esent? Yes No

Tree Stretum (Not size: 30 36 tower selectors) A. Acer rubum	(0) (0) (0)	Absolute	Dominant	Indicator	Dominance Test worksheet:
2. Quercus partiestris	Tree Stratum (Plot size: 30' r)	% Cover	Species?	Status	Number of Dominant Species
1	1 Acer rubrum	40	✓	FAC	That are OBL, FACW, or FAC:6(A)
3	2. Quercus palustris	30	✓	FACW	Total Number of Deminant
Percent of dominant. Species That Are OBL, FACW, or FAC: S5.7% (A/B)	3	0			
That Are OBL, FACW, or FAC: S5.7% (A/B)	4	0			MO.
Sapilina/Shrub Stratum (Plot size: 15'r) 20	5	0_			
Sapiling/Shrub Stratum (Plot size: 15'r) 70	6	0_			That Are OBL, FACW, or FAC:
Sapling/Shrub Stratum Plot size: 15 r Plot Prevalence Index = 30 x 1 = 30 PacCU PacCW	7	0_			Prevalence Index worksheet:
Sapling/Shrub Stratum Plot size: 15 r Plot Prevalence Index = 30 x 1 = 30 PacCU PacCW	207 11 2027	70 =	= Total Cove	r	Total % Cover of: Multiply by:
Acer ubrum 20					
2. Date a benzon 3. Hamamelis wignishan 5. FACU 4. Betula alleghaniensis 5. Rubus allegheniensis 6. O 6. O 7. O 1. Scirpus atrovirens 2. Carex frankii 5. O 8. O 8. O 8. O 8. O 9. FACU 9. FA	1 Acer rubrum		✓	FAC	AND
A Betula alleghaniensis 5	· ·	15	✓	FACW	
4. Betto alregishmenss	3 Hamamelis virginiana	5		FACU	RESIDENT CONTROL OF STREET AND STREET OF STREET
5. Kubus alregimenesis 6. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4. Betula alleghaniensis	5		FAC	0 0
Prevalence Index = 8/A =2.410_	5. Rubus allegheniensis	3		FACU	AN CONTRACTOR AND AN AND AND AND AND AND AND AND AND
Prevalence Index = B/A =2.410_	6	0			Column Totals: <u>173</u> (A) <u>417</u> (B)
Nerb Stratum (Plot size: 5 r					Prevalence Index = B/A = 2,410
Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% Prevalence Index is \$3.0 \cdot Prevalence	(6) S. S. BOS S.	48 =	= Total Cove	r	
1, Scipus atrovirens 2	Herb Stratum (Plot size: 5'r				
2. Carex frankii 3. Solidago canadensis 10	1. Scirpus atrovirens	25	✓	OBL	FTT 470 St. 00-70 JUN D. St. 1984
3. Solidago canadensis 4. Cinna arundinacea 5. Elymus virginicus 6	2. Carex frankii	_ 5		OBL	
4. Cinna arundinacea 10 FACW 5. Elymus virginicus 5. Elymus virginicus 6. 0	3 Solidago canadensis	10	✓	FACU	
5 Elymus virginicus 6.		40	✓	FACW	
6		_		FACW	
7		S. Ottomorphism			Troblematic Hydrophytic Vegetation (Explain)
8.					
9.					be present, unless disturbed or problematic.
10		T			Definitions of Vegetation Strata
breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Herb - All woody vine - All woody vines greater than 3.28 ft in height. Woody vine - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes • No No Photos included in Appendix D.			H		
Woody Vine Stratum (Plot size:) 1					
Woody Vine Stratum (Plot size:) 1					breast neight (DBH), regardless or neight.
Woody Vine Stratum (Plot size:) 1	12				
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No Remarks: (Include photo numbers here or on a separate sheet.) Photos included in Appendix D.	Woody Vine Stratum (Plot size:)	55=	= Total Cove	1	greater than 3.28 ft (1m) tall
2		0			Herb - All herbaceous (non-woody) plants, regardless of
3		-	F		
4	2		Ħ		
Hydrophytic Vegetation Present? Yes No No Photos included in Appendix D.	3.	_	Ħ	-	
Hydrophytic Vegetation Present? Yes No Remarks: (Include photo numbers here or on a separate sheet.) Photos included in Appendix D.	4				neight.
Vegetation Present? Yes No No Remarks: (Include photo numbers here or on a separate sheet.) Photos included in Appendix D.		0=	= Total Cove	r	
Vegetation Present? Yes No No Remarks: (Include photo numbers here or on a separate sheet.) Photos included in Appendix D.					
Vegetation Present? Yes No No Remarks: (Include photo numbers here or on a separate sheet.) Photos included in Appendix D.					
Vegetation Present? Yes No No Remarks: (Include photo numbers here or on a separate sheet.) Photos included in Appendix D.					Hydrophytic
Remarks: (Include photo numbers here or on a separate sheet.) Photos included in Appendix D.					Vegetation
Photos included in Appendix D.					Present? Yes ● No ○
Photos included in Appendix D.					
59000	Remarks: (Include photo numbers here or on a separate sh	eet.)			
59000	Photos included in Appendix D.				
PFO component of wetland with hydrophytic vegetation indicators present including presence of obligate and facultative wetland plants.					
	PFO component of wetland with hydrophytic vegetation indi	cators prese	nt including	presence o	f obligate and facultative wetland plants.
l l					
I I					

Sampling Point: w-bl-20200107-01c

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-17c

Sampling Point: W-b

w-bl-20200107-01c

Depth (inches)	Color (Matrix moist)	0/-	Color /		dox Feat	tures <u>Type</u> ¹	Loo?	- Toyture	Pomarko			
	Color (<u> </u>	Color (Texture	Remarks			
0-4	10YR	3/1		7.5YR	4/6	20	C		Silt Loam				
4-16	10YR	3/1		2.5Y	6/1	30	D	<u>M</u>	Silty Clay Loam				
				10YR	5/8	_ 20	C	М					
		-											
Type: C=Cens	ontration D	-Doplotio	n DM-Dod	used Matrix C	S-Cover	nd or Cont	tod Sand Cra	nine 21 occ	tion: DI -Doro Lining M-M-				
,,		-pehierio	III. KM-Keal	accu Matrix, C	~-covere	a or wa	ieu Janu Gra	iiiis ~LOCa	tion: PL=Pore Lining. M=Ma				
Hydric Soil Ir Histosol (A				Poles	alue Rolo	w Surface	e (S8) (LRR F	2		ematic Hydric Soils: 3			
Histosof (A					149B)	W Juilact	(30) (LKK I	''		(LRR K, L, MLRA 149B)			
Black Histic				Thin	Dark Surf	ace (S9)	(LRR R, MLF	RA 149B)	The state of the s	x (A16) (LRR K, L, R)			
	Sulfide (A4)			Loam	y Mucky	Mineral (F	1) LRR K, L)			or Peat (S3) (LRR K, L, R)			
Stratified L				Loamy Gleyed Matrix (F2)					Dark Surface (S7) (LRR K, L, M)				
Depleted B	Below Dark S	Surface (A	11)	Deple	eted Matri	x (F3)			Polyvalue Below Surface (S8) (LRR K, L)				
	Surface (A1			✓ Redo	x Dark Su	ırface (F6)		☐ Thin Dark Surface (S9) (LRR K, L)☐ Iron-Manganese Masses (F12) (LRR K, L, R)				
Sandy Muc	k Mineral (S	51)		-		Surface (83		Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Gley	ed Matrix (S	54)		✓ Redo	x Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy Red	ox (S5)								Red Parent Material (F21)				
Stripped M	atrix (S6)								Very Shallow Dark Surface (TF12)				
Dark Surfa	ce (S7) (LRF	R R, MLRA	149B)						Other (Explain in F				
³ Indicators of	hvdrophvtic	vegetatio	n and wetla	nd hvdrologv	must be i	oresent, u	ınless disturt	ed or proble					
Restrictive La				, , , ,		,							
Type:	yer (ii obs	erveu).											
Depth (inch	oc).								Hydric Soil Present?	Yes No			
Remarks:	cs)												
haracteristics ased on site i	observed. investigation	Wetland ons this viplex. We	I data point wetland me etland is hy	t is within a eets the thre drologically	depress e criteria connect	ion area a and is ed to we	on a flat p identified a tland w-bl-	lain. Is a wetlan		sistent with hydrological station as part of a larger weather conveyance. Wetland			

Wetland RLP-18a

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning Count	ty Sampli	ng Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: (OH Sampling Point:	w-aeh-20200107-09a
Investigator(s): AEH, SKM	Section, Township, Range	e: S. T. 2N	R. 1W
Landform (hillslope, terrace, etc.): Lowland	Local relief (concave, convex,		Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K Lat.:		ong.: -80.602741	Datum: WGS 84
Soil Map Unit Name: JuB-Jimtown loam, till substratum, 2 to 6 percen		NWI classification:	NA
Are climatic/hydrologic conditions on the site typical for this time of y	_{/ear?} Yes ● No ○	(If no, explain in Remark	
Are Vegetation . , Soil . , or Hydrology . significant	ly disturbed? Are "Norm	nal Circumstances" present?	Yes No
Are Vegetation , Soil , or Hydrology naturally p	problematic? (If needed	d, explain any answers in Re	emarks.)
Summary of Findings - Attach site map showing	i		353
Hydrophytic Vegetation Present? Yes No	-	500	
Hydric Soil Present? Yes • No O	Is the Sampled Area within a Wetland?	Yes ● No ○	
Wetland Hydrology Present?	Within a wettanus	100 30 110	
Remarks: (Explain alternative procedures here or in a separate repo	cut X		
Hydrology			
Wetland Hydrology Indicators:		Secondary Indicators (minin	num of 2 required)
Primary Indicators (minimum of one required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	ves (B9)	✓ Drainage Patterns (B10)
✓ High Water Table (A2) Aquatic Fauna (B1		Moss Trim Lines (B16)	and the state of t
✓ Saturation (A3)		Dry Season Water Table	e (C2)
Water Marks (B1) Hydrogen Sulfide (Crayfish Burrows (C8)	
I 🗆	eres along Living Roots (C3)	Saturation Visible on A	
☐ Drift deposits (B3) ☐ Presence of Reduction Recent Iron Recent Iron Reduction Recent Iron Recen		✓ Stunted or Stressed Pla ✓ Geomorphic Position (D	
	ction in Tilled Soils (C6)	Shallow Aquitard (D3)	12)
Translation Visible on April Improve (DZ)		Microtopographic Relief	f (D4)
Inundation visible on Aerial Imagery (6/) Sparsely Vegetated Concave Surface (B8)	temarks)	FAC-neutral Test (D5)	(04)
Sparser, regulated contact Language		The newson 1997 (2-5)	
Field Observations: Surface Water Present? Yes No Depth (inches):	0.35		
	0.25		
Water Table Present? Yes No Depth (inches):	2 Wetland Hy	ydrology Present? Yes	● No ○
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	0		○ NO ○
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if avai	ilable:	
Remarks:			
Wetland receives hydrology from precipitation and runoff from the roa	idway.		

(All Section 2015)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC:
2.	0_			Total Number of Demisers
3	0_			Total Number of Dominant Species Across All Strata: 3 (B)
4.	-			
5.	0	F		Percent of dominant Species
6.	10 November 1	H		That Are OBL, FACW, or FAC: 66.7% (A/B)
7		H		Prevalence Index worksheet:
1.				The state of the second control of the secon
Sapling/Shrub Stratum (Plot size: 15ft)	=	= Total Cove	9	Total % Cover of: Multiply by:
1	0			OBL species <u>55</u> x 1 = <u>55</u>
2.		H		FACW species <u>10</u> x 2 = <u>20</u>
		H		FAC species <u>5</u> x 3 = <u>15</u>
3	-	H		FACU species 25 x 4 = 100
4		H		UPL species5 x 5 =25
5		H	-	Column Totals: 100 (A) 215 (B)
6	0	H		Column lotals: 100 (A) 215 (3)
7				Prevalence Index = B/A =
(Plot size: 5ft	0 =	= Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)	1.70			Rapid Test for Hydrophytic Vegetation
1. Carex vulpinoidea	_40_	✓	OBL	FTT 470 M (FTT) 3M (FTT)
2. Juncus effusus	15	✓	OBL	
3. Sorghum halepense	15	✓	FACU	✓ Prevalence Index is ≤3.0 ¹
4. Symphyotrichum ericoides			FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. Rumex crispus	10000		FAC	
	_		UPL	☐ Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must
7 Poa palustris		님	FACW	be present, unless disturbed or problematic.
8. Phalaris arundinacea			FACW	Definitions of Vegetation Strata
9				Definitions of Vegetation Strata
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11	0			breast height (DBH), regardless of height.
12	0_			Sanling/ahruh Waadu planta loop than 2 in DDH and
5017 5959B W	100 =	= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)				ground than o.25 it (iiii) talii.
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0		55	Woody vine - All woody vines greater than 3.28 ft in
4	0		3	height.
Τ.	0 =	= Total Cove		
		- Total Cove	7	
				Hydrophytic Vegetation
				Present? Yes • No O
Remarks: (Include photo numbers here or on a separate sh	eet.)			
		als allowed f	or positivo	identification of the species observed within the wetland
Vegetation was disurbed by seasonal conditions. Remanent area. Photographs are located in Appendix D.	piant materi	als allowed to	or positive	identification of the species observed within the wedand
area. Thotographs are located in Appendix D.				

Sampling Point: w-aeh-20200107-09a

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-18a **Soil**

Sampling Point: w-aeh-20200107-09a

Profile Descr	iption: (Describe	to the depth	needed to docume	nt the indi	icator or c	onfirm the	absence of indicators.)	
Depth	Matri			Redox Feati			_	
(inches)	Color (moist		Color (moist)				Texture	Remarks
0-18	10YR4/1	1 90	7.5YR 5/8	10	C		Silty Clay Loam	
¹ Type: C=Cond	centration. D=Deple	etion. RM=Redu	uced Matrix, CS=Cove	ered or Coate	ed Sand Gra	ains ² Loca	ition: PL=Pore Lining. M=M	1atrix
Hydric Soil I	<u>_</u>				-			plematic Hydric Soils: 3
Histosol (Polyvalue Bel	low Surface	(S8) (LRR F	₹.		
	pedon (A2)		MLRA 149B)			*		(LRR K, L, MLRA 149B)
Black Hist			Thin Dark Sur	rface (S9) (LRR R, MLF	(A 149B)	The second secon	dox (A16) (LRR K, L, R)
	Sulfide (A4)		Loamy Mucky	/ Mineral (F1	1) LRR K, L)	i		t or Peat (S3) (LRR K, L, R)
	Layers (A5)		Loamy Gleyed	d Matrix (F2	.)		Dark Surface (S7	NEW STREET, ST
	Below Dark Surface	2 (A11)	✓ Depleted Mat	trix (F3)				Surface (S8) (LRR K, L)
	k Surface (A12)	ANICO PO	Redox Dark S	Surface (F6)	į			e (S9) (LRR K, L)
	ck Mineral (S1)		Depleted Dar	k Surface (F	7)			Masses (F12) (LRR K, L, R)
	yed Matrix (S4)		Redox Depres	ssions (F8)				olain Soils (F19) (MLRA 149B)
Sandy Red								A6) (MLRA 144A, 145, 149B)
The second of the	Matrix (S6)						Red Parent Mate	and the first second
	ace (S7) (LRR R, ML	LRA 149B)						rk Surface (TF12)
	\$200 M.C. 5 Dept 50 1 55 M. S.			**************************************	Terror distances		Other (Explain in	Remarks)
"Indicators or	hydropnytic vegeta	ation and wetia	nd hydrology must be	present, un	iless disturt	ed or proble	ematic.	
Restrictive La	ayer (if observed)):						
Type:	~						Market Call Brassant	
Depth (incl	nes):						Hydric Soil Present?	Yes ● No O
Remarks:								
Depleted mat	rix was met for th	his wetland ar	rea.					
				202 W S	1 3 <u>1272</u> 0	7400 74	10 10 <u>9201/12/2011</u>	
	site investigation by PFO and PEM v			tland meet	all three	criteria and	d classifed this area as a	wetland. The wetland is
represented b	y Pro and run v	Vecialia Compi	offerits.					

Wetland RLP-18b

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: OH Sampling Point: w-aeh-20200107-09b
Investigator(s): AEH, SKM	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): none Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K Lat.	: 41.092341 Long.: -80.602772 Datum: WGS 84
Soil Map Unit Name: JuB-Jimtown loam, till substratum, 2 to 6 perc	ent slopes NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time o	V A N- O
<u> </u>	intly disturbed? Are "Normal Circumstances" present? Yes No
	y problematic? (If needed, explain any answers in Remarks.)
Summary of Findings - Attach site map showing	g sampling point locations, transects, important features, et
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes ● No ○	
	-aeh-20200107-09a and surrounded by commerical and residential lots. It occurs in a the PFO portion of the PEM/PFO wetland complex. The wetland boundary was
Hydrology Wetland Hydrology Indicators:	_Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	
✓ Surface Water (A1) Water-Stained L	
✓ High Water Table (A2)	
Saturation (A3) Marl Deposits (E	Dry Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfid	e Odor (C1) Crayfish Burrows (C8)
I I was to the state of the sta	pheres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3) Presence of Red	
[duction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surfa ☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	
Sparsely Vegetated Concave Surface (B8) Other (Explain is	n Remarks)
	E The head at rest (55)
Field Observations:	- Valorio
Surface Water Present? Yes • No O Depth (inches):0.25
Water Table Present? Yes No Depth (inches):5 Wetland Hydrology Present? Yes • No O
Saturation Present? (includes capillary fringe) Yes No Depth (inches):0
Describe Recorded Data (stream gauge, monitoring well, aerial photo-	tos, previous inspections), if available:
Remarks:	
Wetland receives hydrology from precipitation and runoff from the n	roadway.

(o) and the same of the same o	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Quercus palustris	30	✓	FACW	That are OBL, FACW, or FAC:5(A)
2. Ulmus rubra	10	✓	FAC	Total Number of Demisers
3 Acer negundo	5		FAC	Total Number of Dominant Species Across All Strata: 5 (B)
4	0			
5	0	ī		Percent of dominant Species
6.	O District	Ħ		That Are OBL, FACW, or FAC: 100.0% (A/B)
7	7 888	Ē		Prevalence Index worksheet:
		Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)	- 13	- Total Cove		OBL species 0 x 1 = 0
1 Acer negundo	20	✓	FAC	
2. Quercus palustris	_ 15	~	FACW	FACW species 50 x 2 = 100
3 Celtis occidentalis	5		FAC	FAC species <u>40</u> x 3 = <u>120</u>
4. Rosa multiflora	5		FACU	FACU species $5 \times 4 = 20$
5				UPL species $0 \times 5 = 0$
6				Column Totals: <u>95</u> (A) <u>240</u> (B)
7.			-	Dravalanca Inday - B/A - 2 F2C
	-	- Total Cove		Prevalence Index = B/A = 2.526
Herb Stratum (Plot size: 5ft)	45 =	Total Cove		Hydrophytic Vegetation Indicators:
and the second second	5	~	FACW	Rapid Test for Hydrophytic Vegetation
T + grandeten Administration and a second an	-		TACV	✓ Dominance Test is > 50%
2		H		✓ Prevalence Index is ≤3.0 ¹
3				Morphological Adaptations ¹ (Provide supporting
4		H		data in Remarks or on a separate sheet)
5		H		Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7	0	Ц		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0_			The same of the sa
9	0			Definitions of Vegetation Strata
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11		П		breast height (DBH), regardless of height.
12		П		
And Andrews Inc.		Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)				greater than 5.20 ft (1111) tall
1	0_			Herb - All herbaceous (non-woody) plants, regardless of
2.	100			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine All woody vines greater than 2.29 ft in
1	0			Woody vine - All woody vines greater than 3.28 ft in height.
4.	0 =	Total Cove		noigh.
		- Total Cove	7	
				Hydrophytic
				Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent		als allowed f	or nositive	identification of the species observed within the wetland
area. Photographs are located in Appendix D.	plant materi	and unovicu i	o. positive	advantaged of the species observed within the wedding
esse receptor — escriber of the first strategic and receptor fractions of the first first of the first strategic and the firs				

Sampling Point: w-aeh-20200107-09b

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-18b

Sampling Point: W-a

w-aeh-20200107-09b	
	•

	ption: (Des		the depth	needed to				onfirm the	absence of indicators.)	
Depth (inches)	Color (Matrix moist)	%	Color	moist)	dox Featu %	res Type ¹	Loc ²	Texture	Remarks
0-6	10YR	3/1	100						Silty Clay Loam	
6-18	10YR	3/1	95	10YR	7/8	5	с		Silty Clay Loam	
									Sirry Glay Loam	
									-	
¹ Type: C=Conc	entration. D	=Depletio	n. RM=Red	uced Matrix,	CS=Covere	d or Coate	d Sand Gra	ains ² Loca	tion: PL=Pore Lining. M=Ma	atrix
Hydric Soil I	ndicators:								Indicators for Probl	ematic Hydric Soils: 3
Histosol (A	A1)			Poly	value Belov	v Surface ((S8) (LRR F	₹,		(LRR K, L, MLRA 149B)
Histic Epip	edon (A2)				A 149B)					ox (A16) (LRR K, L, R)
Black Histi	c (A3)						LRR R, MLF	8	The state of the s	or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)) LRR K, L)		Dark Surface (S7)	일을 통일 시간 경험 및 경험 및 경험 및 공항 및 TOP (CONT.
Stratified I	_ayers (A5)				ny Gleyed N		1			Surface (S8) (LRR K, L)
Depleted B	Below Dark S	urface (A:	11)		eted Matrix				Thin Dark Surface	
Thick Dark	Surface (A1	2)			x Dark Sur		_,			Masses (F12) (LRR K, L, R)
Sandy Muc	ck Mineral (S	1)			eted Dark :		7)			ain Soils (F19) (MLRA 149B)
Sandy Gle	yed Matrix (S	64)		Redo	x Depressi	ions (F8)				6) (MLRA 144A, 145, 149B)
Sandy Red	lox (S5)								Red Parent Materi	.535 N N N N
Stripped M	latrix (S6)								Very Shallow Dark	
Dark Surfa	ice (S7) (LRR	R, MLRA	149B)						Other (Explain in	Remarks)
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology	must be p	resent, un	less disturt	ed or proble	ematic.	Control of
Restrictive La	yer (if obs	erved):							7	
Type:										
Depth (inch	nes):								Hydric Soil Present?	Yes ● No ○
Remarks:									L.	
Redox dark su	ırface was r	net for t	hic wetlan	d area						
ricuox dark su	iriace was i	nec for c	ilis Wedaii	u arca.						
					the wetla	and meet	all three	criteria and	d classifed this area as a	wetland. The wetland is
represented b	y PFO and I	PEM wet	land comp	onents.						

Wetland RLP-19a

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County:	Mahoning County	Sampl	ling Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company		State: OH	Sampling Point:	w-aeh-20200107-10a
Investigator(s): AEH, SKM	Section, To	ownship, Range: S	т. 2N	R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (c	oncave, convex, no	ne): none	Slope: 0.0 % / 0.0
Subregion (LRR or MLRA): LRR K Lat.:	41.091581	Long.	: -80.602339	Datum: WGS 84
			NWI classification:	
Soil Map Unit Name: RuB-Rittman-Urban land complex, 2 to 6 percent	endore o e ndenden	00		222.10
Are climatic/hydrologic conditions on the site typical for this time of y	ear? Ye	s ● No ○ (If no, explain in Remar	
Are Vegetation , Soil , or Hydrology significant	ly disturbed?	Are "Normal (Circumstances" present	? Yes ● No O
Are Vegetation , Soil , or Hydrology naturally p	roblematic?	(If needed, ex	cplain any answers in R	temarks.)
Summary of Findings - Attach site map showing s	sampling p	oint location	s, transects, imp	oortant features, et
Hydrophytic Vegetation Present? Yes No				
Hydric Soil Present? Yes No		Sampled Area n a Wetland?	Yes . No O	
Wetland Hydrology Present? Yes ● No ○	1700001000			
Remarks: (Explain alternative procedures here or in a separate repo	rt.)			
Hydrology				
Wetland Hydrology Indicators:		_	Secondary Indicators (mini	imum of 2 reauired)
Primary Indicators (minimum of one required; check all that apply)			Surface Soil Cracks (B	6)
☐ Surface Water (A1) ✓ Water-Stained Lea	ves (B9)		✓ Drainage Patterns (B1	0)
High Water Table (A2) Aquatic Fauna (B13)			Moss Trim Lines (B16)	The state of the s
Saturation (A3) Marl Deposits (B15	Sign parameter		Dry Season Water Tab	
Water Marks (B1) Hydrogen Sulfide (D ((C2)	Crayfish Burrows (C8)	
Sediment Deposits (B2) Drift deposits (B3) Oxidized Rhizosphe		Roots (C3)	Saturation Visible on A Stunted or Stressed Pl	
☐ Drift deposits (B3) ☐ Presence of Reduct ☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduct		c (C6)	Geomorphic Position (
☐ Iron Deposits (B5) ☐ Thin Muck Surface		3 (CO)	Shallow Aquitard (D3)	6.0553#24
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in R			Microtopographic Relie	
Sparsely Vegetated Concave Surface (B8)	(enans)		✓ FAC-neutral Test (D5)	
Field Observations:				
Surface Water Present? Yes No Depth (inches):				
Water Table Present? Yes No Depth (inches):				
Saturation Present? (includes capillary fringe) Yes No Depth (inches):		Wetland Hydro	logy Present? Yes	● No ○
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous insp	ections), if availab	le:	
Remarks:				
Wetland receives hydrology from precipitation and runoff from the roa	adway.			
Treating receives hydrology from precipitation and ration from the roa	avay.			

(o) and the same of the same o	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Populus deltoides	5	✓	FAC	That are OBL, FACW, or FAC:3 (A)
2	0			Total Number of Dominant
3	0			Species Across All Strata:3(B)
4	0			
5	0			Percent of dominant Species That Are OBL FACW or FAC: 100.0% (A/B)
6	_ 0_			That Are OBL, FACW, or FAC:100.0% (A/B)
7	0_			Prevalence Index worksheet:
		Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)				OBL species 10 x 1 = 10
1 Populus deltoides	40	✓	FAC	FACW species 80 x 2 = 160
2	0_			FAC species 45 x 3 = 135
3	0_			PERMITTER AND DESCRIPTION OF STREET AT THE PERMITTER AT T
4	92			FACU species $5 \times 4 = 20$
5	0			UPL species $0 \times 5 = 0$
6				Column Totals: <u>140</u> (A) <u>325</u> (B)
7	-		-	Prevalence Index = B/A = 2.321
		= Total Cover		1994 B-4797/CA 985-973 BC/9929-4745-25500 A = 49629-477-30
Herb Stratum (Plot size: 5ft)	-40 -	- Total Cover		Hydrophytic Vegetation Indicators:
1 Phalaris arundinacea	80	~	FACW	Rapid Test for Hydrophytic Vegetation
	10		OBL	✓ Dominance Test is > 50%
		H	FACU	✓ Prevalence Index is ≤3.0 ¹
		H	FACU	☐ Morphological Adaptations ¹ (Provide supporting
4		H	-	data in Remarks or on a separate sheet)
5		H		Problematic Hydrophytic Vegetation ¹ (Explain)
6				17-4:
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			The state of the s
9	0			Definitions of Vegetation Strata
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11,	0			breast height (DBH), regardless of height.
12	0_	П		O. P. Alex West Indian B. O. Brilled
543 Seitel	95 =	Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)				greater than 5.20 ft (1111) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0_			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0		5.	height.
1.6	0 =	Total Cover		
			8	
				Hydrophytic
				Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent		als allowed fo	or positive	identification of the species observed within the wetland
area. Photographs available in Appendix D.	75W		80	*

Sampling Point: w-aeh-20200107-10a

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-19a

Sampling Point: w-aeh-20200107-10a

Profile Descri	ption: (De	scribe to	the depth	needed to d	locument	t the indi	cator or c	onfirm the	absence of indicators.)	
Depth (in aboa)		Matrix				dox Featı				
(inches)	Color (<u>%</u>	Color (Type 1		Texture	Remarks
0-5	10YR	4/1	85	10YR	5/6		C		Silty Clay Loam	
				10YR	2/1		D			
5-18	10YR	5/1	85	10YR	5/6	15	C	M	Silty Clay Loam	
¹ Type: C=Conc	entration. D	=Depletio	n. RM=Redi	uced Matrix, C	S=Covere	d or Coate	ed Sand Gr	ains ² Loca	tion: PL=Pore Lining. M=M	atrix
Hydric Soil I										lematic Hydric Soils: 3
Histosol (A	A1)			Polyv	alue Belov	w Surface	(S8) (LRR	R,		(LRR K, L, MLRA 149B)
Histic Epip	edon (A2)			MLRA	149B)					OX (A16) (LRR K, L, R)
Black Histi	c (A3)						LRR R, MLI			or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)				Separate Sep) LRR K, L)	Dark Surface (S7)	
	_ayers (A5)					Matrix (F2))			Surface (S8) (LRR K, L)
1-000	Below Dark S	ente mentendern Billion	11)		eted Matrix x Dark Su				Thin Dark Surface	e (S9) (LRR K, L)
	Surface (A1					rrace (F6) Surface (F	7)		Iron-Manganese I	Masses (F12) (LRR K, L, R)
_	ck Mineral (S				x Depress		· /		Piedmont Floodpl	ain Soils (F19) (MLRA 149B)
_	yed Matrix (S	54)			op. 000	()			Mesic Spodic (TA	6) (MLRA 144A, 145, 149B)
Sandy Red Stripped M									Red Parent Mater	and the state of t
	ice (S7) (LRF	D MIDA	140R)						☐ Very Shallow Dar	File and the Committee of the Committee
									Other (Explain in	Remarks)
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology	must be p	resent, un	iless distur	bed or proble	ematic.	
Restrictive La	yer (if obs	erved):								
Type:	8								Hydric Soil Present?	Yes No
Depth (inch	nes):								riyunc son Fresence	res 🥹 No 🖰
Remarks:										
Depleted mate	rix was met	t for this	wetland a	rea.						
Based on our	site investi	nations /	AFCOM ide	entified that	the wetla	and meet	all three	criteria and	d classifed this area as a	wetland. The wetland is
represented b					are rrear			criteria ario		Treatment the Treatment Is

Wetland RLP-19b

Project/Site: Lincoln Park-Ri	verbend 138kV Tra	nsmission L	ine	City/County:	Mahoning River		Sampli	ing Date: 07-Jan-20
Applicant/Owner: ATSI, , a	FirstEnergy Com	pany			State: Ol	H Sam	pling Point:	w-aeh-20200107-10b
Investigator(s): AEH, SKM				Section,	Township, Range:	S.	T. 2N	R. 1W
Landform (hillslope, terrac	e, etc.): Flat				concave, convex,	TOTAL STREET,	2	Slope: 0.0 % / 0.0
Subregion (LRR or MLRA):			1-1-		8 (8)		es e	Datum: WGS 84
	-	5505 Ao 169 EC	Lat.:	41.092279	Lon			
Soil Map Unit Name: JuB	Jimtown Ioam, t	ill substrat	tum, 2 to 6 perce			NWI c	lassification:	PSS1C
Are climatic/hydrologic co	nditions on the	site typica	l for this time of	year? Y	es 💿 No 🔾	(If no, expl	ain in Remarl	ks.)
Are Vegetation, So	oil 🗌 , or F	lydrology	significan	tly disturbed?	Are "Norma	l Circumstan	ces" present?	Yes No
Are Vegetation , So	oil 🗌 , or H	lydrology	naturally	problematic?	(If needed.	explain any	answers in R	emarks.)
Summary of Findin	igs - Attach	site m	12	50	20 00	1.50 A		oortant features, et
Hydrophytic Vegetation P	resent? Yes	No	0		-			340
Hydric Soil Present?	Yes	No	0		ne Sampled Area nin a Wetland?	Yes 💿 N	1o O	
Wetland Hydrology Prese	nt? Yes	No	0	With	iin a wetiandr			
Remarks: (Explain altern					l recidential lete	It occurs in a	flat area on	the east side of Lamar Ave
								the east side of Lamar Ave. derance of larger Quercus
palustris and Populus bal				iex. The wella	nd boundary was	determined b	y the prepon	derance of larger Quercus
palustris ariu ropulus bai	sammera, and si	папсі гор	ulus baisaitillera					
Hydrology								
Wetland Hydrology Indica	itors:					Secondary In	ndicators (mini	mum of 2 reauired)
Primary Indicators (minin	num of one requ	ired; chec	k all that apply)			Surface	Soil Cracks (B6	5)
✓ Surface Water (A1)		~	Water-Stained Le	aves (B9)		Drainag	e Patterns (B10	0)
High Water Table (A2)			Aquatic Fauna (B:	13)		Moss Tr	im Lines (B16)	X E
Saturation (A3)			Marl Deposits (B1	15)		Dry Sea	son Water Tabl	le (C2)
Water Marks (B1)			Hydrogen Sulfide	Odor (C1)		Crayfish	Burrows (C8)	
Sediment Deposits (B2)			Oxidized Rhizospl	heres along Livin	g Roots (C3)	Saturati	on Visible on A	Aerial Imagery (C9)
Drift deposits (B3)			Presence of Redu	ced Iron (C4)		Stunted	or Stressed Pla	ants (D1)
Algal Mat or Crust (B4)			Recent Iron Redu	ction in Tilled So	oils (C6)	✓ Geomor	phic Position ([D2)
Iron Deposits (B5)			Thin Muck Surface	e (C7)		Shallow	Aquitard (D3)	
Inundation Visible on Ae	rial Imagery (B7)		Other (Explain in	Remarks)		Microtop	oographic Relie	ef (D4)
Sparsely Vegetated Cond	ave Surface (B8)					✓ FAC-neu	ıtral Test (D5)	
Field Observations:	5186							
Surface Water Present?	Yes No	\circ	Depth (inches):	0.25	-0			
Water Table Present?	Yes O No	.	Depth (inches):	14				0
Saturation Present? (includes capillary fringe)	Yes O No	•	Depth (inches):	12	Wetland Hyd	Irology Prese	nt? Yes	● No ○
Describe Recorded Data (s	stream gauge, n	nonitorina	well, aerial photo	s, previous ins	spections), if availa	able:		
				-, -,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7070700		
Remarks:								
Wetland receives hydrolog	y from precipita	ation and n	unoff from the ro	adway.				
	, p. aarpite							

(n) years and (n)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	20 Septiment	Status	Number of Dominant Species
1 Quercus palustris	40	✓	FACW	That are OBL, FACW, or FAC:5(A)
2. Populus balsamifera	the second second	~	FACW	Total Number of Dominant
3	0			Species Across All Strata:7 (B)
4	0			
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 71.4% (A/B)
6	0_			That are OBL, FACW, of FAC.
7	0			Prevalence Index worksheet:
(0)-1	65 =	= Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)			0.2592	OBL species
1. Rhamnus cathartica		✓	FAC	FACW species90 x 2 =180
2. Populus balsamifera	15	✓	FACW	FAC species45 x 3 =135
3. Quercus palustris	10		FACW	FACU species 15 x 4 = 60
4. Rosa multiflora	5	Ц	FACU	
5	0			AN CONTROL OF THE PROPERTY AND AN ADDRESS OF THE PROPERTY AND AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPE
6	0			Column Totals: <u>150</u> (A) <u>375</u> (B)
7	0			Prevalence Index = B/A =
(Blot size: Eft	70 =	= Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)				Rapid Test for Hydrophytic Vegetation
1. Juncus tenuis	5	✓	FAC	✓ Dominance Test is > 50%
2. Rosa multiflora	5	✓	FACU	✓ Prevalence Index is ≤3.0 ¹
3. Solidago canadensis	5	✓	FACU	
4	0			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	_ 0			Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9	The second second		0.00	Definitions of Vegetation Strata
10		H		
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
12.		H		breast neight (DBI 1), regardless of neight.
12		= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)	15 =	- Total Cove	8	greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.		П		size, and woody plants less than 3.28 ft tall.
2	0			W 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
4	0			Woody vine - All woody vines greater than 3.28 ft in height.
4.		= Total Cove		noight.
	0 =	- Total Cover		
				Hydrophytic
				Vegetation
				Present? Yes • No ·
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed f	or positive	identification of the species observed within the wetland
area. Photographs available in Appendix D.				20

Sampling Point: w-aeh-20200107-10b

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-19b

Sampling Point: w-aeh-20200107-10b

Profile Description		cribe to Matrix	the depth	needed to		t the indicates		onfirm the	absence of indicators.)	
(inches)	Color (ı		%	Color (%	Type ¹	Loc2	Texture	Remarks
0-8	10YR	3/3	100						Sandy Clay Loam	
8-18	10YR	5/2	80	10YR	5/8	20	С С		Sandy Clay Loam	
									-	
									·	
		=Depletio	n. RM=Red	uced Matrix, (CS=Covere	ed or Coate	d Sand Gra	ins ² Loca	tion: PL=Pore Lining. M=Matrix	
Hydric Soil				П.,					Indicators for Problema	tic Hydric Soils: 3
Histosol (/alue Belo A 149B)	w Surface ((S8) (LRR R	,	2 cm Muck (A10) (LRR	K, L, MLRA 149B)
	pedon (A2)					ace (S9) (I	LRR R, MLR	A 149B)	Coast Prairie Redox (A	16) (LRR K, L, R)
Black His	Sulfide (A4)					Mineral (F1		8	5 cm Mucky Peat or Pe	at (S3) (LRR K, L, R)
	Layers (A5)			1		Matrix (F2)			Dark Surface (S7) (LRI	HOWER WAY COM
	Below Dark S	urface (A	11)	✓ Depl	eted Matri	x (F3)			Polyvalue Below Surface	NAMES OF COMMUNICATIONS OF STATE
10000	k Surface (A1)	one measurement term	11)	Redo	x Dark Su	ırface (F6)			Thin Dark Surface (S9)	
	uck Mineral (S:			Depl	eted Dark	Surface (F	7)		Iron-Manganese Masse	
_	eyed Matrix (S	. 50		Redo	x Depress	sions (F8)				oils (F19) (MLRA 149B)
Sandy Re	. ii	of the second							Mesic Spodic (TA6) (M	
Stripped	Matrix (S6)								Red Parent Material (F Very Shallow Dark Sur	
Dark Surf	ace (S7) (LRR	R, MLRA	149B)						Other (Explain in Rema	
³ Indicators o	f hydrophytic	vegetatio	n and wetla	nd hvdrologv	must be r	oresent, un	less disturb	ed or proble		
Restrictive L			11,700,100,11,000	,5,						
Type:	ayer (ii obs	ci veuj.								
Depth (inc	thes):								Hydric Soil Present?	res ● No O
Remarks:										
Depleted mat	triv was mot	for this	wotland a	ron						
Depleted Mai	uix was meu	101 11115	welland a	iea.						
Based on our	site investig	gations,	AECOM ide	entified that	the wetl	and meet	all three of	criteria and	d classifed this area as a wet	and. The wetland is
represented l	by PFO and F	PSS wetl	and comp	onents.						

Project/Site: Lincoln Park-Riverbend	138kV Transmiss	sion Line	City/County:	Mahoning County	Sampli	ng Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEr	ergy Company			State: OH	Sampling Point:	w-aeh-20200107-02
Investigator(s): AEH, SKM			Section, To	wnship, Range: S.	T. 2N	R. 1W
Landform (hillslope, terrace, etc.)	: Lowland		Local relief (co	ncave, convex, none)): concave	Slope: 0.0 % / 0.0
Subregion (LRR or MLRA): LRR	к	Lat.:	41.090939	Long.:	-80.608800	Datum: WGS 84
Soil Map Unit Name: RuB-Rittma	IRSS					NAME OF THE PROPERTY OF THE PR
152				. ● No ○ (If r		•
Are climatic/hydrologic condition	5		,		no, explain in Remark	Vac (a) Na (
Are Vegetation, Soil	, or Hydrol		tly disturbed?		umstances" present?	
Are Vegetation , Soil	, or Hydrol	255	problematic?		in any answers in Re	350
Summary of Findings -			sampling p	oint locations,	transects, imp	ortant features, et
Hydrophytic Vegetation Present?		No O				
Hydric Soil Present?	Yes	No O		Sampled Area a Wetland? Ye	es 💿 No 🔾	
Wetland Hydrology Present?	Yes	No O	CASSESS ASSESS			
Remarks: (Explain alternative p	rocedures her	e or in a separate rep	ort.)			
Hydrology						
Wetland Hydrology Indicators:				_Seco	ondary Indicators (minir	num of 2 required)
Primary Indicators (minimum of	one required;	check all that apply)			Surface Soil Cracks (B6)
Surface Water (A1)		Water-Stained Le	3 5		Drainage Patterns (B10))
✓ High Water Table (A2)		Aquatic Fauna (B:		닏	Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B1	artification of the same of th	님	Dry Season Water Tabl	e (C2)
Water Marks (B1)		Hydrogen Sulfide			Crayfish Burrows (C8)	(00)
Sediment Deposits (B2) Drift deposits (B3)			heres along Living	Roots (C3)	Saturation Visible on A	
Algal Mat or Crust (B4)		Presence of Redu	cea Iron (C4) iction in Tilled Soils	((6)	Stunted or Stressed Pla Geomorphic Position (E	
Iron Deposits (B5)		Thin Muck Surface		(00)	Shallow Aquitard (D3)	,2)
Inundation Visible on Aerial Ima	gery (B7)	Other (Explain in	, J. 4		Microtopographic Relie	f (D4)
✓ Sparsely Vegetated Concave Sur		other (Explain in	Remarks		FAC-neutral Test (D5)	
Field Observations:						
Surface Water Present? Yes	○ No •	Depth (inches):				
Water Table Present? Yes	● No ○	Depth (inches):	3			
Saturation Present? (includes capillary fringe) Yes	● No ○	Depth (inches):	2005	Wetland Hydrolog	y Present? Yes	● No ○
Describe Recorded Data (stream	gauge, monitor	ring well, aerial photo	s, previous inspe	ections), if available:		
Remarks:						
PUB portion of the wetland is est	imated to be a	hout 6 inches to a foo	nt deen			
portion of the mediana is est	mateu to be a	out o manes to a roo	. Сисер.			

/DIA 20f4	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Quercus palustris		✓	FACW	That are OBL, FACW, or FAC:3(A)
2. Acer rubrum	S. G. Janes S.		FAC	Total Number of Dominant
3				Species Across All Strata:3(B)
4	0			MAN AT A STATE OF THE STATE OF
5	0_			Percent of dominant Species That Are OBL_FACW_or_FAC: 100.0% (A/B)
6	0			That Are OBL, FACW, or FAC:100.0% (A/B)
7	0			Prevalence Index worksheet:
(0)	75 =	= Total Cove	r	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)				OBL species
1 Quercus palustris		✓	FACW	FACW species
2. Acer rubrum	5	✓	FAC	FAC species
3	0			FACU species $0 \times 4 = 0$
4	0			
5	0_			AN OF THE PARTY WAS A STREET OF THE PARTY OF
6	0			Column Totals: <u>87</u> (A) <u>184</u> (B)
7	0_			Prevalence Index = B/A =
		= Total Cove	r	Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)	100			Rapid Test for Hydrophytic Vegetation
1. Cyperus esculentus	2		FACW	✓ Dominance Test is > 50%
2	0_			
3	_ 0			✓ Prevalence Index is ≤3.0 ¹
4.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9	T		· ·	Definitions of Vegetation Strata
10		H		
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
				breast neight (DBH), regardless or neight.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
_Woody Vine Stratum (Plot size: _30ft)	=	= Total Cove	5	greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	-	F		size, and woody plants less than 3.28 ft tall.
2	0	Ħ		
3.		Ħ		Woody vine - All woody vines greater than 3.28 ft in height.
4				neight.
	0=	= Total Cove		
				Hydrophytic
				Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed f	or positive	identification of the species observed within the wetland
area. Photographs available in Appendix D.			M	*

Sampling Point: w-aeh-20200107-02

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: w-aeh-20200107-02

-	otion: (De		the depth	needed to				onfirm the	absence of indicators.)				
Depth _ (inches)	Color (Matrix moist)	%	Color (dox Feat	ures Type_ ¹	Loc2	Texture	Remarks			
0-7	10YR	3/1	90	10YR	5/8	10	C Type	M	Silty Clay Loam	Remarks			
7-18	10YR	6/1	65	10YR		- -10 	D						
	101K				3/1			<u>M</u>	Silty Clay Loam				
				10YR	6/8		C						
¹ Type: C=Conce	ntration. D	=Depletio	n. RM=Red	uced Matrix, (S=Covere	ed or Coate	ed Sand Gra	ains ²Loca	ition: PL=Pore Lining. M=Ma	atrix			
Hydric Soil In	dicators:			240 1000000					Indicators for Probl	ematic Hydric Soils: 3			
Histosol (A	1)					w Surface	(S8) (LRR F	٦,		(LRR K, L, MLRA 149B)			
Histic Epipe	don (A2)				4 149B)	(00)				ox (A16) (LRR K, L, R)			
Black Histic	(A3)						LRR R, MLF	. 87	THE PARTY NAMED IN TAXABLE IN	or Peat (S3) (LRR K, L, R)			
Hydrogen S	ulfide (A4)			100000000000000000000000000000000000000	The second second second		l) LRR K, L)		Dark Surface (S7)				
Stratified La						Matrix (F2)			Surface (S8) (LRR K, L)			
✓ Depleted Be			11)		eted Matri	ırface (F6)			Thin Dark Surface	(S9) (LRR K, L)			
Thick Dark						Surface (F6)			☐ Iron-Manganese N	Masses (F12) (LRR K, L, R)			
Sandy Muck				1	x Depress		.,		Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Gleye		54)							Mesic Spodic (TA6	6) (MLRA 144A, 145, 149B)			
Sandy Redo									Red Parent Materi	al (F21)			
Stripped Ma		D MIDA	140P)						Very Shallow Dark				
			725 C-32 Colo#6						Other (Explain in	Remarks)			
³ Indicators of h	nydrophytic	vegetatio	n and wetla	and hydrology	must be p	oresent, ur	nless distur	oed or proble	ematic.				
Restrictive Lay	er (if obs	erved):											
Туре:													
Depth (inche	es):								Hydric Soil Present?	Yes ● No ○			
Remarks:													
Depleted matrix	x and dep	leted bel	ow dark s	urface were	both me	t within t	his wetlan	d area.					
Daned on our o	ika lawasil		AECOM : d		4la a a 4l			all blaces su	uikauia auud alaaaifaad khia a				
										area as a wetland. The wetland inues outside of the survey area.			
complex to rep.		,, 556							To Troit and Compress Come				

Wetland RLP-21a

Project/Site: Lincoln Park-Rive	rbend 138KV Ira	ansmission Lii	ne	City/County:	Manoning County	San	npling Date: 07-Jan-20
Applicant/Owner: ATSI, , a l	irstEnergy Com	pany			State: OH	Sampling Poin	t: w-aeh-20200107-03a
Investigator(s): AEH, SKM				Section, Tov	vnship, Range:	s. T. 2N	R. 1W
Landform (hillslope, terrace,	etc.): Lowla	and		Local relief (cor	ncave, convex, n	one): concave	Slope: 0.0 % / 0.0
Subregion (LRR or MLRA):	I RR K		Lat.:	41.090960	Long	·: -80.609747	Datum: WGS 84
Soil Map Unit Name: Sb-Set		O to 2 por		41.050500		NWI classification	
				Van	● No ○	— ·	*
Are climatic/hydrologic cond	litions on the	site typical	for this time of y	year? Yes	● No ○	(If no, explain in Ren	
Are Vegetation, Soil	, or l	Hydrology	significant	tly disturbed?	Are "Normal	Circumstances" prese	nt? Yes • No O
Are Vegetation , Soi	, or l	Hydrology	naturally p	problematic?	(If needed, e	xplain any answers in	n Remarks.)
Summary of Finding	js - Attach	ı site ma	ap showing	sampling po	oint location	ns, transects, in	nportant features, et
Hydrophytic Vegetation Pre	sent? Yes	o No	0				
Hydric Soil Present?	Yes	O No	•		Sampled Area	Yes ○ No ●	
Wetland Hydrology Present	yes	· No	0	Within	a Wetland?	100 9 110 9	
Remarks: (Explain alterna	*) net)			
Hydrology							
Wetland Hydrology Indicate	ors:					Secondary Indicators (n	ninimum of 2 reauired)
Primary Indicators (minimu	m of one requ	uired; check	(all that apply)			Surface Soil Cracks	(B6)
✓ Surface Water (A1)			Water-Stained Lea			Drainage Patterns (
High Water Table (A2)			Aquatic Fauna (B1			Moss Trim Lines (B	A DATE OF THE PARTY OF THE PART
Saturation (A3)			Marl Deposits (B15			Dry Season Water	
Water Marks (B1)			Hydrogen Sulfide (Crayfish Burrows (C	
Sediment Deposits (B2)			SOURCE STATE OF SURE LINES AND STATE OF SURE	neres along Living R	Roots (C3)		n Aerial Imagery (C9)
Drift deposits (B3) Algal Mat or Crust (B4)			Presence of Reduc			Stunted or Stressed	
Iron Deposits (B5)				ction in Tilled Soils	(C6)	✓ Geomorphic Positio	200 M.O. 204 S. M.
Inundation Visible on Aeria	al Imagon/ (R7)		Thin Muck Surface			Shallow Aquitard (I	outset)
Sparsely Vegetated Concar			Other (Explain in F	Remarks)		✓ Microtopographic R ✓ FAC-neutral Test (D	
Sparsely Vegetated contain	re surface (bo)					FAC-fleddal Test (L)))
Field Observations:							
Surface Water Present?	Yes No	o O	Depth (inches):	1			
Water Table Present?	Yes No	o O	Depth (inches):	2		800	0 0
Saturation Present? (includes capillary fringe)	Yes No	0	Depth (inches):	0	Wetland Hydro	ology Present? Y	es • No O
Describe Recorded Data (str	eam gauge, n	nonitoring v	well, aerial photos	s, previous inspe	ctions), if availab	ole:	
Remarks:							
The wetland area is located	in a lowspot t	hat receive	s water from pre	cipitation and rur	noff from the sur	rrounding commerical	and roadways.
The wedaria area is located	iii a lowspoc	TIGE TECCTVE	3 Water Holli pres	cipitation and rai	ion from the sur	rounding commencer	and roddways.
1							

(0)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Fraxinus pennsylvanica	5	✓	FACW	That are OBL, FACW, or FAC:4 (A)
2	0_			Total Number of Demisers
3	0_			Total Number of Dominant Species Across All Strata: 4 (B)
4	0			100 miles
5	0	П		Percent of dominant Species
6.	7528	Ħ		That Are OBL, FACW, or FAC: 100.0% (A/B)
7	255	Ī		Prevalence Index worksheet:
		= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)				OBL species
1,	0_			FACW species 65 x 2 = 130
2	0			
3	0_			FAC species $0 \times 3 = 0$
4	0			FACU species $0 \times 4 = 0$
5				UPL species $0 \times 5 = 0$
6				Column Totals: <u>92</u> (A) <u>157</u> (B)
7				Prevalence Index = B/A = 1.707
		= Total Cover		
Herb Stratum (Plot size: 5ft)		- Total Cover		Hydrophytic Vegetation Indicators:
1 Onoclea sensibilis	35	~	FACW	✓ Rapid Test for Hydrophytic Vegetation
0 000	25	V	FACW	✓ Dominance Test is > 50%
		V	OBL	✓ Prevalence Index is ≤3.0 ¹
. TL		Ä	OBL	☐ Morphological Adaptations ¹ (Provide supporting
4. Typha angustifolia	-	H		data in Remarks or on a separate sheet)
5. Scirpus atrovirens		Ħ	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must
7		님		be present, unless disturbed or problematic.
8			-	The same of the sa
9				Definitions of Vegetation Strata
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11	0_			breast height (DBH), regardless of height.
12	0_			Sapling/shrub - Woody plants less than 3 in. DBH and
(0)	87=	= Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)				
1		Ц		Herb - All herbaceous (non-woody) plants, regardless of
2	0_			size, and woody plants less than 3.28 ft tall.
3	0_	Щ		Woody vine - All woody vines greater than 3.28 ft in
4	0_			height.
	0 =	= Total Cover		
				Hydrophytic
				Vegetation Present? Yes No
				Present:
Remarks: (Include photo numbers here or on a separate sh	100 100 100 1 00			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed for	or positive	identification of the species observed within the wetland
area. Photographs are available in Appendix D.				

Sampling Point: w-aeh-20200107-03a

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-21a

Sampling Point: w-aeh-20200107-03a

Profile Descri	iption: (De	scribe to	the depti	needed to	document	the indic	cator or co	onfirm the	absence of indicators.)	
Depth		Matrix				lox Featu			_	_
(inches)		(moist)	%	Color	(moist)	%	Type 1	Loc ²	Texture	Remarks
0-2	5B	5/1	100						Silty Clay	
2-18	5B	5/1	80	7.5YR	5/8	20	C		Silty Clay	
									-	
									-	
									-	
	-									
¹ Type: C=Conc	entration. D	=Depletio	n. RM=Red	luced Matrix,	CS=Covere	d or Coate	d Sand Gra	ins ² Loca	tion: PL=Pore Lining. M=Matrix	
Hydric Soil I	ndicators:								Indicators for Problematic	: Hydric Soils : 3
Histosol (A	A1)			Poly	value Belov	v Surface (S8) (LRR F	ξ,	2 cm Muck (A10) (LRR K,	
Histic Epip	edon (A2)				A 149B)				Coast Prairie Redox (A16)	5. B
☐ Black Histi	ic (A3)			Thir	Dark Surfa	ice (S9) (L	RR R, MLR	RA 149B)	5 cm Mucky Peat or Peat	
Hydrogen	Sulfide (A4)	ĺ			my Mucky N				Dark Surface (S7) (LRR K	
Stratified I	Layers (A5)				my Gleyed I				Polyvalue Below Surface	2 W. 1992
Depleted I	Below Dark	Surface (A	11)	Dep	leted Matrix	(F3)			Thin Dark Surface (S9) (* 0.0 (*
Thick Dark	Surface (A	12)			ox Dark Su				Iron-Manganese Masses	
Sandy Mud	ck Mineral (S	51)			leted Dark		7)		Piedmont Floodplain Soils	
Sandy Gle	yed Matrix (S4)		Red	ox Depress	ions (F8)			Mesic Spodic (TA6) (MLR	
Sandy Red	lox (S5)								Red Parent Material (F21)	N N N
Stripped M	latrix (S6)								Very Shallow Dark Surfac	N. AMERICAN P. P. C.
Dark Surfa	ce (S7) (LR	R R, MLRA	149B)						Other (Explain in Remark	No. of the control of
³ Indicators of	hydrophytic	vegetation	n and wetl	and hydrology	, must be n	recent un	lece dieturk	ed or proble		"
			i and wen	and mydrolog	y must be p	resent, un	iess distuit	red or proble	ematic.	
Restrictive La	ayer (if obs	served):								
Type:									Hydric Soil Present? Yes	s ○ No ●
Depth (inch	nes):								nyunc son Fresent: 16	, O 140 O
Remarks:										
Loamy gleyed	matrix wa	s met wit	hin this v	etland area						
			. = 0 0 1 1						NO. 1. 1. 1. 12. 13.11	
									riteria and classifed this area as tly hydrologically connected to a	
wetland comp		by boarri	o dila i i	-I'i Wedana	componer	its and is	unccuy a	ind mance	ay nyarologically connected to a	in adjacent 11 O/1 OD
·										

Wetland RLP-21b

Project/Site: Lincoln Park-Riverbend 138kV Trans	smission Line	City/County: Mahoning County	Sampli	ng Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Compa	ny	State: Of	H Sampling Point:	w-aeh-20200107-03b
Investigator(s): AEH, SKM		Section, Township, Range:	s. T. 2N	R. 1W
Landform (hillslope, terrace, etc.): Lowland	d	Local relief (concave, convex,	none): concave	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K	Lat.:	41.090875 Lon	g.: -80.610051	Datum: WGS 84
Soil Map Unit Name: RuB-Rittman-Urban la			NWI classification:	
Are climatic/hydrologic conditions on the si		V @ W- O	(If no, explain in Remark	(5.)
		PRODUCTION STATES STATES SECTION	Circumstances" present?	V (A) N (
	<u> </u>			
	25 to	E 0	explain any answers in Re	353
Summary of Findings - Attach		sampling point locatio	ons, transects, imp	ortant features, et
Hydrophytic Vegetation Present? Yes		Yeath a Committed Asses		
Hydric Soil Present? Yes		Is the Sampled Area within a Wetland?	Yes No	
Wetland Hydrology Present? Yes	● No ○	Air channe is learning agreement to the desired with a second		
Remarks: (Explain alternative procedures	here or in a separate repo	rt.)		
sensibilis.			· ,	
Hydrology				
Wetland Hydrology Indicators:	F WHAT I'M STORM SEARCH SHEET SEX		Secondary Indicators (minin	num of 2 required)
Primary Indicators (minimum of one requir	ed; check all that apply)		Surface Soil Cracks (B6))
Surface Water (A1)	✓ Water-Stained Leav	3 5	✓ Drainage Patterns (B10)
✓ High Water Table (A2) ✓ Saturation (A3)	Aquatic Fauna (B13		Moss Trim Lines (B16)	- (C2)
Water Marks (B1)	Marl Deposits (B15	S. S. San	Dry Season Water Table Crayfish Burrows (C8)	3 (C2)
Sediment Deposits (B2)	Hydrogen Sulfide C	eres along Living Roots (C3)	Saturation Visible on A	erial Imagery (C9)
Drift deposits (B3)	Presence of Reduce		Stunted or Stressed Pla	
Algal Mat or Crust (B4)	The state of the s	tion in Tilled Soils (C6)	✓ Geomorphic Position (D	
☐ Iron Deposits (B5)	Thin Muck Surface		Shallow Aquitard (D3)	\$24 5 31
☐ Inundation Visible on Aerial Imagery (B7)	Other (Explain in R	5 No. 1	Microtopographic Relief	f (D4)
Sparsely Vegetated Concave Surface (B8)			▼ FAC-neutral Test (D5)	
Field Observations: Surface Water Present? Yes No	Depth (inches):	1		
Water Table Present? Yes • No		6		
Saturation Present?			rology Present? Yes	● No ○
(includes capillary fringe) Describe Recorded Data (stream gauge, mo		previous inspections), if availa	able:	
Describe Necorata Data (Stream gauge, mo	Theorning Well, derial prioces	, previous inspections, in availa		
2 9				
Remarks:				
The wetland area is located in a lowspot the	it receives water from prec	ipitation and runoff from the su	urrounding commerical and	I roadways.

(0)	Absolute	C	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	50 march 5	Status	Number of Dominant Species
1 Fraxinus pennsylvanica	35	✓	FACW	That are OBL, FACW, or FAC:4 (A)
2. Quercus palustris	the same of the sa	~	FACW	Total Number of Dominant
3	0_			Species Across All Strata: 4 (B)
4	0_			
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6	0			That Are Obl., FACW, OF FAC.
7	0_			Prevalence Index worksheet:
C. L. (Cl. L. C (Plateira) 15ft	45 =	= Total Cover	į.	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)		2 <u></u> V		OBL species <u>25</u> x 1 = <u>25</u>
1,	_			FACW species
2				FAC species x 3 =
3				FACU species $0 \times 4 = 0$
4				UPL species $0 \times 5 = 0$
5	0_			AND
6	0_			Column Totals: <u>100</u> (A) <u>175</u> (B)
7	0			Prevalence Index = B/A = 1.750
Herb Stratum (Plot size: 5ft)	0 =	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Flot size Sit				✓ Rapid Test for Hydrophytic Vegetation
1. Onoclea sensibilis		✓	FACW	✓ Dominance Test is > 50%
2. Typha angustifolia	15	✓	OBL	✓ Prevalence Index is ≤3.0 ¹
3. Poa paludigena	10		OBL	Morphological Adaptations ¹ (Provide supporting
4. Verbesina alternifolia	10	Ц	FACW	data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0_			
7	0			Indicators of hydric soil and wetland hydrology must
8	0_			be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12.		H		
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)				greater triair 5.20 ft (1111) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0_			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0_			height.
	0 =	= Total Cover		9166
				Hydrophytic
				Vegetation Present? Yes ● No ○
				riesent:
Remarks: (Include photo numbers here or on a separate sh	100 PC 103 PE			
Vegetation was disurbed by seasonal conditions. Remanent area. Photographs are located in Appendix D.	plant materi	als allowed for	or positive	identification of the species observed within the wetland
area. Priotographs are located in Appendix D.				

Sampling Point: w-aeh-20200107-03b

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-21b

Sampling Point: w-aeh-20200107-03b

Profile Descr	iption: (Describe to	the depth r	needed to document	the indic	cator or c	onfirm the	absence of indicators.)		
Depth Matrix Redox Features						_			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture	Remarks	
0-18	10YR 6/1	95	7.5YR 6/8	5	C	M 	Silty Clay		
¹ Type: C=Cond	entration. D=Depletio	n. RM=Reduc	ced Matrix, CS=Covere	d or Coate	d Sand Gra	ins ² Locat	tion: PL=Pore Lining. M=Ma	trix	
Black Hist Hydrogen Stratified Depleted Thick Darl Sandy Mu Sandy Gle Sandy Rec Stripped N Dark Surfa	A1) Dedon (A2) Sulfide (A4) Layers (A5) Below Dark Surface (A Surface (A12) Ck Mineral (S1) Lyed Matrix (S4) Lock (S5) Matrix (S6) Lock (S7) (LRR R, MLRA)	149B)	Polyvalue Belov MLRA 149B) Thin Dark Surfa Loamy Mucky N Loamy Gleyed I Popleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depressi	ace (S9) (Lifineral (F1) Matrix (F2) ((F3) face (F6) Surface (F7) ions (F8)	LRR R, MLF) LRR K, L)	A 149B)	2 cm Muck (A10) (Coast Prairie Redox 5 cm Mucky Peat ox Dark Surface (S7) Polyvalue Below St Thin Dark Surface Iron-Manganese M Piedmont Floodpla Mesic Spodic (TA6) Red Parent Materia Very Shallow Dark Other (Explain in R	urface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R) in Soils (F19) (MLRA 149B)) (MLRA 144A, 145, 149B) al (F21) Surface (TF12)	
Restrictive La Type: Depth (incl	nes):						Hydric Soil Present?	Yes ● No ○	
Remarks:							L.		
Depleted mat Based on our	presented by both P	AECOM ider	ntified that the wetla					rea as a wetland. The wetland ed to an adjacent PFO/PUB	

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: OH Sampling Point: w-aeh-20200107-04
Investigator(s): AEH, SKM	Section, Township, Range: S. NA T. 2N R. 1W
Landform (hillslope, terrace, etc.): Lowland	Local relief (concave, convex, none): concave Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K Lat.:	41.090251 Long.: -80.610723 Datum: WGS 84
Soil Map Unit Name: RuB-Rittman-Urban land complex, 2 to 6 percent	slopes NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
	ly disturbed? Are "Normal Circumstances" present? Yes No
	oroblematic? (If needed, explain any answers in Remarks.) sampling point locations, transects, important features, et
	point locations, transects, important reactives, et
.,	Is the Sampled Area
nyane sen riesent.	within a Wetland? Yes \(\cap \) No \(\cap \)
Wetland Hydrology Present? Yes No	
Remarks: (Explain alternative procedures here or in a separate repo	rt.) Rd and west of Lettie St. and a commerical lot. The wetland is a PEM wetland with a
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1) Water-Stained Lea	ves (B9) Prainage Patterns (B10)
✓ High Water Table (A2) Aquatic Fauna (B1:	
✓ Saturation (A3)	
Water Marks (B1) Hydrogen Sulfide (
	eres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3) Presence of Reduc	
The Description (DE)	tion in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in F☐ Sparsely Vegetated Concave Surface (B8)	
Sparsely vegetated concave surface (66)	✓ FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	0.5
Water Table Present? Yes No Depth (inches):	
Saturation Present? (includes capillary fringe) Yes • No O Depth (inches):	Wetland Hydrology Present? Yes ● No ○
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	
The wetland receives hydrology from precipitation, runoff from surrou	nding commerical properties and two ephemeral streams.

(0)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1				That are OBL, FACW, or FAC:1(A)
2.	0			Total Number of Descious
3	0			Total Number of Dominant Species Across All Strata: 2 (B)
4.	-			
5.		H	8	Percent of dominant Species
6.	70 (F. 1928)	H		That Are OBL, FACW, or FAC: 50.0% (A/B)
	-	H		Prevalence Index worksheet:
7				
Sapling/Shrub Stratum (Plot size: 15ft)	=	= Total Cover	ē.	Total % Cover of: Multiply by:
1	0			OBL species <u>0</u> x 1 = <u>0</u>
		H		FACW species <u>50</u> x 2 = <u>100</u>
2		H	-	FAC species $0 \times 3 = 0$
3	2	H		FACU species $30 \times 4 = 120$
4				UPL species $0 \times 5 = 0$
5				AND THE PROPERTY AND TH
6	0	님		Column Totals: <u>80</u> (A) <u>220</u> (B)
7	0			Prevalence Index = B/A = 2.750
		= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)	-			Rapid Test for Hydrophytic Vegetation
1 Phalaris arundinacea	40	✓	FACW	4 - 400 45 (7-17 - 174) OX \$16,000000
2. Reynoutria japonica	30	✓	FACU	☐ Dominance Test is > 50%
3 Onoclea sensibilis		a Time	FACW	✓ Prevalence Index is ≤3.0 ¹
1 0 lt-i-		ā	FACW	Morphological Adaptations ¹ (Provide supporting
· ·		Ħ	TACV	data in Remarks or on a separate sheet)
5		H	-	Problematic Hydrophytic Vegetation 1 (Explain)
6				1 validation of building all and an extend building and
7	0	님		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			PROPERTY AND
9				Definitions of Vegetation Strata
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11,	0			breast height (DBH), regardless of height.
12		Ħ		
1-7		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)				greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	100	П		size, and woody plants less than 3.28 ft tall.
	0			
3		Ħ	-	Woody vine - All woody vines greater than 3.28 ft in height.
4.				neight.
	0=	= Total Cover		
				Hydrophytic Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate sl				
Vegetation was disurbed by seasonal conditions. Remanent	plant materi	als allowed for	or positive	identification of the species observed within the wetland
area. Photographs are located in Appendix D.				
				Telephone

Sampling Point: w-aeh-20200107-04

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: w-aeh-20200107-04

Profile Description: (Describe to	the depth	needed to docume	nt the indi	cator or c	onfirm the	absence of indicators	.)
Depth	Matrix		Redox Features					
	or (moist)	%	Color (moist)	%	Type 1		Texture	Remarks
0-18 5B	5/1	98	10YR 5/4	2	C		Silty Clay Loam	5% gravel
1 Type: C=Concentration	D=Denletic	n RM=Redu	ced Matrix CS=Cove	ered or Coate	ed Sand Gra	ains 2l oca	tion: PL=Pore Lining. M=	=Matriy
	•	iii Ki — Kedu	ccu Hutilix, co-cove	area or court	sa sana ore	iiii Loca		
Hydric Soil Indicator	5:		Debaratus Ba	laus Confine	(CO) (LDD I	,	Indicators for Pro	oblematic Hydric Soils: 3
Histosol (A1)	**		Polyvalue Be MLRA 149B)	low Surface	(58) (LRR I	ζ,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
Histic Epipedon (A2	.)		Thin Dark Su	rface (S9) (LRR R, MLF	RA 149B)	Coast Prairie Re	edox (A16) (LRR K, L, R)
Black Histic (A3)	141		Loamy Muck				5 cm Mucky Pe	at or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (/			✓ Loamy Gleye	to the state of the state of the state of			Dark Surface (57) (LRR K, L, M)
Stratified Layers (A			Depleted Ma		,		Polyvalue Belov	v Surface (S8) (LRR K, L)
Depleted Below Da		11)	Redox Dark S				Thin Dark Surfa	ace (S9) (LRR K, L)
Thick Dark Surface			Depleted Da				Iron-Manganes	e Masses (F12) (LRR K, L, R)
Sandy Muck Minera	. S 19.		Redox Depre		.,		Piedmont Floor	Iplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matri	x (S4)						Mesic Spodic (ГА6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)	2						Red Parent Mat	terial (F21)
Stripped Matrix (S6		10000					Very Shallow D	ark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA	(149B)					Other (Explain	in Remarks)
³ Indicators of hydrophy	ytic vegetatio	n and wetlar	nd hydrology must be	e present, ur	nless disturb	ed or proble	ematic.	
Restrictive Layer (if o	observed):							
Type:	, ooci vea ji							
Depth (inches):							Hydric Soil Present	? Yes O No 💿
								STATE OF THE STATE
Remarks:								
Loamy gleyed matrix	was met for	r this wetlar	nd area.					
Based on our site inve	ectinations	AFCOM ide	ntified that the we	tland meet	all three	criteria and	d classifed this area as	a wetland. The wetland is
represented by PEM w			nanca alat ale we	dana meet	. un uncc	arteria art	a classifica triis area as	a wedard. The wedard is

verbend 138kV Transmiss	sion Line	City/County:	Mahoning County	Samplii	ng Date: 07-Jan-20
a FirstEnergy Company		1	State: OH	Sampling Point:	w-aeh-20200107-05
ı		Section, To	wnship, Range: S.	T. 2N	R. 1W
e, etc.): Floodplain				ie): concave	Slope: 0.0 % / 0.0 °
			5 (5)		
		41.082504	Long.:	70108003000000000000	Datum: WGS 84
Chili-Urban land comp	plex, rolling			NWI classification:	NA
nditions on the site ty	ypical for this time of	year? Yes	;	f no, explain in Remark	**************************************
oil 🗌 , or Hydrol	logy 🗌 significant	tly disturbed?	Are "Normal Ci	rcumstances" present?	Yes No
oil ar Hydro	logy naturally i	nroblematic?	(If needed ev	alain any answers in De	marke)
	7.55		N N N	의	
resent? Yes •	No O			·	
Yes	No O			Yes No	
nt? Yes •	No O	Within	a wedand?		
	o or in a conarate ren	ort \			
ators:			_S	econdary Indicators (minin	num of 2 required)
num of one required;	check all that apply)			Surface Soil Cracks (B6)	
	Water-Stained Lea	aves (B9)	<u> </u>	✓ Drainage Patterns (B10)
			L	Moss Trim Lines (B16)	
		eritari estatuari	L		e (C2)
			L S S SEE	Crayfish Burrows (C8)	(00)
	Santa Santana and American		Roots (C3)		
	The state of the s		L	_	
			i (C6) □		(2)
erial Imagen/ (B7)	3 September 2003 197179 85 P.		Γ		(D4)
	Other (Explain in I	Remarks)	<u></u>		(04)
ave surface (50)				TAC-fleutidi Test (D3)	
V 0 N- 0					
100 120 100 120	Depth (inches):				
Yes O No 🗨	Depth (inches):		Walland D. dool	P Voc (● No ○
Yes ○ No •	Depth (inches):			50 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	⊕ No ∪
stream gauge, monito	ring well, aerial photos	s, previous inspe	ections), if available	:	
	and the intermittent str				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	a FirstEnergy Company Ce, etc.): Floodplain LRR K Chili-Urban land compositions on the site ty coil , or Hydrol coi	ce, etc.): Floodplain : LRR K	Section, To ce, etc.): Floodplain Local relief (co coli	State: OH Section, Township, Range: S. tee, etc.): Floodplain Local relief (concave, convex, none: LRR K Lat: 41.082504 Long:: -Chili-Urban land complex, rolling Inditions on the site typical for this time of year? Yes No (I none: -Chili-Urban land complex, rolling Inditions on the site typical for this time of year? Yes No (I none: -Chili-Urban land complex, rolling Inditions on the site typical for this time of year? Yes No (I needed, expands - Attach site map showing sampling point locations of yes - Attach site map showing sampling point locations of yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Other (Explain in Remarks) Is the Sampled Area within a Wetland? Yes No Depth (inches): Yes No Depth (inches): Yes No Depth (inches): Yes No Depth (inches): Wetland Hydroling Point No Depth (inches): Yes No Depth (inches): Wetland Hydroling Point Yes No Depth (inches): Wetland Hydroling Point Yes No Depth (inches): Wetland Hydroling Point Yes No Depth (inches): Wetland Hydroling Point Yes No Depth (inches): Yes Yes No Depth (inches): Yes Yes	a FirstEnergy Company State: OH Sampling Point: Section, Township, Range: S. T. 2N Local relief (concave, convex, none): concave LRR K Lat: 41.082504 Long.: -80.610718 NWI classification: Inditions on the site typical for this time of year? Yes No (If no, explain in Remark oil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Oil , or Hydrology naturally problematic? (If needed, explain any answers in Rengs - Attach site map showing sampling point locations, transects, imported in the sample of the sample

(0)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC:
2.	0_			Total Number of Deminerat
3	0_			Total Number of Dominant Species Across All Strata: 3 (B)
4				
5.	150	F		Percent of dominant Species
6.	7 (F) (F) (F)	H		That Are OBL, FACW, or FAC: 66.7% (A/B)
	-	H		Prevalence Index worksheet:
7				
Sapling/Shrub Stratum (Plot size: 15ft)	=	Total Cover	ē.	Total % Cover of: Multiply by:
1 Rosa multiflora	5	~	FACU	OBL species <u>40</u> x 1 = <u>40</u>
2.		_	11100	FACW species $20 \times 2 = 40$
		H	-	FAC species $2 \times 3 = 6$
3	-	H		FACU species $5 \times 4 = 20$
4				UPL species $0 \times 5 = 0$
5	0	님		A CONTROL OF THE CONT
6	0_			Column Totals: <u>67</u> (A) <u>106</u> (B)
7	0			Prevalence Index = B/A =1.582_
		Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)				Rapid Test for Hydrophytic Vegetation
1 Carex vulpinoidea	_ 35	~	OBL	ATT 200 51
2. Phalaris arundinacea	20	✓	FACW	✓ Dominance Test is > 50%
3. Juncus effusus		П	OBL	✓ Prevalence Index is ≤3.0 ¹
		n	FAC	Morphological Adaptations ¹ (Provide supporting
· · · · · · · · · · · · · · · · · · ·		Ħ	TAC	data in Remarks or on a separate sheet)
5		H	-	Problematic Hydrophytic Vegetation 1 (Explain)
6				1 validation of building all and an all and building and building
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			The state of the s
9	0_			Definitions of Vegetation Strata
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11,				breast height (DBH), regardless of height.
12		H	-	
	2.00	Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)		Total Corci		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	100	П		size, and woody plants less than 3.28 ft tall.
2	0	Ē		
3		Ħ	-	Woody vine - All woody vines greater than 3.28 ft in
4			-	height.
	0 =	Total Cover	ă II	
				Hydrophytic
				Vegetation Present? Yes No
Remarks: (Include photo numbers here or on a separate sh				
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed for	or positive	identification of the species observed within the wetland
area. Photographs are located in Appendix D.				

Sampling Point: w-aeh-20200107-05

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: w-aeh-20200107-05

Profile Description: (Describe to t	he depth nee	ded to document	t the indic	ator or c	onfirm the	e absence of indicators.)
Depth <u>Matrix</u>						
(inches) Color (moist)	<u></u>	Color (moist)	%	Type 1	Loc2	Texture Remarks
0-18 5B 4/1	95	10YR 5/6	5	C		Silty Clay Loam
		-				·
			_			
			_		-	
¹ Type: C=Concentration. D=Depletion.	DM-Poducod	Matrix CS-Covere	d or Coato	d Sand Gra	nine 2l ocal	otion: DI – Poro Lining M–Matrix
	KI1-Keduceu	Matrix, CS=COVER	d or coated	Janu Gra	iiiis -Locai	
Hydric Soil Indicators:		Debaselus Balas	u Cumfana /	CO) // DD C		Indicators for Problematic Hydric Soils: 3
Histosol (A1)		Polyvalue Belov MLRA 149B)	w Surrace (:	58) (LKK F	ζ,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)		Thin Dark Surfa	ace (S9) (L	RR R, MLR	(A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black Histic (A3)		Loamy Mucky N				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)		✓ Loamy Gleyed				Dark Surface (S7) (LRR K, L, M)
Stratified Layers (A5)		Depleted Matrix				Polyvalue Below Surface (S8) (LRR K, L)
Depleted Below Dark Surface (A11	.)	Redox Dark Su				Thin Dark Surface (S9) (LRR K, L)
Thick Dark Surface (A12)		Depleted Dark	10.00	"		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Muck Mineral (S1)		Redox Depress		,		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4)			10115 (1.0)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)						Red Parent Material (F21)
Stripped Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA 1	49B)					Other (Explain in Remarks)
³ Indicators of hydrophytic vegetation	and wetland h	ydrology must be p	resent, unl	ess disturt	ed or proble	lematic.
Restrictive Layer (if observed):						
Type:						
Depth (inches):						Hydric Soil Present? Yes ● No ○
						10.00
Remarks:						
Loamy gleyed matrix was met for t	his wetland a	area.				
Record on our cite investigations Al	COM identif	ind that the wetl:	and most	all throo	critoria and	d classifed this area as a wetland. The wetland is
represented by PEM wetland compe		ied triat trie wette	and meet	all tillee	ci iteria aric	d classifed this area as a wedaha. The wedaha is
representation by recommendation for						

Project/Site: Lincoln Park-Riverbend 138kV Transr	nission Line	City/County:	Mahoning County	S	ampling Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Compan	у		State: OH	Sampling Po	oint: upl-aeh-20200107-06
Investigator(s): AEH, SKM		Section, To	ownship, Range:	s. T. 2N	R. 1W
Landform (hillslope, terrace, etc.): Flat			oncave, convex, r		Slope: 0.0 % / 0.0
Subregion (LRR or MLRA): LRR K	Lat.:		20 2000		Datum: WGS 84
		41.090846	Long		
Soil Map Unit Name: RuB-Rittman-Urban land	d complex, 2 to 6 percent			NWI classifica	tion: NA
Are climatic/hydrologic conditions on the site	typical for this time of y	ear? Ye	s 💿 No 🔾	(If no, explain in Re	
Are Vegetation , Soil , or Hyd	rology 🗌 significant	ly disturbed?	Are "Normal	Circumstances" pre	sent? Yes No
Are Vegetation , Soil , or Hyd	rology naturally p	roblematic?	(If needed.	explain any answers	in Remarks.)
Summary of Findings - Attach s	ite map showing	sampling p	oint locatio	ns, transects,	important features, et
Hydrophytic Vegetation Present? Yes	No ●		10784 BD 108705		
Hydric Soil Present? Yes	No 💿		e Sampled Area n a Wetland?	Yes O No 💿	
Wetland Hydrology Present? Yes	No ●		ii u iveliana.		
Hydrology					
Wetland Hydrology Indicators:				Secondary Indicators	(minimum of 2 required)
Primary Indicators (minimum of one require	d; check all that apply)			Surface Soil Crac	ks (B6)
Surface Water (A1)	Water-Stained Lea	3 3		☐ Drainage Pattern	
High Water Table (A2)	Aquatic Fauna (B1			Moss Trim Lines	
Saturation (A3) Water Marks (B1)	Marl Deposits (B15	Šian varana		Dry Season Water	155 5
Sediment Deposits (B2)	Hydrogen Sulfide (Oxidized Rhizosph		Poots (C3)	Crayfish Burrows	e on Aerial Imagery (C9)
Drift deposits (B3)	Presence of Reduc		Roots (CS)	Stunted or Stress	5-20 M M M M M M M M M M M M M M M M M M M
Algal Mat or Crust (B4)	Recent Iron Reduc		s (C6)	Geomorphic Posi	
Iron Deposits (B5)	☐ Thin Muck Surface		3 (60)	Shallow Aquitard	(Set 1.0, V.) (Set 20, A.S. (1)
☐ Inundation Visible on Aerial Imagery (B7)	Other (Explain in F			Microtopographic	114704560
Sparsely Vegetated Concave Surface (B8)	Other (Explain in F	(Charle)		FAC-neutral Test	
Field Observations:					
Surface Water Present? Yes No	Depth (inches):	P			
Water Table Present? Yes No	Depth (inches):				
Saturation Present? (includes capillary fringe) Yes No	Depth (inches):		Wetland Hydi	ology Present?	Yes ○ No ●
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos	s, previous insp	ections), if availa	ble:	
Remarks:					
No wetland hydrology was present.					

(District 20ft	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover		Status	Number of Dominant Species
1 Ulmus rubra	5	✓	FAC	That are OBL, FACW, or FAC:3 (A)
2. Acer rubrum	5	✓	FAC	Total Number of Deminant
3	0_			Total Number of Dominant Species Across All Strata: 7 (B)
4	0			
5	S	F		Percent of dominant Species
6	City School Co.	H		That Are OBL, FACW, or FAC: 42.9% (A/B)
7	-	H		Prevalence Index worksheet:
1	57/10:	Tabal Causa		
Sapling/Shrub Stratum (Plot size: 15ft)	=	= Total Cover		Total % Cover of: Multiply by:
1 Rosa multiflora	25	✓	FACU	OBL species 0 x 1 = 0
2 Acer rubrum	15	V	FAC	FACW species <u>0</u> x 2 = <u>0</u>
3. Ulmus rubra	_	Ħ	FAC	FAC species <u>30</u> x 3 = <u>90</u>
		H	1710	FACU species $65 \times 4 = 260$
4		H		UPL species $0 \times 5 = 0$
5		H		Column Totals:95 (A)350 (B)
6		H		750 07 08 08 08 08 08 08 08 08 08 08 08 08 08
7				Prevalence Index = B/A = 3.684
Herb Stratum (Plot size: _5ft)	45 =	= Total Cover		Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
1. Solidago canadensis		~	FACU	Dominance Test is > 50%
2. Glechoma hederacea	15	✓	FACU	Prevalence Index is ≤3.0 ¹
3. Poa pratensis	10	✓	FACU	Morphological Adaptations ¹ (Provide supporting
4	0_	Ц		data in Remarks or on a separate sheet)
5	0_	님		Problematic Hydrophytic Vegetation ¹ (Explain)
6	0_			
7	0			¹ Indicators of hydric soil and wetland hydrology must
8	0			be present, unless disturbed or problematic.
9			0 0	Definitions of Vegetation Strata
10		Ħ		T W
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
	0	H		breast rieight (DDF1), regardless of height.
12	-			Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: _30ft)	=	= Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
	0	H		size, and woody plants less than 3.28 ft tall.
2	0	H		
3		H		Woody vine - All woody vines greater than 3.28 ft in
4	-	4		height.
	0 =	= Total Cover		
				Hydrophytic Vegetation
				Present? Yes ○ No ●
Remarks: (Include photo numbers here or on a separate she	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	100000	als allowed fo	or nositive	identification of the species observed within the unland
area.	Jane Hatelle	als allowed II	or positive	administration of the species observed within the upland
STOCK MARKET				

Sampling Point: upl-aeh-20200107-06

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: upl-aeh-20200107-06

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix			Redox Features Color (moist) % Type ¹ Loc ²				_	T		
(inches)	Color (%	Color	(moist)	%	Type ¹	Loc ²	Texture	Rem	arks
0-18	10YR	4/2	100						Silty Clay		
				-							
¹ Type: C=Cond	entration. D	=Depletion	n. RM=Red	uced Matrix,	CS=Covered	d or Coated	Sand Grain	ns ²Locat	tion: PL=Pore Lining. M=	Matrix	
Hydric Soil I	ndicators:								Indicators for Pro	hlematic Hydrid	Soils : 3
Histosol (A1)			Poly	value Below	Surface (S	8) (LRR R,				
	pedon (A2)				A 149B)	,	,) (LRR K, L, MLRA	
Black Histic (A3)				Thir	Dark Surfa	ce (S9) (LF	RR R, MLRA	149B)	The same of the same of	dox (A16) (LRR K	11 - 11 - 11 - 1 - 1 - 1 - 1 - 1 - 1 -
Hydrogen	Loa	Loamy Mucky Mineral (F1) LRR K, L)				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)					
	Loa	ny Gleyed M	1atrix (F2)				7) (LRR K, L, M)				
Stratified Layers (A5) Depleted Below Dark Surface (A11)				Depleted Matrix (F3)					Polyvalue Below	Surface (S8) (LR	R K, L)
100000	Redox Dark Surface (F6)					Thin Dark Surface (S9) (LRR K, L)					
Thick Dark Surface (A12)				Depleted Dark Surface (F7)					Iron-Manganese Masses (F12) (LRR K, L, R)		
_	ck Mineral (S	. 50			Redox Depressions (F8)				Piedmont Floodplain Soils (F19) (MLRA 149B)		
The second second	yed Matrix (S	34)		Kea	E Redux Depressions (Fo)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Redox (S5)								Red Parent Material (F21)			
Stripped N					Very Shallow Dark Surface (TF12)						
Dark Surface (S7) (LRR R, MLRA 149B)								Other (Explain in Remarks)			
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.											
			rana mene	na myarolog	muse be p	cocincy armo	oo diotarbe	o or proble			
Restrictive La	ayer (if obs	erved):									
Туре:									Hydric Soil Present?	. v	No •
Depth (incl	hes):								nyuric Soil Presents	Yes 🔾	NO ©
Remarks:											
No hydric soil	s were met	within th	ne upland	area.							

Wetland RLP-25

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mai	honing County	Samplin	ng Date: 07-Jan-20
Applicant/Owner: ATSI, , a FirstEnergy Company		State: OH	Sampling Point:	w-aeh-20200107-07
Investigator(s): AEH, SKM	Section, Town	ship, Range: S.	T. 2N	R. 1W
Landform (hillslope, terrace, etc.): Floodplain	Local relief (conca	ave, convex, none):	none	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K La	at.: 41.081422	Long.: -8	30.611463	Datum: WGS 84
	41.001422			
Soil Map Unit Name: CoC - Chili-Urban land complex, rolling			NWI classification:	NA
Are climatic/hydrologic conditions on the site typical for this time	of year? Yes 🖲	No 🔾 (If no	, explain in Remark	· [
Are Vegetation, Soil, or Hydrology signifi	cantly disturbed?	Are "Normal Circu	mstances" present?	Yes ● No O
Are Vegetation , Soil , or Hydrology natura	ally problematic?	(If needed explain	n any answers in Re	marks)
Summary of Findings - Attach site map showing	12 Si		@	353
Hydrophytic Vegetation Present? Yes • No			· · · · · · · · · · · · · · · · · · ·	
Hydric Soil Present? Yes No •		mpled Area	o No ⊙	
Wetland Hydrology Present?	within a V	Netiand?	,	
Remarks: (Explain alternative procedures here or in a separate				
Hydrology				
Wetland Hydrology Indicators:	(28	Secor	ndary Indicators (minim	um of 2 required)
Primary Indicators (minimum of one required; check all that appl	1000		Surface Soil Cracks (B6)	
Surface Water (A1) Water-Stained	3 5		Orainage Patterns (B10)	
✓ High Water Table (A2) Aquatic Fauna Approximation (A2)			Moss Trim Lines (B16)	(00)
✓ Saturation (A3)			Ory Season Water Table	e (C2)
	fide Odor (C1)		Crayfish Burrows (C8) Saturation Visible on Ae	rial Imageny (CO)
[ospheres along Living Root educed Iron (C4)	, , ,	Stunted or Stressed Plan	
	teduced fron (C4) Reduction in Tilled Soils (C6		Geomorphic Position (D	
☐ Iron Deposits (B5) ☐ Thin Muck Su			Shallow Aquitard (D3)	-)
In and other Maible on April Inspect (P7)			Microtopographic Relief	(D4)
Inundation visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	i in Remarks)		AC-neutral Test (D5)	(- //
Field Observations: Surface Water Present? Yes No Depth (inch	ec).			
v- A N- O	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Control to Designation Control	es):4	Wetland Hydrology	Present? Yes	● No ○
(includes capillary fringe) Yes No Depth (inch			edicative restaurant 1,000-000 200	N.2004 9000
Describe Recorded Data (stream gauge, monitoring well, aerial ph	iotos, previous inspectio	ons), if available:		
Remarks:				
The wetland receives water from precipitation and the intermitten	t stream running throug	gh the wetland.		

101000000000000000000000000000000000000	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC:3 (A)
2.	0			Total Number of Deminerat
3	0_			Total Number of Dominant Species Across All Strata: 4 (B)
4				M. A.
5.	No.	F		Percent of dominant Species
6.	70 Ta 1021	H		That Are OBL, FACW, or FAC: 75.0% (A/B)
	-	H		Prevalence Index worksheet:
7				
Sapling/Shrub Stratum (Plot size: 15ft)	=	= Total Cove	ē.	Total % Cover of: Multiply by:
1	0			OBL species <u>55</u> x 1 = <u>55</u>
		H		FACW species <u>15</u> x 2 = <u>30</u>
2		H	-	FAC species5 x 3 =15
3	2			FACU species $15 \times 4 = 60$
4				UPL species5 x 5 =25
5	0			AND STATEMENT ST
6	0			Column Totals: <u>95</u> (A) <u>185</u> (B)
7	0			Prevalence Index = B/A =1.947_
(Diet -! Eft	0 =	= Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)				Rapid Test for Hydrophytic Vegetation
1 Typha angustifolia	25	✓	OBL	6 1 1 200 50 (February 2014) D. Etcherooti
2. Carex vulpinoidea	20	~	OBL	✓ Dominance Test is > 50%
3. Symphyotrichum ericoides		~	FACU	✓ Prevalence Index is ≤3.0 ¹
0-0-0-00		~	FACW	Morphological Adaptations ¹ (Provide supporting
		П		data in Remarks or on a separate sheet)
5. Juncus effusus	_	H	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Daucus carota			UPL	1 validation of building all and an extend building and
7. Rumex crispus	5	님	FAC	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8				The state of the s
9				Definitions of Vegetation Strata
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11,				breast height (DBH), regardless of height.
12.		П	-	
1	-	= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)			20	greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.				size, and woody plants less than 3.28 ft tall.
2	0			
3		H	-	Woody vine - All woody vines greater than 3.28 ft in
4	-		-	height.
	0 =	= Total Cove	ă II	
				Hydrophytic
				Vegetation Present? Yes No ○
				11333111
Remarks: (Include photo numbers here or on a separate sh				
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed f	or positive	identification of the species observed within the wetland
area. Photographs are located in Appendix D.				
				l

Sampling Point: w-aeh-20200107-07

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-25

Sampling Point: w-aeh-20200107-07

Profile Descr	iption: (Des	cribe to	the depth	needed to	documen	t the indi	cator or c	onfirm the	e absence of indicators.)	
Depth										
(inches)			%		(moist)	%	Type 1		Texture Remarks	
<u>0-12</u>	10YR	3/1	95	10YR	5/6	_ 5	C		Silty Clay Loam	
¹ Type: C=Cond	entration. D	=Depletio	n. RM=Redi	uced Matrix,	CS=Covere	ed or Coate	ed Sand Gra	ins ² Loca	ation: PL=Pore Lining. M=Matrix	
Hydric Soil I	ndicators:			240 10000					Indicators for Problematic Hydric Soils: 3	
Histosol (A1)					w Surface ((S8) (LRR F	ξ,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Epip	pedon (A2)				A 149B)				Coast Prairie Redox (A16) (LRR K, L, R)	
☐ Black Hist	ic (A3)			10			LRR R, MLF		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4)			Loar	ny Mucky I	Mineral (F1) LRR K, L)			
Stratified	Layers (A5)			Loar	ny Gleyed	Matrix (F2))		Dark Surface (S7) (LRR K, L, M)	
The state of the s	Below Dark S	urface (A:	11)	☐ Dep	leted Matri	x (F3)			Polyvalue Below Surface (S8) (LRR K, L)	
100000	Surface (A1			Red	ox Dark Su	ırface (F6)			Thin Dark Surface (S9) (LRR K, L)	
	ck Mineral (S			Dep	leted Dark	Surface (F	7)		Iron-Manganese Masses (F12) (LRR K, L, R)	
_	yed Matrix (S	. 50		Red	ox Depress	sions (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)	
Sandy Red		,							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
The second of the second	fatrix (S6)								Red Parent Material (F21)	
	ace (S7) (LRF	D MIDA	140P)						Very Shallow Dark Surface (TF12)	
21									Other (Explain in Remarks)	
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology	must be p	oresent, un	less disturt	ed or proble	lematic.	
Restrictive La	ayer (if obs	erved):								
Type: _co	ncrete	3								
Depth (incl									Hydric Soil Present? Yes ○ No •	
Remarks:	100)1								8	
		<u> </u>		4						
Redox dark su	ırface was ı	net for t	his wetlan	d area.						
Based on our	site investi	nations /	AECOM ide	entified that	the wetl	and meet	all three	criteria and	d classifed this area as a wetland. The wetland is	
represented b				and the trial	. uic wea	and meet	an ance	criteria and	a classified this died as a freddia. The freddia is	
	e.		*							

Wetland RLP-26

Project/Site: Lincoln Park-Riverbend 138kV T	ransmission Line	City/County:	Mahoning County	Samplin	ng Date: 07-Jan-20
Applicant/Owner: ATSI, , a First Energy Co	ompany		State: OH	Sampling Point:	w-aeh-20200107-08
Investigator(s): AEH, SKM		Section, To	wnship, Range: S.		R. 1W
Landform (hillslope, terrace, etc.): Flat		1,040,000,000,000	oncave, convex, none	e): none	Slope: 0.0 % / 0.0
Subregion (LRR or MLRA): LRR K	Lat.:	41.081544	Long.:	-80.613102	Datum: WGS 84
		11.001511		NWI classification:	<u></u>
Soil Map Unit Name: Ua-Udorthents, loa			<u> </u>	0	50000000 T
Are climatic/hydrologic conditions on the	e site typical for this time of y	rear? Yes	s ● No ○ (If	no, explain in Remark	
Are Vegetation, Soil, or	Hydrology significant	ly disturbed?	Are "Normal Cir	cumstances" present?	Yes ● No O
Are Vegetation , Soil , or	Hydrology naturally p	roblematic?	(If needed, expl	ain any answers in Re	marks.)
Summary of Findings - Attac	h site map showing	sampling p	oint locations,	transects, impo	ortant features, et
Hydrophytic Vegetation Present? Ye	es No				
Hydric Soil Present?	es 🔾 No 🖲		Sampled Area a Wetland?	'es 🔾 No 💿	
Wetland Hydrology Present?	es 💿 No 🔾	17094731855			
boundary was determined by the prepo	nacrance of hydrophyde fierb	accous vegetati	orrinadaling. Typna	angustiona and i inagi	inces australis.
Hydrology Wetland Hydrology Indicators:			_Se	condary Indicators (minim	num of 2 reauired)
Primary Indicators (minimum of one re	quired; check all that apply)			Surface Soil Cracks (B6)	
Surface Water (A1)	Water-Stained Lea	ves (B9)		Drainage Patterns (B10))
✓ High Water Table (A2)	Aquatic Fauna (B1	3)		Moss Trim Lines (B16)	
✓ Saturation (A3)	Marl Deposits (B15	Sign parameter	<u>_</u>	Dry Season Water Table	: (C2)
Water Marks (B1)	Hydrogen Sulfide			Crayfish Burrows (C8)	i-11(CO)
Sediment Deposits (B2) Drift deposits (B3)	Oxidized Rhizosph		Roots (C3)	Saturation Visible on Ae Stunted or Stressed Plan	
Algal Mat or Crust (B4)	Presence of Reduc		- (C6)	Geomorphic Position (D	, ,
☐ Iron Deposits (B5)	Thin Muck Surface		(0)	Shallow Aquitard (D3)	-7
☐ Inundation Visible on Aerial Imagery (B7		A 50		Microtopographic Relief	(D4)
Sparsely Vegetated Concave Surface (B8		temanoj	•	FAC-neutral Test (D5)	
Field Observations:					
Surface Water Fresche.	No Depth (inches):				
Water Table Present? Yes • I	No O Depth (inches):	4			a O
Saturation Present? (includes capillary fringe) Yes •	No O Depth (inches):	2	Wetland Hydrolo	gy Present? Yes	● No ○
Describe Recorded Data (stream gauge, Remarks:	monitoring well, aerial photos	s, previous insp	ections), if available:		
The wetland received water from precipi	tiation and runoff from the su	rrounding areas	i.		

101	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1				That are OBL, FACW, or FAC:1(A)
2.	0			Total Number of Descious
3	0			Total Number of Dominant Species Across All Strata: 1 (B)
4				
5.	100	F	8	Percent of dominant Species
6.	70 (F. 1928)	H		That Are OBL, FACW, or FAC: 100.0% (A/B)
	-	H		Prevalence Index worksheet:
7				
Sapling/Shrub Stratum (Plot size: 15ft)	=	= Total Cover		Total % Cover of: Multiply by:
1	0			OBL species <u>70</u> x 1 = <u>70</u>
		H		FACW species <u>35</u> x 2 = <u>70</u>
2		H	-	FAC species $0 \times 3 = 0$
3	2	H		FACU species $0 \times 4 = 0$
4				UPL species $0 \times 5 = 0$
5				AND STATEMENT AN
6	0			Column Totals: <u>105</u> (A) <u>140</u> (B)
7	0			Prevalence Index = B/A =
		= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)	-			✓ Rapid Test for Hydrophytic Vegetation
1 Typha angustifolia	70	✓	OBL	
2. Phragmites australis	20		FACW	✓ Dominance Test is > 50%
3. Phalaris arundinacea		Ē	FACW	✓ Prevalence Index is ≤3.0 ¹
	_	F F	Tricit	Morphological Adaptations ¹ (Provide supporting
4		Ħ	-	data in Remarks or on a separate sheet)
5		Ħ	-	Problematic Hydrophytic Vegetation ¹ (Explain)
6				1 validation of building all and an all and building and building
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8				PROPERTY AND
9				Definitions of Vegetation Strata
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11,	0			breast height (DBH), regardless of height.
12		Ħ	- 3	
1-1		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)				greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	100	П		size, and woody plants less than 3.28 ft tall.
2	0			
4		E .	3	Woody vine - All woody vines greater than 3.28 ft in height.
4				neight.
	=	= Total Cover		
				Hydrophytic Vegetation
				Present? Yes • No
Remarks: (Include photo numbers here or on a separate sh				
Vegetation was disurbed by seasonal conditions. Remanent	plant materi	als allowed fo	r positive	identification of the species observed within the wetland
area. Photographs are located in Appendix D.				

Sampling Point: w-aeh-20200107-08

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-26

Sampling Point: w-aeh-20200107-08

Profile Descripti	ion: (Describe to	the depth r	needed to docume	nt the indi	cator or c	onfirm the	absence of indicators.)
Depth	Matrix			edox Featı			_	-
(inches)	Color (moist)	%	Color (moist)		Type 1		Texture	Remarks
0-4	10YR 4/1	95	10YR 5/6	_ 5	C		Silty Clay Loam	50% fill
1 Type: C=Concent	ration D=Depletion	nn RM=Reduc	red Matrix CS=Cove	red or Coate	ed Sand Gra	ains 2l oca	tion: PL=Pore Lining. M=I	Matrix
Hydric Soil Indi		on. Kin-Kedak	ced Matrix, es=cover	- Cu or could	sa sana ore	11113 LOCA		
_			Polyvalue Beld	ou Curfoso	(CO) (LDD I	,	Indicators for Pro	blematic Hydric Soils: 3
Histosol (A1)			MLRA 149B)	ow Surrace	(58) (LKK I	ζ,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epipedo			Thin Dark Sur	face (S9) (LRR R, MLF	RA 149B)	Coast Prairie Re	dox (A16) (LRR K, L, R)
Black Histic (/	(a)(1)		Loamy Mucky				5 cm Mucky Pea	t or Peat (S3) (LRR K, L, R)
Hydrogen Sul			Loamy Gleyed	na mana and an			Dark Surface (S	7) (LRR K, L, M)
Stratified Lay			✓ Depleted Mat		,		Polyvalue Below	Surface (S8) (LRR K, L)
	ow Dark Surface (A	A11)	Redox Dark S				Thin Dark Surface	ce (S9) (LRR K, L)
Thick Dark Su			Depleted Dark		7)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Sandy Muck N			Redox Depres	W	.,		Piedmont Flood	olain Soils (F19) (MLRA 149B)
Sandy Gleyed							Mesic Spodic (T	A6) (MLRA 144A, 145, 149B)
Sandy Redox							Red Parent Mate	erial (F21)
Stripped Matr							Very Shallow Da	rk Surface (TF12)
Dark Surface	(S7) (LRR R, MLRA	A 149B)					Other (Explain in	n Remarks)
³ Indicators of hyd	drophytic vegetation	on and wetlan	d hydrology must be	present, un	nless disturt	ed or proble	ematic.	
Restrictive Laye								
Type:grave								
Depth (inches)							Hydric Soil Present?	Yes O No •
STANLET ALL TO STANLES)							0 (Mathing 1976)
Remarks:								
Depleted matrix	was met for this	wetland are	ea. Refusal occurre	ed at 4 inch	hes due to	the surro	unding parking pad.	
Based on our site	e investigations	AECOM ider	ntified that the wet	land moet	all three	critoria and	d classifed this area as	a wetland. The wetland is
represented by P			idiled didt die wei	dana meet	. all allee	ancha an	a classifica triis area as i	a wedana. The wedana 13

Wetland RLP-27

Applicant/Owner: ATSL, a Firetizer-tyrowney Section	Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County	Sampling Date: 07-Jan-20
Landform (hilistope, terrace, etc.): Lowland Local relief (concave, convex, none): none Slope: 0.0 % / 0.0 Subregion (LRR or MLRA): LRR K Lat: 41.088615 Long: -80.638187 Datum: WGS 84 Soil Map Unit Name: Un-Udorthents, loamy, 2 to 25 percent slopes	Applicant/Owner: ATSI, , a FirstEnergy Company	State: OH	Sampling Point: w-aeh-20200107-01
Sulf Map Unit Name: Use Udorthents, loamy, 2 to 25 percent slopes Are climatic/hydrologic conditions on the site typical for this time of year? Are Vegetation	Investigator(s): AEH, SKM	Section, Township, Range:	s. T. 2N R. 2W
Soil Map Unit Name: Ua-Udorthents, loamy, 2 to 25 percent slopes	Landform (hillslope, terrace, etc.): Lowland	Local relief (concave, convex, r	ione): none Slope: 0.0 % / 0.
Soil Map Unit Name: Us-Udorthents, loamy, 2 to 25 percent slopes	Subregion (LRR or MLRA): LRR K Lat.:	41.088615 Long	-80.638187 Datum: WGS 84
Are Vegetation		12.000025	
Are "Normal Circumstances" present? Yes No naturally problematic? (If needed, explain any answers in Remarks.) Summary of Findings - Attach site map showing sampling point locations, transects, important features, et Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No No Wetland Hydrology Indicators: No	Are climatic/hydrologic conditions on the site typical for this time of v	vear? Yes No	(If no, explain in Remarks.)
Are Vegetation			Y (A) N (
Summary of Findings - Attach site map showing sampling point locations, transects, important features, et Hydrophytic Vegetation Present? Yes No Book Within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland was within a lowland present on top of a disturbed mound. The wetland was considered a PEM with Populus deltoides along the edge of the wetland. Cyperus esculentus dominates the herbaceous layer within this PEM wetland. Hydrology Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Soil Crades (86) Primary Indicators (minimum of one required; check all that apply) Surface Soil Crades (86) Primary Indicators (minimum of one required; check all that apply) Surface Soil Crades (86) Primary Indicators (minimum of one required; check all that apply) Surface Soil Crades (86) Primary Indicators (minimum of one required; check all that apply) Surface Soil Crades (86) Primary Indicators (minimum of 2 required) Surface Soil Crades (86) Dariage Soil Crades (8			F
Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No No Wetland Avenue within a lowland present on top of a disturbed mound. The wetland was considered a PEM with Populus deltroides along the edge of the wetland. Cyperus esculentus dominates the herbaceous layer within this PEM wetland. Hydrology Wetland Avenue within a lowland present on top of a disturbed mound. The wetland was considered a PEM with Populus deltroides along the edge of the wetland. Cyperus esculentus dominates the herbaceous layer within this PEM wetland. Hydrology Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Soil Cracks (86) Indicate Water (A1) Aquatic Fauna (813) Most Table (A2) Aquatic Fauna (813) Most Table (A2) Most Table (A2) Mare Parks (81) Most Table (A2) Mare Parks (81) Most Table (A2) Mos			
Hydric Soil Present? Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators (minimum of one required; check all that apply) Wetland Hydrology Indicators (minimum of 2 required) Wetland Hydrology Indicators (minimum of 2 required) Surface Vater (A1) Water Table (A2) Water Table (A2) Water Table (A2) Wetland Hydrology Indicators (minimum of 2 required) Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Indicators (Minimum of 2 required) Wetland Hydrology Indicators (Minimum of 2 required) Water Table (A2) Water Table (A2) Water Table (A2) Water Table (A2) Wetland Hydrology Present? Yes No Depth (inches):		sampling point location	ns, transects, important reatures, et
## within a Wetland Hydrology Present? Wetland Hydrology Wetland Hydrology Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Surface Water (A1) Water Hark (B1) Surface Water (A1) Water Hark (B1) Surface Water (A2) Water Water (B1) Surface Water Water Water (B1) Surface Water Water Water (B1) Surface Water Water (B1) Surface Water Water (B1) Surface Water Water (B1) Surface Water Water Water (B1) Surface Water Water (B1) Surface Water Water (B1) Surface Water Water Water (B1) Surface Water Water Water (B1) Surface Water Water Water Water (B1) Surface Water Water (B1) Surface Water Water Water (B1) Surface Water Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Depth (Inches): Water Alber Present? Yes No Depth (Inches): Water Alber Present? Yes No Depth (Inches): Water Alber Present? Yes No Dept		To the Compled Area	
Remarks: (Explain alternative procedures here or in a separate report.) Wetland was within a lowland present on top of a disturbed mound. The wetland was considered a PEM with Populus deltoides along the edge of the wetland. Cyperus esculentus dominates the herbaceous layer within this PEM wetland. Wetland Hydrology Indicators: Primary Indicators (minimum of 2 required) Surface Soil Cracks (86) Primary Indicators (minimum of 2 required) Surface Soil Cracks (86) Drainage Patterns (810) Aquatic Fauna (813) Mass Trim Lines (816) Saturation (A3) Mat Deposits (815) Dry Season Water Table (C2) Water Marks (81) Hydrogen Sulfide Odor (C1) Sediment Deposits (82) Oxidized Rhizospheres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift deposits (83) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Sparsely Vegetated Concave Surface (88) Thin Muck Surface (C7) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (88) Pethol Observations: Surface Water Present? Yes No Depth (Inches): Wetland Hydrology Present? Yes No Pepth (Inches):	Tryante don't redent.		Yes No
Wetland was within a lowland present on top of a disturbed mound. The wetland was considered a PEM with Populus deltoides along the edge of the wetland. Cyperus esculentus dominates the herbaceous layer within this PEM wetland. Wetland Hydrology Methods Metho	Wetland Hydrology Present? Yes ● No ○	STATE OF THE STATE	
## Wetland. Cyperus esculentus dominates the herbaceous layer within this PEM wetland. ## Wetland Hydrology ## Wetland Hydrology Indicators: Primary Indicators (minimum of 2 required)	Remarks: (Explain alternative procedures here or in a separate repo	ort.)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)			
Primary Indicators (minimum of one required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Drainage Patterns (B10) Moss Trim Lines (B16) Dry Season Water Table (C2) Water Marks (B1) Dry Season Water Table (C2) Water Marks (B1) Dry Season Water Table (C2) Crayfish Burrows (C8) Sediment Deposits (B2) Drift deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) FAC-neutral Test (D5) Field Observations: Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Remarks:	Hydrology		
Surface Water (A1) Surface Water (A2) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Dry Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Drift deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B8) Sparsely Vegetated Concave Surface (B8) FAC-neutral Test (D5) Water Marks (B1) Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Pepth (inches): Yes No Pe	Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) Marl Deposits (B15) Dry Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Drift deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Sediment Lines (B16) Dry Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Thin Muck Surface (C7) Shallow Aquitard (D3) Moirrotopographic Relief (D4) FAC-neutral Test (D5) FAC-neutral Test (D5)	Primary Indicators (minimum of one required; check all that apply)		Surface Soil Cracks (B6)
Saturation (A3)		3 5	
Water Marks (B1)			
Sediment Deposits (B2)			
□ Drift deposits (B3) □ Presence of Reduced Iron (C4) □ Stunted or Stressed Plants (D1) □ Algal Mat or Crust (B4) □ Recent Iron Reduction in Tilled Soils (C6) ☑ Geomorphic Position (D2) □ Iron Deposits (B5) □ Thin Muck Surface (C7) □ Shallow Aquitard (D3) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Microtopographic Relief (D4) □ FAC-neutral Test (D5) □ FAC-neutral Test (D5) □ Thin Muck Surface (C7) □ Shallow Aquitard (D3) □ Microtopographic Relief (D4) □ FAC-neutral Test (D5) □ FAC-neutral Test (D			
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Shallow Aquitard (D3) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? (includes capillary fringe) Yes No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:			
□ Iron Deposits (B5) □ Thin Muck Surface (C7) □ Shallow Aquitard (D3) □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Microtopographic Relief (D4) □ Sparsely Vegetated Concave Surface (B8) □ FAC-neutral Test (D5) □ FAC			
□ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Remarks) □ Microtopographic Relief (D4) □ Sparsely Vegetated Concave Surface (B8) □ FAC-neutral Test (D5) □ F	Torre Demonstra (DE)	Constitution of the Consti	Control of the contro
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Ves No Depth (inches): Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Town debies Visible on Assist Townson (DZ)		Microtopographic Relief (D4)
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? (includes capillary fringe) Yes No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:			FAC-neutral Test (D5)
Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Ves No No Depth (inches): No No Depth (inches): Wetland Hydrology Present? Yes No No Depth (inches): No Remarks:	Field Observations:		
Saturation Present? (includes capillary fringe) Depth (inches): Wetland Hydrology Present? Yes No No No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:			
Saturation Present? (includes capillary fringe) Depth (inches): Wetland Hydrology Present? Yes No No No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Water Table Present? Yes No • Depth (inches):		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Saturation Present? Ves No Penth (inches):	Wetland Hydr	ology Present? Yes No
		s, previous inspections), if availa	ble:
	Pomarks:		
		low guals. The wetland receive	a water from rainfall

(D)	Absolute	C	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Populus deltoides	5	✓	FAC	That are OBL, FACW, or FAC:2(A)
2	0_			T
3	_ 0_			Total Number of Dominant Species Across All Strata: 3 (B)
4				Species visious visiou
5.	No.	H		Percent of dominant Species
6		H		That Are OBL, FACW, or FAC: 66.7% (A/B)
		H		
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15ft)	5=	= Total Cover		Total % Cover of: Multiply by:
	0			OBL species x 1 =
1				FACW species <u>20</u> x 2 = <u>40</u>
2			-	FAC species5 x 3 =15
3				FACU species $5 \times 4 = 20$
4	0	님		UPL species $0 \times 5 = 0$
5	0			AN CONTROL OF THE PROPERTY AND A STATE OF THE PARTY OF TH
6	0	빌		Column Totals: 30 (A) 75 (B)
7	0			Prevalence Index = B/A = 2.500
		= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)	-			
1 Cyperus esculentus	20	✓	FACW	Rapid Test for Hydrophytic Vegetation
2. Symphyotrichum ericoides		~	FACU	✓ Dominance Test is > 50%
3	-	Ä		✓ Prevalence Index is ≤3.0 ¹
		H		☐ Morphological Adaptations ¹ (Provide supporting
4		H		data in Remarks or on a separate sheet)
5		H		Problematic Hydrophytic Vegetation ¹ (Explain)
6				1
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9	0_			Definitions of Vegetation Strata
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12.		H	-	
12.		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)		- Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
	-	F		size, and woody plants less than 3.28 ft tall.
2		H		
3		H	- 1	Woody vine - All woody vines greater than 3.28 ft in
4		Ш.		height.
	0 =	= Total Cover	i I	
				Hydrophytic
				Vegetation Present? Yes ● No ○
				Present:
Remarks: (Include photo numbers here or on a separate sh	neet.)			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed for	or positive	identification of the species observed within the wetland
area. Photographs are located in Appendix D.				*

Sampling Point: w-aeh-20200107-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Wetland RLP-27

Sampling Point: w-aeh-20200107-01

Profile Descr	iption: (De	scribe to	the depth	needed to de	ocument	the indic	cator or c	onfirm the	absence of indicators	·.)	
Depth (in check)		Matrix				dox Featu					
(inches)	Color (Color (n	noist)	%	Type 1	Loc²	Texture	Remarks 50% gravel	
0-3	10YR	3/1	100						Silty Clay Loam	50% gravel	
3-18	10YR	6/1	85		5/6	15	C	<u>M</u>	Silty Clay Loam	50% gravei	
										·	
¹ Type: C=Cond	entration. D	=Depletion	n. RM=Red	uced Matrix, CS	S=Covere	d or Coate	d Sand Gra	ains ² Loca	tion: PL=Pore Lining. M	=Matrix	
Hydric Soil I				,						oblematic Hydric Soils: 3	
Histosol (Polyva	lue Belov	v Surface (S8) (LRR F	ξ,			
	pedon (A2)				149B)	,		*		0) (LRR K, L, MLRA 149B)	
Black Hist	ic (A3)					ace (S9) (L		. 8	The second second second	edox (A16) (LRR K, L, R) eat or Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4)				commence and a second	lineral (F1)				S7) (LRR K, L, M)	
Stratified	Layers (A5)					Matrix (F2)				w Surface (S8) (LRR K, L)	
✓ Depleted	Below Dark S	Surface (A:	11)	✓ Deple						ace (S9) (LRR K, L)	
Thick Dark	k Surface (A1	12)				rface (F6)	7\			se Masses (F12) (LRR K, L, R)	
_	ck Mineral (S				Depressi	Surface (F7	()		Piedmont Floo	dplain Soils (F19) (MLRA 149B)
	yed Matrix (54)		Redox	Depress	ions (Fo)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
Sandy Red									Red Parent Ma	terial (F21)	
	Matrix (S6)								Very Shallow D	ark Surface (TF12)	
	ace (S7) (LRF								Other (Explain	in Remarks)	
³ Indicators of	hydrophytic	vegetatio	n and wetla	and hydrology r	nust be p	resent, unl	ess disturt	ed or proble	ematic.		
Restrictive La	ayer (if obs	erved):									
Туре:	1036 66	13							1000 EARL SEAS 1000 FEB.		
Depth (incl	hes):								Hydric Soil Presen	t? Yes • No O	
Remarks:									30		
The soil profil	e indicated	the pres	ence of de	epleted matrix	c and de	pleted be	low a dar	k surface.	The soil was disturbe	d with gravel.	
500 M				FA 185010 NO.050		5-03 ASCX				Devid Additional good live in	
Based on site indirectly hydrony						meet all t	hree crite	ria and cla	ssifed this area as a v	vetland. The wetland is a P	EM and is
munectly myu	lologically (connected	i to the M	anoming Rive							

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning Sampling Date: 20-Aug-20
Applicant/Owner: FirstEnergy	State: OH Sampling Point: Wetland RLP-28
Investigator(s): M.R.Kline, L.H.Jacks	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): concave Slope: 1.7 % / 1.0 °
Subregion (LRR or MLRA): LRR R	Lat.: 41.100878 Long.: -80.594211 Datum: WGS84
Soil Map Unit Name: JtB; Jimtown loam, 2 to 6 percent slo	
Are climatic/hydrologic conditions on the site typical for thi	time of year? Yes No (If no, explain in Remarks.)
	significantly disturbed? Are "Normal Circumstances" present? Yes No •
	naturally problematic? (If needed, explain any answers in Remarks.)
	owing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes • No O	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a wettand?
hydrophytic vegetation dominated by Acer rubrum. Field	observed within the depression. The wetland boundary follows edge of depression and dentification number is W-200820-MRK-001 PFO.
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all the	
	Stained Leaves (B9) Prainage Patterns (B10) Fauna (B13) Moss Trim Lines (B16)
	eposits (B15)
	en Sulfide Odor (C1) Crayfish Burrows (C8)
	d Rhizospheres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	the of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Iron Reduction in Tilled Soils (C6)
	uck Surface (C7) Shallow Aquitard (D3)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other	Explain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-neutral Test (D5)
Field Observations:	
	(inches):0
The state of the s	(inches): 0 Wetland Hydrology Present? Yes • No O
(Includes capillary fringe)	n (inches):0
Describe Recorded Data (stream gauge, monitoring well, a NA	erial photos, previous inspections), if available:
Remarks:	
The source of hydrology is surface runoff collecting within	the forested depression.

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
Tree Structure	% Cover		Status	Number of Dominant Species
1. Acer rubrum		~	FAC	That are OBL, FACW, or FAC:4(A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				
5				Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6				That are obt., Facw, or Fac.
7	0			Prevalence Index worksheet:
Sanling/Shruh Stratum (Plot size: 15' radius)	50 =	= Total Cove		Total % Cover of: Multiply by:
Jupiniq/Jinub Strutum (************************************		55	menres	OBL species <u>10</u> x 1 = <u>10</u>
1. Acer rubrum	25	~	FAC	FACW species 10 x 2 = 20
2. Lindera benzoin	50 H	~	FACW	FAC species 75 x 3 = 225
3				FACU species $0 \times 4 = 0$
4	0			
5	0			
6	0			Column Totals: <u>95</u> (A) <u>255</u> (B)
7	0			Prevalence Index = B/A = 2.684
		= Total Cove	,	Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' radius)				Rapid Test for Hydrophytic Vegetation
1 . Glyceria striata	10	✓	OBL	
2				
3				✓ Prevalence Index is ≤3.0 ¹
4				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				Problematic Hydrophytic Vegetation (Explain)
7	-			1 Indicators of hydric soil and wetland hydrology must
		Ħ		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata:
9		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: None)	10=	= Total Cove		greater than 3.28 ft (1m) tall
				The Allbert Committee of the Committee o
1.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2				oize, and woody planto loss than oize it tall.
3				Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0=	= Total Cove	•	
			Š	
				Hydrophytic
				Vegetation Present? Yes No
B	-LL \			
Remarks: (Include photo numbers here or on a separate s	•			
Herbaceous vegetation is sparse within the concave surfa	ace. Photogra	phs of the w	etland hab	itat are located in Appendix D.

Sampling Point: Wetland RLP-28

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Wetland RLP-28

Profile Descri	iption: (Des	scribe to	the depth	needed to d	locument	the indic	ator or co	onfirm the	absence of indicator	s.)				
Depth									-					
(inches)	Color (moist)	%	Color (moist)	%_	Type ¹		<u>Texture</u> <u>Remarks</u>					
0-4	10YR	4/2	80	10YR	5/6	20	C	M,PL	Silt Loam		10% oxidized	I rhizospheres		
4-14	2.5Y	7/2	80	10YR	5/6	20	С	М	Silt Loam					
		-		-			-		-					
		-												
¹ Type: C=Cond	centration. D	=Depletio	n. RM=Red	uced Matrix,	CS=Covere	ed or Coate	ed Sand Gr	ains ² Loca	ation: PL=Pore Lining.	M=Ma	atrix			
Hydric Soil I	ndicators:								Indicators for P	roble	matic Hydri	c Soils : 3		
Histosol (A	A1)					w Surface	(S8) (LRR I	٦,	2 cm Muck (A					
Histic Epip	pedon (A2)				4 149B)						(A16) (LRR			
Black Histi	ic (A3)						LRR R, ML				r Peat (S3) (L	CSS 25 44		
Hydrogen	Sulfide (A4)) LRR K, L)			(LRR K, L, M)	80 80 90		
Stratified I	Layers (A5)				Proceedings of the said	Matrix (F2))				ırface (S8) (LI	b sur-work commercial		
Depleted I	Below Dark S	Surface (A	11)		eted Matri				Thin Dark Su			Comment of the contract of the		
Thick Dark	k Surface (A1	12)				rface (F6)	71				asses (F12) (I	2000		
Sandy Mu	ck Mineral (S	51)				Surface (F	7)					(MLRA 149B)		
Sandy Gle	yed Matrix (S	54)		Red0	x Depress	ions (F8)			Mesic Spodic	(TA6)	(MLRA 144A	, 145, 149B)		
Sandy Red									Red Parent Material (F21)					
Stripped N									☐ Very Shallow	Dark	Dark Surface (TF12)			
☐ Dark Surfa	ace (S7) (LRF	R R, MLRA	149B)						Other (Explai	n in R	emarks)	5.9		
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology	must be p	resent, un	less distur	oed or probl	ematic.		274			
Restrictive La	aver (if obs	erved):												
Type:												1970		
Depth (inch	nes):								Hydric Soil Prese	nt?	Yes	No O		
Remarks:									100					
	. !	iono AF(COM : done	ماط طماط لمماكة:	. fauasta	d damea.		م مصطلع الم	wikania fan a wakland		alaasifiad bh	favorted		
wetland.	e investigat	ions, AEC	LOM Ident	med that th	e foreste	a aepress	sion meet	all three c	riteria for a wetiand	and	ciassinea tn	e area as a forested		
Wedana														
												l		

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning Sampling Date: 06-Oct-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: Ohio Sampling Point: Wetland RLP-29a
Investigator(s): Brian Miller	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Valley	Local relief (concave, convex, none): concave Slope: % /
	41.096392 Long.: -80.611935 Datum: NAD83
Soil Map Unit Name: Chargin Loam - Ck	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
	tly disturbed? Are "Normal Circumstances" present? Yes • No O
	, and the meaning product
52: 53528 (535 857 85 87 88	problematic? (If needed, explain any answers in Remarks.) sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	manipling point locations, transects, important reatures, etc.
	Is the Sampled Area
V 0 N- 0	within a Wetland? Yes No
Wetland Hydrology Present?	
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	eves (B9)
High Water Table (A2) Aquatic Fauna (B1	3) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B1	
Water Marks (B1) Hydrogen Sulfide	
	eres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in	
Sparsely Vegetated Concave Surface (B8)	✓ FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	0
Water Table Present? Yes No Depth (inches):	
Saturation Present? (includes capillary fringe) Yes No • Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
The source of hydrology is from precipitation and overflow of the ab	utting perennial.

Tree Stratum (Plot size:)	Absolute		Indicator	Dominance Test worksheet:
	% Cover	_ орссисы.	Status	Number of Dominant Species
1,				That are OBL, FACW, or FAC:
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				
5				Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6				That Are obe, I Acw, of I Ac.
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size:)	=	Total Cover		Total % Cover of: Multiply by:
	0_			OBL species
1				FACW species $10 \times 2 = 20$
2	-	H		FAC species $15 \times 3 = 45$
3				FACU species $0 \times 4 = 0$
4		H		UPL species $0 \times 5 = 0$
5		H		Column Totals:100 (A)140 (B)
6		H		
7				Prevalence Index = B/A = 1.400
Herb Stratum (Plot size: 5ft radius)	=	Total Cover		Hydrophytic Vegetation Indicators:
	5		OBL	Rapid Test for Hydrophytic Vegetation
1. Typha latifolia		~		✓ Dominance Test is > 50%
2. Leersia oryzoides		~	OBL	✓ Prevalence Index is ≤3.0 ¹
3. Scirpus atrovirens	40	*	OBL	Morphological Adaptations ¹ (Provide supporting
4. Phalaris arundinacea		H	FACW	data in Remarks or on a separate sheet)
5. Persicaria maculosa	50 50 and 50	H	FAC	☐ Problematic Hydrophytic Vegetation ¹ (Explain)
6				1 7 - 41 - 4
7	3.5	H		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata:
9				Definitions of Vegetation Strata.
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12	0			Sapling/shrub - Woody plants less than 3 in. DBH and
Was to Mark State (Diet size)	100=	Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size:)				
1		H		Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2				oles, and woody planto loss than oles it tall.
3				Woody vine - All woody vines greater than 3.28 ft in
4				height.
	=	Total Cover		
				11.4
				Hydrophytic Vegetation
				Present? Yes • No O
Remarks: (Include photo numbers here or on a separate sh	eet.)			
See Appendix D for photographs of the wetland habitat.				

Sampling Point: Wetland RLP-29a

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Wetland RLP-29a

Profile Descri	iption: (Des	scribe to	the depth	needed to de	ocument	the indic	ator or co	nfirm the	absence of indicators.)				
Depth		Matrix		_									
(inches)	Color (moist)	%	Color (n	noist)	%_	Type ¹	Loc2	Texture Remarks				
0-4	10YR	5/2	80	7.5R	3/4	10	C		Loam				
+mottle				10YR	2/1	10	D	М	Loam				
4-18	10YR	4/1	95	10YR	5/4	5	C	М	Loam				
					· ·								
¹ Type: C=Cond	centration. D	=Depletio	n. RM=Red	uced Matrix, C	S=Covere	ed or Coate	ed Sand Gr	ains ² Loca	ration: PL=Pore Lining. M=Matrix				
Hydric Soil I	ndicators:	207							Indicators for Problematic Hydric Soils : 3				
Histosol (A						w Surface ((S8) (LRR F	₹,					
Histic Epipedon (A2)				MLRA	149B)		•		☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B) ☐ Coast Prairie Redox (A16) (LRR K, L, R)				
Black Histi				Thin I	Dark Surf	ace (S9) (LRR R, MLF	RA 149B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
Hydrogen	Sulfide (A4)) LRR K, L		Dark Surface (S7) (LRR K, L, M)				
Stratified I	Layers (A5)					Matrix (F2))		Polyvalue Below Surface (S8) (LRR K, L)				
Depleted I	Below Dark S	Surface (A	11)		ted Matri	00030000000			Thin Dark Surface (S9) (LRR K, L)				
Thick Dark	k Surface (A1	12)				rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)				
Sandy Muc	ck Mineral (S	51)				Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Gle	yed Matrix (S	54)		Redox	Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)				
Sandy Red	dox (S5)												
Stripped M	latrix (S6)								Very Shallow Dark Surface (TF12)				
Dark Surfa	ace (S7) (LRF	R R, MLRA	149B)						Other (Explain in Remarks)				
³ Indicators of	hvdrophvtic	vegetatio	n and wetla	nd hydrology	must be r	resent, un	less disturt	ed or probl					
				, ,,									
Restrictive La	ayer (11 obs	erveu):											
Type:									Hydric Soil Present? Yes No				
Depth (inch	ies):								, 13 110				
Remarks:													
Due to the pre	esence of v	wetland h	nydrology,	dominance	of hydro	phytic ve	egetation,	and hydri	ic soils, the area was identified as a wetland.				

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning Sampling Date: 06-Oct-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: Ohio Sampling Point: Wetland RLP-29b
Investigator(s): Brian Miller	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Valley	Local relief (concave, convex, none): concave Slope: % /
	41.096568 Long.: -80.611515 Datum: NAD83
Soil Map Unit Name: Chargin Loam - Ck	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of y	year? Yes No (If no, explain in Remarks.)
	tly disturbed? Are "Normal Circumstances" present? Yes • No •
	, and the man entermounted product
52: 535280 that 157 20 17 20	problematic? (If needed, explain any answers in Remarks.)
	sampling point locations, transects, important features, etc.
	Is the Sampled Area
V- 0 N- 0	within a Wetland? Yes • No
Wetland Hydrology Present? Yes NO	
Hydrology	
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water-Stained Lea	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	
Saturation (A3) Marl Deposits (B1	
☐ Water Marks (B1) ☐ Hydrogen Sulfide	The street of th
	neres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift deposits (B3) ☐ Presence of Redu	ced Iron (C4) Stunted or Stressed Plants (D1)
The state of the s	ction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Sparsely Vegetated Concave Surface (B8)	Remarks) Microtopographic Relief (D4) FAC-neutral Test (D5)
Sparsely vegetated concave surface (66)	FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	0
Water Table Present? Yes No Depth (inches):	● Wetland Hydrology Present? Yes ● No ○
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	
The source of hydrology is from precipitation and backwater flow fro	m the perennial stream.

220 ft - 1	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 330 ft radius)	% Cover	Species?	Status	Number of Dominant Species
1. Acer rubrum	10	✓	FAC	That are OBL, FACW, or FAC:4 (A)
2	0			Total Number of Dominant
3				Species Across All Strata: 5 (B)
4	0			
5	0			Percent of dominant Species
6				That Are OBL, FACW, or FAC: 80.0% (A/B)
7				Prevalence Index worksheet:
		= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft radius)				OBL species 45 x 1 = 45
1. Spiraea tomentosa	20	✓	FACW	FACW species 50 x 2 = 100
2. Lonicera morrowii	15	✓	FACU	18 L.
3. Lindera benzoin	_		FACW	FAC species $10 \times 3 = 30$
4	0			FACU species $20 \times 4 = 80$
5				UPL species $0 \times 5 = 0$
6				Column Totals: <u>125</u> (A) <u>255</u> (B)
7	0			Prevalence Index = B/A = 2.040
		= Total Cover		Prevalence index = b/A =
Herb Stratum (Plot size: 5ft)		- Total Cover	1	Hydrophytic Vegetation Indicators:
1 Scirpus cyperinus	45	✓	OBL	Rapid Test for Hydrophytic Vegetation
6 A seignantia a secondaria		~	FACW	✓ Dominance Test is > 50%
The Control of the Co			FACW	✓ Prevalence Index is ≤3.0 ¹
			pa to the contract of the cont	☐ Morphological Adaptations ¹ (Provide supporting
4. Ageratina altissima		H	FACU	data in Remarks or on a separate sheet)
5		H		☐ Problematic Hydrophytic Vegetation ¹ (Explain)
6				1- "
7				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9	0_			Definitions of Vegetation Strata:
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12	0_			Continue to the Manda plants land than 2 in DRU and
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size:)				ground than old it (iii) taili
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cover		6294
				Hydrophytic
				Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate she	et.)			
See Appendix D for photographs of the wetland habitat.				

Sampling Point: Wetland RLP-29b

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Wetland RLP-29b

Depth	iption: (De		ine depth	neeaea to aocu			ontirm the	absence of indicators.)				
(inches)	Color (<u>Matrix</u> (moist)	%	Color (mois	Redox Fea		Loc ²	Texture Remarks				
0-6	10YR	4/1	90		1/6 10	C	M	Loam				
6-18	N	4/1	85	7.5YR 5	5/6 15	C		Loam				
0 10				7.511				Louin				
								-				
Type: C=Con)=Denletio	n RM=Red	uced Matrix CS=C	overed or Co	ated Sand Gr	ains 21 oca	ation: PL=Pore Lining. M=	Matrix			
Hydric Soil 1	10000		n. Kri-Kco	acca Haarx, co-c	overed or con	ated Juna Gr	anis Locc		200			
				Polyaglue	Below Surfac	o (CQ) (LDD L		Indicators for Prob	olematic Hydric Soils: 3			
The second second	Histosol (A1) Histic Epipedon (A2)				BB)	e (30) (LKK)	'	() () () () () () () () () ()) (LRR K, L, MLRA 149B)			
Black Histic (A3)				Thin Dark	Surface (S9)	(LRR R, MLI	RA 149B)	F-1	dox (A16) (LRR K, L, R)			
	Sulfide (A4)	Y		Loamy M	ucky Mineral (F1) LRR K, L)		t or Peat (S3) (LRR K, L, R)			
Stratified Layers (A5) Loamy Gleyed Matrix (F2)								Dark Surface (S7) (LRR K, L, M)				
	Depleted Below Dark Surface (A11) Depleted Matrix (F3)								Surface (S8) (LRR K, L)			
	k Surface (A	D-1- D-1 C (FC)						☐ Thin Dark Surface (S9) (LRR K, L) ☐ Iron-Manganese Masses (F12) (LRR K, L, R)				
	uck Mineral (Depleted	Dark Surface	(F7)		Piedmont Floodplain Soils (F19) (MLRA 149B)				
	eyed Matrix (Redox De	pressions (F8)						
Sandy Re								Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)				
	Matrix (S6)							Very Shallow Dark Surface (TF12)				
☐ Dark Surf	ace (S7) (LR	R R, MLRA	149B)					Other (Explain in				
3 _{Indicators of}	f hydronhytic	c vegetatio	n and wetla	nd hydrology mus	t he precent	unless distur	had or probl		i Kellidiks)			
			iii ana weda	na nyarology mas	t be present,	dilicas distait	oca or probi	emade.				
Restrictive L	ayer (if obs	served):										
Type:	20000200							Hydric Soil Present?	Yes ● No ○			
Depth (inc	hes):							Tryune Son Frescher	res 😊 No 😊			
Due to the pi		wetland I	nydrology,	dominance of h	ydrophytic v	vegetation,	and hydric	soils, the area along the	ne perennial stream was identified			

Project/Site: Lincoln Park-Rive	erbend 138kV Transmiss	ion Line	City/County:	Mahoning		Sampling Date:	06-Oct-20
Applicant/Owner: ATSI, , a	FirstEnergy Company		State: Ohio	Sampling Po	int:	Wetland RLP	-30
Investigator(s): Brian Miller			Section, To	wnship, Range:	s. T. 2	2N	R. 1W
Landform (hillslope, terrace,	etc.): Valley		Local relief (co	ncave, convex, n	one): concave	Slope	: %/
Subregion (LRR or MLRA):	-	Lat.:	41.095290		-80.612739		atum: NAD83
Soil Map Unit Name: Chargi	in Loam - Ck				-	ication: R4SBC	
Are climatic/hydrologic cond	ditions on the site typ	oical for this time of y	ear? Yes	o No ○	(If no, explain in	Remarks.)	
Are Vegetation , Soi	l 🗌 , or Hydrolo	av significan	tly disturbed?	Are "Normal	Circumstances" p	resent? Yes	● No ○
Are Vegetation, Soi		_	problematic?				
Summary of Finding		151 (0.51):	425		explain any answe	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	fosturos etc
Hydrophytic Vegetation Pre		No O	samping po	Jiiit location	s, transects,	important i	eatures, etc.
		No O	Is the	Sampled Area			
Hydric Soil Present?	V (a)	No O	within	a Wetland?	Yes No		
Wetland Hydrology Present	? Yes 🖭	No U					
Hydrology							
Primary Indicators (minimum Surface Water (A1)		check all that apply) Water-Stained Lea	aves (B9)		Secondary Indicato Surface Soil Co Drainage Patte	racks (B6)	reauired)
High Water Table (A2)		Aquatic Fauna (B	(3)		Moss Trim Line	es (B16)	
Saturation (A3)		Marl Deposits (B1	5)		Dry Season W	ater Table (C2)	
Water Marks (B1)		Hydrogen Sulfide	. 1955 10		Crayfish Burro		
Sediment Deposits (B2)			neres along Living	Roots (C3)	These or a way	ble on Aerial Image	ery (C9)
Drift deposits (B3)		Presence of Redu		5.55		essed Plants (D1)	
☐ Algal Mat or Crust (B4)☐ Iron Deposits (B5)			ction in Tilled Soils	s (C6)	✓ Geomorphic P		
Inundation Visible on Aeria	al Imageny (R7)	Thin Muck Surface			Shallow Aquita Microtopograp		
Sparsely Vegetated Conca	an : 보통 (1. 1. 프랑스 레이스 프랑스)	Other (Explain in	Remarks)		✓ FAC-neutral Te		
spursery regented conta	ve surface (50)				▼ TAC Heddal To	.st (D3)	
Field Observations:	0 0		2900				
Surface Water Present?	Yes No •	Depth (inches):	0				
Water Table Present?	Yes No •	Depth (inches):	0	Watland Hydr	ology Present?	Yes No	\bigcirc
Saturation Present? (includes capillary fringe)	Yes No •	Depth (inches):	- TO 100	308 NOV 8017 N	- 1000	res 🤍 No	
Describe Recorded Data (st	ream gauge, monito	ring well, aerial phot	os, previous ins	pections), if avail	able:		
N/A							
Remarks: The source of hydrology is	from precipitation an	d overflow from the	abutting stream	1.			

- (Plot size	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	<u>opecies:</u>	Status	Number of Dominant Species
1,				That are OBL, FACW, or FAC:1(A)
2				Total Number of Dominant
3				Species Across All Strata:1(B)
4				
5				Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6	0			That Are Obl., I Acw, of I Ac.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size:)	0 =	Total Cover		Total % Cover of: Multiply by:
	0			OBL species
1				FACW species $15 \times 2 = 30$
2				FAC species15 x 3 =45
3	20			FACU species $5 \times 4 = 20$
4				UPL species $0 \times 5 = 0$
5				Column Totals: 105 (A) 165 (B)
6				AND THE PROPERTY OF THE PROPER
7				Prevalence Index = B/A =1.571_
Herb Stratum (Plot size: _5ft radius)	=	Total Cover		Hydrophytic Vegetation Indicators:
NATIONAL AND	65		ODI	✓ Rapid Test for Hydrophytic Vegetation
1. Leersia oryzoides		✓	OBL	✓ Dominance Test is > 50%
2. Cinna arundinacea			FACW	✓ Prevalence Index is ≤3.0 ¹
3. Urtica dioica			FAC	Morphological Adaptations ¹ (Provide supporting
4. Epilobium coloratum		H	OBL	data in Remarks or on a separate sheet)
5. Persicaria virginiana		H	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Impatiens capensis			FACW	1
7. Tussilago farfara			FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8				
9	0			Definitions of Vegetation Strata:
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
(Disk size	105=	Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size:)				
1				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2	0			Size, and woody plants less than 5.20 it tall.
3				Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0 =	Total Cover		
			3	
				Hydrophytic Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	eet.)			
See Appendix D for photographs of the wetland habitat.	,			
occorreptionally 2 (c) photographic or the rectains habitati				

Sampling Point: Wetland RLP-30

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Wetland RLP-30

Profile Descri	iption: (Des	cribe to	the depth	needed to d	ocument	the indic	ator or co	onfirm the	absence of indicators.)				
Depth (in about)					dox Featı								
(inches)	Color (%	Color (%_	Type ¹		Texture	Remarks			
0-2	10YR	2/1	_ 75	10YR	4/6	_ 15	C	<u>M</u>	Loam				
				10YR	4/1	10	D	M	- ·				
2-18	10YR	5/1	95	10YR	5/6	5	С	M	Loam				
									-				
						_	_						
1										54. P. C.			
	1000	=Depletio	n. RM=Redi	iced Matrix, (S=Covere	ed or Coate	ed Sand Gr	ains ² Loca	ation: PL=Pore Lining. M=Ma				
Hydric Soil I				П			(60) (1 ==		Indicators for Proble	ematic Hydric Soils: 3			
Histosol (A					alue Belo A 149B)	w Surface	(S8) (LRR I	ζ,	2 cm Muck (A10) (LRR K, L, MLRA 149B)			
Histic Epipedon (A2) Black Histic (A3)						ace (S9) (LRR R, ML	RA 149B)	Coast Prairie Redo	x (A16) (LRR K, L, R)			
	- 15 St					150 ij (5) LRR K, L	. 50	5 cm Mucky Peat of	r Peat (S3) (LRR K, L, R)			
	Sulfide (A4) Layers (A5)					Matrix (F2			Dark Surface (S7)	(LRR K, L, M)			
	Below Dark S	Surface (A	11)		eted Matri		500		Polyvalue Below Surface (S8) (LRR K, L)				
	k Surface (A1		11)	Redo	x Dark Su	rface (F6)			Thin Dark Surface				
	ck Mineral (S			Deple	eted Dark	Surface (F	7)		The second secon	asses (F12) (LRR K, L, R)			
	yed Matrix (S			Redo	x Depress	ions (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Rec													
Stripped M													
	ace (S7) (LRF	R R, MLRA	149B)						Other (Explain in R				
³ Indicators of	hydrophytic	vegetatio	n and wetla	ad hydrology	must be r	recent un	loce dietur	and or probl		cilia ks)			
			ii ana weda	ia riyarology	must be p	reserie, un	iicaa diaturi	oca or probi	Ciriduc.				
Restrictive La	ayer (if obs	erved):											
Type:									Hydric Soil Present?	Yes ● No ○			
Depth (inch	nes):									110			
Remarks:													
Due to the pro wetland.	esence of v	vetland h	nydrology,	dominance	of hydro	phytic ve	getation,	and hydric	soils, the area along the	stream as identified as a			
wettand.													

Project/Site: Lincoln Park-River	on Line	City/County: Mahoning Sampling Date: 06-Oct-20								
Applicant/Owner: ATSI, , a Fir	stEnergy Company		State: Oh	io Sampling Pe	oint:		Wetla	nd RLP-31		
Investigator(s): Brian Miller			Section	n, Township, Range:	s.	т.	2N			R. 1W
Landform (hillslope, terrace, e	tc.): Valley		Local relief	f (concave, convex,	none)	: concave		Slope:	2.0 % /	1.1 °
Subregion (LRR or MLRA):	-	Lat.:	41.094743			80.612947			1: NAD83	100000000000000000000000000000000000000
Soil Map Unit Name: Dekalb	en in nove	9-09 / Pre-20		// // // // // // // // // // // // //	-	NWI classi	fication:			
		The state of the s	SALL SAUNGE	Yes No				•		
Are climatic/hydrologic condit						no, explain i		Yes •	No O	
Are Vegetation, Soil	, or Hydrolo	gy 🗌 significan	tly disturbed	d? Are "Norma	l Circi	umstances"	present?	res 🙂	NO O	
Are Vegetation, Soil	, or Hydrolo	gy naturally	problematic	? (If needed,	expla	in any answ	ers in Rei	marks.)		
Summary of Findings		- 10 TO	sampling	point location	ns, t	ransects	, impo	rtant feat	ures, e	etc.
Hydrophytic Vegetation Prese		No O								
Hydric Soil Present?		No O		the Sampled Area ithin a Wetland?	Υe	es 💿 No 🤇)			
Wetland Hydrology Present?	Yes	No O	860							
Hydrology										
Wetland Hydrology Indicator	rs:				Seco	ondary Indica	tors (minim	num of 2 reauir	red)	
Primary Indicators (minimum	n of one required;	check all that apply)				Surface Soil (-	
Surface Water (A1)		☐ Water-Stained Le	aves (B9)		~	Drainage Pat				
High Water Table (A2)		Aquatic Fauna (B	13)			Moss Trim Li	nes (B16)			
Saturation (A3)		Marl Deposits (B1	5)			Dry Season V		e (C2)		
Water Marks (B1)		Hydrogen Sulfide				Crayfish Burr			managery.	
Sediment Deposits (B2)		Oxidized Rhizospl						rial Imagery (C	(9)	
Drift deposits (B3)		Presence of Redu				Stunted or St				
☐ Algal Mat or Crust (B4)☐ Iron Deposits (B5)		Recent Iron Redu		Soils (C6)	()	Geomorphic		2)		
Inundation Visible on Aerial	Imagery (B7)	Thin Muck Surfac			-	Shallow Aqui Microtopogra		(D4)		
Sparsely Vegetated Concave	전경 (B. 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19	Other (Explain in	Remarks)		-	FAC-neutral		(04)		
Field Observations:										
	Yes O No 💿	Depth (inches):	0							
Water Table Present?	Yes O No •	Depth (inches):	200							
Saturation Present?	res O No 💿	Depth (inches):	2000	Wetland Hyd	irolog	y Present?	Yes	● No ○		
(includes capillary fringe) Describe Recorded Data (stre	9.25		-	inspections) if ava	ilablo	•				
N/A	am gauge, monito	ning well, deliai priot	os, previous	inspections), ii ava	шаые	•				
Remarks:										
The source of hydrology is from	om precipitation an	d overflow from the	abutting str	eams.						

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
4 Platence and death lie	F			Number of Dominant Species
1 Platanus occidentalis		~	FACW	That are OBL, FACW, or FAC:3(A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				
5				Percent of dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)
6				That Are OBL, FACW, or FAC: 75.0% (A/B)
7				Prevalence Index worksheet:
750 - 150 -	5 =	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft radius)				OBL species 60 x 1 = 60
1 Rosa multiflora	5	~	FACU	FACW species 30 x 2 = 60
2				FAC species5 _ x 3 =15
3	0			1987/17 10. 1977/2004 At 15 17 17 17 17 17 17 17 17 17 17 17 17 17
4	0			FACU species $5 \times 4 = 20$
5	0			UPL species $0 \times 5 = 0$
6				Column Totals: 100 (A) 155 (B)
7				Prevalence Index = B/A = 1.550
		= Total Cover		100 Contrate (100 Contrate (10
Herb Stratum (Plot size: 5ft radius)		- Total cover		Hydrophytic Vegetation Indicators:
1. Scirpus atrovirens	45	~	OBL	Rapid Test for Hydrophytic Vegetation
O. Failahi wa salawat wa		~	OBL	✓ Dominance Test is > 50%
S Sistematical destinations		Ė	FACW	✓ Prevalence Index is ≤3.0 1
		H	FACW	Morphological Adaptations ¹ (Provide supporting
· · · · · · · · · · · · · · · · · · ·		H	FACW	data in Remarks or on a separate sheet)
		H	0.0000000	☐ Problematic Hydrophytic Vegetation ¹ (Explain)
6. Rumex crispus			FAC	¹ Indicators of hydric soil and wetland hydrology must
7	5.0	H		be present, unless disturbed or problematic.
8				
9				Definitions of Vegetation Strata:
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Sanling/obruh Woody plants loss than 3 in DBH and
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size:)				3 (,
1,				Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3				Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cover		
				Hydrophytic
				Vegetation Present? Yes • No •
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sl	neet.)			
See Appendix D for photographs of the wetland habitat.				

Sampling Point: Wetland RLP-31

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Wetland RLP-31

Profile Descr	iption: (Des	scribe to	the depth	needed to doc	ıment th	e indic	ator or co	onfirm the	absence of indicators.)					
Depth														
(inches)	Color (moist)	%	Color (mo	ist)	<u>%</u>	Type ¹	Loc2	Texture	Remarks				
0-7	10YR	4/2	95	10YR	5/4 5	5	C		Loam					
7-16	10YR	4/1	90	10YR	4/6 1	10	C	M	Loam					
¹ Type: C=Cond	centration. D	=Depletio	n. RM=Redu	uced Matrix, CS=	Covered o	or Coate	d Sand Gra	ains ² Loca	ition: PL=Pore Lining. M=I	Matrix				
Hydric Soil I	ndicators:								Indicators for Prob	lematic Hydric Soils: 3				
Histosol (A1)					urface (S8) (LRR F	₹,		(LRR K, L, MLRA 149B)				
Histic Epip	Histic Epipedon (A2)				19B)				F-1	ox (A16) (LRR K, L, R)				
Black Hist	ic (A3)				RR R, MLF			or Peat (S3) (LRR K, L, R)						
Hydrogen	Sulfide (A4)						LRR K, L)		Dark Surface (S7					
Stratified	Layers (A5)				Sleyed Mat					Surface (S8) (LRR K, L)				
Depleted	Below Dark S	Surface (A	11)		Matrix (F	2005			Thin Dark Surface (S9) (LRR K, L)					
Thick Dar	k Surface (A1	12)			ark Surfac				☐ Iron-Manganese Masses (F12) (LRR K, L, R)					
Sandy Mu	ck Mineral (S	51)			Dark Sur		')		Piedmont Floodplain Soils (F19) (MLRA 149B)					
Sandy Gle	yed Matrix (S	54)		Redox D	epression	s (F8)				6) (MLRA 144A, 145, 149B)				
Sandy Red	dox (S5)								Red Parent Material (F21)					
Stripped N	4atrix (S6)								Very Shallow Dar					
Dark Surfa	ace (S7) (LRF	R R, MLRA	\ 149B)						Other (Explain in					
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology mu	st be pres	sent, uni	ess disturt	ed or proble						
Restrictive La	aver (if ohe	erved):												
Type:	ayer (ii obs	erveu).												
Depth (incl	nec).								Hydric Soil Present?	Yes ● No ○				
	ics)								***	20000 07.44P				
Remarks:						200	79.732		20.13	300 V 30 W				
Due to the pr	esence of v	wetland h	nydrology,	dominance of	hydroph	ytic ve	getation,	and hydric	c soils, the area was ide	ntified as a wetland.				

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning Sampling Date: 06-Oct-20
Applicant/Owner: ATSI, , a FirstEnergy Company	State: Ohio Sampling Point: Wetland RLP-32
Investigator(s): Brian Miller	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Valley	Local relief (concave, convex, none): concave Slope: 2.0 % / 1.1
	41.094332 Long.: -80.613826 Datum: NAD83
Soil Map Unit Name: Chargin Loam - Ck	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of	year? Yes No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significan	atly disturbed? Are "Normal Circumstances" present? Yes • No
	problematic? (If needed, explain any answers in Remarks.)
GE: 1550-780 (MAR) 1570 (MAR) (MAR)	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes • No O	Is the Sampled Area within a Wetland?
Wetland Hydrology Present? Yes No	within a Wetland?
Remarks: (Explain alternative procedures here or in a separate rep	-41
Hydrology	
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) High Water Table (A2) Water-Stained Le	
Saturation (A3) Aduatic Fauria (B) Marl Deposits (B1)	
Water Marks (B1) Hydrogen Sulfide	Consideration and the
	heres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift deposits (B3) ☐ Presence of Redu	
Algal Mat or Crust (B4)	uction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	e (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in	
Sparsely Vegetated Concave Surface (B8)	✓ FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	0
Water Table Present? Yes No Depth (inches):	● Wetland Hydrology Present? Yes ● No ○
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	0
Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos, previous inspections), if available:
N/A	
Remarks: The source of hydrology is from precipitation and overflow from the	abutting stream.
	abutting stream.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 de	25			Number of Dominant Species
1. Acer rubrum		~	FAC	That are OBL, FACW, or FAC:5(A)
2 Platanus occidentalis		~	FACU	Total Number of Dominant
3. Carya ovata			FACU	Species Across All Strata:5(B)
4				Percent of dominant Species
5				That Are OBL, FACW, or FAC: 100.0% (A/B)
6				1870 85
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15ft radius)	40=	= Total Cover		Total % Cover of: Multiply by:
4 Lindows housein	15	~	FACW	OBL species <u>55</u> x 1 = <u>55</u>
2. Cornus racemosa		~	FAC	FACW species $\underline{25}$ x 2 = $\underline{50}$
				FAC species <u>35</u> x 3 = <u>105</u>
3	20			FACU species $5 \times 4 = 20$
4				UPL species $0 \times 5 = 0$
5				Column Totals:120 (A)230 (B)
6				A STATE OF THE STA
7				Prevalence Index = B/A = 1.917
Herb Stratum (Plot size: 5ft radius)	25=	= Total Cove	11	Hydrophytic Vegetation Indicators:
A PRODUCTION OF THE PRODUCTION	55	~	OBL	Rapid Test for Hydrophytic Vegetation
• • parameter and the control of the		_	ODL	✓ Dominance Test is > 50%
2				✓ Prevalence Index is ≤3.0 ¹
3		H		☐ Morphological Adaptations ¹ (Provide supporting
4				data in Remarks or on a separate sheet)
5				☐ Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata:
9				Definitions of Vegetation Strata.
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size:)	55 =	= Total Cove	9	greater than 3.28 ft (1m) tall
	0			
1				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2	0_			oles, and noos, plane loss than oles it am
3				Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	=	= Total Cove	1	
				Understadia
				Hydrophytic Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate s	heet.)			
See Appendix D for photographs of the wetland habitat.				
., , , , , , , , , , , , , , , , , , ,				

Sampling Point: Wetland RLP-32

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Wetland RLP-32

Profile Descri	iption: (Describe to	the depth	needed to document	the indic	ator or co	nfirm the	absence of indicators.)	
Depth	Matrix			lox Featu				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture	Remarks
0-18	10YR4/1	95	10YR4/6	5	C		Loam	
1 Type: C=Cond	rentration D=Denletio	n RM=Padi	iced Matrix CS=Covere	d or Coate	ed Sand Gr	ains 21 oca	ation: PL=Pore Lining. M=M	latrix
	32	ii. Ki-i-keut	acco madix, co-covere	a or codit	Janu Gi	i5 -LUC		
Hydric Soil I			Dobardus Delev	Curtons	(CO) (LDD 1	re:	Indicators for Problem	ematic Hydric Soils: 3
Histosol (A			Polyvalue Belov MLRA 149B)	V Surrace ((58) (LKK I	,	2 cm Muck (A10)	(LRR K, L, MLRA 149B)
Black Histi	pedon (A2)		☐ Thin Dark Surfa	ce (S9) (LRR R, MLF	A 149B)	Coast Prairie Redo	x (A16) (LRR K, L, R)
	Sulfide (A4)		Loamy Mucky N			- 50	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)
	Layers (A5)		Loamy Gleyed I				Dark Surface (S7)	(LRR K, L, M)
	Below Dark Surface (A	11)	✓ Depleted Matrix		500			urface (S8) (LRR K, L)
	Surface (A12)	11)	Redox Dark Sur				Thin Dark Surface	
	ck Mineral (S1)		Depleted Dark		7)			lasses (F12) (LRR K, L, R)
	yed Matrix (S4)		Redox Depressi					in Soils (F19) (MLRA 149B)
Sandy Red								6) (MLRA 144A, 145, 149B)
Stripped N							Red Parent Materi	
	ace (S7) (LRR R, MLRA	140P)					Very Shallow Dark	
75-12	0.003 (0.000) 22	- 6					Other (Explain in I	Remarks)
³ Indicators of	hydrophytic vegetatio	n and wetlar	nd hydrology must be p	resent, un	less disturt	ed or proble	ematic.	
Restrictive La	yer (if observed):							
Туре:								
Depth (inch	nes):						Hydric Soil Present?	Yes No
Remarks:								
	econce of wetland h	ydrology	dominance of hydro	abytic ve	agetation	and hydrid	c soils, the area was ide	ntified as a wetland
Due to the pr	escrice or wedaria r	iyarology,	dominance or riyaro	Jilyac ve	getation,	and myant	c soils, the area was laci	tined as a wedana.

Project/Site: Lincoln-Park Riverber	nd 138kV Transmis	sion Line	City/County:	Mahoning County	Sampling Date: 11-Mar-21
Applicant/Owner: FirstEnergy			State: OH	Sampling Po	int: UPL-2021-03-11-BJM-001
Investigator(s): B. Miller and L. Z	ettle		Section, To	ownship, Range:	s. T. 2N R. 2W
Landform (hillslope, terrace, etc.): Floodplain		Local relief (c	oncave, convex, n	one): flat Slope: % /
Subregion (LRR or MLRA): LRR		Lat.:	41.10420794	Long	.: -80.66139285 Datum:
Soil Map Unit Name: Ua- Udorth	70 WAR VINES				NWI classification: NA
	30000000000000000000000000000000000000		- Vo	s • No O	_
Are climatic/hydrologic condition					(If no, explain in Remarks.) Circumstances" present? Yes No
Are Vegetation, Soil	, or Hydrolo	gy 🗌 significan	tly disturbed?	Are "Normal	Circumstances" present? Yes No
Are Vegetation, Soil 🗸	, or Hydrolo	gy naturally	problematic?	(If needed, e	explain any answers in Remarks.)
Summary of Findings -			sampling p	oint location	s, transects, important features, etc.
Hydrophytic Vegetation Present		No •			
Hydric Soil Present?	Yes 🔾	No 💿		e Sampled Area n a Wetland?	Yes ○ No •
Wetland Hydrology Present?	Yes 🔾	No 💿			
Hydrology					
Hydrology					
Wetland Hydrology Indicators:					Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum o	r one requirea; o		7001		Surface Soil Cracks (B6)
Surface Water (A1) High Water Table (A2)		Water-Stained Le			Drainage Patterns (B10) Moss Trim Lines (B16)
Saturation (A3)		Marl Deposits (B1			Dry Season Water Table (C2)
Water Marks (B1)		Hydrogen Sulfide			Crayfish Burrows (C8)
Sediment Deposits (B2)		Oxidized Rhizosph	. (89) 25	Roots (C3)	Saturation Visible on Aerial Imagery (C9)
☐ Drift deposits (B3)		Presence of Redu			Stunted or Stressed Plants (D1)
☐ Algal Mat or Crust (B4)		Recent Iron Redu		s (C6)	Geomorphic Position (D2)
☐ Iron Deposits (B5)		Thin Muck Surface		50.X55Z	Shallow Aquitard (D3)
☐ Inundation Visible on Aerial Ima	igery (B7)	Other (Explain in			Microtopographic Relief (D4)
Sparsely Vegetated Concave Su	rface (B8)	* * !!	(50)		FAC-neutral Test (D5)
Field Observations:					
Surface Water Present? Yes	O No 💿	Depth (inches):	0		
Water Table Present? Yes	O No 💿	Depth (inches):	0		
Saturation Present? (includes capillary fringe) Yes	○ No ●	Depth (inches):		Wetland Hydr	rology Present? Yes No •
Describe Recorded Data (stream	n gauge, monitor	ring well, aerial phot	os, previous ins	spections), if avail	able:
Remarks:					
	nent deposits we	ere observed. There	efore, only one s	secondary wetland	d hydrology indicator was identified.

- (Plot size:	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	- Species:	Status	Number of Dominant Species
1,				That are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata:1(B)
4				
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
6	0			That are obt, facw, or fac.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size:)	0 =	= Total Cover		Total % Cover of: Multiply by:
	2	-		OBL species 0 x 1 =0
1,				FACW species
2				FAC species
3				FACU species 85 x 4 = 340
4	0			UPL species $0 \times 5 = 0$
5				
6				Column Totals: <u>85</u> (A) <u>340</u> (B)
7	0			Prevalence Index = B/A = 4.000
Herb Stratum (Plot size: 5ft radius)	_ 0 =	= Total Cover	1	Hydrophytic Vegetation Indicators:
Herb Stratum (Flot Size. Stradius)				Rapid Test for Hydrophytic Vegetation
1 Reynoutria japonica	85	✓	FACU	Dominance Test is > 50%
2				Prevalence Index is ≤3.0 ¹
3	0			
4				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			communication of closes details tendent on a relation to the authority of the second of the content of the cont
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				
14.		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size:)			20	greater than 3.20 it (iiii) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.				size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
50. A**	0 =	= Total Cover		
				Hydrophytic
				Vegetation Present? Yes No
				Present? Yes No S
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Approximately 15 percent of soil's surface was bare ground	d.			

Sampling Point: UPL-2021-03-11-BJM-001

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: UPL-2021-03-11-BJM-001

Profile Descr	iption: (Describe	e to the depth	needed to document	the indica	tor or co	nfirm the a	absence of indicators.)
Depth	Mat			ox Featur			-
(inches)	Color (mois		Color (moist)	%	Type ¹	Loc2	Texture Remarks
0-13	2.5YR 3,	100					Fine Silty Loam
13-17	2.5YR 3,	2 100					Fine Silty Loam
							
							p-
¹ Type: C=Cond	centration. D=Dep	letion. RM=Redu	iced Matrix, CS=Covere	d or Coated	Sand Gra	ins ² Loca	ation: PL=Pore Lining. M=Matrix
Hydric Soil I							Indicators for Problematic Hydric Soils: 3
Histosol (/			Polyvalue Below	Surface (S	8) (LRR R		
	pedon (A2)		MLRA 149B)	/			2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Hist			Thin Dark Surfa	ce (S9) (LF	RR R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
-	Sulfide (A4)		Loamy Mucky M	lineral (F1)	LRR K, L)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	Layers (A5)		Loamy Gleyed N	Matrix (F2)			Dark Surface (S7) (LRR K, L, M)
	Below Dark Surfac	e (A11)	Depleted Matrix	(F3)			Polyvalue Below Surface (S8) (LRR K, L)
Thick Dar	k Surface (A12)		Redox Dark Sur	face (F6)			☐ Thin Dark Surface (S9) (LRR K, L)
Sandy Mu	ck Mineral (S1)		Depleted Dark S	Surface (F7)	É		☐ Iron-Manganese Masses (F12) (LRR K, L, R) ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
	yed Matrix (S4)		Redox Depressi	ons (F8)			
Sandy Red							Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
-	4atrix (S6)						Red Parent Material (F21)
	ace (S7) (LRR R, M	ILRA 149B)					Very Shallow Dark Surface (TF12)
75-12	0.23 (20.23) 20	- 6	ad budralagu must ba n	rocont unla	ce dieburb	ad ar proble	U Other (Explain in Remarks)
			nd hydrology must be p	esent, unie	รร นเรเนาม	ed or proble	emauc.
Restrictive La	ayer (if observed	1):					
Type:							Hydric Soil Present? Yes ○ No ●
Depth (incl	nes):						Hydric Soil Present? Yes ○ No ●
Remarks:							

Project/Site: Lincoln-Park Riverbend 138kV Transmission Line	City/County: Mahoning County Sampling Date: 11-Mar-21
Applicant/Owner: FirstEnergy	State: OH Sampling Point: UPL-2021-03-11-BJM-002
Investigator(s): B. Miller and L. Zettle	Section, Township, Range: S. T. 2N R. 2W
Landform (hillslope, terrace, etc.): Floodplain	Local relief (concave, convex, none): CONVEX Slope: % /
	: 41.1041986 Long.: -80.66123021 Datum:
Soil Map Unit Name: Ua - Udorthents, loamy, 2 to 25 percent slope	NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of	year? Yes No (If no, explain in Remarks.)
	ntly disturbed? Are "Normal Circumstances" present? Yes No
	problematic? (If needed, explain any answers in Remarks.)
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No •	sampling point locations, transcess, important reactives, etc.
	Is the Sampled Area within a Wetland? Yes No •
	within a Wetland? Yes ONO O
Wetland Hydrology Present?	
Hydrology	
Wetland Hydrology Indicators:	Connection Indicateur (minimum of 2 magnitud)
Primary Indicators (minimum of one required; check all that apply	Secondary Indicators (minimum of 2 required) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained L	
High Water Table (A2) Aquatic Fauna (I	
Saturation (A3) Marl Deposits (B	Dry Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide	e Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizosp	pheres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3) Presence of Red	
	duction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain ir Sparsely Vegetated Concave Surface (B8)	n Remarks)
Sparsely regented contains surface (50)	FACTIEUU al Test (D3)
Field Observations: Surface Water Present? Yes No Depth (inches)	
Water Table Present? Yes No Depth (inches) Saturation Present?): Wetland Hydrology Present? Yes ○ No ●
(includes capillary fringe) Yes No Depth (inches)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	
No primary and/or secondary wetland hydrology indicators were ob	oserved.

- (Plot size:	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	- Species:	Status	Number of Dominant Species
1				That are OBL, FACW, or FAC:0(A)
2				Total Number of Dominant
3				Species Across All Strata:1(B)
4				
5	0			Percent of dominant Species That Are OBL_FACW_or_FAC: 0.0% (A/B)
6	0			That Are OBL, FACW, or FAC: 0.0% (A/B)
7				Prevalence Index worksheet:
		Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)	20			OBL species 0 x 1 = 0
1,	0			FACW species 0 x 2 = 0
2	0			FAC species 0 x 3 = 0
3	0			FACU species $100 \times 4 = 400$
4	0			The state of the s
5	0_			UPL species $0 \times 5 = 0$
6	0			Column Totals: <u>100</u> (A) <u>400</u> (B)
7				Prevalence Index = B/A = 4.000
		= Total Cover		
Herb Stratum (Plot size: 5ft radius)				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation
1 Poa pratensis	90	✓	FACU	
2. Andropogon virginicus	10		FACU	Dominance Test is > 50%
3				Prevalence Index is ≤3.0 ¹
4				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				the state of the s
				Problematic Hydrophytic Vegetation ¹ (Explain)
6	-			¹ Indicators of hydric soil and wetland hydrology must
7				be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata:
9				Deminions of Vegetation strata.
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
/District	_ 100 =	Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size:)				
1,				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2	0			size, and woody plants less than 3.20 it tall.
3				Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0 =	Total Cover		
			8	
				Hydrophytic
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate sh	eet.)			

Sampling Point: UPL-2021-03-11-BJM-002

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: UPL-2021-03-11-BJM-002

Profile Descr	iption: (Describe to	the depth	needed to document	the indica	ator or co	nfirm the a	absence of indicators	s.)		
Depth	Matrix			lox Featu	res					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture			marks
0-6	7.5YR2/2	100					Silt Loam		gravel refusa	al below 6inches
¹ Type: C=Con	centration. D=Depletio	n. RM=Redi	uced Matrix, CS=Covere	d or Coate	d Sand Gra	ins ² Loca	tion: PL=Pore Lining. I	4=Ма	itrix	
Hydric Soil I	ndicators:						Indicators for Pi	oble	matic Hvdr	ic Soils: 3
Histosol (A1)		Polyvalue Belov	v Surface (S8) (LRR R	,	2 cm Muck (A			
Histic Epip	pedon (A2)		MLRA 149B)				Coast Prairie			
Black Hist			Thin Dark Surfa	ice (S9) (L	RR R, MLR	A 149B)				1 W. H. &
Hydrogen	Sulfide (A4)		Loamy Mucky N	1ineral (F1)) LRR K, L)		5 cm Mucky P			
	Layers (A5)		Loamy Gleyed I	Matrix (F2)			Dark Surface			
	Below Dark Surface (A	11)	Depleted Matrix	(F3)			Polyvalue Beld			
	k Surface (A12)	r int	Redox Dark Sur	face (F6)			Thin Dark Sur			
	ck Mineral (S1)		Depleted Dark	Surface (F7	")		Iron-Mangane			
	eyed Matrix (S4)		Redox Depressi	ions (F8)			-			(MLRA 149B)
Sandy Re							Mesic Spodic			A, 145, 149B)
-	Matrix (S6)						Red Parent M			
	ace (S7) (LRR R, MLRA	140R)					Very Shallow			2)
75.32	(CE) (E) (E)	- 6					Other (Explain	ı in Re	emarks)	
³ Indicators of	hydrophytic vegetatio	n and wetla	nd hydrology must be p	resent, unl	ess disturb	ed or proble	ematic.			
Restrictive L	ayer (if observed):									
Type:									122	
Depth (incl	hes):						Hydric Soil Presen	t?	Yes 🔾	No 💿
Remarks:										
			e	727 7						
The soil profit	le displays a gravel	layer belov	v 6inches indicating	previous o	disturband	œ.				

Project/Site: Lincoln-Park Riverbend 138kV Transmission Line	City/County: Mahoning Cour	Sampling Date: 11-Mar-21
Applicant/Owner: FirstEnergy	State: OH Sampling	Point: UPL-2021-03-11-BJM-003
Investigator(s): B. Miller and L. Zettle	Section, Township, Range	e: S. T. 2N R. 2W
Landform (hillslope, terrace, etc.): Floodplain	Local relief (concave, convex	k, none): convex Slope: % /
Subregion (LRR or MLRA): LRR R	Lucipio avan disentanta in man	ong.: -80.6612234 Datum:
	11.10550777	NWI classification: NA
Soil Map Unit Name: W - Water	v 0 v 0	
Are climatic/hydrologic conditions on the site typical for	this time of year? Yes No	(If no, explain in Remarks.)
Are Vegetation	significantly disturbed? Are "Norm	nal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology	naturally problematic? (If needed	d, explain any answers in Remarks.)
Summary of Findings - Attach site map	showing sampling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No •		
Hydric Soil Present? Yes No •	Is the Sampled Area within a Wetland?	Yes O No •
Wetland Hydrology Present? Yes No •		
Hardrala are		
Hydrology		
Wetland Hydrology Indicators:	(d.) - 1 X	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check al		Surface Soil Cracks (B6)
	ter-Stained Leaves (B9)	Drainage Patterns (B10)
	atic Fauna (B13) I Deposits (B15)	Moss Trim Lines (B16) Dry Season Water Table (C2)
	drogen Sulfide Odor (C1)	Crayfish Burrows (C8)
	dized Rhizospheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
	sence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
	ent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
	n Muck Surface (C7)	Shallow Aquitard (D3)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Oth	er (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No • D	epth (inches):0	
Water Table Present? Yes No • D	epth (inches):0	
Saturation Present? (includes capillary fringe) Yes No •	epth (inches): 0	ydrology Present? Yes No •
Describe Recorded Data (stream gauge, monitoring wel	, aerial photos, previous inspections), if a	vailable:
Remarks:		
No primary and/or secondary wetland hydrology indicat	ors were observed.	

VEGETATION - Use scientific names of pi	ants	Sai	ampling Point: UPL-2021-03-11-BJM-003
Tree Stratum (Plot size:)	Absolute Domi % Cover Spec	nant Indicator ies? Status	Dominance Test worksheet: Number of Dominant Species
1			That are OBL, FACW, or FAC:1(A)
2			Total Number of Dominant
3	0		Species Across All Strata:
4			Described descinant Consider
5			Percent of dominant Species That Are OBL, FACW, or FAC: 20.0% (A/B)
6			<u>'</u>
7			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15 ft radius)	0 = Total	Cover	Total % Cover of: Multiply by: OBL species 0 x 1 = 0
1 Rubus occidentalis	10	UPL	
2			FACW species $10 \times 2 = 20$
3			FAC species $15 \times 3 = 45$
4	20		FACU species $85 \times 4 = 340$
5			UPL species $\frac{10}{x}$ x 5 = $\frac{50}{x}$
6			Column Totals: 120 (A) 455 (B)
7	0		Prevalence Index = B/A = 3.792
Herb Stratum (Plot size: 5ft radius)	10 = Total	Cover	Hydrophytic Vegetation Indicators:
	55	EACH	Rapid Test for Hydrophytic Vegetation
1. Andropogon virginicus		FACU	☐ Dominance Test is > 50%
2. Solidago altissima 3. Reynoutria japonica		FACU	Prevalence Index is ≤3.0 ¹
		FAC	Morphological Adaptations ¹ (Provide supporting
F 1		FACW	data in Remarks or on a separate sheet)
6			Problematic Hydrophytic Vegetation ¹ (Explain)
7			¹ Indicators of hydric soil and wetland hydrology must
8	55	-	be present, unless disturbed or problematic.
9			Definitions of Vegetation Strata:
10			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11			at breast height (DBH), regardless of height.
12			Sanling/abruh Woody plants loss than 3 in DBH and
Woody Vine Stratum (Plot size:)	110 = Total	Cover	Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
1,			Herb - All herbaceous (non-woody) plants, regardless of
2	0		size, and woody plants less than 3.28 ft tall.
3	0 _		Woody vine - All woody vines greater than 3.28 ft in
4		-	height.
	0 = Total	Cover	
			Hydrophytic Vegetation Present? Yes No No
			1
Remarks: (Include photo numbers here or on a separate s	heet.)		

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: UPL-2021-03-11-BJM-003

	Matrix		Red	ox Feature	<u>s</u>					
inches)	Color (moist)	%	Color (moist)		Type $^{ m 1}$	Loc ²	Texture		Ren	narks
0-4	7.5YR 2/2	100					Silt Loam		efusal due to	rock and fill materia
							H-			
no: C-Concont	ration D-Donlation	- DM-Poduc	ed Matrix, CS=Covere	d or Costod 9	Cand Cra	nc 21 ocat	ion: DIDoro Lining	M-Mai	heliv	
		i. KM=Reduc	ed Matrix, CS=Covered	u or Coateu :	Sanu Gra	ris -Local	ion: PL=Pore Lining.	M=Mq	UIX	
dric Soil Indi	cators:						Indicators for F	Proble	natic Hydri	c Soils:
Histosol (A1)	4.53		Polyvalue Below MLRA 149B)	Surface (S8) (LRR R,		2 cm Muck (A10) (L	RR K, L, MLF	RA 149B)
Histic Epipedo			☐ Thin Dark Surfa	ce (S9) (LRR	R. MLRA	(149B)	Coast Prairie	Redox	(A16) (LRR	K, L, R)
Black Histic (A			Loamy Mucky M			, ,	5 cm Mucky	Peat or	Peat (S3) (L	RR K, L, R)
Hydrogen Sul			Loamy Gleyed N		, (((() L)		Dark Surface	e (S7) (LRR K, L, M)	
Stratified Laye		45	Depleted Matrix				Polyvalue Be	low Su	face (S8) (LI	RR K, L)
	ow Dark Surface (A1	1)	Redox Dark Sur	VIETE - 1			Thin Dark Su	ırface (59) (LRR K,	L)
Thick Dark Su			Depleted Dark S				☐ Iron-Mangan	iese Ma	sses (F12) (I	LRR K, L, R)
Sandy Muck N			Redox Depression				Piedmont Flo	odplair	Soils (F19)	(MLRA 149B)
Sandy Gleyed				(/			Mesic Spodio	(TA6)	(MLRA 144A	, 145, 149B)
Sandy Redox							Red Parent N	1aterial	(F21)	
Stripped Matr		4.40P)					Very Shallow	Dark S	Surface (TF12	2)
Dark Surface	(S7) (LRR R, MLRA	1498)					Other (Expla	in in Re	marks)	
ndicators of hyd	Irophytic vegetation	and wetland	hydrology must be pr	esent, unles	s disturbe	ed or proble	matic.			
strictive Laye	r (if observed):									
Type:	Killing or There's 110000 with discountries on the ON IN								1294	1877
Depth (inches)):						Hydric Soil Prese	nt?	Yes 🔾	No 💿
acher (micrico)	<u> </u>					3	700		- 55000	900-90
mauka.					201	121 212	n use seven on a	2 47		
	12 17 T V	40000 000							isisted of ro	ock or gravel that
soil profile in	ndicated a previou		nce due to fill mater	iai being pr	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile in	ndicated a previou evel investigation.		nce due to fill mater	iai being pr	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile in			nce due to fill mater	iai being pr	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile ir			nce due to fill mater	iai being pr	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile ir			nce due to fill mater	iai being pr	resent b	elow 4 Inc	hes. The fill mater	iai cor		
soil profile ir			nce due to fill mater	iai being pr	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile ir			nce due to fill mater	iai being pi	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile ir			nce due to fill mater	iai being pi	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile ir			nce due to fill mater	iai being pi	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile ir			nce due to fill mater	iai being pi	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile ir			nce due to fill mater	iai being pi	resent b	elow 4 inc	hes. The fill mater	iai cor		
soil profile in			nce due to fill mater	iai being pi	resent b	elow 4 inc	hes. The fill mater	iai cor		
			nce due to fill mater	iai being pi	resent b	elow 4 inc	hes. The fill mater	nai cor		
soil profile in			nce due to fill mater	iai being pi	resent b	elow 4 inc	hes. The fill mater	nai cor		
soil profile in			nce due to fill mater	iai being pr	resent b	elow 4 inc	hes. The fill mater	nai cor		
soil profile in			nce due to fill mater	iai being pr	resent b	elow 4 inc	hes. The fill mater	nai cor		
soil profile in			nce due to fill mater	iai being pr	resent b	elow 4 inc	hes. The fill mater	nai cor		

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line			City/County:	Mahoning		Sampling D	ate: 20-Aug-20)
Applicant/Owner: FirstEnergy			State: OH	Sampling Po	int:	UPL-200820	-MRK-001	
Investigator(s): M.R.Kline, L.H.Ja	cks		Section, T	ownship, Range:	s. T	. 2N		R. 2W
Landform (hillslope, terrace, etc.)): Flat		Local relief (c	concave, convex, r	none): flat	S	lope: 1.7 %	/ 1.0 °
Subregion (LRR or MLRA): LRR	R	Lat.:	41.095956	Lone	-80.642382)	Datum: WG	
Soil Map Unit Name: Ua; Udorth	90 VA VIAN	3 000000 000	111033330		-	sification: NA	_	
			- V	es No		-		
Are climatic/hydrologic condition		T			(If no, explain		Yes O No	<u> </u>
Are Vegetation, Soil 🗸	, or Hydrol	ogy significan	tly disturbed?	Are "Normal	Circumstances	" present?	Yes O No	9
Are Vegetation, Soil	, or Hydrol	ogy naturally	problematic?	(If needed,	explain any ans	wers in Remarl	ks.)	
Summary of Findings -	Attach site		sampling p	oint location	s, transect	s, importa	nt features	, etc.
Hydrophytic Vegetation Present		No •						
Hydric Soil Present?	Yes 🔾	No •		e Sampled Area in a Wetland?	Yes O No	•		
Wetland Hydrology Present?	Yes 🔾	No ⊙	55000					
Hydrology								
Wetland Hydrology Indicators:					Secondary Indic	cators (minimum	of 2 required)	
Primary Indicators (minimum of	f one required;	check all that apply)				l Cracks (B6)		-
Surface Water (A1)		Water-Stained Le	aves (B9)		Drainage Pa	atterns (B10)		
High Water Table (A2)		Aquatic Fauna (B	13)		Moss Trim I	Lines (B16)		
Saturation (A3)		Marl Deposits (B1	.5)		Dry Season	Water Table (C2	2)	
Water Marks (B1)		Hydrogen Sulfide	Odor (C1)		Crayfish Bu	rrows (C8)		
Sediment Deposits (B2)		Oxidized Rhizosph		g Roots (C3)	The second	Visible on Aerial I		
Drift deposits (B3)		Presence of Redu		B - 2.50(10)		Stressed Plants (I	D1)	
Algal Mat or Crust (B4)		Recent Iron Redu		ils (C6)	— ·	c Position (D2)		
Iron Deposits (B5)	ann (P7)	Thin Muck Surface			Shallow Aqu		k.	
Inundation Visible on Aerial ImaSparsely Vegetated Concave Su		Other (Explain in	Remarks)		FAC-neutra	raphic Relief (D4))	
sparsery vegetated containe su	ridee (bo)			,	TAC-fleutia	i rest (D3)		
Field Observations: Surface Water Present? Yes	○ No ●	Double (in about)	0					
	1000	Depth (inches):	200	-				
Water Table Present? Yes	1 2000	Depth (inches):	0	Wetland Hyd	rology Present?	Yes O	No 💿	
Saturation Present? (includes capillary fringe) Yes	O No 💿	Depth (inches):	0	-		4 1.56.50 200	5.5.5. Since	
Describe Recorded Data (stream NA	gauge, monito	oring well, aerial phot	os, previous in	spections), if avai	lable:			
Remarks:								
No source of hydrology was obs	erved.							
No source of flydrology was obs	ci vea.							

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1. Acer saccharinum		~	FACW	That are OBL, FACW, or FAC:3(A)
2. Populus grandidentata	10	~	FACU	Total Number of Dominant
3. Acer saccharum	10	✓	FACU	Species Across All Strata: 9 (B)
4. Platanus occidentalis	10	~	FACW	20 00 00 00 00 00 00 00 00 00 00 00 00 0
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
6				That are obt., Facw, or Fac.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' radius)	60 =	= Total Cover		Total % Cover of: Multiply by:
3 N 60 12 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2		-	TERRET I	OBL species 0 x 1 = 0
1 . Acer saccharinum		~	FACW	FACW species
2				FAC species
3				FACU species 120 x 4 = 480
4				UPL species 30 x 5 = 150
5				
6				Column Totals: <u>200</u> (A) <u>730</u> (B)
7	0			Prevalence Index = $B/A = 3.650$
Herb Stratum (Plot size: 5' radius)	10=	= Total Cove		Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
1. Parthenocissus quinquefolia		~	FACU	Dominance Test is > 50%
2. Ambrosia artemisiifolia		~	FACU	Prevalence Index is ≤3.0 ¹
3. Dactylis glomerata		~	FACU	Morphological Adaptations ¹ (Provide supporting
4. Verbascum thapsus		✓	UPL	data in Remarks or on a separate sheet)
5. Solidago canadensis	10		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Daucus carota	10		UPL	
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9	0			Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12	0			Continue to the Manda plants land than 2 in DRU and
		= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: None)				3 (,
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3				Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0 =	= Total Cove		
			8	
				Hydrophytic
				Vegetation Present? Yes ○ No ●
				response and a second contract of the second
Remarks: (Include photo numbers here or on a separate sh	eet)			
ixemarks. (Therauce photo numbers here of on a separate sh	icci,			

Sampling Point: UPL-200820-MRK-001

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: UPL-200820-MRK-001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix			ox Featu	res						
(inches)	Color (moist)	%	Color (moist)	%	Type 1	Loc2_	Texture	Remarks			
0-14	10YR2/1	100					Silt Loam	Fill material			
								· · · · · · · · · · · · · · · · · · ·			
								·			
¹ Type: C=Cond	centration. D=Deplet	ion. RM=Rec	luced Matrix, CS=Covere	d or Coate	d Sand Gra	ins ² Loca	tion: PL=Pore Lining. M:	=Matrix			
Hydric Soil I	ndicators:						Indicators for Pro	blematic Hydric Soils: 3			
Histosol (/	A1)		Polyvalue Below	Surface (S	58) (LRR R	,					
Histic Epig	pedon (A2)		MLRA 149B)	er og verkere er				0) (LRR K, L, MLRA 149B)			
Black Hist			Thin Dark Surfa	ce (S9) (L	RR R, MLR	A 149B)		edox (A16) (LRR K, L, R)			
	Sulfide (A4)		Loamy Mucky M	lineral (F1)	LRR K, L)			at or Peat (S3) (LRR K, L, R)			
	Layers (A5)		Loamy Gleyed I	Matrix (F2)				67) (LRR K, L, M)			
	Below Dark Surface (A11)	Depleted Matrix	(F3)			Polyvalue Below Surface (S8) (LRR K, L)				
	k Surface (A12)		Redox Dark Sur	face (F6)				ice (S9) (LRR K, L)			
	ck Mineral (S1)		Depleted Dark S	Surface (F7	')			e Masses (F12) (LRR K, L, R)			
	yed Matrix (S4)		Redox Depressi	ons (F8)			F-1	plain Soils (F19) (MLRA 149B)			
								A6) (MLRA 144A, 145, 149B)			
Sandy Red							Red Parent Material (F21)				
	Matrix (S6)	A 440D)					Very Shallow Da	ark Surface (TF12)			
□ Dark Surta	ace (S7) (LRR R, MLF	(A 149B)					Other (Explain i	in Remarks)			
³ Indicators of	hydrophytic vegetat	ion and wetla	and hydrology must be p	resent, unl	ess disturb	ed or proble	ematic.				
Restrictive La	ayer (if observed):										
Type:											
Depth (incl	nes).						Hydric Soil Present	? Yes ○ No ●			
	163)						***	200000 000000			
Remarks:			20 1001 1700 10 10 1000	500 F00003 - 19400							
Soil is compri	sed of fill material	and rubble	from the former indu	strial site	•						

Project/Site: Lincoln Park-Riv	erbend 138kV Fransmiss	sion Line	City/County:	Mahoning County		Sampli	ing Date: 06-Jan-20	
Applicant/Owner: ATSI, a	FirstEnergy Company			State: OF	l Sa	ampling Point:	upl-aeh-20200106-01	
Investigator(s): AEH, SKM			Section, To	wnship, Range:	S.	T. 2N	R. 2W	
Landform (hillslope, terrace	, etc.): Flat		Local relief (co	ncave, convex, r	none): no	one	Slope: 0.0 % / 0.0	
Subregion (LRR or MLRA):	I RR K	Lat.:	41.101504	Long	m.: -80.6	57237	Datum: WGS 84	
Soil Map Unit Name: Ua - U			11.101501		-	I classification:		
Are climatic/hydrologic con	ditions on the site ty	pical for this time of	vear? Yes	. ● No ○	(If no. ex	plain in Remar	ks.)	
Are Vegetation, So	_		tly disturbed?			ances" present?	Yes (a) No (
	57-12						• DESCRI DESCRI	
Are Vegetation , So	5.5	255 E	problematic?	20 00	(1000)	y answers in R	353	
Summary of Findin	gs - Attach site		sampling p	oint locatio	ns, trar	isects, imp	ortant features, et	
Hydrophytic Vegetation Pr		No •						
Hydric Soil Present?	Yes 🔾	No ●		Sampled Area a Wetland?	Yes 🔾	No ●		
Wetland Hydrology Presen	t? Yes 🔾	No ⊙	48.6880,000.00					
Hydrology								
Wetland Hydrology Indica		70 ONIN 422002 17007 10 28			Secondary	/ Indicators (minir	mum of 2 required)	
Primary Indicators (minim	um of one required;					ice Soil Cracks (B6	260	
Surface Water (A1)		Water-Stained Lea	3 3			age Patterns (B10	•	
High Water Table (A2) Saturation (A3)		Aquatic Fauna (B1				Trim Lines (B16)		
Water Marks (B1)		Marl Deposits (B1	a Maria			Season Water Tabl	ie (CZ)	
Sediment Deposits (B2)		Hydrogen Sulfide	CONTROL OF THE PARTY OF THE PARTY OF	Crayfish Burrows (C8) Living Roots (C3) Saturation Visible on Aerial Imagery (C9)				
Drift deposits (B3)		Presence of Reduc						
Algal Mat or Crust (B4)		The property of the second of	ction in Tilled Soils	•				
Iron Deposits (B5)		Thin Muck Surface		, (60)		ow Aquitard (D3)	30 32 01	
Inundation Visible on Aer	ial Imagery (B7)	Other (Explain in			Micro	topographic Relie	ef (D4)	
Sparsely Vegetated Conca	ive Surface (B8)		,		FAC-r	neutral Test (D5)		
Field Observations:								
Surface Water Present?	Yes ○ No •	Depth (inches):						
Water Table Present?	Yes O No 💿	Depth (inches):				320	0 0	
Saturation Present? (includes capillary fringe)	Yes O No •	Depth (inches):		Wetland Hyd	rology Pre	sent? Yes	○ No •	
Describe Recorded Data (st	ream gauge, monitor	ring well, aerial photo	s, previous inspe	ections), if availa	ible:			
Remarks:								
No wetland hydrology was	identified within the	data point.						

- (Plot size: 30ft	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	7223	Status	Number of Dominant Species
1. Pinus strobus		✓	FACU	That are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3	0			Species Across All Strata: 4 (B)
4				
5	0	ī		Percent of dominant Species
6	oct de some	F		That Are OBL, FACW, or FAC: 0.0% (A/B)
7		H		Prevalence Index worksheet:
1.6				
Sapling/Shrub Stratum (Plot size: 15ft)	45=	= Total Cove	6	Total % Cover of: Multiply by:
1 Pinus strobus	5	~	FACU	OBL species 0 x 1 = 0
2				FACW species $5 \times 2 = 10$
3		H	- 1	FAC species $0 \times 3 = 0$
		H		FACU species $95 \times 4 = 380$
4	_	H		UPL species $0 \times 5 = 0$
5		H	7	Column Totals:100 (A)390 (B)
6	72	H		2004 10 CA 1
7				Prevalence Index = B/A = 3.900
Herb Stratum (Plot size: 5ft)	5=	= Total Cove	•	Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
1 Poa pratensis	30	~	FACU	Dominance Test is > 50%
2. Oxalis corniculata	15	✓	FACU	Prevalence Index is ≤3.0 ¹
3. Heracleum maximum	5		FACW	
4	0			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
			0.00	Definitions of Vegetation Strata
9		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: _30ft)	50 =	= Total Cove		greater than 3.28 ft (1m) tall
1		H		Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2		H		oled, and woody planto lood than oled it tall.
3				Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0 =	= Total Cove	6	
				Hydrophytic
				Vegetation
				Tresent.
Remarks: (Include photo numbers here or on a separate sl			CORRESE DE LA COMPTE	
Vegetation as previoulsy disturbed by mowing activities as	well as seaso	nal condition	s. Remane	ent plant materials allowed for positive identification of the
species observed within the upland area.				

Sampling Point: upl-aeh-20200106-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-aeh-20200106-01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Red	lox Featur	res		_		
(inches)	Color (moist)	%	Color (moist)	%	Type 1	Loc2	Texture Remarks		
0-6	10YR 2/2	100					Silty Clay Loam		
							-		
¹ Type: C=Cond	centration. D=Depletio	n. RM=Redu	ced Matrix, CS=Covere	d or Coated	Sand Grai	ns ² Locat	ation: PL=Pore Lining. M=Matrix		
Hydric Soil I	<u>_</u>								
Histosol (Polyvalue Belov	Curface /	(Q) (I DD D		Indicators for Problematic Hydric Soils: 3		
			MLRA 149B)	v Surface (S	00) (LKK K	1	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
	pedon (A2)		Thin Dark Surfa	ce (S9) (LI	RR R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)		
Black Hist			Loamy Mucky M			6	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
	Sulfide (A4)		Loamy Gleyed		Litti (1, L)		Dark Surface (S7) (LRR K, L, M)		
	Layers (A5)		Depleted Matrix				Polyvalue Below Surface (S8) (LRR K, L)		
100000000000000000000000000000000000000	Below Dark Surface (A	11)	Redox Dark Sur				Thin Dark Surface (S9) (LRR K, L)		
	k Surface (A12)			100	`		☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Mu	ck Mineral (S1)		Depleted Dark		,		Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy Gle	yed Matrix (S4)		Redox Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Red	dox (S5)						Red Parent Material (F21)		
Stripped N	Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dark Surfa	ace (S7) (LRR R, MLRA	149B)					Other (Explain in Remarks)		
31	i bu uduna abu stin u nanstastin		d budualagu usust ba w		saa diabuub	ad au auahla			
Indicators of	nydropnytic vegetatio	n and wetiar	d hydrology must be p	resent, unie	ess disturbe	ed or proble	lematic.		
Restrictive L	ayer (if observed):								
Type: _Br	ick								
Depth (inc	hes): <u>6</u>						Hydric Soil Present? Yes ○ No ●		
Remarks:									
	a disturbed from the	railroad a	nd roadway. A restri	etivo lavor	was obs	anyod at 6	Finches		
THE SOIIS WEI	e disturbed from the	t raili oau ai	iu ioauway. A restri	Live layer	was obse	erveu at o	o inches.		

Project/Site: Lincoln Park-Riverbe	nd 138kV Transmissio	on Line	City/County:	Mahoning County		Sampli	ng Date: 06-Jan-20
Applicant/Owner: ATSI, a First	Energy Company			State: OH	1	Sampling Point:	upl-aeh-20200106-02
Investigator(s): AEH, SKM			Section, T	ownship, Range:	s. I	NA T. 2N	R. 2W
Landform (hillslope, terrace, et	c.): Floodplain		Local relief (c	concave, convex, i	none)): none	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LR	RR K	Lat.:	41.103801	Lon	g.: -	80.660029	Datum: WGS 84
Soil Map Unit Name: W-Water					_	NWI classification:	NA
Are climatic/hydrologic condition	ons on the site typ	ical for this time of	year? Ye	es 💿 No 🔾	(If r	no, explain in Remark	(s.)
Are Vegetation , Soil	, or Hydrolo	gy significant	tly disturbed?	Are "Norma	l Circ	umstances" present?	Yes ● No ○
Are Vegetation , Soil	, or Hydrolo		problematic?			nin any answers in Re	
Summary of Findings		7.5	ii .	E 8	1.50		353
Hydrophytic Vegetation Preser		No •		point locatio	113,	transcets, imp	ortant reatures, et
Hydric Soil Present?		No ●		e Sampled Area	V	es O No 💿	
ACCOUNT OF SECURITIES AND COMMON		No 💿	withi	in a Wetland?	1.	es C No C	
Wetland Hydrology Present? Remarks: (Explain alternative							
Hydrology	*						
Wetland Hydrology Indicators		e nero sacce nga ing sa			Seco	ondary Indicators (minin	i de la composition della comp
Primary Indicators (minimum	of one required; cr					Surface Soil Cracks (B6)	•
Surface Water (A1) High Water Table (A2)		Water-Stained Lea				Drainage Patterns (B10))
Saturation (A3)		Aquatic Fauna (B1				Moss Trim Lines (B16) Dry Season Water Table	0 (C2)
Water Marks (B1)		Hydrogen Sulfide	200 m		П	Crayfish Burrows (C8)	e (C2)
Sediment Deposits (B2)		Oxidized Rhizosph		Roots (C3)	H	Saturation Visible on Ae	erial Imagery (C9)
Drift deposits (B3)		Presence of Reduc	nandahan pereki dari Manusi	y 110015 (45)		Stunted or Stressed Pla	
Algal Mat or Crust (B4)		Recent Iron Reduc		ils (C6)	~	Geomorphic Position (D	
☐ Iron Deposits (B5)		Thin Muck Surface				Shallow Aquitard (D3)	
☐ Inundation Visible on Aerial Ir	magery (B7)	Other (Explain in	. N - 4			Microtopographic Relief	F (D4)
Sparsely Vegetated Concave S	Surface (B8)		NEWSTROOM			FAC-neutral Test (D5)	
Field Observations:							
	es 🔾 No 💿	Depth (inches):					
Water Table Present? Ye	es O No 💿	Depth (inches):		-			
Catavatian Descent?	es O No 💿	Depth (inches):		Wetland Hyd	rolog	y Present? Yes	○ No ●
Describe Recorded Data (stream	m gauge, monitori	ng well, aerial photo	s, previous insp	pections), if availa	able:		
Remarks:							
No other hydrology indicators v	were observed in t	he floodplain expect	geomorphic po	osition of being ne	ext to	the stream.	

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
				Number of Dominant Species
1. Platanus occidentalis		~	FACW	That are OBL, FACW, or FAC:3(A)
2. Acer rubrum		~	FAC	Total Number of Dominant
3				Species Across All Strata:6(B)
4	0			Wild Control of the C
5	0			Percent of dominant Species
6	0			That Are OBL, FACW, or FAC: 50.0% (A/B)
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)		- Total Cove	19	OBL species 0 x 1 = 0
1. Lonicera morrowii	20	✓	FACU	N
2. Acer rubrum	15	~	FAC	FACW species $40 \times 2 = 80$
3		Ē		FAC species35 x 3 =105
4		Ħ	-	FACU species <u>27</u> x 4 = <u>108</u>
		H		UPL species $5 \times 5 = 25$
5		H	- 1	Column Totals:107 (A)318 (B)
6	52	H		I is a 2 IN
7				Prevalence Index = B/A = 2.972
Herb Stratum (Plot size: 5ft)	35=	= Total Cove	r	Hydrophytic Vegetation Indicators:
	_			Rapid Test for Hydrophytic Vegetation
1 Solidago canadensis		✓	FACU	Dominance Test is > 50%
2. Daucus carota	5	✓	UPL	✓ Prevalence Index is ≤3.0 ¹
3				
4	0			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
				Definitions of Vegetation Strata
9		님		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
(Plateine 20ft	12=	= Total Cove	r e	greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)	2022			
1,				Herb - All herbaceous (non-woody) plants, regardless of
2	0	닏		size, and woody plants less than 3.28 ft tall.
3			-	Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0 =	= Total Cove	r	100
				Hydrophytic
				Vegetation Present? Yes No •
				Present? Yes \(\text{NO } \text{\$\text{\$\text{\$\cong }}} \)
Remarks: (Include photo numbers here or on a separate	sheet.)			
Vegetation was disurbed by seasonal conditions. Remaner	nt plant materi	als allowed f	or positive	identification of the species observed within the upland
area.				

Sampling Point: upl-aeh-20190106-02

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-aeh-20190106-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth <u>Matrix</u>	Redox Features							
(inches) Color (moist) %	Color (moist) % Type 1 Loc2	Texture Remarks						
0-18 10YR 3/2 100		Sandy Clay Loam						
	·							
¹ Type: C=Concentration. D=Depletion. RM=Rec	duced Matrix, CS=Covered or Coated Sand Grains ² Locat	tion: PL=Pore Lining. M=Matrix						
Hydric Soil Indicators:	,	Indicators for Problematic Hydric Soils: 3						
Histosol (A1)	Polyvalue Below Surface (S8) (LRR R,							
Histic Epipedon (A2)	MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)						
Black Histic (A3)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)						
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) LRR K, L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)						
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Dark Surface (S7) (LRR K, L, M)						
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Polyvalue Below Surface (S8) (LRR K, L)						
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Thin Dark Surface (S9) (LRR K, L)						
Sandy Muck Mineral (S1)	Depleted Dark Surface (F7)	Iron-Manganese Masses (F12) (LRR K, L, R)						
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19) (MLRA 149B)						
Sandy Redox (S5)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)						
Stripped Matrix (S6)		Red Parent Material (F21)						
Dark Surface (S7) (LRR R, MLRA 149B)		Very Shallow Dark Surface (TF12)						
		Other (Explain in Remarks)						
Indicators of hydrophytic vegetation and wetle	and hydrology must be present, unless disturbed or proble	ematic.						
Restrictive Layer (if observed):								
Туре:								
Depth (inches):		Hydric Soil Present? Yes ○ No ●						
Remarks:								
Soils seemed to be well drained to the stre	am							

Project/Site: Lincoln Park-Ri	verbend 138kV Transmis	sion Line	City/County:	Mahoning County		Sampli	ing Date: 06-Jan-20	
Applicant/Owner: ATSI, a	First Energy Company			State: OH	Samp	oling Point:	upl-aeh-20200106-03	
Investigator(s): AEH, SKM			Section, To	wnship, Range:	S.	T. 2N	R. 2W	
Landform (hillslope, terrac	e, etc.): Flat		Local relief (co	ncave, convex, n	ione): none		Slope: 1.0 % / 0.0	
Subregion (LRR or MLRA):	LRR K	Lat.:	41.104174	Long	-80.6593	93	Datum: WGS 84	
Soil Map Unit Name: Ua -	-		12.201271			assification:		
Are climatic/hydrologic co			vear? Yes	. ● No ○	(If no, expla	in in Remar	ks.)	
Are Vegetation, S			tly disturbed?		Circumstanc		Yes (a) No (
			The state of the s					
Are Vegetation , S		25.5	problematic?	E 20	explain any a -		35.	
Summary of Findir	igs - Attach sit		sampling p	oint locatio	ns, transe	ects, imp	ortant features, et	
Hydrophytic Vegetation P		No •						
Hydric Soil Present?	Yes O	No •		Sampled Area a Wetland?	Yes O N	o		
Wetland Hydrology Prese	nt? Yes	No 💿	special record					
Hydrology								
Wetland Hydrology Indica		(N			Secondary Inc	dicators (minir	mum of 2 required)	
Primary Indicators (minir	num of one required;					Soil Cracks (B6		
Surface Water (A1)		Water-Stained Lea				Patterns (B10		
High Water Table (A2)		Aquatic Fauna (B)				m Lines (B16)		
Saturation (A3) Water Marks (B1)		Marl Deposits (B1	aritina essentia		=	on Water Tabl	le (C2)	
Sediment Deposits (B2)		Hydrogen Sulfide		Doots (C3)		Burrows (C8)	erial Imageny (CQ)	
Drift deposits (B3)		Presence of Reduce		ng Living Roots (C3) Saturation Visible on Aerial Imagery (C9) (C4) Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)		The state of the s	ction in Tilled Soils	: (C6)	The state of the s	hic Position (
Iron Deposits (B5)		Thin Muck Surface		s (CO)		Aguitard (D3)	52)	
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in			The second secon	ographic Relie	f (D4)	
Sparsely Vegetated Cond		Other (Explain in	Kendiks)			ral Test (D5)		
Field Observations:	122 444							
Surface Water Present?	Yes ○ No ●	Depth (inches):						
Water Table Present?	Yes ○ No ●	Depth (inches):				122	O O	
Saturation Present? (includes capillary fringe)	Yes ○ No •	Depth (inches):		Wetland Hydr		t? Yes	○ No •	
Describe Recorded Data (stream gauge, monito	oring well, aerial photo	s, previous inspe	ections), if availa	ble:			
Remarks:								
No hydrology indicators w	ere observed within t	he data point.						

Tree Stratum (Plot size: 30ft)	Absolute	Dominant Species?	Indicator Status	Dominance Test worksheet:
	% Cover			Number of Dominant Species
1. Acer saccharum		✓	FACU	That are OBL, FACW, or FAC:1(A)
2. Carya laciniosa	Of Section 1981	~	FACW	Total Number of Dominant
3. Platanus occidentalis	5		FACW	Species Across All Strata: 4 (B)
4				5
5				Percent of dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)
6				That Are obt, FACW, of FAC.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15ft)	45 =	Total Cover		Total % Cover of: Multiply by:
The state of the s		52	0.2249200	OBL species 0 x 1 = 0
1. Acer saccharum		✓	FACU	FACW species
2. Prunus serotina	5_	✓	FACU	FAC species 0 x 3 = 0
3	0			FACU species $50 \times 4 = 200$
4	0			UPL species
5	0			
6	0			Column Totals: 65 (A) 230 (B)
7	70			Prevalence Index = B/A = 3.538
(0)	20 =	Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)	-			Rapid Test for Hydrophytic Vegetation
1	0_			- 822 A W-V DAI DO \$6,00000
2	0			Dominance Test is > 50%
3				Prevalence Index is ≤3.0 ¹
4				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5.				
6				Problematic Hydrophytic Vegetation ¹ (Explain)
7				1 Indicators of hydric soil and wetland hydrology must
		H		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9				
10		Ш		Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11		Ш		breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)	=	Total Cover		greater than 3.28 ft (1m) tall
	0			Llank All banks as a constant and a land a second land of
1	100	H		Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2				oles, and woody plants loss than oles it tall
3		H	5.5	Woody vine - All woody vines greater than 3.28 ft in
4		Ш		height.
	0 =	Total Cover		
				Hydrophytic
				Vegetation
Remarks: (Include photo numbers here or on a separate s		ala elle !	fau	identification of the appril
Vegetation was disturbed by seasonal conditions. Remanerarea.	nt plant mater	ials allowed	or positive	e identification of the species observed within the upland
arca.				

Sampling Point: upl-aeh-20200106-03

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-aeh-20200106-03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Rec	lox Features		_		
(inches)	Color (moist)	%	Color (moist)	<u>% Tyr</u>	e ¹ Loc²	Texture	Remarks	
0-18	10YR 2/1	100				Silty Clay Loam	5% rocks throuhout soil	
¹ Type: C=Cond	centration. D=Depletio	n. RM=Redu	ced Matrix, CS=Covere	d or Coated Sand	I Grains ² Loca	tion: PL=Pore Lining. M=	=Matrix	
Hydric Soil I								
Histosol (Polyagina Palan	v Surface (S8) (L	DD D		oblematic Hydric Soils: 3	
			MLRA 149B)	V Surface (S6) (L	KK K,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)	
100	pedon (A2)			ce (S9) (LRR R,	MLRA 149B)	Coast Prairie R	edox (A16) (LRR K, L, R)	
Black Hist				lineral (F1) LRR		5 cm Mucky Pe	at or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)		Loamy Gleyed I		·, -,	Dark Surface (S7) (LRR K, L, M)	
The second second	Layers (A5)		Depleted Matrix			Polyvalue Belov	w Surface (S8) (LRR K, L)	
100000000000000000000000000000000000000	Below Dark Surface (A	11)	Redox Dark Sur			Thin Dark Surfa	ace (S9) (LRR K, L)	
	k Surface (A12)			10.00		Iron-Manganes	se Masses (F12) (LRR K, L, R)	
Sandy Mu	ck Mineral (S1)		Depleted Dark				dplain Soils (F19) (MLRA 149B)	
Sandy Gle	yed Matrix (S4)		Redox Depress	ons (F8)			TA6) (MLRA 144A, 145, 149B)	
Sandy Red	dox (S5)					Red Parent Mar		
Stripped N	Matrix (S6)					Annual page and	Park Surface (TF12)	
Dark Surfa	ace (S7) (LRR R, MLRA	149B)				Other (Explain		
3 _{Indicators of}	hudrophutic vocatatio	n and wattar	nd hydrology must be p	rocent unless di	sturbed or probl		iii Kananay	
		ii aliu wellal	ia flyarology fliast be p	resent, unless un	sturbed or probi	erriadic.		
Restrictive L	ayer (if observed):							
Туре:								
Depth (inc	hes):					Hydric Soil Present	t? Yes ○ No ●	
Remarks:								

Project/ Site: Lincoin Park-Riverbend 138KV Transmission Line	Sampling Date: 06-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company	State: OH Sampling Point: upl-aeh-20200106-04
Investigator(s): AEH, SKM	Section, Township, Range: S. T. 2N R. 2W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): none Slope: 2.0 % / 0.0
Subregion (LRR or MLRA): LRR K Lat.:	41.097599 Long.: -80.656317 Datum: WGS 84
Soil Map Unit Name: Ua - Udorthents, loamy, 2 to 25 percent slopes	NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of y	year? Yes No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significant	rly disturbed? Are "Normal Circumstances" present? Yes No
	problematic? (If needed, explain any answers in Remarks.) sampling point locations, transects, important features, et
Hydrophytic Vegetation Present? Yes ○ No ●	
v	Is the Sampled Area
Vac O No 🗨	within a Wetland? Yes \(\cap \) No \(\cap \)
Wetland Hydrology Present? Yes ○ No ●	
Hydrology	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water-Stained Lea	Surface Soil Cracks (B6) Drainage Patterns (B10)
Surface Water (A1) Water-Stained Lea High Water Table (A2) Aquatic Fauna (B1:	The second secon
Saturation (A3) Marl Deposits (B15)	
☐ Water Marks (B1) ☐ Hydrogen Sulfide (
	eres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)	ted Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduct	tion in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	(C7) Shallow Aquitard (D3)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in R	(2001) (100) - A)
Sparsely Vegetated Concave Surface (B8)	FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No • Depth (inches):	
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	Wetland Hydrology Present? Yes No •
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	
Geomorphic position was present as the data point was taken within a	a swale at the bottom of a hill. No other hydrologic indicators were present.

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
				Number of Dominant Species
1. Acer saccharum		✓	FACU	That are OBL, FACW, or FAC:0(A)
2. Ulmus rubra			FAC	Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				5
5	0_			Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
6				That Are obt, FACW, of FAC.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15ft)	80 =	= Total Cove		Total % Cover of: Multiply by:
	100	SE	0.2249203	OBL species 0 x 1 = 0
1 Acer saccharum		✓	FACU	FACW species
2. Lonicera morrowii		✓	FACU	FAC species15 x 3 =45
3. Ulmus rubra	7 25		FAC	FACU species 100 x 4 = 400
4				UPL species $0 \times 5 = 0$
5	0			
6	0			Column Totals: <u>115</u> (A) <u>445</u> (B)
7	0			Prevalence Index = B/A =
(Plot size: Eft	35 =	= Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)				Rapid Test for Hydrophytic Vegetation
1	0			Dominance Test is > 50%
2	0_			Prevalence Index is ≤3.0 ¹
3	0			
4				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata
		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				bleast height (DDIT), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)	=	= Total Cove		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
		H		size, and woody plants less than 3.28 ft tall.
2	0	H		
3.		H	3	Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0=	= Total Cove		
				Hadaaahada
				Hydrophytic Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Vegetation was disturbed by seasonal conditions. Remane		ials allowed	for positive	e identification of the species observed within the unland
area.	F			

Sampling Point: upl-aeh-20200106-04

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-aeh-20200106-04

Profile Descri	iption: (Describe to	the depth n	eeded to document	the indica	ator or co	nfirm the	absence of indicators.)	
Depth	Matrix		Red	lox Featur	es			
(inches)	Color (moist)	%	Color (moist)	%	Type 1	Loc2	Texture	Remarks
0-7	10YR 2/1	100					Sandy Clay	
							-	
	-							
¹ Type: C=Conc	entration. D=Depletio	n. RM=Reduc	ed Matrix, CS=Covere	d or Coated	Sand Grai	ns ² Locat	tion: PL=Pore Lining. M=Matrix	
Hydric Soil I							Indicators for Problema	tic Hudric Scile . 3
Histosol (A			Polyvalue Belov	v Surface (S	8) (IRR R			
Histic Epip			MLRA 149B)	v Surrace (S	o) (Litter)		2 cm Muck (A10) (LRR	38
Black Histi			Thin Dark Surfa	ice (S9) (LF	RR R, MLRA	A 149B)	Coast Prairie Redox (A	
	Sulfide (A4)		Loamy Mucky M	lineral (F1)	LRR K, L)		5 cm Mucky Peat or Pe	
			Loamy Gleyed				Dark Surface (S7) (LRF	R K, L, M)
	Layers (A5)	111	Depleted Matrix				Polyvalue Below Surface	ce (S8) (LRR K, L)
1000	Below Dark Surface (A	11)	Redox Dark Sur				Thin Dark Surface (S9)	(LRR K, L)
	Surface (A12)		Depleted Dark	10 1000	1		Iron-Manganese Masse	es (F12) (LRR K, L, R)
_	ck Mineral (S1)		Redox Depressi				Piedmont Floodplain So	oils (F19) (MLRA 149B)
	yed Matrix (S4)		Redox Depressi	013 (10)			Mesic Spodic (TA6) (M	LRA 144A, 145, 149B)
Sandy Red							Red Parent Material (F.	21)
Stripped M	latrix (S6)						Very Shallow Dark Surf	face (TF12)
Dark Surfa	ice (S7) (LRR R, MLRA	149B)					Other (Explain in Rema	
3Indicators of	hydrophytic vegetatio	n and wetlan	l hydrology must be n	resent unle	es disturb	ed or proble		
		ii dila wedan	a nyarology mase be p	reserre, urne	.55 GISCUID	o or proble		
12-14-2-14-11	yer (if observed):							
Type: <u>co</u>							Hydric Soil Present?	′es ○ No ●
Depth (inch	nes): <u>7</u>						nyunc son Present?	res 🔾 No 😌
Remarks:								
Soil was distu	rbed by the railroad	. A restrictiv	e laver was observe	ed at 7 inc	hes.			
	/		/- /	T. T. T. T. L	1107E0			

Project/Site: Lincoin Park-Riverbend 138KV Transmission Line	City/County: Manoning County Sampling Date: 06-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company	State: OH Sampling Point: upl-aeh-20200106-05
Investigator(s): AEH, SKM	Section, Township, Range: S. T. 2N R. 2W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): none Slope: 0.0 % / 0.0
Subregion (LRR or MLRA): LRR K Lat.	: 41.093013
Soil Map Unit Name: CoC - Chili-Urban land complex, rolling	NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time o	of year? Yes No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significa	antly disturbed? Are "Normal Circumstances" present? Yes • No •
	y problematic? (If needed, explain any answers in Remarks.)
	g sampling point locations, transects, important features, et
Hydrophytic Vegetation Present? Yes No •	Is the Sampled Area
Hydric Soil Present? Yes ○ No ●	within a Wetland? Yes ○ No ●
Wetland Hydrology Present? Yes ○ No ●	whites a mind and of the ordered and account
Hydrology	
Hydrology	
Wetland Hydrology Indicators:	_Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	
Surface Water (A1) Water-Stained L	
High Water Table (A2) Saturation (A3) Aquatic Fauna (Marl Deposits (6)	
	and a second and a
	pheres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3) Presence of Rec	
	duction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surfa	
Inundation Visible on Aerial Imagery (B7) Other (Explain i	Misselana guardia Deliaf (DA)
Sparsely Vegetated Concave Surface (B8)	FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches	3):
Saturation Present? (includes capillary fringe) Yes No Depth (inches	Wetland Hydrology Present? Yes ○ No ●
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Remarks:	
No hydrologic indicators were observed.	

Tree Stratum (Plot size: 30ft)	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover		Status	Number of Dominant Species
1			-	That are OBL, FACW, or FAC: O (A)
2				Total Number of Dominant
3				Species Across All Strata:
4	0			Many Control of the C
5	0			Percent of dominant Species That Are OBL_FACW_or_FAC: 0.0% (A/B)
6	0			That Are OBL, FACW, or FAC: 0.0% (A/B)
7				Prevalence Index worksheet:
277 1024 1	0 =	= Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)	-			OBL species
1,	0			FACW species 0 x 2 = 0
2	0			FAC species 0 x 3 = 0
3	0			Activated between the control of the
4	0			FACU species $\frac{75}{}$ x 4 = $\frac{300}{}$
5.	0			UPL species $5 \times 5 = 25$
6	0			Column Totals: <u>80</u> (A) <u>325</u> (B)
7				Prevalence Index = B/A = 4,063
		= Total Cove		#####################################
Herb Stratum (Plot size: 5ft)		- Total Core		Hydrophytic Vegetation Indicators:
1. Poa pratensis	30	~	FACU	Rapid Test for Hydrophytic Vegetation
C. Calidana annadanaia	25	V	FACU	☐ Dominance Test is > 50%
S C-h-d			FACU	Prevalence Index is ≤3.0 ¹
·		H	UPL	■ Morphological Adaptations ¹ (Provide supporting)
4. Daucus carota		H		data in Remarks or on a separate sheet)
5. Symphyotrichum ericoides		H	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Dipsacus fullonum			FACU	1 Tadicators of hudric call and motional hudraless, much
7		님		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9				Definitions of Vegetation Strata
0	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
1				breast height (DBH), regardless of height.
2				Continue to Manda plants land than 2 in DRH and
20 20 2	80 =	Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)	-			ground than o.25 it (iiii) talli.
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0		15	height.
T	0 =	= Total Cove		
		- Total Cove	2	
				Hydrophytic
				Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate :	sheet.)			
Vegetation was disturbed by seasonal conditions. Remane	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ials allowed	for positive	e identification of the species observed within the upland
area.	ne preme meets		o. positiv	

Sampling Point: upl-aeh-20200106-05

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-aeh-20200106-05

Profile Descr	iption: (Describe to	the depth r	eeded to documen	t the indi	cator or c	onfirm the	e absence of indicators.)	
Depth	Matrix		Re	dox Featu	ıres		_	
(inches)	Color (moist)	%	Color (moist)	%_	Type ¹	Loc ²	Texture Remarks	
0-4	10YR3/2	95	10YR 5/3	5	C		Silty Clay Loam	
					_			
					-			
¹ Type: C=Cond	centration. D=Depletio	n. RM=Reduc	ced Matrix, CS=Covere	ed or Coate	d Sand Gra	ains ² Loca	ation: PL=Pore Lining. M=Matrix	
Hydric Soil 1	Indicators:						Indicators for Problematic Hydric Soils: 3	Ш
Histosol (A1)		Polyvalue Belov	w Surface ((S8) (LRR I	₹,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Epi	pedon (A2)		MLRA 149B)					
☐ Black Hist	ic (A3)		Thin Dark Surfa	ace (S9) (I	LRR R, MLF	RA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)	
Hydrogen	Sulfide (A4)		Loamy Mucky N	Mineral (F1) LRR K, L)		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
	Layers (A5)		Loamy Gleyed	Matrix (F2))		Dark Surface (S7) (LRR K, L, M)	
	Below Dark Surface (A	11)	Depleted Matri	x (F3)			Polyvalue Below Surface (S8) (LRR K, L)	
The second second	k Surface (A12)	200	Redox Dark Su	rface (F6)			Thin Dark Surface (S9) (LRR K, L)	
	ck Mineral (S1)		Depleted Dark	Surface (F	7)		Iron-Manganese Masses (F12) (LRR K, L, R)	
_	eyed Matrix (S4)		Redox Depress	ions (F8)			Piedmont Floodplain Soils (F19) (MLRA 1498))
Sandy Re	B 18						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Matrix (S6)						Red Parent Material (F21)	
	ace (S7) (LRR R, MLRA	140R)					Very Shallow Dark Surface (TF12)	
21							Other (Explain in Remarks)	
³ Indicators of	f hydrophytic vegetatio	n and wetlan	d hydrology must be p	resent, un	less distur	oed or proble	lematic.	
Restrictive L	ayer (if observed):							
Type: _ro	cks							
Depth (inc	hes): 4						Hydric Soil Present? Yes ○ No ●	
Remarks:								-
							-	
Soll was distu	irbed by possible his	storic/broke	n nomesteads. A re	strictive ia	ayer was	observed a	at 4 inches.	

Project/Site: Lincoln Park-Riverbend 138kV Transn	nission Line City	y/County: Manoning County	Sampli	ng Date: 07-Jan-20				
Applicant/Owner: ATSI, a FirstEnergy Company	č	State: Of	Sampling Point:	upl-aeh-20200107-01				
Investigator(s): AEH, SKM		Section, Township, Range:	s. T. 2N	R. 2W				
Landform (hillslope, terrace, etc.): Floodpla	in Loc	cal relief (concave, convex,	none): none	Slope: 0.0 % / 0.0				
Subregion (LRR or MLRA): LRR K	State: OH Sampling Point: upl-aeh-202001 Section, Township, Range: S. T. 2N R. 2W Floodplain Local relief (concave, convex, none): none Slope: 0.0 % Lat.: 41.087148 Long.: -80.633867 Datum: WC loamy, 2 to 25 percent slopes NWI classification: NA the site typical for this time of year? Yes No (If no, explain in Remarks.) , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No (If needed, explain any answers in Remarks.) tach site map showing sampling point locations, transects, important feature Yes No Yes No Is the Sampled Area within a Wetland? Yes No Yes Yes No Yes No Yes No Yes No Yes No Yes Yes No Yes No Yes No Yes No Yes Yes No Yes No Yes No Yes Yes No Yes Yes Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes Yes		Datum: WGS 84					
Soil Map Unit Name: Ua-Udorthents, loamy,		.08/148		The second secon				
-		yes No						
		Patrick Controls - National Control		Yes A No				
500 (100 CH)								
	255 E	ž 6		353				
	-	mpling point locatio	ns, transects, imp	ortant features, et				
		To the Commission Asses						
			Yes 🔾 No 💿					
Wetland Hydrology Present? Yes	No ●	Sin employ it from a supplying retrieve electrical action as						
Upland was taken within the floodplain of th	e Mahoning River.							
Hydrology								
Wetland Hydrology Indicators:	AND THE PROPERTY OF THE PARTY O		Secondary Indicators (minin	num of 2 reauired)				
Primary Indicators (minimum of one require	d; check all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)		Dry Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor	TO STATE OF THE PARTY OF THE PARTY.	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Similar service and second and a subsequent date.	along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)					
Drift deposits (B3)	Presence of Reduced In		Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	✓ Geomorphic Position (D	02)				
Iron Deposits (B5)	Thin Muck Surface (C7))	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	Microtopographic Relief	f (D4)				
Sparsely Vegetated Concave Surface (B8)			FAC-neutral Test (D5)					
Field Observations:								
Surface Water Present? Yes No		5						
Water Table Present? Yes No	Depth (inches):	Wetland Hyd	rology Present? Yes	○ No •				
Saturation Present? (includes capillary fringe) Yes No	Depth (inches):	wedalid nyd	rology Present?					
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, pr	revious inspections), if availa	able:					
Remarks:								
Geomorphic position was present as the upla	nd was taken in the floodolai	in. No other hydrologic indic	ators present.					
Scottorphic position was present as the upla	na mas taken in the noouplai	110 oct of Trydrologic Maic	acors present					

Tree Stratum (Plot size: 30ft)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1. Carya ovata	30	✓	FACU	That are OBL, FACW, or FAC: (A)
2. Acer rubrum		~	FAC	Total Number of Dominant
3. Ulmus rubra	15	✓	FAC	Species Across All Strata:4 (B)
4				
5	0_			Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
6	0			That are obt, Facw, or Fac
7				Prevalence Index worksheet:
(Dist.: 15ft	65 =	Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)		88		OBL species 0 x 1 = 0
1,				FACW species
2				FAC species 35 x 3 = 105
3				FACU species 35 x 4 = 140
4	0			UPL species $0 \times 5 = 0$
5	0			
6	0			Column Totals: 70 (A) 245 (B)
7	72			Prevalence Index = B/A =3.500_
Herb Stratum (Plot size: 5ft)	0 =	Total Cove		Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
1 Solidago canadensis	5	✓	FACU	Dominance Test is > 50%
2	0			Prevalence Index is ≤3.0 ¹
3	0			
4	0			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata
		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				breast neight (DBH), regardless of height.
12		_ 凵_		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)	=	Total Cove	9	greater than 3.28 ft (1m) tall
	0			Herb - All herbaceous (non-woody) plants, regardless of
1	-	H		size, and woody plants less than 3.28 ft tall.
2	0	H		
3.	0	H	-	Woody vine - All woody vines greater than 3.28 ft in
4			-	height.
	=	Total Cove		
				Dedocated:
				Hydrophytic Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate s	heet.)	-		
Vegetation was disurbed by seasonal conditions. Remanent		als allowed f	or nositive	identification of the species observed within the unland
area.	piane materi	and unovicu i	o. positive	action of the species observed within the uplant
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1				

Sampling Point: upl-aeh-20200107-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-aeh-20200107-01

Profile Descr	iption: (Describe to	the depth i	needed to document	the indica	ator or co	nfirm the	absence of indicators.)
Depth	Matrix		Red	lox Featur	es		-
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ² _	<u>Texture</u> <u>Remarks</u>
0-18	10YR3/2						Silty Clay Loam
							10-
¹ Type: C=Cond	centration. D=Depletio	n. RM=Redu	ced Matrix, CS=Covere	d or Coated	Sand Grain	ns ² Locat	ition: PL=Pore Lining. M=Matrix
Hydric Soil I							Indicators for Problematic Hydric Soils: 3
Histosol (A1)		Polyvalue Belov	v Surface (S	8) (LRR R,		
	pedon (A2)		MLRA 149B)				2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)
Black Hist	ic (A3)		Thin Dark Surfa	ice (S9) (LF	RR R, MLRA	4 149B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		Loamy Mucky M		LRR K, L)		Dark Surface (S7) (LRR K, L, M)
Stratified	Layers (A5)		Loamy Gleyed I				Polyvalue Below Surface (S8) (LRR K, L)
Depleted	Below Dark Surface (A	11)	Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)
Thick Dar	k Surface (A12)		Redox Dark Sur	10 100			☐ Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Mu	ck Mineral (S1)		Depleted Dark)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gle	yed Matrix (S4)		Redox Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Red	dox (S5)						Red Parent Material (F21)
Stripped N	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Surfa	ace (S7) (LRR R, MLRA	149B)					Other (Explain in Remarks)
3Indicators of	hydrophytic vegetatio	n and wetlan	d hydrology must be p	resent unle	es disturbe	ed or proble	
		in and wedan	a myanology mase se p	reserve, arme	.55 0,560,50	ou or proble	
	ayer (if observed):						
Type:	l X-						Hydric Soil Present? Yes ○ No •
Depth (inc	nes):						100 0 110 0
Remarks:							
No hydric soil	s present.						

Project/Site: Lincoln Park-Ri	verbend 138kV T	ransmiss	ion Line	City/County:	Mahoning County		Sampli	ing Date: 07-Jan-20
Applicant/Owner: ATSI, a	FirstEnergy Con	npany				upl-aeh-20200107-02		
Investigator(s): AEH, SKM				Section, T	ownship, Range:	s.	T. 2N	R. 2W
Landform (hillslope, terrac	e, etc.): Low	land			oncave, convex, r	-		Slope: 0.0 % / 0.0
Subregion (LRR or MLRA):	LDDV		Late	41.089215			1478.03	Datum: WGS 84
		200	Lat.:	41.089215	Long		20000000	
Soil Map Unit Name: Ua-U	dorthents, loa	my, 2 t	o 25 percent slopes	-20V	~~	- NWI CI	assification:	NA
Are climatic/hydrologic co	nditions on the	e site ty	pical for this time of	year? Ye	s 💿 No 🔾	(If no, expla	in in Remark	
Are Vegetation, So	oil 🗌 , or	Hydrol	ogy 🗌 significant	tly disturbed?	Are "Normal	Circumstance	es" present?	Yes No
Are Vegetation , So	oil . or	Hydrol	ogy naturally	problematic?	(If needed.	explain any a	nswers in Ro	emarks.)
Summary of Findin	ıgs - Attac	h site	map showing	sampling	N N	(155) ·		ortant features, et
Hydrophytic Vegetation P	resent? Ye	es 💿	No O					
Hydric Soil Present?	Υe	\circ	No •		e Sampled Area n a Wetland?	Yes O N	lo	
Wetland Hydrology Prese	nt? Ye	s O	No ●	W.C.II.	ii a wedana:			
Hydrology								
Wetland Hydrology Indica		1927 - 1927	70 ONIN 422002 17007 IN 28			Secondary In	dicators (minir	mum of 2 required)
Primary Indicators (minin	num of one red	quired;					Soil Cracks (B6	æ)
Surface Water (A1)			Water-Stained Lea	3 5			Patterns (B10	•
High Water Table (A2) Saturation (A3)			Aquatic Fauna (B1				m Lines (B16)	
Water Marks (B1)			Marl Deposits (B1			-	son Water Tabl Burrows (C8)	e (C2)
Sediment Deposits (B2)			Hydrogen SulfideOxidized Rhizosph		Poots (C3)			erial Imagery (C9)
Drift deposits (B3)			Presence of Reduc		(CS)	\equiv	or Stressed Pla	
Algal Mat or Crust (B4)			Recent Iron Redu		ls (C6)		ohic Position (E	
Iron Deposits (B5)			Thin Muck Surface		13 (CO)		Aquitard (D3)	25X
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in				ographic Relief	f (D4)
Sparsely Vegetated Cond	ave Surface (B8)	Other (Explain in	(Cildio)			tral Test (D5)	
Field Observations:								
Surface Water Present?	Yes O	√o o	Depth (inches):					
Water Table Present?	Yes O	o ol						
Saturation Present?		10 ③			Wetland Hyd	rology Preser	nt? Yes	O No 💿
(includes capillary fringe)			Depth (inches):					
Describe Recorded Data (s	tream gauge,	monito	ring well, aerial photo	s, previous insp	pections), if availa	ible:		
Remarks:								
No wetland hydrology indi	cators present							
rectaria fiyarology illai	cators present							

(0)	Absolute	Dominant	ziidicaco.	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Populus deltoides	15	✓	FAC	That are OBL, FACW, or FAC:3(A)
2. Ulmus rubra	10	✓	FAC	Table Number of Baselone
3	_ 0_			Total Number of Dominant Species Across All Strata: 5 (B)
4				
5.	No.	H		Percent of dominant Species
6		H	-	That Are OBL, FACW, or FAC: 60.0% (A/B)
		H		Prevalence Index worksheet:
7	1000			
Sapling/Shrub Stratum (Plot size: 15ft)	25 =	= Total Cove	r:	Total % Cover of: Multiply by:
1. Populus deltoides	5	~	FAC	OBL species 0 x 1 = 0
2.				FACW species
			-	FAC species <u>30</u> x 3 = <u>90</u>
3	_	H	-	FACU species $40 \times 4 = 160$
4		H		UPL species $0 \times 5 = 0$
5		H	-	AN AN ANALOGE SANDER SANDER SANDER SANDER SANDER
6	0	H		Column Totals:
7				Prevalence Index = B/A = 3.571
Herb Stratum (Plot size: 5ft)	5_=	= Total Cove	r	Hydrophytic Vegetation Indicators:
Herb Stratum (Flot size)				Rapid Test for Hydrophytic Vegetation
1. Solidago canadensis	30	✓	FACU	✓ Dominance Test is > 50%
2. Oxalis corniculata	10	✓	FACU	
3	0			Prevalence Index is ≤3.0 ¹
4				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				Problematic Hydrophytic Vegetation - (Explain)
				1 Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9		님		Deminions of regeration strata
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11	0			breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
(8)	40=	= Total Cove	r	greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)				•
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cove	r	
				Hydrophytic
				Vegetation
				Present? Yes • No ·
Remarks: (Include photo numbers here or on a separate sl	neet.)			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed f	or positive	identification of the species observed within the upland
area.	p.a.re		o. poo	

Sampling Point: upl-aeh-20200107-02

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-aeh-20200107-02

Profile Descr	iption: (Des	scribe to	the depth	needed to docun	ent the indi	cator or c	onfirm the	e absence of indicators.)		
Depth		Matrix			Redox Feati			_		
(inches)	Color (%	Color (moist	.)	Type ¹	Loc²	Texture Remarks		
0-6	10YR	4/2	100					Silty Clay Loam		
6-18	10YR	5/1	60	10YR 5/	6 40	С	М	Silty Clay Loam		
									—	
¹ Type: C=Cond	centration. D=	=Depletio	n. RM=Rec	luced Matrix, CS=Co	vered or Coate	ed Sand Gra	ains ² Loca	ation: PL=Pore Lining. M=Matrix		
Hydric Soil I	indicators:	-						Indicators for Problematic Hydric Soils: 3		
Histosol (A1)			Polyvalue E	elow Surface	(S8) (LRR I	٦,			
	pedon (A2)			MLRA 149E		3 0 2		2 cm Muck (A10) (LRR K, L, MLRA 149B)		
☐ Black Hist				Thin Dark	Surface (S9) (LRR R, MLF	RA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)		
Hydrogen	Sulfide (A4)			Loamy Muc	ky Mineral (F1) LRR K, L))	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
Stratified	Layers (A5)				ed Matrix (F2))		Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L)		
Depleted	Below Dark S	Surface (A:	11)	✓ Depleted M	latrix (F3)					
Thick Dar	k Surface (A1	2)			Surface (F6)			☐ Thin Dark Surface (S9) (LRR K, L) ☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Mu	ck Mineral (S	1)			ark Surface (F	7)				
Sandy Gle	yed Matrix (S	64)		Redox Dep	ressions (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy Red	dox (S5)							Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)		
Stripped N	Matrix (S6)							Very Shallow Dark Surface (TF12)		
Dark Surfa	ace (S7) (LRR	R, MLRA	149B)					Other (Explain in Remarks)		
3 _{Indicators of}	F budrophytic	vogotatio	n and wath	and hydrology must	ho procent un	loce distur	nod or probl			
			n and well	and nydrology must	be present, un	iless disturi	bed of probl	merriauc.	-	
Restrictive L	ayer (if obs	erved):								
Туре:	1 62							Hydric Soil Present? Yes ○ No ●		
Depth (inc	hes):							Hydric Soil Present? Yes No •		
Remarks:										
Soils exhibited	d a depleted	d matrix.								

Project/Site: Lincoln Park-Riv	rerbend 138kV Transmiss	sion Line C	City/County: Maho	ning County	Sampl	ing Date: 07-Jan-20			
Applicant/Owner: ATSI, a	FirstEnergy Company			State: OH	Sampling Point:	upl-aeh-20200107-04			
Investigator(s): AEH, SKM			Section, Townsh	ip, Range: S.	NA T. NA	R. NA			
Landform (hillslope, terrac	e, etc.): Flat	L	ocal relief (concav	e, convex, non	e): none	Slope: 0.0 % / 0.0			
Subregion (LRR or MLRA):	I RR K	Lat.: 4	41.081992	Long:	-80.618426	Datum: WGS 84			
Soil Map Unit Name: Ua-U	AND THE RESERVE OF THE PARTY OF		11.001992		NWI classification:				
3			ar? Yes •	No O /T	f no, explain in Remar	J 			
Are climatic/hydrologic con Are Vegetation , So	_	. —	PATRICIA DE LA CONTRACTOR DE LA CONTRACT			V (A) N (
	52_1E				rcumstances" present?				
Are Vegetation , So	2.6	25.5	,		olain any answers in R	353			
Summary of Findin	gs - Attach site	e map showing sa	ampling point	locations	, transects, imp	ortant features, et			
Hydrophytic Vegetation Pr		No •							
Hydric Soil Present?	Yes 🔾	No ●	Is the Samp within a We		Yes 🔾 No 💿				
Wetland Hydrology Preser	nt? Yes	No 💿	An order A finance at severe with a						
Hydrology									
Wetland Hydrology Indica		-ll -ll M-1l X		_S	econdary Indicators (mini				
Primary Indicators (minin	ium of one required;		202 200 0		Surface Soil Cracks (B6	· ·			
Surface Water (A1) High Water Table (A2)		Water-Stained Leave Aquatic Fauna (B13)	3 3	Drainage Patterns (B10)					
Saturation (A3)		Marl Deposits (B15)		Ē	Moss Trim Lines (B16) Dry Season Water Table (C2)				
Water Marks (B1)		Hydrogen Sulfide Od		Ē	Crayfish Burrows (C8)				
Sediment Deposits (B2)			es along Living Roots	The state of the s					
Drift deposits (B3)		Presence of Reduced		Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)		Recent Iron Reduction	on in Tilled Soils (C6)	Ē	Geomorphic Position (02)			
Iron Deposits (B5)		Thin Muck Surface (0	C7)		Shallow Aquitard (D3)				
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in Re	emarks)		Microtopographic Relie	f (D4)			
Sparsely Vegetated Conc	ave Surface (B8)				FAC-neutral Test (D5)				
Field Observations:									
Surface Water Present?	Yes O No •	Depth (inches):							
Water Table Present?	Yes O No 💿	Depth (inches): _				0 0			
Saturation Present? (includes capillary fringe)	Yes ○ No •	Depth (inches): _		etland Hydrol	or the district of the state of	○ No •			
Describe Recorded Data (s	tream gauge, monitor	ring well, aerial photos,	previous inspection	s), if available	:				
Remarks:									
No hydrologic indicators w	ere present.								
,	moves to a manage								

(Diet size, 20ft	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species	Status	Number of Dominant Species
1				That are OBL, FACW, or FAC:1(A)
2				Total Number of Descinant
3	0			Total Number of Dominant Species Across All Strata: 4 (B)
4.	-			
5.	F2	Ħ	8	Percent of dominant Species
6	de sous	H		That Are OBL, FACW, or FAC: 25.0% (A/B)
		H		Prevalence Index worksheet:
7	1000			D. ISTORIES OF TOURS OF THE CONTROL
Sapling/Shrub Stratum (Plot size: 15ft)	=	= Total Cove	r	Total % Cover of: Multiply by:
1. Ulmus rubra	5	~	FAC	OBL species <u>0</u> x 1 = <u>0</u>
2.				FACW species
		H	-	FAC species $5 \times 3 = 15$
3		H		FACU species 107 x 4 = 428
4		H		UPL species $0 \times 5 = 0$
5		H	-	AND THE PROPERTY AND THE PROPERTY OF THE PROPE
6		H		Column Totals: <u>112</u> (A) <u>443</u> (B)
7				Prevalence Index = B/A = 3.955
Herb Stratum (Plot size: 5ft)	5_=	= Total Cove	r	Hydrophytic Vegetation Indicators:
Herb Stratum (11003126. 310				Rapid Test for Hydrophytic Vegetation
1. Schedonorus arundinaceus	35	✓	FACU	Dominance Test is > 50%
2. Solidago canadensis	35	✓	FACU	Prevalence Index is ≤3.0 ¹
3. Dipsacus fullonum	30	✓	FACU	
4. Symphyotrichum ericoides	5		FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. Plantago lanceolata	_		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
6	Office and the second			
7.		П		1 Indicators of hydric soil and wetland hydrology must
		F		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9				
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
(Plot size, 20ft	107 =	= Total Cove	r	greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)	8523			
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3			-	Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0 =	= Total Cove	r	
				Hydrophytic
				Vegetation Present? Yes ○ No ●
				Present? Yes \(\text{NO } \(\text{V} \)
Remarks: (Include photo numbers here or on a separate s				
Vegetation was disurbed by seasonal conditions. Remanen	t plant materi	als allowed f	or positive	identification of the species observed within the upland
area.				

Sampling Point: upl-aeh-20200107-04

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-aeh-20200107-04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth											
(inches)	Color (%	Color (mc	oist)	% Type	1 Loc2	<u>Texture</u>	Remarks		
0-6	10YR	3/1	100					Silty Clay Loam	30% fill		
6-18	10YR	5/3	80	10YR	5/6 20	C	М	Silty Clay Loam	30% fill		
		-									
		-									
									•		
1 Type: C=Cond	rentration D:	=Denletio	n RM=Rec	luced Matrix CS=	Covered or (Coated Sand G	rains ² l oca	tion: PL=Pore Lining. M=	Matrix		
- ''		-Берісио	11. 141–1400	ideca Matrix, es-	Covered or C	Coutcu Suria Gi	uiii3 Loca				
Hydric Soil I Histosol (Dobardi	a Balow Sud	face (S8) (LRR	D		blematic Hydric Soils: 3		
	pedon (A2)			MLRA 14		Tace (56) (LKK	K,	2 cm Muck (A10)) (LRR K, L, MLRA 149B)		
				Thin Da	rk Surface (S	69) (LRR R, ML	RA 149B)	Coast Prairie Re	edox (A16) (LRR K, L, R)		
Black Hist				10 mm		al (F1) LRR K, L		5 cm Mucky Pea	at or Peat (S3) (LRR K, L, R)		
	Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Mucky Mineral (F1) LRR K, L) Loamy Gleyed Matrix (F2)				,	Dark Surface (S7) (LRR K, L, M)					
		····fooo / A	11)		d Matrix (F3)			Polyvalue Below	Polyvalue Below Surface (S8) (LRR K, L)		
100000000000000000000000000000000000000	Depleted Scient Santace (111)				Thin Dark Surfa	ce (S9) (LRR K, L)					
	Thick Dark Surface (A12) Sandy Muck Mineral (S1) Redox Dark Surface (F6) Depleted Dark Surface (F7)				Iron-Manganese	e Masses (F12) (LRR K, L, R)					
_					epressions (Piedmont Flood	plain Soils (F19) (MLRA 149B)		
	eyed Matrix (S	94)			<u>1</u>			Mesic Spodic (T	A6) (MLRA 144A, 145, 149B)		
Sandy Red								Red Parent Mat	erial (F21)		
	Matrix (S6)		4.400)					☐ Very Shallow Da	Very Shallow Dark Surface (TF12)		
Dark Surfa	ace (S7) (LRR	R, MLRA	149B)					Other (Explain i	n Remarks)		
³ Indicators of	f hydrophytic	vegetatio	n and wetla	and hydrology mu	ist be presen	nt, unless distu	bed or probl	ematic.			
Restrictive L	ayer (if obs	erved):									
Type:		,									
Depth (inc	hes):							Hydric Soil Present	? Yes ○ No •		
Remarks:											
No hydric soil	present.										

Project/Site: Lincoln Park-Ri	verbend 138kV Transmi	ssion Line	City/County:	Mahoning County	Sampli	ing Date: 08-Jan-20
Applicant/Owner: ATSI, a	FirstEnergy Company			State: OH	Sampling Point:	upl-aeh-20200108-01
Investigator(s): AEH, SKM			Section, T	ownship, Range: S	т. 2N	R. 2W
Landform (hillslope, terrac	e, etc.): Flat			oncave, convex, no		Slope: 1.0 % / 0.0
Subregion (LRR or MLRA):	I DD K	Lat.:	41.095088	Long.:	-80.651014	Datum: WGS 84
			41.093000	Long		<u></u>
Soil Map Unit Name: Ua-U	dorthents, loamy, 2	to 25 percent slopes	-000		NWI classification:	NA
Are climatic/hydrologic co	nditions on the site	typical for this time of	year? Ye	s ● No ○ (If no, explain in Remar	**************************************
Are Vegetation, So	oil, or Hydro	ology significan	tly disturbed?	Are "Normal C	Circumstances" present?	Yes No
Are Vegetation , Sc	oil, or Hydro	ology naturally	problematic?	(If needed, ex	plain any answers in R	emarks.)
Summary of Findin	igs - Attach si	te map showing	sampling _[oint location	s, transects, imp	ortant features, etc
Hydrophytic Vegetation P	resent? Yes •	No O				
Hydric Soil Present?	Yes 🔾	No ⊙		e Sampled Area n a Wetland?	Yes ○ No ●	
Wetland Hydrology Preser	nt? Yes •	No O	With	ii a wedaliu:		
Remarks: (Explain altern	arana an Tarana ana ana an-	ann an an an an an air an Air ann an an Air an an an Air an an an Air an an an Air an an an an Air an an an Air	and Figure and a species a	netructed urban na	ark landscane	
Upland was taken within	an upiano drainage	reature (sware) of appa	arent recently co	onstructed urban pa	irk iandscape	
Hydrology						
Wetland Hydrology Indica	itors:				Secondary Indicators (minir	mum of 2 reauired)
Primary Indicators (minin	num of one required	; check all that apply)			Surface Soil Cracks (B6	6)
Surface Water (A1)		Water-Stained Le	aves (B9)		Drainage Patterns (B10))
High Water Table (A2)		Aquatic Fauna (B	13)		Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B1	.5)		Dry Season Water Tabl	ie (C2)
Water Marks (B1)		Hydrogen Sulfide	Odor (C1)		Crayfish Burrows (C8)	
Sediment Deposits (B2)		Oxidized Rhizospl	heres along Living	Roots (C3)	Saturation Visible on A	erial Imagery (C9)
Drift deposits (B3)		Presence of Redu	ced Iron (C4)		Stunted or Stressed Pla	ants (D1)
Algal Mat or Crust (B4)		Recent Iron Redu	ction in Tilled Soi	ls (C6)	✓ Geomorphic Position ([02)
☐ Iron Deposits (B5)		Thin Muck Surface			Shallow Aquitard (D3)	
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in			Microtopographic Relie	f (D4)
Sparsely Vegetated Conc	cave Surface (B8)	other (Explain in	Remarkey		✓ FAC-neutral Test (D5)	
					= = = = = = = = = = = = = = = = = = = =	
Field Observations: Surface Water Present?	Yes ○ No ●	Depth (inches):				
Water Table Present?	Yes O No •			•		
Saturation Present?				Wetland Hydro	logy Present? Yes	No ○
(includes capillary fringe)	Yes O No •	Depth (inches):				
Describe Recorded Data (s	tream gauge, monit	oring well, aerial photo	s, previous insp	pections), if available	e:	
2 7						
Remarks:						
The upland is located with	in a swale and recei	ves water from precipit	ation.			
2.5						

(0) (0)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC:1(A)
2.	0			Total Number of Deminent
3	0_			Total Number of Dominant Species Across All Strata: 1 (B)
4				
5.	190	Ħ		Percent of dominant Species
6.	0 (F 1/2)	H		That Are OBL, FACW, or FAC: 100.0% (A/B)
		H		Prevalence Index worksheet:
7				
Sapling/Shrub Stratum (Plot size: 15ft)	=	= Total Cover		Total % Cover of: Multiply by:
1	0			OBL species <u>5</u> x 1 = <u>5</u>
2.		H		FACW species <u>60</u> x 2 = <u>120</u>
		H		FAC species $0 \times 3 = 0$
3	2	H	-	FACU species 20 x 4 = 80
4		H		UPL species $0 \times 5 = 0$
5		H	-	AN CONTROL OF THE PROPERTY AND A STATE OF THE PARTY OF TH
6	0	H		Column Totals: <u>85</u> (A) <u>205</u> (B)
7				Prevalence Index = B/A =
(Plot size: 5ft	0 =	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)				✓ Rapid Test for Hydrophytic Vegetation
1. Cyperus esculentus	60	✓	FACW	✓ Dominance Test is > 50%
2. Schedonorus arundinaceus	15		FACU	
3 Juncus effusus	5		OBL	✓ Prevalence Index is ≤3.0 ¹
4. Plantago lanceolata			FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				
6				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8			-	Definitions of Vegetation Strata
9		Ш		Definitions of Vegetation Strata
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11	0			breast height (DBH), regardless of height.
12	0_			Sanling/ahruh Waadu planta loop than 2 in DRH and
241 SSSS 9	85 =	= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)				ground that old it (111) tall.
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0		- 57	Woody vine - All woody vines greater than 3.28 ft in
4	0		15	height.
T.	0 =	= Total Cover		
		- Total Cover		
				Hydrophytic
				Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	50 N. S. C. S.	als allowed fo	or nositive	identification of the species observed within the unland
area.	plant materi	als allowed to	or positive	racharteation of the species observed within the uplant
000000000				

Sampling Point: upl-20200108-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-20200108-01

Profile Descri	iption: (Des	cribe to	the depth	needed to do	cument	the indicator o	r confirm the	absence of indicators.)	
Depth		Matrix				ox Features	1		
(inches)	Color (%	Color (m	oist)	<u> </u>	Loc ²	Texture	Remarks
0-18	10YR	4/3	100					Silty Clay Loam	
								-	
¹ Type: C=Conc	entration. D	=Depletior	n. RM=Redi	uced Matrix, CS	=Covered	d or Coated Sand	Grains ² Loca	tion: PL=Pore Lining. M=Ma	trix
Hydric Soil I	ndicators:			240 100000				Indicators for Proble	ematic Hydric Soils: 3
Histosol (A	A1)					Surface (S8) (LR	R R,		LRR K, L, MLRA 149B)
Histic Epip	oedon (A2)			MLRA :					x (A16) (LRR K, L, R)
☐ Black Histi	ic (A3)			Thin D	ark Surfac	ce (S9) (LRR R, N	/LRA 149B)		or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)			Loamy	Mucky Mi	ineral (F1) LRR K	L)	Dark Surface (S7)	:
Stratified I	Layers (A5)			Loamy	Gleyed M	latrix (F2)			Activities and the first state of the first state o
Depleted B	Below Dark S	urface (A1	11)	Deplet	ed Matrix	(F3)			urface (S8) (LRR K, L)
100000000000000000000000000000000000000	Surface (A1		0.00	Redox	Dark Surf	face (F6)		Thin Dark Surface	***************************************
	ck Mineral (S			Deplet	ed Dark S	Surface (F7)		(<u>-1</u>	lasses (F12) (LRR K, L, R)
_	yed Matrix (S	. 50		Redox	Depression	ons (F8)			in Soils (F19) (MLRA 149B)
Sandy Red) (MLRA 144A, 145, 149B)
Stripped M								Red Parent Materia	
	ace (S7) (LRR	R MIRA	149R)					☐ Very Shallow Dark	
20			hart-sarithia.					Other (Explain in F	Remarks)
³ Indicators of	hydrophytic	vegetation	n and wetla	nd hydrology m	ust be pr	esent, unless dist	urbed or proble	ematic.	
Restrictive La	ayer (if obs	erved):							
Туре:	1000 00							2000 1000 100001000 000	
Depth (inch	nes):							Hydric Soil Present?	Yes ○ No •
Remarks:									
No hydric soil:	s were pres	ent withi	n the upla	na area.					

Project/Site: Lincoln Park-R	iverbend 138kV Transmis	sion Line	City/County:	Mahoning County	Samp	oling Date: 08-Jan-20
Applicant/Owner: ATSI, In	c a FirstEnergy Compar	ny		State: OH	Sampling Point	upl-aeh-20200108-03
Investigator(s): AEH, SKM	1		Section, To	ownship, Range:	s. T. 2N	R. 2W
Landform (hillslope, terrac	ce, etc.): Terrace		Local relief (c	oncave, convex, n	one): convex	Slope: 1.5 % / 0.0
Subregion (LRR or MLRA):	IDDK	Lat.:	41.092507	Long	-80.635940	Datum: WGS 84
	AND THE RESERVE OF THE PARTY OF		41.092307	Long		
Soil Map Unit Name: Ua-L	Idorthents, loamy, 2	to 25 percent slopes	-500		NWI classification	· NA
Are climatic/hydrologic co	nditions on the site t	ypical for this time of	year? Ye	s 💿 No 🔾	(If no, explain in Rema	
Are Vegetation , S	oil 🗌 , or Hydro	logy 🗌 significant	tly disturbed?	Are "Normal	Circumstances" presen	t? Yes 💿 No 🔾
Are Vegetation , S	oil , or Hydro	logy naturally	problematic?	(If needed, e	explain any answers in	Remarks.)
Summary of Findir	ngs - Attach sit	e map showing	sampling p	point location	ns, transects, im	portant features, etc
Hydrophytic Vegetation P	resent? Yes	No ●				
Hydric Soil Present?	Yes 🔾	No •		e Sampled Area n a Wetland?	Yes ○ No ●	
Wetland Hydrology Prese	nt? Yes	No 💿	Wich	n a wedana:		
Upland area between the	railload corridor and	commercial locs.				
Hydrology Wetland Hydrology Indic	ators:				Secondary Indicators (mir	nimum of 2 required)
Primary Indicators (minir	num of one required;	check all that apply)			Surface Soil Cracks (I	
Surface Water (A1)		Water-Stained Lea	aves (B9)		Drainage Patterns (B	-00 .
High Water Table (A2)		Aquatic Fauna (B1	3 5		Moss Trim Lines (B16	5)
Saturation (A3)		Marl Deposits (B1	5)		Dry Season Water Ta	ble (C2)
Water Marks (B1)		Hydrogen Sulfide	Odor (C1)		Crayfish Burrows (C8)
Sediment Deposits (B2)		Oxidized Rhizosph	neres along Living	Roots (C3)	Saturation Visible on	Aerial Imagery (C9)
Drift deposits (B3)		Presence of Reduc	ced Iron (C4)		Stunted or Stressed I	Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduc	ction in Tilled Soi	Is (C6)	Geomorphic Position	(D2)
☐ Iron Deposits (B5)		Thin Muck Surface	e (C7)		Shallow Aquitard (D3	X.17
Inundation Visible on A		Other (Explain in I	Remarks)		Microtopographic Rel	
Sparsely Vegetated Con	cave Surface (B8)				FAC-neutral Test (D5)
Field Observations:	Yes ○ No ●	Donth (inches)				
Surface Water Present?	20 mg	Depth (inches):		•5		
Water Table Present?	Yes O No 💿	Depth (inches):		Wetland Hydr	ology Present? Yes	s ○ No ●
Saturation Present? (includes capillary fringe)	Yes ○ No •	Depth (inches):			ology Frescher Tes	
Describe Recorded Data (stream gauge, monito	oring well, aerial photo	s, previous insp	pections), if availa	ble:	
Remarks:						
No hydrologic indicators p	present.					

(o) and the same of the same o	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Acer negundo	5	✓	FAC	That are OBL, FACW, or FAC:
2				Total Number of Dominant
3	0_			Species Across All Strata: 5 (B)
4	0			
5	_ 0_			Percent of dominant Species
6	0			That Are OBL, FACW, or FAC: 40.0% (A/B)
7	1 135			Prevalence Index worksheet:
		= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)				OBL species
1 Fagus grandifolia	10	✓	FACU	FACW species 0 x 2 = 0
2 Acer negundo	5	✓	FAC	100 mm 10
3	0			FAC species $10 \times 3 = 30$
4	0			FACU species
5				UPL species $0 \times 5 = 0$
6			- E	Column Totals: <u>80</u> (A) <u>310</u> (B)
7		Ē	-	December 1 Index D/A 2075
<i>(</i>		= Total Cover		Prevalence Index = B/A = 3.875
Herb Stratum (Plot size: 5ft	15 =	= Total Cover		Hydrophytic Vegetation Indicators:
. C. II. de la constante	40	✓	FACU	Rapid Test for Hydrophytic Vegetation
C. Remarkate temporales	20	~	FACU	Dominance Test is > 50%
2. Reynoutria japonica		_	FACU	Prevalence Index is ≤3.0 ¹
3				Morphological Adaptations ¹ (Provide supporting
4		H		data in Remarks or on a separate sheet)
5		H		Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0_			The same of the sa
9	0			Definitions of Vegetation Strata
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11,				breast height (DBH), regardless of height.
12		П		
(1.500.48) (1.15) Kardeli (1.15)	3	= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)				greater than 5.20 ft (1111) tail
1	0_			Herb - All herbaceous (non-woody) plants, regardless of
2.	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine All woody vines greater than 2.29 ft in
1	0			Woody vine - All woody vines greater than 3.28 ft in height.
4.	0 =	= Total Cover		noight.
		- Total Cover	2	
				Hydrophytic
				Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	50. Q.S.G. (*)	als allowed fo	or nositive	identification of the species observed within the unland
area.	plant materi	all dilovica i	o. positive	advantaged of the species observed within the upiditu
hadrapensities				

Sampling Point: upl-aeh-20200108-03

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-aeh-20200108-03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			•				
(inches)	Color (moist)		Color (moist)		Гуре 1 _ L	.OC ²	Texture Remarks	
0-10	10YR2/1						Silty Clay	
							· · · · · · · · · · · · · · · · · · ·	
1 Type: C-Cond	contration D-Donlatio	n DM-Dodu	and Matrix CS=Covers	d or Coated S	and Crains	21 ocat	stion: DI – Poro Lining M–Matrix	
- ' '		in. RM=Reduc	eu Matrix, CS=Covere	or Coated S	and Grains	²L0Cat	ation: PL=Pore Lining. M=Matrix	
Hydric Soil I			□ n-tt n-	. C	(IDD D		Indicators for Problematic Hydric Soils: 3	
Histosol (Polyvalue Belov MLRA 149B)	V Surface (S8)) (LRR R,		2 cm Muck (A10) (LRR K, L, MLRA 149B)	
7	pedon (A2)		Thin Dark Surfa	re (S9) (LRR	R MIRA 14	9B)	Coast Prairie Redox (A16) (LRR K, L, R)	
Black Hist			Loamy Mucky M			,	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)		The second of th		(K K, L)		Dark Surface (S7) (LRR K, L, M)	
	Layers (A5)		Loamy Gleyed N				Polyvalue Below Surface (S8) (LRR K, L)	
Depleted	Below Dark Surface (A	11)	Depleted Matrix				☐ Thin Dark Surface (S9) (LRR K, L)	
Thick Darl	k Surface (A12)		Redox Dark Sur	10.00			☐ Iron-Manganese Masses (F12) (LRR K, L, R)	
Sandy Mu	ck Mineral (S1)		Depleted Dark				Piedmont Floodplain Soils (F19) (MLRA 149B)	
Sandy Gle	yed Matrix (S4)		Redox Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
Sandy Red	dox (S5)						Red Parent Material (F21)	
Stripped N	Matrix (S6)						Very Shallow Dark Surface (TF12)	
Dark Surfa	ace (S7) (LRR R, MLRA	149B)					Other (Explain in Remarks)	
3, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,			an persana ratio de l'acceptant de l		. araaa a a			
Indicators of	hydrophytic vegetatio	n and wedan	a nyarology must be p	resent, unless	s disturbed of	proble	ematic.	
Restrictive La	ayer (if observed):							
Type: <u>ro</u>	ck					_		
Depth (incl	hes): 10						Hydric Soil Present? Yes ○ No ●	
Remarks:								
Restrictive lay	ver at 10 inches.							
1,000,100,10	01 01 10 1101001							

Project/Site: Lincoln Park-Riverbend 1	38kV Transmission Line	City/County: Mahoning County	Sampling Date: 06-Jan-20
Applicant/Owner: ATSI, a FirstEner	gy Company	State: OH	Sampling Point: upl-bl-20200106-02
Investigator(s): B Leopold, R Massa	3	Section, Township, Range: S.	T. 2N R. 1W
Landform (hillslope, terrace, etc.):	Flat	Local relief (concave, convex, none	s): none Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K		41.09891 Long. :	-80.59684 Datum: NAD83
Soil Map Unit Name: FhB - Fitchvil	lle silt loam, till substratum, 2 to 6	percent slopes	NWI classification:
Are climatic/hydrologic conditions	on the site typical for this time of	vear? Yes No (If	no, explain in Remarks.)
Are Vegetation, Soil		2	cumstances" present? Yes • No O
Are Vegetation , Soil	terms		cambanicas present.
			ain any answers in Remarks.)
		sampling politi locations,	transects, important features, etc.
Hydrophytic Vegetation Present?	Yes ● No ○	Is the Sampled Area	
Hydric Soil Present?	Yes ○ No ●	within a Wetland?	es ○ No ●
Wetland Hydrology Present?	Yes No ocedures here or in a separate repo		
		pacted, with loose sandy loam upper	
Hydrology			
Wetland Hydrology Indicators:		Se	condary Indicators (minimum of 2 required)
	one required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Le		Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B		Moss Trim Lines (B16)
Saturation (A3)	☐ Marl Deposits (B1	-A	Dry Season Water Table (C2)
Water Marks (B1)	☐ Hydrogen Sulfide	AMERICAN AND AND AND AND AND AND AND AND AND A	Crayfish Burrows (C8)
Sediment Deposits (B2) Drift deposits (B3)	A TOTAL STATE OF THE PARTY OF T	heres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Presence of Redu	action in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)			Shallow Aguitard (D3)
Inundation Visible on Aerial Image	Thin Muck Surface		Microtopographic Relief (D4)
Sparsely Vegetated Concave Surfa	U Oulei (Explain in	kemarks)	FAC-neutral Test (D5)
Field Observations: Surface Water Present? Yes	No Depth (inches):		
	^ @		
Water Table Present? Yes		Wetland Hydrolo	gy Present? Yes O No •
Saturation Present? (includes capillary fringe) Yes	No Depth (inches):		
Describe Recorded Data (stream of	gauge, monitoring well, aerial phot	os, previous inspections), if available	e:
Remarks:			
No hydrology indicators present a	cross feature.		

201	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' r	% Cover	Species?	Status	Number of Dominant Species
1 Salix babylonica	10	✓	FAC	That are OBL, FACW, or FAC:4 (A)
2. Betula alleghaniensis	3	✓	FAC	Total Number of Dominant
3	0			Species Across All Strata: 6 (B)
4	0_			MO
5	0_			Percent of dominant Species That Are OBL_FACW_or_FAC: 66.7% (A/B)
6	0_			That Are OBL, FACW, or FAC: 66.7% (A/B)
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' r)	-			OBL species 0 x 1 = 0
1 Rhamnus cathartica	10	✓	FAC	FACW species 10 x 2 = 20
2. Betula nigra	10	✓	FACW	FAC species 35 x 3 = 105
3. Lonicera morrowii	20	✓	FACU	BEARLES INSTRUCTION DESCRIPTION WINDOWS IN STREET
4. Rubus allegheniensis	3		FACU	40 50
5. Acer saccharum	5		FACU	UPL species x 5 =50
6	0			Column Totals:113 (A)407 (B)
7				Prevalence Index = B/A = 3.602
		= Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: _5' r)				Rapid Test for Hydrophytic Vegetation
1. Brassica nigra	10		UPL	(m) 200 00 000 0000 000000000
2. Solidago altissima	30	✓	FACU	
3. Agrimonia parviflora	_10_		FAC	Prevalence Index is ≤3.0 ¹
4. Geum canadense	2		FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9	4.0			Definitions of Vegetation Strata:
10		H		
				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11		H	-	at broast height (BBH), regardless of height.
12		- Total Cause		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)	52 =	= Total Cove		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	323	Ē		size, and woody plants less than 3.28 ft tall.
3	0	П		
1	0		3	Woody vine - All woody vines greater than 3.28 ft in height.
4.		- Total Cava		noight.
	0 =	= Total Cove	11	
				Hydrophytic
				Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sho	et.)			
Photos provided in Appendix D.				
Hydrophytic vegetation present via Dominance Test indicator indicator. FAC vegetation mostly present around edges of fl			of FAC spe	ecies, though location does not pass Prevalence Index
mulcator. FAC vegetation mostly present around edges of fi	at, illied in a	aiea.		

Sampling Point: upl-bl-20200106-02

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-bl-20200106-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix		Red				
(inches)	Color (moist)	%	Color (moist)	<u>% Type</u>	Loc ²	Texture	Remarks
0-5	2.5Y 4/2	100				Sandy Loam	gravelly
5+							gravel fill
1 Type: C=Cond	rentration D=Denletic	n RM=Redu	ced Matrix CS=Covere	d or Coated Sand G	rains 2l oca	ation: PL=Pore Lining.	M=Matrix
- ' '		JII. KI-I-KCGG	ced Fladix, C5—Covere	a or coatea sana a	Tulii Locc		
Hydric Soil I Histosol (/			Polyagluo Polo	v Surface (S8) (LRR	D		roblematic Hydric Soils: 3
	pedon (A2)		MLRA 149B)	V Surface (So) (LRK	κ,	2 cm Muck (A	A10) (LRR K, L, MLRA 149B)
Black Hist			Thin Dark Surfa	ice (S9) (LRR R, ML	RA 149B)	Coast Prairie	Redox (A16) (LRR K, L, R)
	Sulfide (A4)		Loamy Mucky N	lineral (F1) LRR K, L	.)		Peat or Peat (S3) (LRR K, L, R)
	Layers (A5)		Loamy Gleyed	Matrix (F2)			(S7) (LRR K, L, M)
	Below Dark Surface (A	11)	Depleted Matrix	(F3)		AT THE RESERVE TO A STATE OF THE PARTY OF TH	low Surface (S8) (LRR K, L)
	Surface (A12)	(11)	Redox Dark Sur			1,000	rface (S9) (LRR K, L)
	ck Mineral (S1)		Depleted Dark	Surface (F7)			ese Masses (F12) (LRR K, L, R)
(S	yed Matrix (S4)		Redox Depress	ons (F8)		F	odplain Soils (F19) (MLRA 149B)
Sandy Red							(TA6) (MLRA 144A, 145, 149B)
Stripped N	40 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6					Red Parent M	SAN AND SAN AN
	ace (S7) (LRR R, MLRA	149R)					Dark Surface (TF12)
and the second second		100-0-1010111 - 00					n in Remarks)
³ Indicators of	hydrophytic vegetation	on and wetlar	d hydrology must be p	resent, unless distu	bed or probl	ematic.	
Restrictive La	yer (if observed):						
Type: <u>ar</u>	avel & concrete fill					0/50 MAN 1/20/07/04/04/04	
Depth (incl	nes): <u>5</u>					Hydric Soil Prese	nt? Yes ○ No •
Remarks:	100 S 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5						
22 III 80 80	ncrete fill at 5-inch	denth acro	ec entire area: nocc	ible old low area	filled in long	nast No hydric soi	I indicators present due to absence
						related to gravel fill	
				24 E22 34 25 5	200101 298		* 1000000
							The loose sandy loam soil indicates
significantly d	isturbed soils, thou	gn insuffici	ent evidence presen	t (lack of nydrolog	gy indicator	s) to conclude this i	ocation meets wetland criteria.

Upland RLP-01

Project/Site: Lincoln Park-River	bend 138kV Transmiss	ion Line	City/County: Mahoning Count	y Sampl	ing Date: 08-Jan-20
Applicant/Owner: ATSI, a Fir	stEnergy Company		State: (OH Sampling Point:	upl-aeh-20200108-02
Investigator(s): AEH, SKM			Section, Township, Range	: S. T. 2N	R. 2W
Landform (hillslope, terrace,	etc.): Footslope		Local relief (concave, convex,	none): flat	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA):	LRR K	Lat.:	41.086133 Lo	ng.: -80.627218	Datum: WGS 84
Soil Map Unit Name: Ua-Udo	TOTAL TO THE PARTY OF THE PARTY		11000000	NWI classification:	
Are climatic/hydrologic cond			ear? Yes No	(If no, explain in Remar	ks.)
Are Vegetation, Soil	, or Hydrol			al Circumstances" present	V (A) N (
					• 56 (PC) Dept 65 VV
	or Hydrol, S - Attach site	17.5	roblematic? (If needed sampling point locati	l, explain any answers in R Ons. transects. imr	
Hydrophytic Vegetation Pres		No •	paniping point ious.	ons, cansees, i	ortant reatures, etc
	Yes O	No •	Is the Sampled Area	Yes ○ No ●	
Hydric Soil Present?	V ()	No •	within a Wetland?	Yes ∪ No 💌	
Wetland Hydrology Present? Remarks: (Explain alternat					
Hydrology					
Wetland Hydrology Indicato	rs:			_Secondary Indicators (mini	mum of 2 required)
Primary Indicators (minimum	m of one required;	check all that apply)		Surface Soil Cracks (Bo	
Surface Water (A1)		Water-Stained Leav	/es (B9)	Drainage Patterns (B1	0)
High Water Table (A2)		Aquatic Fauna (B13		Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B15		Dry Season Water Tab	ele (C2)
Water Marks (B1)		Hydrogen Sulfide O		Crayfish Burrows (C8)	
Sediment Deposits (B2)			eres along Living Roots (C3)	Saturation Visible on A	
☐ Drift deposits (B3) ☐ Algal Mat or Crust (B4)		Presence of Reduce		Stunted or Stressed Pl	
Iron Deposits (B5)			tion in Tilled Soils (C6)	Geomorphic Position (Shallow Aquitard (D3)	EU-ROSE EN
Inundation Visible on Aerial	Imagery (B7)	Thin Muck Surface		Microtopographic Relie	
Sparsely Vegetated Concave		Other (Explain in R	emans)	FAC-neutral Test (D5)	
Field Observations:					
Surface Water Present?	Yes O No 💿	Depth (inches):			
Water Table Present?	Yes O No 💿	Depth (inches):			1000 129, 1000
Saturation Present? (includes capillary fringe)	Yes O No 💿	Depth (inches):	Wetland Hy	drology Present? Yes	○ No •
	eam gauge, monito	ring well, aerial photos,	, previous inspections), if avai	lable:	
Remarks:					
No hydrology present within	the upland area.				

(A)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1	0_			That are OBL, FACW, or FAC: (A)
2	0			Total Number of Deminent
3	0_			Total Number of Dominant Species Across All Strata: 3 (B)
4				M. A.
5.	100	Ħ		Percent of dominant Species
6.	700	H		That Are OBL, FACW, or FAC: 0.0% (A/B)
SS-206	-	H		Prevalence Index worksheet:
7	1000			
Sapling/Shrub Stratum (Plot size:)	=	Total Cover	ē.	Total % Cover of: Multiply by:
1 Rosa multiflora	30	~	FACU	OBL species 0 x 1 = 0
- N	-	_	FACW	FACW species $5 \times 2 = 10$
	-		THEN	FAC species $10 \times 3 = 30$
3	-	H	-	FACU species $80 \times 4 = 320$
4		H		UPL species $0 \times 5 = 0$
5		H	-	AND STATE OF
6	0	H		Column Totals: 95 (A) 360 (B)
7				Prevalence Index = B/A = 3.789
(Plot size:	35 =	Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size:)	13700			Rapid Test for Hydrophytic Vegetation
1. Dipsacus fullonum	20	✓	FACU	4 - 400 45 (7-17 - 174) OX \$16,000000
2. Setaria faberi	20	✓	FACU	Dominance Test is > 50%
3. Poa pratensis	10		FACU	Prevalence Index is ≤3.0 ¹
4. Xanthium strumarium			FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5.				
	100000			☐ Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9		Ш		Definitions of Vegetation Strata
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11	0_			breast height (DBH), regardless of height.
12	0_			Sanling/shrub Woody plants loss than 2 in DDU and
202	60 =	Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size:)				ground than 0.20 ft (111) tall
1,	0_			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0		S	height.
T.	0 =	Total Cove		
		- Total Cove	9	
				Hydrophytic Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate she	eet.)			
	1100000	ala allawad f	au maaltii ia	identification of the angular about admitting the unland
Vegetation was disurbed by seasonal conditions. Remanent parea.	Jiant materia	als allowed to	or positive	idenuncation of the species observed within the upland
arca.				

Sampling Point: upl-aeh-20200108-02

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-01 **Soil**

Sampling Point: upl-aeh-20200108-02

Profile Descr	iption: (Describ	e to the depth	needed to document	the indicator or co	nfirm the	absence of indicators.)	
Depth	Mat			ox Features		_	
(inches)	Color (mois		Color (moist)		Loc ²	Texture	Remarks
0-18	10YR4	/3 100				Silty Clay	40% fill
1 Type: C=Cond	rentration D=Den	letion RM=Redi	ıced Matrix CS=Covered	or Coated Sand Grain	ns 2l ocat	ion: PL=Pore Lining. M=N	Matrix
Hydric Soil I		icuoni Kri–Kedi	acca Flactiv, co-coverca	or coated band Gran	15 Locat		
Histosol (Poharalua Polow	Surface (S8) (LRR R,			lematic Hydric Soils: 3
	pedon (A2)		MLRA 149B)	Surface (56) (LKK K,		2 cm Muck (A10)	(LRR K, L, MLRA 149B)
			Thin Dark Surface	ce (S9) (LRR R, MLRA	149B)	Coast Prairie Rec	lox (A16) (LRR K, L, R)
Black Hist			The same of the same	neral (F1) LRR K, L)	5	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Loamy Gleyed M			Dark Surface (S7) (LRR K, L, M)
The second secon	Layers (A5)	20000	Depleted Matrix			Polyvalue Below	Surface (S8) (LRR K, L)
1	Below Dark Surfac	e (A11)	Redox Dark Surf			Thin Dark Surfac	e (S9) (LRR K, L)
	k Surface (A12)		Depleted Dark S			Iron-Manganese	Masses (F12) (LRR K, L, R)
Sandy Mu	ck Mineral (S1)						lain Soils (F19) (MLRA 149B)
Sandy Gle	yed Matrix (S4)		Redox Depression	ons (F8)			6) (MLRA 144A, 145, 149B)
Sandy Red	dox (S5)					Red Parent Mate	
Stripped N	Matrix (S6)					A CONTRACT OF THE PARTY OF THE	k Surface (TF12)
Dark Surfa	ace (S7) (LRR R, N	ILRA 149B)				Other (Explain in	
3 Indicators of	hydrophytic yeae	tation and wetla	nd hydrology must be pr	ecent unless disturbe	d or proble		, canalis,
			na nyarology mast be pr	eseric, uriless disturbe	d or proble	induc.	
	ayer (if observe	d):					
Type:	1 82					Hydric Soil Present?	Yes ○ No ●
Depth (incl	hes):					nyuric son Presentr	Yes ○ No •
Remarks:							
No hydric soil	present within	the upland are	a.				
and the second of the second s	90	and the second of the second s					

Upland RLP-02

Project/Site: Lincoln Park-Riverbend 13	8kV Transmissi	on Line	City/County:	Mahoning County	Sa	mpling Date: 06-Jan-20
Applicant/Owner: ATSI, a FirstEnerg	y Company			State: OH	Sampling Po	int: upl-jbl-20200106-01
Investigator(s): JBL, JTT			Section, To	wnship, Range:	s. T. 2N	R. 1W
Landform (hillslope, terrace, etc.):	Toeslope		Local relief (co	oncave, convex, n	one): convex	Slope: 3.0 % / 1.7 °
Subregion (LRR or MLRA): LRR K		Lat.:	41.095705	Long	-80.611118	Datum: NAD 83
Soil Map Unit Name: DkF-Dekalb ve	ery stony loar	m 25 to 50 percent sl			NWI classificat	tion: N/A
3.				s • No O		0 -2004-000
Are climatic/hydrologic conditions	53		/		(If no, explain in Re	V (A) N- (
Are Vegetation, Soil	, or Hydrol	ogy significant	tly disturbed?	Are "Normal	Circumstances" pres	sent? Tes © NO O
Are Vegetation , Soil	, or Hydrol	ogy naturally	problematic?	(If needed, o	explain any answers	in Remarks.)
Summary of Findings - A	ttach site	map showing	sampling p	oint locatio	ns, transects, i	mportant features, et
Hydrophytic Vegetation Present?	Yes 🔾	No •		2		
Hydric Soil Present?	Yes 🔾	No •		Sampled Area n a Wetland?	Yes O No 💿	
Wetland Hydrology Present?	Yes O	No •	1709271000			
Remarks: (Explain alternative pro Upland data point down gradient of and hh-05. data point associated w	of stream hh-	jbl-20200106-04 whe	re it loses defin	ition. Located in v	alley south of Oak S	treet Extension, between hh-04
and miros, data point associated t	vitii w-jbi-202	200100-01 Just east 0	ii data poirit.			
Hydrology						
Wetland Hydrology Indicators:					Secondary Indicators	(minimum of 2 required)
Primary Indicators (minimum of o	ne required;	check all that apply)			Surface Soil Crack	
Surface Water (A1)		Water-Stained Lea	aves (B9)		✓ Drainage Patterns	
High Water Table (A2)		Aquatic Fauna (B1	3 3		Moss Trim Lines (B16)
Saturation (A3)		Marl Deposits (B1	5)		Dry Season Water	Table (C2)
Water Marks (B1)		Hydrogen Sulfide	Odor (C1)		Crayfish Burrows	(C8)
Sediment Deposits (B2)		Oxidized Rhizosph	neres along Living	Roots (C3)	Saturation Visible	on Aerial Imagery (C9)
Drift deposits (B3)		Presence of Reduc	ced Iron (C4)		Stunted or Stress	ed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduc	ction in Tilled Soil	s (C6)	Geomorphic Posit	ion (D2)
Iron Deposits (B5)		Thin Muck Surface	e (C7)		Shallow Aquitard	(D3)
Inundation Visible on Aerial Image	ry (B7)	Other (Explain in I	Remarks)		Microtopographic	Relief (D4)
Sparsely Vegetated Concave Surface	e (B8)				FAC-neutral Test	(D5)
Field Observations:						
Surface Water Present? Yes	○ No •	Depth (inches):				
Water Table Present? Yes	○ No •	Depth (inches):				0 0
Saturation Present? (includes capillary fringe)	No ●	Depth (inches):		Wetland Hydr	ology Present?	Yes ○ No •
Describe Recorded Data (stream ga	uge, monitor	ing well, aerial photo	s, previous insp	ections), if availa	ble:	
Domodra						
Remarks:	d:	4 No albertander	. !			and the second bandon land
drainage patterns present downgra criteria.	alent of nn-u	4. No other secondary	y indicators wer	e observed-the sa	ample point does not	meet the wetland hydrology
Critchia.						

- (Plot size: 30'	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover		Status	Number of Dominant Species
1. Prunus serotina	35	~	FACU	That are OBL, FACW, or FAC: (A)
2. Acer saccharum	20	~	FACU	Total Number of Dominant
3. Platanus occidentalis	10		FACW	Species Across All Strata: 9 (B)
4	0_			B
5	0_			Percent of dominant Species That Are OBL, FACW, or FAC:
6	0_			That Are obt., FACW, of FAC.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15')	65=	= Total Cover	•	Total % Cover of: Multiply by:
		3 <u></u> V	E. C	OBL species <u>0</u> x 1 = <u>0</u>
1. Rosa multiflora		~	FACU	FACW species 40 x 2 = 80
2. Acer saccharum		✓	FACU	FAC species5 x 3 =15
3. Rosa setigera		~	FACU	FACU species 175 x 4 = 700
4. Fraxinus pennsylvanica			FACW	UPL species $0 \times 5 = 0$
5	0			
6	0			Column Totals: <u>220</u> (A) <u>795</u> (B)
7	0_			Prevalence Index = B/A = 3.614
(Plot size: 5'	60 =	= Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5'				Rapid Test for Hydrophytic Vegetation
1. Ageratina altissima	25	✓	FACU	Dominance Test is > 50%
2. Alliaria petiolata	20	✓	FACU	Prevalence Index is ≤3.0 ¹
3. Lobelia siphilitica	20	✓	FACW	10.000000000000000000000000000000000000
4. Phytolacca americana	20	✓	FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. Geum canadense	5		FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Solidago gigantea	5		FACW	
7	0			1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9	E		0.00	Definitions of Vegetation Strata
10		H		- W. I. I. S. C. S
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
		H		breast neight (DBH), regardless of height.
12		= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30')	95_ =	- Total Cover		greater than 3.28 ft (1m) tall
1 Vitis riparia	0		FAC	Herb - All herbaceous (non-woody) plants, regardless of
2.	0	n		size, and woody plants less than 3.28 ft tall.
2	0			
1	0		-	Woody vine - All woody vines greater than 3.28 ft in height.
4.	-	- Tatal Cause		noight.
	0=	= Total Cove	ž II	
				Hydrophytic
				Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate she	eet.)			
Sycamore the only dominant hydrophytic species. Sample Po	int did not r	meet any of t	he hydropl	hytic vegetaion indicators.
		888	65 S	950 (95)

Sampling Point: upl-jbl-20200106-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-02 **Soil**

Sampling Point: upl-jbl-20200106-01

Profile Descr	iption: (Des	cribe to	the depth	needed to	document	the indic	ator or co	nfirm the	absence of indica	tors.)		
Depth		Matrix				lox Featu			_			
(inches)	Color (%	Color	(moist)	%	Type ¹	Loc ²	Texture		Remarks	
<u>0-12</u>	10YR	4/2	100						Sandy Clay Loam		gravel at 12"	
									-			
¹ Type: C=Cond	entration. D=	=Depletion	n. RM=Redi	uced Matrix,	CS=Covere	d or Coated	d Sand Grain	ns ²Locat	tion: PL=Pore Lining	g. M=Mai	trix	
Hydric Soil I	ndicators:								Indicators for	r Droble	ematic Hydric Soils :	3
Histosol (✓ Pol	yvalue Belov	v Surface (S8) (LRR R.					
	pedon (A2)				RA 149B)						LRR K, L, MLRA 149B)	
Black Hist				Thi	n Dark Surfa	ice (S9) (L	RR R, MLRA	(149B)			x (A16) (LRR K, L, R)	
	Sulfide (A4)			Loa	my Mucky N	lineral (F1)	LRR K, L)		5 cm Muck	ky Peat o	r Peat (S3) (LRR K, L, R)
	Layers (A5)				my Gleyed I				Dark Surfa	ace (S7)	(LRR K, L, M)	
The second second		usaa (At	1)	_	pleted Matrix				Polyvalue I	Below Su	urface (S8) (LRR K, L)	
100000	Below Dark S		11)		dox Dark Su				Thin Dark	Surface ((S9) (LRR K, L)	
-	k Surface (A1				pleted Dark)		☐ Iron-Mang	janese M	asses (F12) (LRR K, L, F	t)
_	ck Mineral (S	. 50			dox Depress		,		Piedmont I	Floodplai	in Soils (F19) (MLRA 14	9B)
The second second	yed Matrix (S	64)		L Ke	dux Depress	013 (10)			Mesic Spoo	dic (TA6)) (MLRA 144A, 145, 149	B)
Sandy Red	dox (S5)								Red Parent	t Materia	al (F21)	80
Stripped N	1atrix (S6)								Annual An		Surface (TF12)	
Dark Surfa	ace (S7) (LRR	R, MLRA	149B)						Other (Exp			
³ Indicators of	hydronhytic	vegetation	and wetla	nd hydroloc	ıv must he n	recent unl	ace dieturhe	d or proble				
			i dila weda	na nyarolog	ly must be p	reserre, urn	cos distuibe	d or proble	induc.			
Restrictive La		erved):										
Type: <u>ar</u>	avel								Undela Call Bus		v 0 v 0	
Depth (incl	hes): <u>12</u>								Hydric Soil Pre	sent?	Yes O No 💿	
Remarks:												
No hydric indi	cators Roc	k/oravel	at 12 inch	es No ind	icators obs	vered Th	e samnle r	noint unl-i	bl-20200106-01 d	lid not r	meet the 3 criteria to	he
classified as a	wetland.	iy graver	ut 12 men	cs. No ma	icators obs	vereu. III	c sumple ;	Joint apr J	DI 20200100 01 0	aid floc i	neet the 5 criteria to	DC .

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company	State: OH Sampling Point: upl-jbl-20200107-02
Investigator(s): JBL,JTT	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Undulating	Local relief (concave, convex, none): flat Slope: 2.0 % / 0.0 °
Subregion (LRR or MLRA): LRR R Lat.:	41.096807 Long.: -80.608659 Datum: NAD 83
Soil Map Unit Name: CmC - Chili loam, 6 to 12 percent slopes	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of y	year? Yes No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significant	tly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
98 (45) 444 E-101 145 15 17 17	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No •	
Hydric Soil Present? Yes ○ No •	Is the Sampled Area within a Wetland? Yes No •
Wetland Hydrology Present? Yes ○ No ●	
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	aves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B1	
Saturation (A3) Marl Deposits (B1)	
Water Marks (B1) Hydrogen Sulfide	
	neres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift deposits (B3) ☐ Presence of Redu ☐ Algal Mat or Crust (B4) ☐ Recent Iron Redu	
	ction in Tilled Soils (C6) Geomorphic Position (D2)
This visit A : 11 (97)	
Inundation Visible on Aerial Imagery (B/) Sparsely Vegetated Concave Surface (B8) Other (Explain in	FAC-neutral Test (D5)
Field Observations:	
Water Table Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes ○ No ●
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	14
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	
No hydrology indicators present. Saturation was present at 14 in, wh	nich is too deep to meet the hydrologic indicator

vegeration - use scientific names of plai	nts			Sampling Point: upl-jbl-20200107-02
22 0000 0	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 10')	% Cover	Species?	Status	Number of Dominant Species
1				That are OBL, FACW, or FAC:
2				Total Number of Dominant
3	0			Species Across All Strata: 4 (B)
4	0			
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
6	0			That Are Obl., FACW, OF FAC.
7	0_			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 10'	=	= Total Cover		Total % Cover of: Multiply by: OBL species0 x 1 =0
1 Pyrus communis	5		UPL	
2. Quercus palustris	15	~	FACW	FACW species 30 x 2 = 60
3 Rhamnus cathartica	15	~	FAC	FAC species $30 \times 3 = 90$
4. Cornus obliqua	5		FACW	FACU species $60 \times 4 = 240$
5	0			UPL species $\frac{5}{}$ x 5 = $\frac{25}{}$
6				Column Totals: <u>125</u> (A) <u>415</u> (B)
7				Prevalence Index = B/A = 3.320
Herb Stratum (Plot size: 5')	40=	= Total Cover		Hydrophytic Vegetation Indicators:
	25		FACIL	Rapid Test for Hydrophytic Vegetation
1. Poa pratensis		~	FACU	Dominance Test is > 50%
2. Achillea millefolium	0.0000		FACU	Prevalence Index is ≤3.0 ¹
3 Festuca arundinacea		~	FACU	Morphological Adaptations ¹ (Provide supporting
4. Symphyotrichum lateriflorum			FAC	data in Remarks or on a separate sheet)
5. Solidago gigantea			FACW	☐ Problematic Hydrophytic Vegetation ¹ (Explain)
6				1 To disabone of budgie sail and wellend budgelens much
7		H		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata:
9				Definitions of Vegetation Strata.
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12	0			Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 10')	85 =	= Total Cover	•	greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4,	0			height.
	0 =	= Total Cover		
			8	
				Hydrophytic
				Vegetation Present? Yes ○ No ●
				Tracin.
Remarks: (Include photo numbers here or on a separate she	at \			
plot limited to 10 ft radius for trees/shrubs to include hillside		do doprossio	nal wotlan	d swale to the portheast. Vegetaien did not most any of
the hydrophytic indicators	e NOT INCIU	de depressio	nai wedan	d swale to the northeast. Vegetaion did not meet any of
and any and and and any and any and any any and any				

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-jbl-20200107-02

Profile Descri	iption: (De	scribe to	the depth	needed to	document	t the indic	ator or co	nfirm the	absence of indicators.)	
Depth		Matrix			Re	dox Featu			•	
(inches)	Color (moist)	%	Color	(moist)	%	Type 1	Loc2	Texture	Remarks
0-11	10YR	4/3	100						Clay Loam	
11-17	10YR	4/2	98	10YR	4/6	2			Clay Loam	
									-	
¹ Type: C=Cond	centration. D	=Depletio	n. RM=Red	duced Matrix,	CS=Covere	ed or Coate	ed Sand Gra	ains ² Loca	ation: PL=Pore Lining. M=Matr	ix
Hydric Soil I										20/08
Histosol (A				Dol	value Rele	w Surface ('S8) (I PD 1	. :	Indicators for Problem	
	pedon (A2)				RA 149B)	w Surface (30) (LKK F	4	2 cm Muck (A10) (LF	RR K, L, MLRA 149B)
_				☐ Thir	Dark Surf	ace (S9) (l	RR R, MLF	RA 149B)	Coast Prairie Redox ((A16) (LRR K, L, R)
Black Histi						Mineral (F1			5 cm Mucky Peat or	Peat (S3) (LRR K, L, R)
	Sulfide (A4)					Matrix (F2)			Dark Surface (S7) (L	RR K, L, M)
	Layers (A5)	c			leted Matri		53.		Polyvalue Below Surf	ace (S8) (LRR K, L)
	Below Dark		11)		ox Dark Su	0.010.200.000.000			☐ Thin Dark Surface (S	9) (LRR K, L)
	k Surface (A					Surface (F)	71		☐ Iron-Manganese Mas	ses (F12) (LRR K, L, R)
	ck Mineral (S						<i>(</i>)		Piedmont Floodplain	Soils (F19) (MLRA 149B)
Sandy Gle	yed Matrix (S4)		□ Red	ox Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Red	dox (S5)								Red Parent Material (
Stripped N	Matrix (S6)								Very Shallow Dark Su	
☐ Dark Surfa	ace (S7) (LR	R R, MLRA	149B)						Other (Explain in Rer	
³ Indicators of	hydronhytic	vegetatio	n and wetl	and hydrolog	v must be r	arecent un	loce dicturk	and or proble		
			ii ana wea	and mydrolog	y must be p	oreserie, un	icss distuit	ca or probi	- Induc.	
Restrictive La	ayer (if obs	erved):								
Type:										
Depth (inch	nes):								Hydric Soil Present?	Yes O No •
Remarks:										
	dicated no	hydric so	il indicate	rc The can	nnla noint	unl-ibl-20	200107-	02 did not	meet the vegetation, soil	or hydrology indicators to be
classified as a		riyuric 30	ii iiidicatt	is. The san	ibie boilit	upi-jui-20	200107	oz ulu Hot	meet the vegetation, son,	or flydrology findicators to be
ĺ										
ĺ										

Project/Site: Lincoln Park-Riverbend 138kV Transmis	ssion Line City/C	County: Mahoning County	Samplin	g Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company		State: OH	Sampling Point:	upl-jbl-20200107-01
(nvestigator(s): JBL,JTT	Se	ction, Township, Range: S		R. 1W
Landform (hillslope, terrace, etc.): Hillside		relief (concave, convex, no		Slope: 1.0 % / 0.0 °
Subregion (LRR or MLRA): LRR R	Lat.: 41.09	686 Long. :	-80.60706	Datum: NAD 83
Soil Map Unit Name: BtB - Bogart loam, till su			NWI classification:	
			-	302 A 102 C
Are climatic/hydrologic conditions on the site		20 Miles	If no, explain in Remarks	Yes No
Are Vegetation, Soil, or Hydro	ology significantly dist	urbed? Are "Normal C	Circumstances" present?	res 🙂 No 🔾
Are Vegetation, Soil, or Hydro	ology naturally problem	natic? (If needed, ex	plain any answers in Re	marks.)
Summary of Findings - Attach sit		ling point locations	, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present? Yes	No ●	V		
Hydric Soil Present? Yes	No •	Is the Sampled Area within a Wetland?	Yes O No 💿	
Wetland Hydrology Present? Yes	No ●			
Hydrology				
Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required	for check all that apply)	-	Secondary Indicators (minim Surface Soil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)	
High Water Table (A2)	Aquatic Fauna (B13)	,	Moss Trim Lines (B16)	
Saturation (A3)	Marl Deposits (B15)		Dry Season Water Table	(C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C	1)	Crayfish Burrows (C8)	
Sediment Deposits (B2)	Oxidized Rhizospheres alo	ng Living Roots (C3)	Saturation Visible on Ae	rial Imagery (C9)
Drift deposits (B3)	Presence of Reduced Iron	(C4)	Stunted or Stressed Plan	nts (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Position (D	2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)	(5.4)
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	Microtopographic Relief	(D4)
Sparsely vegetated Concave Surface (66)			FAC-neutral Test (D5)	
Field Observations:				
Surface Water Present? Yes No •	Depth (inches):			
Water Table Present? Yes No •	Depth (inches):	Wetland Hydro	logy Present? Yes	O No ●
Saturation Present? (includes capillary fringe) Yes No •	St. Ones His More Mit His	20 100 200 200 200		3 NO ()
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, prev	vious inspections), if availa	ble:	
Remarks:				
No wetland hydrology indicators observed				

Indicator Status
Number of Dominant Species That are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of dominant Species That Are OBL, FACW, or FAC: Total % Cover of: Multiply by: OBL species Ox 1 = 0 FACW species Dx 3 = 15 FACU species So x 4 = 320 UPL species UPL species Column Totals: Total % Cover of: Multiply by: OBL species Ox 2 = 40 FACU species So x 4 = 320 UPL species Column Totals: Total % Cover of: Auditiply by: OBL species Ox 5 = 0 Column Totals: Total % Cover of: Auditiply by: OBL species Ox 5 = 0 Column Totals: Total % Cover of: Auditiply by: OBL species Ox 5 = 0 Column Totals: Total % Cover of: Auditiply by: OBL species Ox 2 = 40 FACU species By x 4 = 320 Column Totals: Total % Cover of: Multiply by: Ox 3 = 15 FACW species FACW species Dy x 5 = 0 Column Totals: Total % Cover of: Multiply by: Ox 3 = 15 FACW species FACW species Dy x 5 = 0 Column Totals: Total % Cover of: Multiply by: Ox 3 = 15 FACW species FACW species Dy x 5 = 0 Column Totals: Total % Cover of: Multiply by: Ox 3 = 40 FACW species Dy x 5 = 0 Column Totals: Total % Cover of: Multiply by: Ox 3 = 40 FACW species FACW species Dy x 5 = 0 Column Totals: Total % Cover of: Multiply by: Ox 3 = 40 FACW species FACW species Dy x 5 = 0 Column Totals: Total % Cover of: Multiply by: Ox 3 = 40 FACW species FACW species Dy x 5 = 0 Column Totals: Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Auditiply by: Ox 1 = 0 FACW species Total % Cover of: Total %
Total Number of Dominant Species Across All Strata: Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
Species Across All Strata:
Species Across All Strata:
Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) Prevalence Index worksheet:
Prevalence Index worksheet:
Prevalence Index worksheet:
Prevalence Index worksheet:
Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 20 x 2 = 40 FAC species 5 x 3 = 15 FACU species 80 x 4 = 320 UPL species 0 x 5 = 0 column Totals: 105 (A) 375 (B) Prevalence Index = B/A = 3.571 Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% FACU FACU FACU FACU FACU FACU FACU Problematic Hydrophytic Vegetation ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
FAC FAC FAC FACW species
FAC FACW species 20
FACU species 5 x 3 = 15 FACU species 80 x 4 = 320 UPL species 0 x 5 = 0 Column Totals: 105 (A) 375 (B) Prevalence Index = B/A = 3.571 Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% FACU FACU FACU FACU FACU FACU Prevalence Index is ≤3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
FACU species 80 x 4 = 320 UPL species 0 x 5 = 0 Column Totals: 105 (A) 375 (B) Prevalence Index = B/A = 3.571 Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% FACU FACU FACU FACU FACU FACU FACU Prevalence Index is ≤3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
UPL species 0 x 5 = 0 column Totals: 105 (A) 375 (B) Prevalence Index = B/A = 3.571 Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% Prevalence Index is ≤3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) FACU Problematic Hydrophytic Vegetation ¹ (Explain)
UPL species 0 x 5 = 0 column Totals: 105 (A) 375 (B) Prevalence Index = B/A = 3.571 Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% Prevalence Index is ≤3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) FACU Problematic Hydrophytic Vegetation ¹ (Explain)
column Totals: 105 (A) 375 (B) Prevalence Index = B/A = 3,571 Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% FACU FACU FACU FACU FACU FACU FACU Prevalence Index is ≤3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
Prevalence Index = B/A = 3.571 Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% FACU FACU FACU FACU FACU FACU FACU Prevalence Index is ≤3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is > 50% FACU FACU FACU FACU FACU FACU FACU Prevalence Index is ≤3.0 ¹ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
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FACU FACU FACU FACU Problematic Hydrophytic Vegetation ¹ (Explain)
FACU data in Remarks or on a separate sheet) FACU Problematic Hydrophytic Vegetation ¹ (Explain)
FACU Problematic Hydrophytic Vegetation ¹ (Explain)
— Problematic Hydrophytic Vegetation (Explain)
territory I
FACU
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
be present, unless disturbed or problematic.
Definitions of Vegetation Strata:
Tree - Woody plants, 3 in. (7.6 cm) or more in diamete
at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH and
greater than 3.28 ft (1m) tall
Herb - All herbaceous (non-woody) plants, regardless of
size, and woody plants less than 3.28 ft tall.
Woody vine - All woody vines greater than 3.28 ft in
height.
over
Hydrophytic
Vegetation Present? Yes ○ No ●
ricelli
over

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-jbl-20200107-01

Depth Matrix			roc		bsence of indicators.	
Depth Matrix (inches) Color (moist) %	Color (moist)	dox Featur %	Type 1	Loc2	Texture	Remarks
0-12 10YR 3/2 100					Clay Loam	
12-17 10YR 3/2 99	7.5YR 4/4	1			Clay Loam	distinct
1018 3/2 99			C	<u></u>	Clay Loani	
					-	
ype: C=Concentration. D=Depletion. RM=R	Reduced Matrix, CS=Covere	ed or Coated	d Sand Gr	ains ² Loca	tion: PL=Pore Lining. M	=Matrix
ydric Soil Indicators:					Indicators for Pro	oblematic Hydric Soils: 3
Histosol (A1)	Polyvalue Belov MLRA 149B)	w Surface (S	58) (LRR F	₹,	2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)	☐ Thin Dark Surfa	ace (S9) (LI	RR R, MLF	RA 149B)	Coast Prairie Re	edox (A16) (LRR K, L, R)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Mucky N	150 5 5		. 38		at or Peat (S3) (LRR K, L, R)
Stratified Layers (A5)	Loamy Gleyed					S7) (LRR K, L, M)
Depleted Below Dark Surface (A11)	Depleted Matrix	x (F3)				v Surface (S8) (LRR K, L)
Thick Dark Surface (A12)	Redox Dark Su	rface (F6)			Description of the second	ace (S9) (LRR K, L)
Sandy Muck Mineral (S1)	Depleted Dark	Surface (F7)		The state of the s	e Masses (F12) (LRR K, L, R) Iplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4)	Redox Depress	ions (F8)				ΓΑ6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)					Red Parent Mat	
Stripped Matrix (S6)						ark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA 149B)					Other (Explain	
Indicators of hydrophytic vegetation and w	etland hydrology must be p	resent, unle	ess disturt	ed or proble		©
1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
				_		
estrictive Layer (if observed):					Hydric Soil Present	? Yes ○ No •
estrictive Layer (if observed): Type: Depth (inches):					Hydric Soil Present	? Yes ○ No ●
estrictive Layer (if observed): Type: Depth (inches): emarks:	stors. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: il profile indicated no hydric soil indica	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: Il profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: Il profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: Il profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 ES 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: il profile indicated no hydric soil indica	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 ES 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: Il profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 ES 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: Il profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: Il profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: il profile indicated no hydric soil indica	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: il profile indicated no hydric soil indica	stors. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type:	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): demarks: sil profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): demarks: sil profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 E. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): demarks: iil profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 ES 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): demarks: iil profile indicated no hydric soil indicated	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 ES 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
estrictive Layer (if observed): Type: Depth (inches): emarks: il profile indicated no hydric soil indica	ators. The sample point	upl-jbl-20	200107-	01 did not		20 2000 ES 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company	State: OH Sampling Point: upl-jbl-20200107-03
Investigator(s): JBL,JTT	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Hillside	Local relief (concave, convex, none): CONVEX Slope: 5.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K Lat.:	41.0978 Long.: -80.60465 Datum: NAD 83
Soil Map Unit Name: CmC - Chili loam, 6 to 12 percent slopes	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of y	year? Yes No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significant	tly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
45 457(Ca) 1457 557(1 15) 15) 15	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No •	
Hydric Soil Present? Yes ○ No ●	Is the Sampled Area within a Wetland? Yes No No
Wetland Hydrology Present? Yes ○ No ●	within a wettand:
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	
☐ High Water Table (A2) ☐ Aquatic Fauna (B1 ☐ Saturation (A3) ☐ Marl Deposits (B1)	
Water Marks (B1) Hydrogen Sulfide	
	heres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift deposits (B3) ☐ Presence of Reduc	
	uction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in F	
Sparsely Vegetated Concave Surface (B8)	FAC-neutral Test (D5)
Field Observations:	
1000	
Water Table Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes ○ No ●
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	wetland Hydrology Present? Tes O NO O
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
No wetland hydrology indicators observed.	

VEGETATION - Use scientific names of plan	its			Sampling Point: upl-jbl-20200107-03
Tree Stratum (Plot size: 20')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 Prunus serotina	15	~	FACU	Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)
2	-			11100 die 002, 1701, 01 170.
	50.00	H		Total Number of Dominant
3				Species Across All Strata:6(B)
4		Ш		Barrent of descinant Species
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
6	0			That Are obt., TACW, of TAC.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15')	15=	= Total Cover		Total % Cover of: Multiply by: OBL species x 1 =
1. Alnus glutinosa	5		FACW	The state of the s
2. Cornus alba	30	~	FACW	FACW species $35 \times 2 = 70$
3. Rosa multiflora	20	~	FACU	FAC species $15 \times 3 = 45$
	2			FACU species $65 \times 4 = 260$
4		H		UPL species $0 \times 5 = 0$
5		H		Column Totals:115 (A)375 (B)
6				COTAINI TOCATSIIS (A)S/S CS
7	0			Prevalence Index = $B/A = 3.261$
Herb Stratum (Plot size: 5')	55 =	= Total Cover	9	Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
1 Geum canadense		~	FAC	Dominance Test is > 50%
2. Solidago canadensis	20	✓	FACU	Prevalence Index is ≤3.0 ¹
3	0			
4	0			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				Problematic Hydrophytic Vegetation (Explain)
				1 Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata:
9				Definitions of Vegetation Strata.
10	0_			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11	0			at breast height (DBH), regardless of height.
12	0			Continued to the state of the Continued to the Continued
Woody Vine Stratum (Plot size: 20'	35=	= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
1 Lonicera japonica	10	✓	FACU	Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			
3.	0			Woody vine - All woody vines greater than 3.28 ft in height.
4				neight.
	10=	= Total Cover		
				Hydrophytic Vegetation
				Present? Yes No •
)	DEMONSTRATIONS
Danielle (Taskida akata mimbana kana ayan a sananta aka	-+ \			
Remarks: (Include photo numbers here or on a separate she	et.)			
No hydrophytic vegetation indicators present.				

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-jbl-20200107-03

Color Col	Depth		Matrix	•		dox Featu			absence of indicators.)	
Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains *Indicators:		Color (%				_Loc2	Texture	Remarks
Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains **Polyvalue Below Surface (S8) (LRR R, Histosol (A1)	0-9	10YR	4/3	100					Clay Loam	
#ydric Soil Indicators: Histosol (A1)	9-16	10YR	4/2	100					Clay Loam	
Addric Soil Indicators: Histosol (A1)										
Addric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators: Histosol (A1) Histosol (A2) Black Histic Epipedon (A2) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Surface (S9) (LRR R, MLRA 149B) Depleted Below Surface (S9) Depleted Below Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Muck Mineral (S1) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S4) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Polyvalue Below Surface (S8) (LRR K, L) Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Dark Surface (S9) (LRR K, L) Fedox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Polyvalue Below Surface (S9) (LRR K, L, R) Dark Surface (S7) (LRR R, MLRA 149B) Polyvalue Below Surface (S9) (LRR K, L, R) Dark Surface (S9) (LRR K, L) Type: Depth (inches): Type:										
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Histosol (A1)	lydric Soil I	Indicators:	- 1945 - 1945						Indicators for Prob	lematic Hydric Soils: 3
Histic Epipeuoli (RZ) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thin Dark Surface (F6) Depleted Dark Surface (F7) Sandy Muck Mineral (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR K, L, R) Findicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type: Depth (inches): Hydric Soil Present? Thin Dark Surface (A16) (LRR K, L, R) Som Muck Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L, M) Dark Surface (S7) (LRR K, L, M) Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Pindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type: Depth (inches): Hydric Soil Present? Yes No No	Service and the service of					w Surface ((S8) (LRR R	,		
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Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Conditionations of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sestrictive Layer (if observed): Type: Depth (inches): Depth (i	_ Thick Dar	k Surface (A:	12)				71		Iron-Manganese	Masses (F12) (LRR K, L, R)
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PIndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if observed): Type: Depth (inches): Depth (inches): Hydric Soil Present? Yes No Remarks: bil profile indicated no hydric soil indicators. The sample point upl-jbl-20200107-03 did not meet the vegetation, soil, or hydrology indicators to be	Dark Surf	ace (S7) (LRI	R R, MLRA	149B)						
Type:	³ Indicators of	f hydrophytic	vegetatio	n and wetla	and hydrology must be p	resent, un	less disturb	ed or proble		<u></u>
Depth (inches):	Restrictive L	ayer (if obs	erved):							
Remarks: oil profile indicated no hydric soil indicators. The sample point upl-jbl-20200107-03 did not meet the vegetation, soil, or hydrology indicators to be	Type:	entre e nance							Hydric Soil Brocont?	Vac O No 📵
pil profile indicated no hydric soil indicators. The sample point upl-jbl-20200107-03 did not meet the vegetation, soil, or hydrology indicators to be	Depth (inc	hes):							Hydric Soil Present?	Yes ○ No ⑤
assified as a wetland.			hydric so	il indicato	rs. The sample point	upl-jbl-20)200107-0	03 did not	meet the vegetation, so	oil, or hydrology indicators to b
	assified as a	a wetland.								

Project/Site: Lincoln Park-Riverbend 138kV Transmission	n Line Cit	ty/County: N	lahoning County	Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company		_	State: OH	Sampling Point: upl-jbl-20200107-04
Investigator(s): JBL,JTT		Section, Tow	nship, Range: S	6. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Hillside	Loc		cave, convex, no	
Subregion (LRR or MLRA): LRR K	Lat.: 41	.09788	Long.	: -80.60394
Soil Map Unit Name: CmC - Chili loam, 6 to 12 pe	ercent slopes			NWI classification: N/A
Are climatic/hydrologic conditions on the site typi	ical for this time of year?	? Yes	● No ○	(If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrolog				Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrolog				xplain any answers in Remarks.)
Summary of Findings - Attach site	18 9681		5 ulija: 200 (4	s, transects, important features, etc.
	No O			
	No 💿		ampled Area Wetland?	Yes ○ No •
Wetland Hydrology Present? Yes	No 💿			
Hydrology				
Wetland Hydrology Indicators:			2	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; c				Surface Soil Cracks (B6)
Surface Water (A1) High Water Table (A2)	Water-Stained Leaves	(B9)		Drainage Patterns (B10)
Saturation (A3)	Aquatic Fauna (B13) Marl Deposits (B15)			Moss Trim Lines (B16) Dry Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor	r (C1)		Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres	CONTRACTOR CONTRACTOR	nots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)	Presence of Reduced I		7013 (00)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction		C6)	Geomorphic Position (D2)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7	7)	(2)450.#*	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema			Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)				FAC-neutral Test (D5)
Field Observations:	25.000000000000000000000000000000000000			
Surface Water Present? Yes No •	Depth (inches):			
Water Table Present? Yes No •	Depth (inches):	100		ology Present? Yes No •
Saturation Present? (includes capillary fringe) Yes No •	Depth (inches):	40 500	Wetland Hydro	#####################################
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, p	previous inspe	ections), if availa	able:
Remarks:				
No wetland hydrology indicators observed.				

vegeration - use scientific names of plan	its			Sampling Point: upl-jbl-20200107-04
201	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species
1. Quercus palustris	55	✓	FACW	That are OBL, FACW, or FAC:4 (A)
2. Prunus serotina		✓	FACU	Total Number of Dominant
3	0			Species Across All Strata:7 (B)
4	0			MA STATE OF THE ST
5	0			Percent of dominant Species That Are OBL_FACW_or_FAC: 57.1% (A/B)
6				That Are OBL, FACW, or FAC: 57.1% (A/B)
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15')		= Total Cover		Total % Cover of: Multiply by: OBL species0 x 1 =0
1 Rosa multiflora	20	~	FACU	
2 Frangula alnus	15	~	FAC	FACW species $\underline{60}$ x 2 = $\underline{120}$
3.		Ħ		FAC species $\underline{25}$ x 3 = $\underline{75}$
4	2			FACU species $50 \times 4 = 200$
5				UPL species $0 \times 5 = 0$
6				Column Totals: <u>135</u> (A) <u>395</u> (B)
7	53			Prevalence Index = B/A = 2.926
Herb Stratum (Plot size: 5')	35=	= Total Cover	ž	Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
1. Solidago gigantea	5	~	FACW	✓ Dominance Test is > 50%
2. Geum canadense	2000	~	FAC	✓ Prevalence Index is ≤3.0 ¹
3	0			Morphological Adaptations ¹ (Provide supporting
4	0			data in Remarks or on a separate sheet)
5	0			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7	0			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			Mars decreases insperse statistical as
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12		Ħ		
Woody Vine Stratum (Plot size: 30')		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
1 Lonicera japonica	10	✓	FACU	Herb - All herbaceous (non-woody) plants, regardless of
2.	0			size, and woody plants less than 3.28 ft tall.
2	0			
1	0			Woody vine - All woody vines greater than 3.28 ft in height.
4.	-	- Total Cover		neight.
	10=	= Total Cover		
				Hydrophytic Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate she	et.)			
4 of the 7 dominant species were hydrophytic- the sample p		the indicator	s of domin	nance test and prevalance index.

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-jbl-20200107-04

(inches) Color (moist) % Color (moist) % Type. ¹ Loc2 Texture Remarks Sandy Clay Loam	Depth		Matrix			dox Featu			absence of indicators.)	
Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains Topic Calcal Sand Sand Sand Sand Sand Sand Sand Sand		Color (Loc2	Texture	Remarks
Trype: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains **Location: PL=Pore Lining. M=Matrix **Hydric Soil Indicators:	0-10	10YR	4/3	100					Sandy Clay Loam	
Hydric Soil Indicators: Histosol (A1)	10-18	10YR	4/4	100					Sandy Clay Loam	
Hydric Soil Indicators:										
Hydric Soil Indicators:										
Hydric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators:										
Hydric Soil Indicators:										
Hydric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators:										
Histosol (A1)	Type: C=Con	centration. D	=Depletio	n. RM=Red	uced Matrix, CS=Covere	ed or Coate	ed Sand Gra	ins ² Locat	tion: PL=Pore Lining. M=M	latrix
Histosol (A1) Histic Epipedon (A2) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Dark Surface (S7) (LRR R, L, R) Sandy Redox (S5) Dark Surface (S7) Dark Surface (S7) Dark Surface (S8) (LRR K, L) Depleted Dark Surface (F8) Sandy Muck Mineral (S1) Sandy Redox (S5) Surface (A12) Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Redox (S5) Surface (F8) Dark Surface (F8) Dark Surface (F8) Dark Surface (F8) Depleted Dark Surface (F8) Dark Surface (F8) Depleted Dark Surface (F8) Dark Surface	lydric Soil 1	Indicators:	- 10 - 10						Indicators for Probl	ematic Hydric Soils: 3
Black Histic (A3)						w Surface ((S8) (LRR R		_	
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox Depressions (F8) Redox Depressions (F8) Redox Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Type: Depth (inches): Remarks: Depth (inches): Type: Depth indicated no hydric soil indicators. The sample point upl-jbl-20200107-04 did meet the vegetation hydrophytic indicators; however, it						ace (S9) (I	LRR R. MLR.	A 149B)	Coast Prairie Redo	ox (A16) (LRR K, L, R)
Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Tron-Manganese Masses (F12) (LRR K, L, R) Peledmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Type: Depth (inches): Depth (inches): Type: Depth (inches): Depth indicators. The sample point upl-jbl-20200107-04 did meet the vegetation hydrophytic indicators; however, it		- FI S						(1150)	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)
Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Tindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stestrictive Layer (if observed): Type: Depth (inches): Type: Depth (inches): Depth dincators. The sample point upl-jbl-20200107-04 did meet the vegetation hydrophytic indicators; however, it									Dark Surface (S7)	(LRR K, L, M)
Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox Depressions (F8) Redox Derressions (F8) Redox Depressions (F8) Redox Derressions (F8) Redox Depressions (F8) Redox De		그렇게 보게 걸린다.					6		Polyvalue Below S	Surface (S8) (LRR K, L)
Sandy Muck Mineral (S1) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sestrictive Layer (if observed): Type: Depth (inches): Depth (inches): Depth (inches): Depth point upl-jbl-20200107-04 did meet the vegetation hydrophytic indicators; however, it				11)		41.50.000			Thin Dark Surface	(S9) (LRR K, L)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Redox Depressions (F8) Redox Depressions (F8) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Redox Depressions (F8) Redox Depressi	27 27 27 27 27 27 27 27 27 27 27 27 27 2						7)		☐ Iron-Manganese N	Masses (F12) (LRR K, L, R)
Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5)							. ,		Piedmont Floodpla	ain Soils (F19) (MLRA 149B)
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stestrictive Layer (if observed): Type: Depth (inches): Depth (inches): Type: Type: Type: Depth (inches): Type: Type: Depth (inches): Type: Type: Depth (inches): Type: Type: Type: Depth (inches): Type: Type: Type: Depth (inches): Type: Type: Type: Depth (inches): Ty	_		S4)		Nedox Depress	10113 (10)			Mesic Spodic (TA6	5) (MLRA 144A, 145, 149B)
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Hydric Soil Present? Yes No Remarks: Dip profile indicated no hydric soil indicators. The sample point upl-jbl-20200107-04 did meet the vegetation hydrophytic indicators; however, it		52 15							Red Parent Mater	ial (F21)
Other (Explain in Remarks) Total (Explain in Remarks) Hydric Soil Present? Yes No Remarks: Dip profile indicated no hydric soil indicators. The sample point upl-jbl-20200107-04 did meet the vegetation hydrophytic indicators; however, it									Very Shallow Dark	Surface (TF12)
Restrictive Layer (if observed): Type:		625 (675)	50	- 6						Remarks)
Type:	Indicators o	f hydrophytic	vegetatio	n and wetla	nd hydrology must be p	resent, un	less disturb	ed or proble	ematic.	
Depth (inches): Hydric Soil Present? Yes No • No		ayer (if obs	erved):							
Remarks: pil profile indicated no hydric soil indicators. The sample point upl-jbl-20200107-04 did meet the vegetation hydrophytic indicators; however, it	411100000000000000000000000000000000000	hes).							Hydric Soil Present?	Yes O No •
oil profile indicated no hydric soil indicators. The sample point upl-jbl-20200107-04 did meet the vegetation hydrophytic indicators; however, it									50	20028 N 10.287 N
d not meet the soil or hydrology indicators to be classified as a wetland.		dicated no l	hydric so	il indicato	rs. The sample point	unl-ibl-20	1200107-0	4 did me	et the vegetation hydro	nhytic indicators: however it
	id not meet	the soil or	hydrolog	y indicato	rs to be classified as	a wetland	1.	H ulu IIIe	et tile vegetation nytro	priytic indicators, nowever, it
				•						

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County	Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company	State: OH	Sampling Point: upl-JBL-20200107-05
Investigator(s): JBL,JTT	Section, Township, Range: S.	T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, non	e): convex Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K Lat	.: 41.09773 Long. :	-80.60299 Datum: NAD 83
Soil Map Unit Name: BtB - Bogart loam, till substratum, 2 to 6 per	cent slopes	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of	f year? Yes No (I	f no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology signification	antly disturbed? Are "Normal Cir	rcumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturall		olain any answers in Remarks.)
Summary of Findings - Attach site map showing	searc sea college search	
Hydrophytic Vegetation Present? Yes No •		
Hydric Soil Present? Yes No •	Is the Sampled Area within a Wetland?	Yes ○ No ●
Wetland Hydrology Present? Yes ○ No ●	within a wettands	
I hadrada ana		
Hydrology	92	
Wetland Hydrology Indicators:	race and the second	econdary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that appl	(A)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained High Water Table (A2) Aquatic Fauna		Drainage Patterns (B10) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (Dry Season Water Table (C2)
☐ Water Marks (B1) ☐ Hydrogen Sulfin	transfer and the state of the s	Crayfish Burrows (C8)
	spheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
☐ Drift deposits (B3) ☐ Presence of Re	duced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	duction in Tilled Soils (C6)	Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surf	ace (C7)	Shallow Aquitard (D3)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain	in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-neutral Test (D5)
Field Observations:	.2	
100 Page 100	s):	
Water Table Present? Yes No Depth (inches	:): Wetland Hydrolo	ogy Present? Yes No •
Saturation Present? (includes capillary fringe) Yes No Depth (inches	s):	*** Control and Control Control Co
Describe Recorded Data (stream gauge, monitoring well, aerial ph Remarks:	otos, previous inspections), if availab	le:
No hydrology indicators present.		

VEGETATION - OSE SCIENTIFIC Harries of pic	ants			Sampling Point: upl-JBL-20200107-05
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.0		- орсско		Number of Dominant Species
1. Pyrus communis			UPL	That are OBL, FACW, or FAC:
2	CO 000 000			Total Number of Dominant
3	0			Species Across All Strata:5(B)
4				20 000 00 10 10 10 10 10 10 10 10 10 10 1
5	0			Percent of dominant Species That Are OBL FACW or FAC: 40.0% (A/B)
6	0			That Are OBL, FACW, or FAC: $\frac{40.0\%}{}$ (A/B)
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15'		= Total Cove	r	Total % Cover of: Multiply by: OBL species 0 x 1 = 0
1 Frangula alnus	30	~	FAC	,
2 Rosa multiflora		~	FACU	FACW species $15 \times 2 = 30$
		Ě	FACW	FAC species30 x 3 =90
Y			TACT	FACU species $40 \times 4 = 160$
4			$\overline{}$	UPL species $\frac{2}{x}$ x $5 = \frac{10}{x}$
5		H	$\overline{}$	Column Totals: <u>87</u> (A) <u>290</u> (B)
6				Cordini rocars (A)
7	0			Prevalence Index = B/A =3.333
Herb Stratum (Plot size: 5')	65 :	= Total Cove	r l	Hydrophytic Vegetation Indicators:
		_		Rapid Test for Hydrophytic Vegetation
1 Symphyotrichum ericoides		~	FACU	Dominance Test is > 50%
2 Solidago gigantea	5	✓	FACW	Prevalence Index is ≤3.0 ¹
3				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
4	0			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0			Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				1 Indicators of hydric soil and wetland hydrology must
8	3.5			be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
		H		Proposition (1995) 1995
10			$\overline{}$	Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 10')	:	= Total Cove	r	greater than 3.28 ft (1m) tall
	0			Herb - All herbaceous (non-woody) plants, regardless of
1	-			size, and woody plants less than 3.28 ft tall.
2				
3				Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0 :	= Total Cove	•	
				Hydrophytic
				Vegetation Present? Yes No •
Remarks: (Include photo numbers here or on a separate sh				
No hydrophytic vegetation indicators present. Tree layer n	ot applicable	to Dominan	ce Test du	e to total cover<5%

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: upl-JBL-20200107-05

Depth Matrix Redox Features Texture Remarks	
0-16 10YR 4/3 100 Clay Loam	
¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ² Location: PL=Pore Lining. M=Matrix	
Historial (A1)	
Histis Epipedon (A2) MLRA 149B)	
Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Loamy Mucky Mineral (F1) LRR K, L)	
Loamy Gleyed Matrix (F2) Dark Surface (S7) (LRR K, L, M)	
Depleted Relew Dark Surface (A11) Depleted Matrix (F3)	
Thick Dark Surface (A12) Redox Dark Surface (F6)	
Depleted Dark Surface (F7)	
Redox Depressions (F8)	
Mesic Spoulc (TAO) (MLKA 144A, 145, 149b)	
Chrispad Mahriy (CC)	
Ports Surface (S7) (LDD D. MI DA 140D)	
Unit (Explain in Remarks)	
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
Restrictive Layer (if observed):	
Type:	
Depth (inches): Hydric Soil Present? Yes No •	
Remarks:	
Uniform coloring throughout, no hydric soil indicators present. The sample point upl-jbl-20200107-05 did not meet the vegetation, soil, or hy	drology
indicators to be classified as a wetland.	urology

Upland RLP-08ab

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County:	Mahoning County	Sampling Date: 14-Jun-16
Applicant/Owner: ATSI, a FirstEnergy Company		State: OH	Sampling Point: upl-jbl-20200107-06a,b
Investigator(s): JTT, JBL	Section, To	wnship, Range: S.	T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Take A september of the same	ncave, convex, none	
Subregion (LRR or MLRA): LRR R	Lat.: 41.097507	Long.:	80.601570 Datum: NAD83
Soil Map Unit Name: FhB-Fitchville silt loam, till substrat			NWI classification: N/A
10 10 10 10 10 10 10 10 10 10 10 10 10 1		s • No O (If	no, explain in Remarks.)
Are climatic/hydrologic conditions on the site typical for Are Vegetation , Soil , or Hydrology	1	· · · · · · · · · · · · · · · · · · ·	Vac 📵 Na 🔿
	significantly disturbed?		and production
Are Vegetation , Soil , or Hydrology	naturally problematic?	N N 1851	in any answers in Remarks.)
Summary of Findings - Attach site map	showing sampling p	oint locations,	transects, important features, et
Hydrophytic Vegetation Present? Yes No •	Te the	Sampled Area	
Hydric Soil Present? Yes ● No ○		a Wetland?	es O No 💿
Wetland Hydrology Present? Yes No			
Hydrology			
Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all	that apply)	_Sec	ondary Indicators (minimum of 2 required)
	ater-Stained Leaves (B9)		Surface Soil Cracks (B6) Drainage Patterns (B10)
	uatic Fauna (B13)	П	Moss Trim Lines (B16)
	arl Deposits (B15)		Dry Season Water Table (C2)
	drogen Sulfide Odor (C1)		Crayfish Burrows (C8)
	idized Rhizospheres along Living	Roots (C3)	Saturation Visible on Aerial Imagery (C9)
	esence of Reduced Iron (C4)		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	cent Iron Reduction in Tilled Soils	s (C6)	Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Th	in Muck Surface (C7)		Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	her (Explain in Remarks)		Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			FAC-neutral Test (D5)
Field Observations:			
Surface Water Present? Yes No •	Depth (inches):		
Water Table Present? Yes • No O	Depth (inches): 12	Ē	
Saturation Present? (includes capillary fringe) Yes • No •	Depth (inches):9	Wetland Hydrolog	y Present? Yes No
Describe Recorded Data (stream gauge, monitoring well Remarks:			
Area receives hydrology from precipitation. Sample poir	nt meets the saturation and h	igh water table hydro	logic indicators.

Tree Stratum (Plot size: 30'	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	эрестез:	Status	Number of Dominant Species
1				That are OBL, FACW, or FAC:1(A)
2				Total Number of Dominant
3				Species Across All Strata:5(B)
4	0			
5				Percent of dominant Species That Are OBL_FACW_or_FAC: 20.0% (A/B)
6	0			That Are OBL, FACW, or FAC: 20.0% (A/B)
7	0			Prevalence Index worksheet:
		Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15')	-			OBL species 15 x 1 = 15
1 Rosa multiflora	30	✓	FACU	FACW species
2 Robinia pseudoacacia	3		FACU	FAC species 0 x 3 = 0
3. Lonicera maackii	2		UPL	Management and the state of the
4	0			FACU species $63 \times 4 = 252$
5				UPL species $\frac{2}{}$ x 5 = $\frac{10}{}$
6				Column Totals: <u>85</u> (A) <u>287</u> (B)
7	92		-	Prevalence Index = B/A = 3.376
05.5		Total Cove		100 a 400 / 20,5 40 (40,5 x 27 20 20 20 20 20 20 20 20 20 20 20 20 20
Herb Stratum (Plot size: 5')	35=	- Total Cove	8	Hydrophytic Vegetation Indicators:
1. Symphyotrichum ericoides	20	•	FACU	Rapid Test for Hydrophytic Vegetation
O Enilohium coloratum	15	V	OBL	Dominance Test is > 50%
			Victoria de la composición dela composición de la composición de la composición dela composición dela composición dela composición dela composición de la composición del composición del composición dela composición dela composición del composición del composición del composición del composición dela composición dela composición dela composición dela composición dela composición dela comp	Prevalence Index is ≤3.0 ¹
3. Symphyotrichum novae-angliae		H	FACW	Morphological Adaptations ¹ (Provide supporting
4		H		data in Remarks or on a separate sheet)
5	The state of the s	H		Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9	0			Definitions of Vegetation Strata
0				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
1		П		breast height (DBH), regardless of height.
2		H		
		Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 15')		1000.0010.		greater than 3.28 ft (1m) tall
1. Lonicera japonica	5	~	FACU	Herb - All herbaceous (non-woody) plants, regardless of
2 Rosa setigera	5	~	FACU	size, and woody plants less than 3.28 ft tall.
3				W1
٠. ٨			3	Woody vine - All woody vines greater than 3.28 ft in height.
4,		— T-1-1 C	7	neight.
	10 =	= Total Cove		
	10=	: Total Cove		
				Hydrophytic Vegetation Present? Yes No No
Remarks: (Include photo numbers here or on a separate				
1 of the 5 dominant species was hydrophytic. Vegetation	at this data po	int does not	meet any	hydrophytic indicators.

Sampling Point: upl-jbl-20200107-06

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-08ab **Soil**

Sampling Point: upl-jbl-20200107-06

Profile Description Depth	ription: (De	scribe to Matrix	the depth	needed to		the indiction that the the the the the the the the the th		onfirm the	absence of indicators.)	l
(inches)	Color ((moist)	%	Color	(moist)	%	Type ¹	Loc2	- Texture	Remarks
0-11	10YR	3/2	100						Clay Loam	
11-16	10YR	4/2	99	10YR	5/6	1	С	M	Clay Loam	distinct redox
										-
										-
¹ Type: C=Con	centration. D	=Depletio	n. RM=Red	uced Matrix,	CS=Covere	d or Coate	d Sand Gra	ins ² Loca	tion: PL=Pore Lining. M=N	–
Hydric Soil				<u> </u>						blematic Hydric Soils: 3
Histosol ((A1)					v Surface ((S8) (LRR R	,) (LRR K, L, MLRA 149B)
Histic Epi	pedon (A2)				A 149B)					dox (A16) (LRR K, L, R)
Black His	tic (A3)						LRR R, MLR	A 149B)	The same of the same of	t or Peat (S3) (LRR K, L, R)
Hydroger	Sulfide (A4)				and the second s) LRR K, L)		Dark Surface (S7	
	Layers (A5)				ny Gleyed I					Surface (S8) (LRR K, L)
The state of the s	Below Dark S	Andrew Control of the State	11)		leted Matrix				Thin Dark Surfac	te (S9) (LRR K, L)
	k Surface (A1				ox Dark Sur leted Dark	100	7)		Iron-Manganese	Masses (F12) (LRR K, L, R)
_	uck Mineral (S				ox Depressi		<i>'</i>)		Piedmont Floodp	olain Soils (F19) (MLRA 149B)
	eyed Matrix (S4)		Keu	DA Depressi	013 (10)			Mesic Spodic (TA	A6) (MLRA 144A, 145, 149B)
Sandy Re									Red Parent Mate	rial (F21)
	Matrix (S6)	D D MIDA	140P\						Very Shallow Da	rk Surface (TF12)
21	face (S7) (LRF		Mis Company Color						Other (Explain in	ı Remarks)
³ Indicators o	f hydrophytic	vegetatio	n and wetla	and hydrology	must be p	resent, un	less disturb	ed or proble	ematic.	
Restrictive L	ayer (if obs	served):								
Туре:	U 80								Hydric Soil Present?	Yes No
Depth (inc	:hes):								nyuric son Presents	res © No O
Remarks:										
Soil profile of	lid not meet	hydric s	oil indicate	ors						
Based on site	investigatio	ons this s	sample po	int does not	meet the	three we	etland crite	eria to be o	classified as a wetland	Although the hydrology was
present at th										, maneagir and my anology was

Upland RLP-09ab

Applicant/Owner: ATSI, a Investigator(s): B Leopold Landform (hillslope, terrac Subregion (LRR or MLRA):	, R Massa		pany			2 1		State: O	1	Sampling Point:	upl-bl-	20200108-02
Landform (hillslope, terrac Subregion (LRR or MLRA):	70	1220				2						
Subregion (LRR or MLRA):	e, etc.):	100200000				Sec	tion, Town:	ship, Range:	S.	T. 2N		R. 1W
		Mou	nd			Local re	elief (conca	ve, convex,	none):	flat	Slope:	0.0 % / 0.0
	LRR K				Lat.:	41.0977	77	Lon	g.: -8	0.59952	Date	um: NAD83
Soil Map Unit Name: BtB -	Bogart lo	oam, i	till sub	stratum,					-	NWI classification:	n/a	
Are climatic/hydrologic co	nditions	on the	site t	vpical fo	or this time of	vear?	Yes •	No O	(If no	o, explain in Remarl	ks.)	
Are Vegetation, So			Hydro		significant		rbed?	Are "Norma		mstances" present?	V (No O
	_				_							
Are Vegetation , So Summary of Findin		-	Hydro h cit	2000	naturally			8 8		n any answers in Re	.55	estures et
•			s O	No 💿		Sampi	iiiig poii	iii iocatio	113, 0	ransects, imp	or carre is	eatures, et
Hydrophytic Vegetation P	resent?		s 💿	No O			Is the Sar	mpled Area		0 0		
Hydric Soil Present?							within a \		Yes	s ○ No ●		
Wetland Hydrology Preser	nt?	Ye	s •	No O	<u> </u>							
Hydrology												
Wetland Hydrology Indica			020 020	G 01 1	22702 0000 12 28				Secor	ndary Indicators (minir	mum of 2 rea	uired)
Primary Indicators (minin	num of or	ne rea	uired;	check a	II that apply)					Surface Soil Cracks (B6		
Surface Water (A1)				_	/ater-Stained Lea				-	Orainage Patterns (B10		
✓ High Water Table (A2)✓ Saturation (A3)					quatic Fauna (B1					Moss Trim Lines (B16)		
Water Marks (B1)					larl Deposits (B1					Ory Season Water Tabl Crayfish Burrows (C8)	e (C2)	
Sediment Deposits (B2)				-	ydrogen Sulfide xidized Rhizosph	- The state of the state of	E/10	tc (C3)		Saturation Visible on A	erial Imagery	(C9)
Drift deposits (B3)				-	resence of Reduc			is (C)	_	Stunted or Stressed Pla		(C3)
Algal Mat or Crust (B4)					ecent Iron Reduc	***************************************	***********	5)		Geomorphic Position ([
Iron Deposits (B5)					hin Muck Surface		inca sons (co	٥)		Shallow Aquitard (D3)	/	
Inundation Visible on Ae	rial Image	ry (B7))		ther (Explain in I	35 - 35				Microtopographic Relie	f (D4)	
Sparsely Vegetated Conc					ther (Explain iii i	(Kemano)				FAC-neutral Test (D5)	5. 5. 4 695 52 10 2 5.	
Field Observations:	95.53		6554									
Surface Water Present?	Yes) N	lo 💿		Depth (inches):	p-						
Water Table Present?	Yes 🤄) N	lo O		Depth (inches):	7	7				_	
Saturation Present? (includes capillary fringe)	Yes 🤄	N	lo O		Depth (inches):		1	Wetland Hyd	rology	Present? Yes	● No C)
Describe Recorded Data (s	stream ga	iuge, i	monito	oring wel	ll, aerial photo	s, previo	ous inspection	ons), if availa	able:			
Remarks:												
Primary hydrology indicato	ors preser	nt as s	saturat	ed soils	(within 12" of	surface)) and high v	water table.				

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover	7 7 7 7 7 7	Status	Number of Dominant Species
1. Crataegus crus-galli		~	FAC	That are OBL, FACW, or FAC:3(A)
2. Acer rubrum			FAC	Total Number of Dominant
3				Species Across All Strata:8(B)
4	0_			Develop of developed Species
5	2000			Percent of dominant Species That Are OBL, FACW, or FAC: 37.5% (A/B)
6				matric day many of matrices
7	0_			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	35 =	Total Cover	0	Total % Cover of: Multiply by:
4 06	10		FAC	OBL species 0 x 1 = 0
0.044-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-	45	✓	FAC	FACW species 0 x 2 =0
Betula allegnaniensis Rosa multiflora	germannia de la compansa de la compa	~	FACU	FAC species <u>60</u> x 3 = <u>180</u>
	2	Ħ	TACO	FACU species $35 \times 4 = 140$
4	-	H		UPL species $\frac{5}{}$ x 5 = $\frac{25}{}$
5		П	-	Column Totals: <u>100</u> (A) <u>345</u> (B)
6		H		750 II G III S
7	-	Tatal Cause		Prevalence Index = B/A = 3.450
Herb Stratum (Plot size: 5' r)	40 =	Total Cover		Hydrophytic Vegetation Indicators:
1. Solidago altissima	10	✓	FACU	Rapid Test for Hydrophytic Vegetation
2. 6:		V	FACU	Dominance Test is > 50%
	1000	V	FACU	Prevalence Index is ≤3.0 ¹
		V	UPL	Morphological Adaptations ¹ (Provide supporting
• production of the second sec	-	Ī	OFL	data in Remarks or on a separate sheet)
5		ā		Problematic Hydrophytic Vegetation ¹ (Explain)
6				1 Indicators of hydric soil and wetland hydrology must
7		H	-	be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11			_	breast height (DBH), regardless of height.
12		_ 🗆		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: _30'r)	25 =	Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	-			size, and woody plants less than 3.28 ft tall.
3	0			Manda de Allacanda de antesta de antesta de la 200 filia
4	0			Woody vine - All woody vines greater than 3.28 ft in height.
7.	0 =	Total Cover		
		10441 00101		
				Hydrophytic
				Vegetation Present? Yes ○ No ●
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos provided in Appendix D.	,			
Priotos provided in Appendix D.				
No hydrophytic vegetation indicators present.				

Sampling Point: upl-bl-20200108-02

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-09ab

Sampling Point: upl-bl-20200108-02

Profile Description: (Describe to the dep	th needed to documen	t the indi	cator or c	onfirm the	absence of indicators.)
Depth <u>Matrix</u>		dox Featu	ures		_
(inches) Color (moist) %	Color (moist)	%_	Type 1		Texture Remarks
0-710YR4/295		5	C	PL	Silt Loam
7-1710YR5/395	10YR6/6	_ 5	C	M	Silty Clay Loam
¹ Type: C=Concentration. D=Depletion. RM=R	educed Matrix CS=Covere	ed or Coate	ed Sand Gr	ains 21 oca	ation: PI =Pore Lining M=Matrix
Hydric Soil Indicators:	educed Flatrix, es—covere	d or could	ca Sana Gre	1113 LOCA	
Histosol (A1)	Polyvalue Belov	w Surface	(S8) (LDD L	•	Indicators for Problematic Hydric Soils: 3
Histic Epipedon (A2)	MLRA 149B)	W Surface	(50) (ERR)	' /	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Histic (A3)	Thin Dark Surfa	ace (S9) (LRR R, MLF	RA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Hydrogen Sulfide (A4)	Loamy Mucky N	Mineral (F1) LRR K, L		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Stratified Layers (A5)	Loamy Gleyed	Matrix (F2))		Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L)
Depleted Below Dark Surface (A11)	✓ Depleted Matri				Thin Dark Surface (S9) (LRR K, L)
Thick Dark Surface (A12)	Redox Dark Su	10.00			☐ Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Muck Mineral (S1)	Depleted Dark		7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4)	Redox Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)					Red Parent Material (F21)
Stripped Matrix (S6)					Very Shallow Dark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA 149B)					Other (Explain in Remarks)
³ Indicators of hydrophytic vegetation and we	tland hydrology must be p	resent, un	nless distur	oed or probl	ematic.
Restrictive Layer (if observed):					
Type:					
Depth (inches):					Hydric Soil Present? Yes ● No ○
Remarks:					•
Hydric soil indicators present due to pres	ence of redox features	in low ch	roma and	high value	e matrix in upper layer
Tryune son maleators present due to pres	since of redox reduces	iii iow ciii	roma ana	riigir value	a madrix in apper layer.
Based on site investigation, this location i	s not in a wetland as it	does not	t meet hyd	drophytic v	regetation criteria.

Upland RLP-10

Project/Site: Lincoln Park-Riverbend 138	kV Transmiss	sion Line	City/County: Mahoning County Sampling Date: 08-Jan-20							
Applicant/Owner: ATSI, a FirstEnergy	Company		_	State: OH	Sampling Poir	nt: upl-bl-20200108-01				
Investigator(s): B Leopold, R Massa			Section, Tov	vnship, Range:	s. T. 2N	R. 1W				
Landform (hillslope, terrace, etc.):	Геггасе		Local relief (con	icave, convex, n	one): convex	Slope: 3.0 % / 1.7 °				
Subregion (LRR or MLRA): LRR K		Lat.:	41.09776	Long	-80.59849	Datum: NAD83				
Soil Map Unit Name: CoC - Chili-Urba	an land com	nplex, rolling			NWI classificati	on: n/a				
Are climatic/hydrologic conditions or	the site ty	pical for this time of	year? Yes	No ○	— (If no, explain in Rer	marks.)				
Are Vegetation, Soil	, or Hydrol	ogy Significant	tly disturbed?		Circumstances" prese	Yes (a) No (
	, or Hydrol		problematic?		explain any answers i					
Summary of Findings - Att	55	170	ii	5. 6	(A)	353				
Hydrophytic Vegetation Present?	Yes O	No •	Jamping Po	Jiii Tocacioi	15/ (141150015/ 11	inportaine reactures, et				
Hydric Soil Present?	Yes	No O		Sampled Area	Yes ○ No ●					
Wetland Hydrology Present?	Yes O	No •	within	a Wetland?	ies 🔾 ino 🔾					
Data point upl-bl-20200108-01 is poshrub-scrub.	int out asso	ociated with wetland v	w-bl-20200108-0	1 (PSS). Point o	ut located about 10' w	vest of PSS boundary in upland				
Hydrology Wetland Hydrology Indicators:					Secondary Indicators (r	minimum of 2 required)				
Primary Indicators (minimum of one	required;	check all that apply)			Surface Soil Cracks	(B6)				
Surface Water (A1)		Water-Stained Lea	3 3		Drainage Patterns	*******				
High Water Table (A2)		Aquatic Fauna (B1			Moss Trim Lines (B					
Saturation (A3)		Marl Deposits (B1			Dry Season Water	155 5				
Water Marks (B1) Sediment Deposits (B2)		Hydrogen Sulfide		. (22)	Crayfish Burrows (1 15 mm mm m m m m m m m m m m m m m m m				
Drift deposits (B3)		Service and a service and a service and and	neres along Living R	loots (C3)	Stunted or Stresse	on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Presence of Reduc		(00)	Geomorphic Position					
Iron Deposits (B5)		-2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	ction in Tilled Soils	(C6)	Shallow Aquitard (
Inundation Visible on Aerial Imagery	(B7)	Thin Muck Surface			Microtopographic F					
Sparsely Vegetated Concave Surface	10-50.00-050-1	Other (Explain in I	Remarks)		FAC-neutral Test (I					
Field Observations:										
Surface Water Present? Yes	No 💿	Depth (inches):								
Water Table Present? Yes	No 💿	Depth (inches):				/ O N- O				
Saturation Present? (includes capillary fringe) Yes	No 💿	Depth (inches):		Wetland Hydr	ology Present? Y	′es ○ No •				
Describe Recorded Data (stream gau	ge, monitor	ing well, aerial photo	s, previous inspe	ctions), if availal	ole:					
Remarks:										
No primary hydrology indicators pres	ent.									

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1 Populus tremuloides	10000	~	FACU	That are OBL, FACW, or FAC:(A)
2. Acer rubrum		V	FAC	Total Number of Dominant
3. Quercus alba	10	~	FACU	Species Across All Strata: 9 (B)
4	0_			
5				Percent of dominant Species That Are OBL, FACW, or FAC:11.1% (A/B)
6				mat Are obt., racw, or rac.
7	0_			Prevalence Index worksheet:
(Dist.: 151s	45 =	Total Cover	į	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' r)	1122		V.25492	OBL species 0 x 1 = 0
1. Acer rubrum			FAC	FACW species
2. Rosa multiflora		✓	FACU	FAC species 35 x 3 = 105
3. Ulmus rubra	10		FAC	FACU species 125 x 4 = 500
4. Lonicera morrowii	20	✓	FACU	UPL species $0 \times 5 = 0$
5	0_			
6	0			Column Totals: <u>160</u> (A) <u>605</u> (B)
7	0_			Prevalence Index = B/A = 3.781
(0)-4 - 51-	60 =	Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' r				Rapid Test for Hydrophytic Vegetation
1 Solidago altissima	10	✓	FACU	a 200 at 1720 193 to 15 biologic
2. Symphyotrichum pilosum	10	✓	FACU	Dominance Test is > 50%
3 Lonicera japonica	20	✓	FACU	Prevalence Index is ≤3.0 ¹
4				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	_			Problematic Hydrophytic Vegetation ¹ (Explain)
6				Problematic Hydrophytic Vegetation - (Explain)
7.	-			1 Indicators of hydric soil and wetland hydrology must
		Ħ		be present, unless disturbed or problematic.
8	Tr (1989)		-	Definitions of Vegetation Strata
9	1000	H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11,				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)	50=	Total Cover		greater than 3.28 ft (1m) tall
	5	~	FACU	Herb - All herbaceous (non-woody) plants, regardless of
•	0	Ħ	TACO	size, and woody plants less than 3.28 ft tall.
2	0	H		The desired the second
3	-	H	3	Woody vine - All woody vines greater than 3.28 ft in
4		-		height.
	5=	Total Cover		
				Hydrophytic Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos provided in Appendix D.	,			
Thotas provided in Appendix D.				
Hydrophytic vegetation indicators not present.				
Lao 2005 Al 20 1550				

Sampling Point: upl-bl-20200108-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-10 **Soil**

Sampling Point: upl-bl-20200108-01

Profile Descri	iption: (Des	cribe to	the depth	needed to	document	the indic	cator or co	onfirm the	e absence of indicators.)	
Depth		Matrix				lox Featu				
(inches)	Color (%	Color ((moist)	%	Type 1	Loc ² _	Texture Remarks	
0-7	10YR	3/2	100						Silt Loam	
7-14	10YR	3/2	90	7.5YR	4/6	10	c	PL	Silt Loam	
			-	-	-					
1										
		=Depletior	n. RM=Red	uced Matrix, (CS=Covere	d or Coate	d Sand Gra	ins ² Locat	ation: PL=Pore Lining. M=Matrix	
Hydric Soil I					11 IA 140 - 110 A 10 14 15 14 15 14 15 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16				Indicators for Problematic Hydric Soils: 3	
Histosol (A					value Belov A 149B)	v Surface (S8) (LRR R	ι,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
	pedon (A2)				57	ice (S9) (L	RR R, MLR	A 149B)	Coast Prairie Redox (A16) (LRR K, L, R)	
Black Histi) LRR K, L)	5	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
	Sulfide (A4) Layers (A5)				ny Gleyed I				Dark Surface (S7) (LRR K, L, M)	
	Below Dark S	Surface (A1	1)		eted Matrix				Polyvalue Below Surface (S8) (LRR K, L)	
12000	Surface (A1		.1)	✓ Redo	ox Dark Sur	face (F6)			Thin Dark Surface (S9) (LRR K, L)	
	ck Mineral (S			Depl	eted Dark	Surface (F7	7)		☐ Iron-Manganese Masses (F12) (LRR K, L, R)	
_	yed Matrix (S			Redo	x Depress	ions (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)	
Sandy Red	ğ								Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
Stripped M									Red Parent Material (F21)	
Dark Surfa	ice (S7) (LRR	R, MLRA	149B)						✓ Very Shallow Dark Surface (TF12)✓ Other (Explain in Remarks)	
³ Indicators of	hudronhutic	vogotation	and watta	nd budrologu	must be n	rocent uni	oce dieturb	and or proble	25 - 17 10 - 17 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	
			i and welle	na nyarology	must be p	reseric, urii	ess distuit	red of proble	lettidu.	-
Restrictive La	ayer (if obs	erved):								
Type:									Hydric Soil Present? Yes No	
Depth (inch	ies):								90° miles (100° mi	
Remarks: Hydric soil ind	licator pres	ent in soi	l profile d	ue to prese	nce of red	lox featur	es in low	chroma ar	nd low value matrix of lower layer meeting thickness	
(4"+) and dep	oth (starting	g <=8") r	equireme	nts.					,	
Pasad on site	invoctiontic	n this le	estion is	aat in a wat	land as it	door not	most bus	leology or l	hydrophytic vegetation criteria.	
based on site	investigatio	ii, uiis io	ication is	iot iii a wet	iailu as it	does not	meet nyc	irology or i	Trydrophydic vegetation chteria.	

Upland RLP-11

Project/Site: Lincoln Park-Riverbend 13	JKV Transmiss	lon Line City,	/County: Manoning County	Sampili	ng Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy	y Company		State: OF	Sampling Point:	upl-bl-20200107-05
Investigator(s): B Leopold, R Massa			Section, Township, Range:	s. T. 2N	R. 1W
Landform (hillslope, terrace, etc.):	Saddle	Loca	al relief (concave, convex, r	none): convex	Slope: 3.0 % / 1.7
Subregion (LRR or MLRA): LRR K		Lat.: 41.09	97844 Lon e	g.: -80.59763	Datum: NAD83
Soil Map Unit Name: BgB - Bogart lo	oam, 2 to 6	20 VIII 1		NWI classification:	
Are climatic/hydrologic conditions o			Yes ● No ○	(If no, explain in Remark	
Are Vegetation, Soil	, or Hydrol			Circumstances" present?	Yes ● No ○
Are Vegetation , Soil ,	, or Hydrold	27.5	ž .	explain any answers in Re	3.5
Summary of Findings - At	_		ipling point locatio	ns, transects, imp	ortant features, etc
Hydrophytic Vegetation Present?	Yes 🔾	No •	To the Commission Aven		
Hydric Soil Present?	Yes	No O	Is the Sampled Area within a Wetland?	Yes 🔾 No 💿	
Wetland Hydrology Present?	Yes O	No ●			
Remarks: (Explain alternative prod	cedures here	or in a separate report.)	·		
Hydrology Wetland Hydrology Indicators:				_Secondary Indicators (minin	num of 2 required)
Primary Indicators (minimum of on	e required:	check all that apply)		Surface Soil Cracks (B6)	
Surface Water (A1)		Water-Stained Leaves (E	89)	Drainage Patterns (B10	
High Water Table (A2)		Aquatic Fauna (B13)		Moss Trim Lines (B16)	,
Saturation (A3)		Marl Deposits (B15)		Dry Season Water Table	e (C2)
Water Marks (B1)		Hydrogen Sulfide Odor ((C1)	Crayfish Burrows (C8)	
Sediment Deposits (B2)		Oxidized Rhizospheres a	along Living Roots (C3)	Saturation Visible on Ae	erial Imagery (C9)
Drift deposits (B3)		Presence of Reduced Iro	on (C4)	Stunted or Stressed Pla	
Algal Mat or Crust (B4)		Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic Position (D	2)
☐ Iron Deposits (B5)	(0.7)	Thin Muck Surface (C7)		Shallow Aquitard (D3)	and Table (1994)
Inundation Visible on Aerial ImagerSparsely Vegetated Concave Surface		Other (Explain in Remar	rks)	Microtopographic Relief	(D4)
Sparsely vegetated Concave Surface	: (DO)			FAC-neutral Test (D5)	
Field Observations:					
Surface Water Present? Yes	No 💿	Depth (inches):	0		
Water Table Present? Yes	No 💿	Depth (inches):		122 /	O O
Saturation Present? (includes capillary fringe) Yes	No 💿	Depth (inches):	Wetland Hyd	rology Present? Yes	○ No •
Describe Recorded Data (stream ga	uge, monitor	ing well, aerial photos, pre	evious inspections), if availa	ble:	
Remarks:					
No hydrology indicators present.					
No flydrology indicators present.					

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover	эресіез:	Status	Number of Dominant Species
1. Ulmus americana			FACW	That are OBL, FACW, or FAC:3(A)
2 Populus tremuloides		~	FACU	Total Number of Dominant
3. Acer rubrum			FAC	Species Across All Strata:6(B)
4				Develop of developer Consider
5	2000			Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
6				matric day many of matrices
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	60 =	Total Cover		Total % Cover of: Multiply by:
d door with the	30		FAC	OBL species x 1 =
O. Ulawa annadana	10	✓	FACW	FACW species
		~	FAC	FAC species $\underline{55}$ x 3 = $\underline{165}$
· · · · · · · · · · · · · · · · · · ·		~	FACU	FACU species $110 \times 4 = 440$
C.I. Maria Maria Cara Cara Cara Cara Cara Cara Cara	-		TACO	UPL species $0 \times 5 = 0$
5	-	П	-	Column Totals: <u>180</u> (A) <u>635</u> (B)
6	-	H		150 15 150
7	-	Tatal Cause		Prevalence Index = B/A = 3.528
Herb Stratum (Plot size: 5' r	60 =	Total Cover		Hydrophytic Vegetation Indicators:
1 Fallopia japonica	40	✓	FACU	Rapid Test for Hydrophytic Vegetation
2 Lonicera japonica	10		FACU	Dominance Test is > 50%
0 11 do-1 do-1 do-1		Н	FAC	Prevalence Index is ≤3.0 ¹
		Ħ	TAC	Morphological Adaptations ¹ (Provide supporting
4	-	Ħ	-	data in Remarks or on a separate sheet)
5		ā		Problematic Hydrophytic Vegetation ¹ (Explain)
6	-			¹ Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11			_	breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: _30'r)	60=	Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	-	Ē		size, and woody plants less than 3.28 ft tall.
3	0			Washington Allert Aller
1	0			Woody vine - All woody vines greater than 3.28 ft in height.
4.	0 =	Total Cover		noight.
		Total Cover		
				Hydrophytic
				Vegetation Present? Yes ○ No ●
				riesent:
Demonto. (Tankada abata arresta arr				
Remarks: (Include photo numbers here or on a separate she	eet.)			
Photos provided in Appendix D.				
No hydrophytic vegetation indicators present.				

Sampling Point: upl-bl-20200107-05

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-11 **Soil**

Sampling Point: upl-bl-20200107-05

	iption: (De		the depth	needed to				onfirm the	absence of indicators.)	
Depth (inches)	Color (Matrix moist)	%	Color (Re moist)	dox Featu %	ıres Type_ ¹	Loc2	_ Texture	Remarks
0-16	10YR	4/2	90	10YR	5/6	10	C	<u></u> М	Sandy Clay Loam	Kemarks
									- Suriay Ciay Louin	
							-			
		-								
		-					-		·	
									-	
									-	
1										
		=Depletio	n. RM=Red	uced Matrix, (CS=Covere	ed or Coate	ed Sand Gra	ains ² Loca	tion: PL=Pore Lining. M=Matrix	
Hydric Soil I								200	Indicators for Problematic	Hydric Soils: 3
Histosol (value Belo A 149B)	w Surface ((S8) (LRR F	₹,	2 cm Muck (A10) (LRR K,	L, MLRA 149B)
	pedon (A2)					face (S9) (I	IRR R MIR	RA 149B)	Coast Prairie Redox (A16)	(LRR K, L, R)
Black Hist						Mineral (F1			5 cm Mucky Peat or Peat ((S3) (LRR K, L, R)
	Sulfide (A4)			100000000000000000000000000000000000000		Matrix (F2)			Dark Surface (S7) (LRR K,	L, M)
	Layers (A5)				eted Matri		<i>(</i>)		Polyvalue Below Surface (S8) (LRR K, L)
1	Below Dark S		11)			ırface (F6)			Thin Dark Surface (S9) (L	RR K, L)
	k Surface (A1					Surface (F	7)		Iron-Manganese Masses (I	F12) (LRR K, L, R)
	ck Mineral (S				x Depress				Piedmont Floodplain Soils	(F19) (MLRA 149B)
	eyed Matrix (S	54)				,			Mesic Spodic (TA6) (MLRA	144A, 145, 149B)
Sandy Red	30 (550)								Red Parent Material (F21)	
	Matrix (S6)	D MIDA	140P)						Very Shallow Dark Surface	
	ace (S7) (LRF								Other (Explain in Remarks)
³ Indicators of	f hydrophytic	vegetation	n and wetla	nd hydrology	must be p	present, un	less distur	oed or proble	ematic.	
Restrictive L	ayer (if obs	erved):								
Type:	1020 60								100 100 100 100 100 100 100 100 100 100	~
Depth (inc	hes):								Hydric Soil Present? Yes	⊙ No ○
Remarks:										
Hydric soil inc	dicator pres	ent as re	dox featur	es in low ch	roma an	d low valu	ıe matrix	Location	appears to be possible spoils pil	e
riyane son me	alcutor pres	che as re	dox reata	co in ion ci	ii oiria air	a low valu	ac macin.	Location	appears to be possible spons pri	. .
Based on site	investigation	on, this lo	cation is	not in a wet	land as it	t does not	meet hy	drology or	hydrophytic vegetation criteria.	

Upland RLP-12

Project/Site: Lincoln Park-Riverb	end 138kV Transmiss	sion Line	City/County: Mahoning Coun	nty	Sampli	ng Date: 07-Jan-20
Applicant/Owner: ATSI, a Firs	tEnergy Company		State:	OH San	npling Point:	upl-bl-20200107-04
Investigator(s): B Leopold, R i	Massa		Section, Township, Range	e: S.	T. 2N	R. 1W
Landform (hillslope, terrace, e	tc.): Flat		Local relief (concave, convex	, none): con	vex	Slope: 1.0 % / 0.6
Subregion (LRR or MLRA):	RR K	Lat.:	41.09793 Lo	ong.: -80.596	25	Datum: NAD83
Soil Map Unit Name: Se - Seb	2000 PCS - 1900 PCS -	AND THE PARTY OF T			classification:	
Are climatic/hydrologic condit	ions on the site tv	pical for this time of	vear? Yes • No O	(If no, exp	lain in Remark	(s,)
Are Vegetation, Soil	, or Hydrol				nces" present?	V (N- (
	_					
Are Vegetation , Soil	, or Hydrol	15 to	10 A		answers in Re	353
Summary of Findings			sampling point locati	ions, trans	sects, imp	ortant features, etc
Hydrophytic Vegetation Prese		No •	To the Complet Aven			
Hydric Soil Present?	Yes O	No •	Is the Sampled Area within a Wetland?	Yes 🔾	No 💿	
Wetland Hydrology Present?	Yes O	No •				
same roadside drainage swa	le at a slightly high	ner elevation.				
Hydrology Wetland Hydrology Indicator	s:			Carandani	fodieskous (estato	and of 2 was incl
Primary Indicators (minimum		check all that apply)				num of 2 reauired)
Surface Water (A1)	or one required,	Water-Stained Lea	avec (RO)		e Soil Cracks (B6 ge Patterns (B10	
High Water Table (A2)		Aquatic Fauna (B1			rim Lines (B16)	,
Saturation (A3)		Marl Deposits (B1			ason Water Tabl	e (C2)
Water Marks (B1)		Hydrogen Sulfide			h Burrows (C8)	- ()
Sediment Deposits (B2)			neres along Living Roots (C3)			erial Imagery (C9)
Drift deposits (B3)		Presence of Reduc			d or Stressed Pla	[20] 12[20] [20] [20] [20] [20] [20] [20] [20]
Algal Mat or Crust (B4)		STATE OF THE PROPERTY OF THE P	ction in Tilled Soils (C6)		rphic Position (E	
Iron Deposits (B5)		Thin Muck Surface		Shallov	v Aquitard (D3)	(SOA* 1)
Inundation Visible on Aerial	Imagery (B7)	Other (Explain in	, F T	Microto	pographic Relief	(D4)
Sparsely Vegetated Concave	Surface (B8)			FAC-ne	eutral Test (D5)	
Field Observations:	-0.04					
Surface Water Present?	′es ○ No •	Depth (inches):	0			
Water Table Present?	′es ○ No •	Depth (inches):				
Saturation Present? (includes capillary fringe)	'es O No 💿	Depth (inches):	Wetland Hy	ydrology Pres	ent? Yes	○ No •
	am gauge, monito	ring well, aerial photo	s, previous inspections), if ava	ailable:		
Remarks:						
No hydrology indicators prese	nt.					

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
The state of the s	% Cover		Status	Number of Dominant Species
1 Quercus rubra	10000	V	FACU	That are OBL, FACW, or FAC:
2. Quercus palustris		V	FACW	Total Number of Dominant
3. Quercus alba	5	✓	FACU	Species Across All Strata:6(B)
4	0			Book of device of Consider
5				Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
6				That Are Obe, FACW, OF FAC.
7	0_			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15'r)	25 =	Total Cover		Total % Cover of: Multiply by:
The second second	120	82	12720	OBL species <u>15</u> x 1 = <u>15</u>
1 Rosa multiflora		✓	FACU	FACW species 30 x 2 = 60
2 Fraxinus pennsylvanica		✓	FACW	FAC species15 x 3 =45
3		Ц		FACU species 115 x 4 = 460
4		Ц		UPL species $0 \times 5 = 0$
5	0			
6	0			Column Totals: <u>175</u> (A) <u>580</u> (B)
7	0			Prevalence Index = B/A = 3.314
(Plot size, El'z	35 =	Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' r)	0.00			Rapid Test for Hydrophytic Vegetation
1. Solidago altissima	60	✓	FACU	Dominance Test is > 50%
2. Scirpus atrovirens	15		OBL	
3. Carex spicata	15		FACU	Prevalence Index is ≤3.0 ¹
4 Geum canadense	-		FAC	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. Poa pratensis			FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Carex blanda			FAC	
7		П		¹ Indicators of hydric soil and wetland hydrology must
8.		Ē		be present, unless disturbed or problematic.
	T			Definitions of Vegetation Strata
9	1655	H		22 20 10 10 10 10 10 10 10 10 10 10 10 10 10
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11			_	breast neight (DBH), regardless or neight.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)	115 =	: Total Cover		greater than 3.28 ft (1m) tall
	0			Herb - All herbaceous (non-woody) plants, regardless of
1		H		size, and woody plants less than 3.28 ft tall.
2	0	H		
3	0	Ħ		Woody vine - All woody vines greater than 3.28 ft in height.
4				neight.
	0=	: Total Cover		
				Undersalis
				Hydrophytic Vegetation
				Present? Yes ○ No ●
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos provided in Appendix D.				
3. 3.5				
No hydrophytic vegetation indicators present.				

Sampling Point: upl-bl-20200107-04

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-12 **Soil**

Sampling Point: upl-bl-20200107-04

	iption: (De		the depth	needed to				onfirm the	absence of indicators.)	
Depth (inches)	Color (Matrix moist)	%	Color	Re (moist)	dox Featı %	res1	Loc ²	_ Texture	Remarks
0-13	10YR	3/2	100	COIOI	(IIIOISC)		Туре		Sandy Loam	Remarks
				LOVE	2/2	10		- DI		
13-17	10YR	2/2	90	10YR	3/3		C	PL	sandy silt loam	
¹ Type: C=Cond	centration. D	=Depletio	n. RM=Rec	luced Matrix,	CS=Covere	ed or Coate	d Sand Gra	ins ² Loca	tion: PL=Pore Lining. M=Ma	atrix
Hydric Soil 1	Indicators:			40 7700					Indicators for Proble	ematic Hydric Soils: 3
Histosol (A1)					w Surface ((S8) (LRR R	.,		LRR K, L, MLRA 149B)
	pedon (A2)				A 149B)	200 (50) (IDD D MID	A 140P)		x (A16) (LRR K, L, R)
Black Hist							LRR R, MLR) LRR K, L)	83	There was no was in	or Peat (S3) (LRR K, L, R)
_	Sulfide (A4)			1000000		Matrix (F2)			Dark Surface (S7)	(LRR K, L, M)
	Layers (A5)	C			leted Matri		ts.		Polyvalue Below S	urface (S8) (LRR K, L)
The second second	Below Dark S k Surface (A1	Anna makanapan Bana	11)		ox Dark Su				Thin Dark Surface	(S9) (LRR K, L)
	ick Mineral (S					Surface (F	7)			lasses (F12) (LRR K, L, R)
	eyed Matrix (Red	ox Depress	ions (F8)				in Soils (F19) (MLRA 149B)
Sandy Re	. B	51)) (MLRA 144A, 145, 149B)
	Matrix (S6)								Red Parent Materia	
	ace (S7) (LRF	R R, MLRA	149B)							
³ Indicators of	f hydrophytic	voqotatio	n and woth	and budralage	must be r	rocont un	loce dicturb	and or proble		Remarks)
			ii and well	and mydrology	must be p	nesent, un	iless distuit	ed of proble	errauc.	
Restrictive L	ayer (if obs	served):								
Type:	has).								Hydric Soil Present?	Yes O No •
Depth (inc	nes):									
Remarks:	10 100		2 22	2 2	5	5.5		20 2		
No hydric soil	indicators	present o	lue to abs	ence of red	ox feature	es in low	chroma ar	nd low valu	ue matrix in upper layer.	
Based on site	investigation	on, this lo	cation is	not in a wet	land as it	does not	meet hyd	Irology, hy	drophytic vegetation or h	ydric soil criteria.

Project/Site: Lincoln Park-Riverbend 13	8kV Transmiss	sion Line	City/County:	Mahoning County	Sampl	ling Date: 06-Jan-20
Applicant/Owner: ATSI, a FirstEnerg	y Company	5		State: OH	Sampling Point:	upl-bl-20200106-01
Investigator(s): B Leopold, R Massa			Section, To	wnship, Range: \$	ъ. т. 2N	R. 1W
Landform (hillslope, terrace, etc.):	Flat		Local relief (co	ncave, convex, no	one): none	Slope: 1.0 % / 0.6
Subregion (LRR or MLRA): LRR K		Lat.:	41.09834	Long	: -80.59672	Datum: NAD83
Soil Map Unit Name: Se - Sebring s	ilt loam, till :	substratum, 0 to 2 pe	rcent slopes		NWI classification:	
19		•		. ● No ○		
Are climatic/hydrologic conditions o					(If no, explain in Remar	
Are Vegetation, Soil	, or Hydrol	ogy 🗌 significan	tly disturbed?	Are "Normal	Circumstances" present	, les en live
Are Vegetation , Soil	, or Hydrol	ogy naturally	problematic?	(If needed, e	xplain any answers in R	emarks.)
Summary of Findings - At	tach site		sampling po	int location	s, transects, imp	ortant features, etc.
Hydrophytic Vegetation Present?	Yes	No O	202	EN 9 121721		
Hydric Soil Present?	Yes 🔾	No •		Sampled Area a Wetland?	Yes O No 💿	
Wetland Hydrology Present?	Yes 🔾	No 💿				
Hydrology						
AS SERVICE						
Wetland Hydrology Indicators:	no roquirod:	chack all that apply)			Secondary Indicators (min	
Primary Indicators (minimum of or Surface Water (A1)	ie requireu;		nues (BO)		Surface Soil Cracks (BDrainage Patterns (B1	noen
High Water Table (A2)		Water-Stained Le			Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B1			Dry Season Water Tab	
Water Marks (B1)		Hydrogen Sulfide	- <u>1</u>		Crayfish Burrows (C8)	N (5
Sediment Deposits (B2)			neres along Living I	Roots (C3)	Saturation Visible on A	
Drift deposits (B3)		Presence of Redu			Stunted or Stressed P	lants (D1)
Algal Mat or Crust (B4)		Recent Iron Redu	ction in Tilled Soils	(C6)	Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface	e (C7)		Shallow Aquitard (D3)	
Inundation Visible on Aerial Image	termore access	Other (Explain in	Remarks)		Microtopographic Relie	ef (D4)
Sparsely Vegetated Concave Surface	:e (B8)				FAC-neutral Test (D5)	
Field Observations:						
Surface Water Present? Yes	No 💿	Depth (inches):				
Water Table Present? Yes	No ●	Depth (inches):			32	0 0
Saturation Present? (includes capillary fringe)	No ●	Depth (inches):		Wetland Hydro	ology Present? Yes	○ No •
Describe Recorded Data (stream ga	auge, monito	oring well, aerial phot	os, previous insp	pections), if availa	able:	
Remarks:						
No hydrology indicators present.						

VEGETATION - Use scientific names of plants

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1 Crataegus crus-galli		~	FAC	That are OBL, FACW, or FAC: 4 (A)
2				Total Number of Dominant
3		Ш		Species Across All Strata: 5 (B)
4				B 1 (1 1 1 1 6 1
5				Percent of dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)
6				That are obt, racw, or rac.
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	5 =	= Total Cover		Total % Cover of: Multiply by:
		_	F1611	OBL species 0 x 1 = 0
1. Lonicera morrowii		~	FACU	FACW species0 x 2 =0
2. Rhamnus cathartica		✓	FAC	FAC species60 x 3 =180
3. Rosa multiflora			FACU_	FACU species 25 x 4 = 100
4 Rhus typhina		님	UPL	UPL species $\frac{5}{}$ x 5 = $\frac{25}{}$
5. Viburnum lentago			FAC	
6	0			Column Totals: 90 (A) 305 (B)
7	0			Prevalence Index = B/A = 3.389
Herb Stratum (Plot size: 5' r)	75 =	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Flot Size. 3 1	100			Rapid Test for Hydrophytic Vegetation
1. Cornus racemosa		✓	FAC	✓ Dominance Test is > 50%
2. Parathelypteris noveboracensis	5	✓	FAC	Prevalence Index is ≤3.0 ¹
3	0			
4	0			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	X-X			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0_			
7	0			Indicators of hydric soil and wetland hydrology must
8	0			be present, unless disturbed or problematic.
9		П		Definitions of Vegetation Strata:
10		Ē		Tree Weeds plants 2 in (7.6 cm) or more in diameter
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
12		H	-	
1.5.		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)		- Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	323			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0		8	height.
T.	0 =	= Total Cover		
		- Total Cover	i n	
				Hydrophytic
				Vegetation No. No.
				Present? Yes VO
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos provided in Appendix D.				
II do al di control de Romano Tara in dis-			- f FAC	o' the ship of the Double of Table
Hydrophytic vegetation present via Dominance Test indica indicator.	tor due to pre	eaominance	or FAC spe	ecies, though location does not pass Prevalence Index
mulcator.				
				I

Sampling Point: upl-bl-20200106-01

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Sampling Point: upl-bl-20200106-01

Profile Descri	iption: (Des	cribe to t	he depth	needed to de	ocument	the indica	ator or co	nfirm the a	absence of indicators.)	
Depth		Matrix				ox Featu				_
(inches)	Color (r		%	Color (n	noist)	%	Type 1	Loc2	Texture	Remarks
0-16	10YR	3/2	100						Silt Loam	
¹ Type: C=Cond	centration. D	=Depletion	ı. RM=Redı	uced Matrix, C	S=Covered	d or Coate	d Sand Gra	ins ² Loca	ation: PL=Pore Lining. M=Ma	atrix
Hydric Soil I	ndicators:								Indicators for Proble	matic Hydric Soils: 3
Histosol (A	A1)			Polyva	alue Below	Surface (S	58) (LRR R			
_	edon (A2)				149B)	,				LRR K, L, MLRA 149B)
Black Histi				Thin [Dark Surfac	ce (S9) (L	RR R, MLR	A 149B)		(A16) (LRR K, L, R)
	Sulfide (A4)			Loam	y Mucky M	lineral (F1)	LRR K, L)			r Peat (S3) (LRR K, L, R)
	Layers (A5)			Loam	y Gleyed M	Matrix (F2)			Dark Surface (S7)	
	Below Dark S	urfaco (A1	1)		ted Matrix				Polyvalue Below Su	ırface (S8) (LRR K, L)
			1)		Dark Surf				Thin Dark Surface ((S9) (LRR K, L)
	Surface (A1					Surface (F7)		☐ Iron-Manganese Ma	asses (F12) (LRR K, L, R)
	ck Mineral (S				C Depression				Piedmont Floodplai	n Soils (F19) (MLRA 149B)
	yed Matrix (S	4)		Redo/	Съсргеззи	0113 (10)			Mesic Spodic (TA6)	(MLRA 144A, 145, 149B)
Sandy Red	dox (S5)								Red Parent Materia	l (F21)
Stripped N	latrix (S6)								Very Shallow Dark	Surface (TF12)
Dark Surfa	ace (S7) (LRR	R, MLRA	149B)						Other (Explain in R	
³ Indicators of	hydrophytic	venetation	and wetla	nd hydrology i	must he nr	resent unl	ess disturb	ed or proble		•
			una weda	na myarology	nuse be pr	eserie, arm	coo diocarb	ca or probit		
Restrictive La	ayer (if obse	rved):								
Type:	0.0								Hydric Soil Present?	Yes ○ No •
Depth (inch	nes):								nyuric son Present?	Yes O No 🖲
Remarks:										
No hydric soil	indicators i	oresent in	soil prof	ile due to ab	sence of	redox fe	atures in	ow chrom	na and low value matrix.	
			F							
Based on site	investigation	n, this lo	cation is	not in a wet	and as it	does not	meet hy	drology or	hydric soil criteria.	

Project/Site: Lincoln Park-Rivert		- 4500		\$55-281943.E.051	ng Date: 07-Jan-20
Applicant/Owner: ATSI, a Firs	tEnergy Company		State: OH	Sampling Point:	upl-bl-20200107-03
Investigator(s): B Leopold, R	Massa	Sect	tion, Township, Range:	s. T. 2N	R. 1W
Landform (hillslope, terrace, e	tc.): Flat	Local re	elief (concave, convex, n	one): convex	Slope: 0.0 % / 0.0
Subregion (LRR or MLRA):	RR K	Lat.: 41.0995	59 Long	-80.59586	Datum: NAD83
Soil Map Unit Name: JtB - Jim	0000001000 49 75/V 000004 W			NWI classification:	n/a
Are climatic/hydrologic condit	ions on the site ty	pical for this time of year?	Yes ● No ○	(If no, explain in Remark	s.)
Are Vegetation, Soil	, or Hydrol			Circumstances" present?	Yes A No
	_				
Are Vegetation, Soil Summary of Findings	, or Hydrol	ogy inaturally problema e map showing sampl	·	explain any answers in Re	
Hydrophytic Vegetation Prese		No •	mg pome rocation	is, transcets, imp	Ji tuile reatures, etc
	Yes •	No O	Is the Sampled Area	Yes ○ No ●	
Hydric Soil Present?	Yes O	No ●	within a Wetland?	Yes ∪ No 💌	
Wetland Hydrology Present? Remarks: (Explain alternation					
Hydrology					
Wetland Hydrology Indicator		2 2 92 7 7 7 8	,	Secondary Indicators (minim	
Primary Indicators (minimum	of one required;			Surface Soil Cracks (B6)	
Surface Water (A1) High Water Table (A2)		Water-Stained Leaves (B9) Aquatic Fauna (B13)		Drainage Patterns (B10) Moss Trim Lines (B16)	1
Saturation (A3)		Marl Deposits (B15)		Dry Season Water Table	(C2)
Water Marks (B1)		Hydrogen Sulfide Odor (C1)	ē.	Crayfish Burrows (C8)	; (C2)
Sediment Deposits (B2)		Oxidized Rhizospheres along		Saturation Visible on Ae	erial Imagery (C9)
Drift deposits (B3)		Presence of Reduced Iron (0		Stunted or Stressed Plan	20. TO 10. T
Algal Mat or Crust (B4)		Recent Iron Reduction in Til	lled Soils (C6)	Geomorphic Position (D	2)
Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquitard (D3)	
Inundation Visible on Aerial		Other (Explain in Remarks)		Microtopographic Relief	(D4)
Sparsely Vegetated Concave	Surface (B8)			FAC-neutral Test (D5)	
Field Observations:					
	Yes ○ No •	Depth (inches):			
Water Table Present?	Yes O No 💿	Depth (inches):		V /	o o
Saturation Present? (includes capillary fringe)	res O No 💿	Depth (inches):	Wetland Hydro	ology Present? Yes	○ No •
	am gauge, monito	ring well, aerial photos, previou	us inspections), if availab	ole:	
Domarke:					
Remarks:	nt				
Remarks: No hydrology indicators prese	ent.				
	ent.				
	ent.				
	ent.				

VEGETATION - Use scientific names of plants

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1. Quercus rubra		~	FACU	That are OBL, FACW, or FAC:3(A)
2. Acer rubrum			FAC	Total Number of Dominant
3. Quercus alba	15	~	FACU	Species Across All Strata:6(B)
4				
5				Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
6	0			That Are Obt., FACW, of FAC.
7	0			Prevalence Index worksheet:
(6)	55 =	Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' r)	4444			OBL species
1 Lindera benzoin		✓	FACW	FACW species
2 Smilax glauca	10	✓	FACU	FAC species 25 x 3 = 75
3. Acer rubrum	10	✓	FAC	FACU species $55 \times 4 = 220$
4	0_			
5	0_			UPL species $0 \times 5 = 0$
6				Column Totals: <u>100</u> (A) <u>335</u> (B)
7	52			Prevalence Index = B/A = 3.350
Ct. St.		Total Cover		1994 8-4019/CA 985492 CA79929496544409 A CCC 9 St ■ 1942997 CCC 9 St
Herb Stratum (Plot size: 5' r)				Hydrophytic Vegetation Indicators:
1. Carex blanda	5	~	FAC	Rapid Test for Hydrophytic Vegetation
2				Dominance Test is > 50%
3		Ē		Prevalence Index is ≤3.0 ¹
		F		☐ Morphological Adaptations ¹ (Provide supporting
4		Π		data in Remarks or on a separate sheet)
5		Ħ		Problematic Hydrophytic Vegetation ¹ (Explain)
6	-			¹ Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8			-	Definitions of Vegetation Strata
9				Definitions of Vegetation Strata
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
		Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30'r)				σ
1.		Ш		Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0_			height.
	0 =	Total Cover		0.000
				Hydrophytic
				Vegetation Present? Yes ○ No ●
				Present? Yes O NO •
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos provided in Appendix D.				
No budunah dia marakkin india ka				
No hydrophytic vegetation indicators present.				

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-14 **Soil**

Profile Descri	iption: (Des	cribe to	the depti	needed to	documen	t the indi	cator or c	onfirm the	e absence of indicators.)			
Depth		Matrix				dox Featu						
(inches)	Color (%		(moist)	%_	Type ¹		Texture Remarks			
0-6	10YR	2/2	95	7.5YR	4/6		C	<u>M</u>	Silt Loam			
6-16	10YR	6/1	60						Silty Clay Loam			
	10YR	5/8	40									
¹ Type: C=Conc	entration. D	=Depletio	n. RM=Red	luced Matrix,	CS=Covere	d or Coate	ed Sand Gra	ains ² Loca	ation: PL=Pore Lining. M=Matrix			
Hydric Soil I	ndicators:								Indicators for Problematic Hydric Soils: 3			
Histosol (A	A1)					w Surface ((S8) (LRR I	₹,	2 cm Muck (A10) (LRR K, L, MLRA 149B)			
Histic Epip	edon (A2)				A 149B)	(50) (1 400)	Coast Prairie Redox (A16) (LRR K, L, R)			
Black Histi	ic (A3)						LRR R, MLF		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
Hydrogen	Sulfide (A4)) LRR K, L)		Dark Surface (S7) (LRR K, L, M)			
	Layers (A5)				ny Gleyed)		Polyvalue Below Surface (S8) (LRR K, L)			
	Below Dark S		11)		leted Matri				Thin Dark Surface (S9) (LRR K, L)			
	Surface (A1				ox Dark Su leted Dark		7\		☐ Iron-Manganese Masses (F12) (LRR K, L, R)			
	ck Mineral (S			1	ox Depress		/)		Piedmont Floodplain Soils (F19) (MLRA 149B)			
	yed Matrix (S	64)		Red	ox Depress	ions (Fo)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
Sandy Red									Red Parent Material (F21)			
Stripped M									Very Shallow Dark Surface (TF12)			
Dark Surfa	ice (S7) (LRR	R, MLRA	149B)						Other (Explain in Remarks)			
³ Indicators of	hydrophytic	vegetatio	n and wetl	and hydrology	must be p	resent, un	less distur	ed or proble	olematic.			
Restrictive La	ver (if obs	erved):										
Type:												
Depth (inch	nes):								Hydric Soil Present? Yes ● No ○			
Remarks:	,								1			
eces was a	ě								V			
no redox featu			edox feat	ures in low (chroma ar	nd low va	lue matrix	of upper	layer, as well as low chroma and high value matrix with			
The redex react	arcs III lowe	i layer.										
Based on site	investigatio	n, this lo	ocation is	not in a wet	land as it	does not	meet hy	drology or	hydrophytic vegetation criteria.			

Upland RLP-15ab

Project/Site: Lincoln Park-Riverbend 138KV Transmission Line	City/County: Manoning County Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company	State: OH Sampling Point: upl-bl-20200107-02
nvestigator(s): B Leopold, R Massa	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): none Slope: 1.0 % / 0.6
Subregion (LRR or MLRA): LRR K Lat.:	41.1007 Long.: -80.59616 Datum: NAD83
Soil Map Unit Name: JtB - Jimtown loam, 2 to 6 percent slopes	NWI classification: n/a
Are climatic/hydrologic conditions on the site typical for this time of	year? Yes • No (If no, explain in Remarks.)
	ntly disturbed? Are "Normal Circumstances" present? Yes No
	problematic? (If needed, explain any answers in Remarks.)
	sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes No	
v	Is the Sampled Area within a Wetland? Yes No No
V O N- A	within a Wetland?
Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate rep	
Hydrology	
Hydrology	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water-Stained Le	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Le High Water Table (A2) Aquatic Fauna (B	
Saturation (A3) Marl Deposits (B)	
Water Marks (B1) Hydrogen Sulfide	The second secon
	oheres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)	
	uction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surfac	
Inundation Visible on Aerial Imagery (B7) Other (Explain in	The second section is
Sparsely Vegetated Concave Surface (B8)	✓ FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	£
Water Table Present? Yes No Depth (inches):	:
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	Wetland Hydrology Present? Yes ○ No ●
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
No primary hydrology indicators present.	
No primary hydrology indicators present.	

VEGETATION - Use scientific names of plants

(Disputed 201-	Absolute	Dominant Species 2	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' r)	% Cover	Species?	Status	Number of Dominant Species
1 Quercus rubra	40	✓	FACU	That are OBL, FACW, or FAC:4 (A)
2. Quercus palustris	15	✓	FACW	Total Number of Dominant
3 Fagus grandifolia	10		FACU	Species Across All Strata:5(B)
4	0_			MANAGEMENT SERVICE SER
5	0			Percent of dominant Species That Are OBL_FACW_or_FAC: 80.0% (A/B)
6	0			That Are OBL, FACW, or FAC: 80.0% (A/B)
7	0_			Prevalence Index worksheet:
	65 =	Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' r)				OBL species 0 x 1 = 0
1 Ulmus americana	15	✓	FACW	FACW species 40 x 2 = 80
2 Acer rubrum	5		FAC	FAC species 10 x 3 = 30
3 Smilax glauca	5		FACU	MESSAGRAD AND STREET STREET STREET STREET STREET
4 Lindera benzoin	10	✓	FACW	FACU species x 4 =
5				UPL species $0 \times 5 = 0$
6				Column Totals: <u>105</u> (A) <u>330</u> (B)
7	92			Prevalence Index = B/A = 3.143
- 25-3 11		= Total Cove		0 0 0 0 × 10 × 10 × 10 × 10 × 10 × 10 ×
Herb Stratum (Plot size: 5' r)				Hydrophytic Vegetation Indicators:
1 Carex blanda	5	✓	FAC	Rapid Test for Hydrophytic Vegetation
2				✓ Dominance Test is > 50%
3		F		Prevalence Index is ≤3.0 ¹
0.00		- Fi		☐ Morphological Adaptations ¹ (Provide supporting
4	-	Ħ	-	data in Remarks or on a separate sheet)
5		Ħ		Problematic Hydrophytic Vegetation ¹ (Explain)
6	-			¹ Indicators of hydric soil and wetland hydrology must
7		H		be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata
9		Ц		Definitions of Vegetation Strata
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11	0			breast height (DBH), regardless of height.
12	0			Sapling/shrub - Woody plants less than 3 in. DBH and
(A)	_ 5 =	Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30'r)				
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0_	Ц		size, and woody plants less than 3.28 ft tall.
3	0_			Woody vine - All woody vines greater than 3.28 ft in
4	0_			height.
	0 =	Total Cover		V-100
				Hydrophytic
				Vegetation Present? Yes No
				Present? Yes VNO V
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Photos provided in Appendix D.				
Hudrophytic vocatation procent via Daminance Test indicate	r though los	ation door n	ot pace Dr	ovalence Index indicator
Hydrophytic vegetation present via Dominance Test indicato	i, triougn iot	auon does n	ot pass Pre	evalence tridex indicator.

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-15ab

Profile Descr	iption: (Desc	cribe to	the depti	n needed to document	the indicator or co	nfirm the	absence of indicators.)	
Depth		Matrix			dox Features			_
(inches)	Color (n		%	Color (moist)		Loc2	Texture	Remarks
0-5	10YR	3/2	100				Silt Loam	
5-15	2.5Y	6/6	60				Silty Clay	
	10YR	6/2	40					
				·				
¹ Type: C=Cond	entration. D=	Depletio	n. RM=Red	luced Matrix, CS=Covere	d or Coated Sand Grai	ns ² Locat	tion: PL=Pore Lining. M=Matrix	
Hydric Soil I	ndicators:						Indicators for Problematic F	lydric Soils: 3
Histosol (A1)				v Surface (S8) (LRR R		2 cm Muck (A10) (LRR K, L	
Histic Epip	pedon (A2)			MLRA 149B)			Coast Prairie Redox (A16) (No. and the second
☐ Black Hist	ic (A3)				ace (S9) (LRR R, MLR/	A 149B)	5 cm Mucky Peat or Peat (S	14
Hydrogen	Sulfide (A4)				lineral (F1) LRR K, L)		Dark Surface (S7) (LRR K,	
Stratified	Layers (A5)			Loamy Gleyed			Polyvalue Below Surface (S	MANAGEM CO.
Depleted	Below Dark Su	ırface (A	11)	Depleted Matri:			Thin Dark Surface (S9) (LR	20 X 0 X 1 0 3 C 0 5 0 2 0 - X 1
Thick Dark	k Surface (A12	2)		Redox Dark Su			Iron-Manganese Masses (F.	
Sandy Mu	ck Mineral (S1)		Depleted Dark			Piedmont Floodplain Soils (
Sandy Gle	yed Matrix (S4	1)		Redox Depress	ions (F8)		Mesic Spodic (TA6) (MLRA	
Sandy Red	dox (S5)						Red Parent Material (F21)	N
Stripped N	1atrix (S6)						Very Shallow Dark Surface	(TF12)
Dark Surfa	ace (S7) (LRR	R, MLRA	149B)				Other (Explain in Remarks)	The control of the co
³ Indicators of	hydrophytic v	egetation	n and wetl	and hydrology must be p	resent, unless disturb	ed or proble		
Restrictive La								
Type:	ayer (ii obse	iveu).						
Depth (incl	hoc):						Hydric Soil Present? Yes	○ No •
Spark Erral Means	103)						9.5 (Fib. 4)	
Remarks:								
No hydric soil	indicators p	resent i	n soil pro	file due to absence of	redox features in lo	w chroma	a and low value matrix of upper I	ayer.
Based on site	investigation	n, this lo	cation is	not in a wetland as it	does not meet hyd	ology or I	hydric soil criteria.	
20000 011 0100	socigatio.	,, с				0.09, 0	nyana san antana.	

Upland RLP-16abc

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning County Sampling Date: 06-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company	State: OH Sampling Point: upl-bl-20200106-03
Investigator(s): B Leopold, R Massa	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): none Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K Lat.:	41.09959 Long.: -80.59586 Datum: NAD83
Soil Map Unit Name: JtB - Jimtown loam, 2 to 6 percent slopes	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this time of y	year? Yes No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significant	tly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology naturally ,	problematic? (If needed, explain any answers in Remarks.)
Summary of Findings - Attach site map showing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes ○ No ●	Is the Sampled Area within a Wetland? Yes ○ No ●
Wetland Hydrology Present? Yes ● No ○	within a wedaha:
lot similar to PFO component point in (w-bl-20200106-02a). Hydrology	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (minimum of 2 required) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	aves (B9) Drainage Patterns (B10)
✓ High Water Table (A2) Aquatic Fauna (B1 ✓ Saturation (A3) Marl Deposits (B1	
	odor (C1) Craylish burlows (C6) heres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift deposits (B3) ☐ Presence of Redu	
	ction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Surface	e (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in	Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	9
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
Hydrology indicators present as high water table and saturated soils. 20200106-02a (PFO) and w-bl-20200106-02c (PSS disturbed vegeta	. Data point is located in a topographic position similar to wetland data points w-blation), thereby with possible equivalent soil saturation parameters.

VEGETATION - Use scientific names of plants

Tree Stratum (Plot size: 30' r)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1. Acer rubrum	-	~	FAC	That are OBL, FACW, or FAC:3(A)
2. Acer saccharum			FACU	Total Number of Dominant
3. Quercus rubra		✓	FACU	Species Across All Strata: 5 (B)
4				B 1 (1 1 1 1 6 1
5	0_			Percent of dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)
6				That Are Obt., FACW, of FAC.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15' r)	60=	= Total Cover		Total % Cover of: Multiply by:
O AND SECTION AND				OBL species 0 x 1 = 0
1 Fagus grandifolia		~	FACU	FACW species3 x 2 =6
2. Acer rubrum		✓	FAC	FAC species
3. Hamamelis virginiana			FACU	FACU species 50 x 4 = 200
4 Rhamnus cathartica			FAC	UPL species $0 \times 5 = 0$
5. Cornus alba			FACW	AND THE PROPERTY OF THE PARTY O
6	0	H		Column Totals: <u>103</u> (A) <u>356</u> (B)
7	0			Prevalence Index = B/A = 3.456
Herb Stratum (Plot size: 5' r)	38=	= Total Cover		Hydrophytic Vegetation Indicators:
Real Property of the Control of the				Rapid Test for Hydrophytic Vegetation
1. Dichanthelium dichotomum	5	~	FAC	✓ Dominance Test is > 50%
2				Prevalence Index is ≤3.0 ¹
3	_0_			Morphological Adaptations ¹ (Provide supporting
4	0_			data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0_			
7	0_			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0_			
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12		Ħ		
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30'r)	3130			greater than 0.20 ft (1111) tall
1	0_			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cover		
				Hydrophytic
				Vegetation Present? Yes No
				Tioschi.
Boundary (Books) and the second of				
Remarks: (Include photo numbers here or on a separate sho	eet.)			
Photos provided in Appendix D.				
Hydrophytic vegetation present via Dominance Test indicate	or due to pre	edominance	of FAC spe	ecies, though location does not pass Prevalence Index
indicator. Vegetation at this data point is not disturbed.		scotts at 15th		2 2000 2000 30000 20000 2000 00000 15 UT 1

Sampling Point: upl-bl-20200106-03

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-16abc

Sampling Point: upl-

upl-bl-20200106-03

Depth (inches)	Color (Matrix moist)	%	Color (moist)	lox Features % Type	1 Loc2	Texture	Remarks
0-10	10YR	Digital in	I Sweet	Color (moist)	-% Type	LOC*	Same Same	Remarks
		3/2	100				Silt Loam	
10-16	2.5Y	4/2	50				Silty Clay Loam	-
	2.5Y	5/6	50					-
							_	
		-						
		Daulatia	- DM Dad	——————————————————————————————————————			tion. D. Dove Lining M. N	A-bii.
··		- pepietio	ıı. KM=Kedi	uceu matrix, CS=Covere	or Coated Sand G	nallis ² LOCa	tion: PL=Pore Lining. M=N	
Hydric Soil I				Poharakia Pel-	v Surface (S8) (LRR	D	Indicators for Prob	lematic Hydric Soils: 3
Histosol (A	edon (A2)			MLRA 149B)	v ourrace (S8) (LRR	K,	2 cm Muck (A10)	(LRR K, L, MLRA 149B)
				Thin Dark Surfa	ice (S9) (LRR R, Mi	LRA 149B)	Coast Prairie Red	ox (A16) (LRR K, L, R)
Black Hist	Sulfide (A4)			Loamy Mucky N	lineral (F1) LRR K,	L)	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)
	Layers (A5)			Loamy Gleyed			Dark Surface (S7) (LRR K, L, M)
	Below Dark S	Surface (A	11)	Depleted Matrix	(F3)		ar - grown Calculation and a second	Surface (S8) (LRR K, L)
	Surface (A1		11)	Redox Dark Su	face (F6)		Thin Dark Surface	
	ck Mineral (S			Depleted Dark	Surface (F7)		_	Masses (F12) (LRR K, L, R)
=	yed Matrix (5			Redox Depress	ons (F8)			ain Soils (F19) (MLRA 149B)
Sandy Red	9 B	51)						6) (MLRA 144A, 145, 149B)
	fatrix (S6)						Red Parent Mater	
	ace (S7) (LRF	R. MLRA	(149B)				☐ Very Shallow Dar	
						a process processors	Other (Explain in	Remarks)
"Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology must be p	resent, unless distu	rbed or proble	ematic.	
Restrictive La	ayer (if obs	erved):						
Type:	07						Hydric Soil Present?	Yes ○ No ●
Depth (inch	nes):						nyuric son Fresence	Yes ○ No •
Remarks:								
lo hydric soil	indicators	present	in soil prof	ile due to absence of	redox features i	n low chrom	na and low value matrix	of upper layer. Low value and
ow chroma n	natrix of lov	ver layer	does not	exceed 60%.				
aced on cite	investigatio	on this l	ocation is	not in a wetland as i	does not meet h	ovdric soil cr	iteria. This data noint d	oes meet wetland criteria for
ydrology and	d vegetation	n, indica	ting this lo	cation is in a similar	topographic posit	ion as wetla	and w-bl-20200106-02.	Saturated soils and high water
				ason, resulting in the				.

Upland RLP-17abc

Project/Site: Lincoln Park-Riverbend	138KV Transmis	sion Line City/C	ounty: Manoning County	Sampli	ng Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEn	ergy Company		State: OF	Sampling Point:	upl-bl-20200107-01
Investigator(s): B Leopold, R Mass	sa	Sec	ction, Township, Range:	s. T. 2N	R. 1W
Landform (hillslope, terrace, etc.)	: Flat	Local ı	relief (concave, convex, r	none): convex	Slope: 1.0 % / 0.6
Subregion (LRR or MLRA): LRR	K	Lat.: 41.101	95 Long	g.: -80.59544	Datum: NAD83
Soil Map Unit Name: JtB - Jimtov	750 99000 A	A AND THE RESERVE AND THE RESE	<u> </u>	NWI classification:	
Are climatic/hydrologic condition	s on the site to	pical for this time of year?	Yes ● No ○	(If no, explain in Remark	(s.)
Are Vegetation, Soil	, or Hydrol		irbed? Are "Normal	Circumstances" present?	V (N- (
Are Vegetation , Soil	C • Control Control	Time			
Summary of Findings -	or Hydrol, Attach site	255 E	5 6	explain any answers in Re	353
Hydrophytic Vegetation Present		No O		,	
Hydric Soil Present?	Yes •	No O	Is the Sampled Area	Yes ○ No ●	
	Yes O	No ●	within a Wetland?	res O No O	
Wetland Hydrology Present? Remarks: (Explain alternative p					
Hydrology					
Wetland Hydrology Indicators:				Secondary Indicators (minir	
Primary Indicators (minimum of	one requirea;			Surface Soil Cracks (B6	
Surface Water (A1) High Water Table (A2)		Water-Stained Leaves (B9))	Drainage Patterns (B10)
Saturation (A3)		Aquatic Fauna (B13) Marl Deposits (B15)		Moss Trim Lines (B16) Dry Season Water Table	e (C2)
Water Marks (B1)		Hydrogen Sulfide Odor (C1	1)	Cravfish Burrows (C8)	: (C2)
Sediment Deposits (B2)		Oxidized Rhizospheres alor		Saturation Visible on A	erial Imagery (C9)
Drift deposits (B3)		Presence of Reduced Iron		Stunted or Stressed Pla	
Algal Mat or Crust (B4)		Recent Iron Reduction in T	And the second s	Geomorphic Position (D	12)
Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquitard (D3)	
Inundation Visible on Aerial Ima		Other (Explain in Remarks))	Microtopographic Relief	(D4)
Sparsely Vegetated Concave Sur	face (B8)			FAC-neutral Test (D5)	
Field Observations:	~ ^				
Surface Water Present? Yes		Depth (inches):			
Water Table Present? Yes	O No 💿	Depth (inches):		V	0 0
Saturation Present? (includes capillary fringe) Yes	○ No •	Depth (inches):	Wetland Hyd	rology Present? Yes	○ No •
Describe Recorded Data (stream	gauge, monito	ring well, aerial photos, previo	ous inspections), if availa	ible:	
Remarks:					
No hydrology indicators present.					
,, a. a. a. g p. a. a					

VEGETATION - Use scientific names of plants

(Olander 201 -)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' r	% Cover	Name (19)	Status	Number of Dominant Species
1 Acer rubrum	50_	✓	FAC	That are OBL, FACW, or FAC:5(A)
2. Acer saccharum		✓	FACU	Total Number of Dominant
3. Ulmus americana	10		FACW	Species Across All Strata:7 (B)
4	0			
5	0			Percent of dominant Species That Are OBL FACW or FAC: 71.4% (A/B)
6	_ 0			That Are OBL, FACW, or FAC: 71.4% (A/B)
7	_ 0_			Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15'r)				OBL species
1 Acer rubrum	30	✓	FAC	FACW species 10 x 2 = 20
2 Hamamelis virginiana	10	✓	FACU	FAC species $90 \times 3 = 270$
3 Rosa multiflora	5		FACU	[HENRY NEW TOTAL TOTAL NEW TOTAL NE
4	0			FACU species <u>35</u> x 4 = <u>140</u>
5				UPL species $0 \times 5 = 0$
6			S	Column Totals: <u>148</u> (A) <u>443</u> (B)
7				Prevalence Index = B/A = 2.993
		= Total Cove		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Herb Stratum (Plot size: 5' r)	45 =	- Total Cove		Hydrophytic Vegetation Indicators:
1 Carex frankii	10	✓	OBL	Rapid Test for Hydrophytic Vegetation
			OBL	✓ Dominance Test is > 50%
	-	V	VICTORIA CONTRACTORIA CONTRACTO	✓ Prevalence Index is ≤3.0 ¹
3. Carex blanda		~	FAC	Morphological Adaptations ¹ (Provide supporting
4. Persicaria virginiana			FAC	data in Remarks or on a separate sheet)
5		H		Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0_			
9				Definitions of Vegetation Strata
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11		П		breast height (DBH), regardless of height.
12.		H		5 18 10 5
1.5		= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30'r)				greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	0			size, and woody plants less than 3.28 ft tall.
3	0			W
4	0		3	Woody vine - All woody vines greater than 3.28 ft in height.
4.		— T-1-1 C	7	noight.
	0=	= Total Cove	ā II	
				Hydrophytic Vegetation
				Present? Yes • No O
Remarks: (Include photo numbers here or on a separate sh	oot \			
	eet.)			
Photos provided in Appendix D.				
Hydrophytic vegetation present via Dominance Test and Pre-	valence Inde	x indicators.	Herbaceou	us vegetation limited to small depression area in woodlot.
				×

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-17abc

	ription: (De		the depth	needed to d				onfirm the	absence of indicators.)	
Depth (inches)	Color (Matrix (moist)	%	Color (dox Feat %	tures Type_ ¹	Loc ²	Texture	Remarks
0-7	2.5Y	4/1	95	2.5Y	7/6	5	C	PL	Silty Clay Loam	
7-11		4/1	40	10YR	6/6	30		м	Silty Clay	
7 11	2.51								Sitty City	
				2.5Y	6/1	_ 30	D			
										-
Type: C=Con	ncentration. D	=Depletio	n. RM=Redi	uced Matrix, C	S=Covere	ed or Coat	ed Sand Gra	ains ²Loca	tion: PL=Pore Lining. M=M	atrix
Hydric Soil										lematic Hydric Soils: 3
Histosol				Polyv	alue Belo	w Surface	(S8) (LRR I	₹.		
	ipedon (A2)				149B)		. , ,	*		(LRR K, L, MLRA 149B)
Black His				Thin	Dark Surf	ace (S9)	(LRR R, MLF	RA 149B)	The state of the s	ox (A16) (LRR K, L, R)
<u></u>	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L)							or Peat (S3) (LRR K, L, R)		
_	Stratified Layers (A5) Loamy Gleyed Matrix (F2)						Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L)			
	Depleted Below Dark Surface (A11) ✓ Depleted Matrix (F3)									
Thick Dar	rk Surface (A1	12)	NONES:	Redo	x Dark Su	ırface (F6))		Thin Dark Surface	
Sandy Mu	uck Mineral (S	51)		Deple	eted Dark	Surface (F7)			Masses (F12) (LRR K, L, R)
=	eyed Matrix (Redo	x Depress	sions (F8)				ain Soils (F19) (MLRA 149B)
	edox (S5)									6) (MLRA 144A, 145, 149B)
The second of the	Matrix (S6)								Red Parent Mater	
Dark Surf	face (S7) (LRI	R R, MLRA	(149B)							
3 _{Indicators} o	of hydrophytic	vocatatio	on and wotla	nd hydrology	must be r	procent u	place dietur	had ar probl		Kellars)
			ii aliu weda	na nyarology	must be p	bresent, u	riiess distuit	bed of probl	enauc.	
Restrictive L	Layer (if obs	served):								
Type:	1 X								Hydric Soil Present?	Yes ● No ○
Depth (inc	cnes):			_						163 0 110 0
Remarks:										
Hydric soil in	dicators pre	esent as p	orominent i	redox featur	es in ma	trix of lo	w chroma	and low va	alue throughout soil prof	ile.
Raced on site	investinati	on this l	ocation is r	not in a wetl	and as it	does no	nt meet hv	drology crit	teria. Presence of hydror	phytic vegetation and hydric soil
indicators co										myde vegetation and mydne son
			•							

Upland RLP-18ab

Project/Site: Lincoln Park-Ri	verbend 138kV Transmis	sion Line	City/County:	Mahoning County	Sampl	ing Date: 07-Jan-20
Applicant/Owner: ATSI, a	FirstEnergy Company			State: OH	Sampling Point:	upl-aeh-20200107-12
Investigator(s): AEH, SKM			Section, T	ownship, Range: S	ъ. т. 2N	R. 1W
Landform (hillslope, terrac	e, etc.): Hillside		1,0,40,0,00,00,00,00,00	oncave, convex, no		Slope: 3.0 % / 0.0
Subregion (LRR or MLRA):	, , , , , , , , , , , , , , , , , , , ,					
		Lat.:	41.091855	Long.		Datum: WGS 84
Soil Map Unit Name: JuB-J	imtown loam, til sub	stratum, 2 to 6 percen			NWI classification:	NA
Are climatic/hydrologic co	nditions on the site t	pical for this time of	year? Ye	s • No 🔾 (If no, explain in Remar	
Are Vegetation, So	oil 🗌 , or Hydrol	logy significant	tly disturbed?	Are "Normal (Circumstances" present	_? Yes 💿 No 🔾
Are Vegetation , So	oil, or Hydrol	logy naturally i	problematic?	(If needed, ex	oplain any answers in R	emarks.)
Summary of Findin	gs - Attach site	e map showing	sampling p	oint location	s, transects, imp	oortant features, et
Hydrophytic Vegetation P	resent? Yes •	No O				
Hydric Soil Present?	Yes 🔾	No ●		e Sampled Area n a Wetland?	Yes O No 💿	
Wetland Hydrology Preser	nt? Yes	No •	With	ii a wedana:		
Hydrology						
Hydrology Wetland Hydrology Indica	tores					
Primary Indicators (minin		check all that apply)		-	Secondary Indicators (mini	
Surface Water (A1)	ium of one required,	Water-Stained Lea	1/0c (P0)		Surface Soil Cracks (B6 Drainage Patterns (B1)	0.00
High Water Table (A2)		Aquatic Fauna (B1	8 6		Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B1			Dry Season Water Tab	
Water Marks (B1)		Hydrogen Sulfide			Crayfish Burrows (C8)	
Sediment Deposits (B2)		Oxidized Rhizosph		Roots (C3)	Saturation Visible on A	verial Imagery (C9)
Drift deposits (B3)		Presence of Reduc	ced Iron (C4)		Stunted or Stressed Pl	ants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduc	ction in Tilled Soi	ls (C6)	Geomorphic Position (D2)
☐ Iron Deposits (B5)	31 31 31	Thin Muck Surface	e (C7)		Shallow Aquitard (D3)	
Inundation Visible on Ae		Other (Explain in I	Remarks)		Microtopographic Relie	
Sparsely Vegetated Conc	ave Surface (B8)				FAC-neutral Test (D5)	
Field Observations:	Yes ○ No •	Depth (inches):				
Surface Water Present?	100 mg					
Water Table Present?	Yes ○ No •	Depth (inches):		Wetland Hydro	logy Present? Yes	○ No ●
Saturation Present? (includes capillary fringe)	Yes ○ No ●	Depth (inches):	-			SEC AMP OF S
Describe Recorded Data (s	tream gauge, monito	ring well, aerial photo	s, previous insp	pections), if availab	le:	
Remarks:						
No wetland hydrology was	present.					

VEGETATION - Use scientific names of plant

(DIA - 1 20f4)	Absolute	Dominant	ziidicaco.	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1. Acer rubrum	25	✓	FAC	That are OBL, FACW, or FAC:3(A)
2. Acer negundo		✓	FAC	Total Number of Dominant
3. Fagus grandifolia	15	✓	FACU	Species Across All Strata:5(B)
4. Ulmus rubra	5		FAC	
5. Quercus palustris	5		FACW	Percent of dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)
6	0			That are obt., Facw, or Fac.
7	0			Prevalence Index worksheet:
(0)-1	65 =	Total Cove	ř.	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)	114.21		72270	OBL species
1. Acer negundo		✓	FAC	FACW species5 x 2 =10
2. Fagus grandifolia	35.5	✓	FACU	FAC species65 x 3 =195
3. Ulmus rubra	5		FAC	FACU species 25 x 4 = 100
4,	0	Ц		
5	0			AND
6	0			Column Totals: 95 (A) 305 (B)
7	0			Prevalence Index = B/A =3.211_
(Plot size) Eft	30 =	Total Cove	r	Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)				Rapid Test for Hydrophytic Vegetation
1	0			✓ Dominance Test is > 50%
2	0_			Prevalence Index is ≤3.0 ¹
3	0			
4	0			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0_			
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9			-	Definitions of Vegetation Strata
10		H		Tree Meedy plants 3 in (7.6 cm) or more in diameter at
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
12				Si sastrioigin (221), rogalaisee si rioigini
12.		= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)		- Total Cove	VS	greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	100			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine All woody vines greater than 2.20 ft in
4	0			Woody vine - All woody vines greater than 3.28 ft in height.
-1	0 =	Total Cove		
		- Total Cove		
				Hydrophytic
				Vegetation No. 0 No. 0
				Present? Yes VNO
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed f	or positive	identification of the species observed within the upland
area.				

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-18ab

Profile Desci Depth		cribe to Matrix	rne aepth	needed to document the indicator or confirm the Redox Features	: ausence or indicators.)	
(inches)	Color (n		%	Color (moist) % Type ¹ Loc ²	Texture Remarks	
0-6	10YR	3/2	100		Silty Clay Loam	
6-18	10YR	4/2	100		Silty Clay Loam	
¹ Type: C=Con	centration. D=	Depletio	n. RM=Red	uced Matrix, CS=Covered or Coated Sand Grains ² Loca	tion: PL=Pore Lining. M=Matrix	
Hydric Soil					Indicators for Problematic Hydric Soils: 3	
Histosol (Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
-	pedon (A2)			Thin Dark Surface (S9) (LRR R, MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)	
Black His				Loamy Mucky Mineral (F1) LRR K, L)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)			Loamy Gleyed Matrix (F2)	Dark Surface (S7) (LRR K, L, M)	
	Layers (A5)	ufaca (A	11)	Depleted Matrix (F3)	Polyvalue Below Surface (S8) (LRR K, L)	
10000	Below Dark Surk Surface (A12		11)	Redox Dark Surface (F6)	Thin Dark Surface (S9) (LRR K, L)	
	uck Mineral (S1			Depleted Dark Surface (F7)	Iron-Manganese Masses (F12) (LRR K, L, R)	
_	eyed Matrix (S4	50		Redox Depressions (F8)	Piedmont Floodplain Soils (F19) (MLRA 149B)	
Sandy Re	. B	.,			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
A STATE OF THE STA	Matrix (S6)				Red Parent Material (F21)	
	ace (S7) (LRR	R, MLRA	149B)		Very Shallow Dark Surface (TF12)	
				and hydrology must be present, unless disturbed or proble	Uther (Explain in Remarks)	
			n and wella	and flydrology must be present, diffess disturbed or proble	emauc.	
	ayer (if obse	rved):				
Type:	1 X				Hydric Soil Present? Yes No •	
Depth (inc	ches):				injune son i resenti. Pes 🔾 No 🔾	
Remarks:						
No hydric soi	ls were prese	ent with	in this upl	and area.		

Upland RLP-19ab

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County:	Mahoning County	Sampli	ng Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company		State: OH	Sampling Point:	upl-aeh-20200107-13
investigator(s): AEH, SKM	Section, To	wnship, Range: S.	T. 2N	R. 1W
andform (hillslope, terrace, etc.): Hillside	Local relief (co	ncave, convex, none)): none	Slope: 5.0 % / 0.0
Subregion (LRR or MLRA): LRR K Lat.:	41.091195	Long.:	-80.602498	Datum: WGS 84
Soil Map Unit Name: RuB-Rittman-Urban land complex, 2 to 6 percer			NWI classification:	
	124	. ● No ○ (If r		7
Are climatic/hydrologic conditions on the site typical for this time of	, ,	mes municipality	no, explain in Remark	
Are Vegetation 🔲 , Soil 🔲 , or Hydrology 🔲 significan	ntly disturbed?	Are "Normal Circ	umstances" present?	res 🙂 No 🔾
Are Vegetation , Soil , or Hydrology naturally	problematic?	(If needed, expla	ain any answers in Re	emarks.)
Summary of Findings - Attach site map showing	, sampling p	oint locations,	transects, imp	ortant features, et
Hydrophytic Vegetation Present? Yes No	A	0.84		
Hydric Soil Present? Yes ○ No •		Sampled Area a Wetland? Ye	es 🔾 No 💿	
Wetland Hydrology Present? Yes ○ No ●	\$7.000.77 MAY 12			
				_
Hydrology				
Wetland Hydrology Indicators:		_Sec	ondary Indicators (minin	num of 2 reauired)
Primary Indicators (minimum of one required; check all that apply)			Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Le	8 8		Drainage Patterns (B10))
High Water Table (A2) Aquatic Fauna (B			Moss Trim Lines (B16)	- (63)
Saturation (A3) Marl Deposits (B Water Marks (B1) Hydrogen Sulfide	and the second	H	Dry Season Water Table Crayfish Burrows (C8)	e (C2)
	pheres along Living	Poots (C3)	Saturation Visible on A	erial Imagery (C9)
Drift deposits (B3) Presence of Redu		(6)	Stunted or Stressed Pla	
	uction in Tilled Soils	(C6)	Geomorphic Position (D	
Iron Deposits (B5) Thin Muck Surface			Shallow Aquitard (D3)	9-9-4 ⁶ -31
Inundation Visible on Aerial Imagery (B7) Other (Explain in	n Remarks)		Microtopographic Relief	f (D4)
Sparsely Vegetated Concave Surface (B8)	**************************************		FAC-neutral Test (D5)	
Field Observations:				
Surface Water Present? Yes No • Depth (inches)	ı:			
Water Table Present? Yes No Depth (inches)):			
Saturation Present? (includes capillary fringe) Yes No • Depth (inches)		Wetland Hydrolog	y Present? Yes	○ No ●
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspe	ections), if available:		
Remarks:				
No wetland hydrology was present.				

VEGETATION - Use scientific names of plant

(0)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC:
2.	0_			Total Number of Dominant
3	0			Species Across All Strata: 3 (B)
4	0_			
5	_ 0_	П		Percent of dominant Species
6	0	Ħ		That Are OBL, FACW, or FAC: 66.7% (A/B)
7	7 Page 100	ī		Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)		- Total Cove		OBL species 0 x 1 = 0
1. Populus deltoides	5	~	FAC	
2.				FACW species 40 x 2 = 80
3	0	ā		FAC species <u>5</u> x 3 = <u>15</u>
4.	2	Ē		FACU species <u>55</u> x 4 = <u>220</u>
5		$\overline{\Box}$		UPL species $0 \times 5 = 0$
		П		Column Totals: 100 (A) 315 (B)
6		Ħ		D 1 1 1 2/4
7	-			Prevalence Index = B/A = 3.150
Herb Stratum (Plot size: 5ft)	5_=	= Total Cove		Hydrophytic Vegetation Indicators:
a Object of the second second	40	~	FACW	Rapid Test for Hydrophytic Vegetation
		V		✓ Dominance Test is > 50%
2. Schedonorus arundinaceus		_	FACU	Prevalence Index is ≤3.0 ¹
3. Solidago canadensis		H	FACU	Morphological Adaptations ¹ (Provide supporting
4. Symphyotrichum ericoides		H	FACU	data in Remarks or on a separate sheet)
5. Poa pratensis		H	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			The same of the sa
9				Definitions of Vegetation Strata
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12		H		
		= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)		- Total Cove	10	greater than 3.28 ft (1m) tall
1,	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	0	П		size, and woody plants less than 3.28 ft tall.
2	0			W 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
3.	0		-	Woody vine - All woody vines greater than 3.28 ft in height.
4.				neight.
	=	= Total Cove		
				Hydrophytic Vegetation
				Present? Yes • No
Remarks: (Include photo numbers here or on a separate sh	aat \			
	0.00000	-llld &		ideatification of the consistent of this the content
Vegetation was disurbed by seasonal conditions. Remanent area.	piant materi	als allowed i	or positive	identification of the species observed within the upland
arca.				

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-19ab

Depth	приоп: (Des	scribe to Matrix	the depth	needed to d		t the indicated		יייינית tne	absence of indicators.)	
(inches)	Color (%	Color (%	Type ¹	Loc2	Texture	Remarks
0-6	10YR	4/2	100						Silty Clay Loam	
6-18	10YR	4/2	85	10YR	6/4	15	С	М	Silty Clay Loam	
Type: C=Con	centration D	=Denletio	n RM=Redi		S=Covere	ed or Coate	d Sand Gra	ins 2l oca	tion: PL=Pore Lining. M=Matrix	
Hydric Soil		Берісио	m ra i – read	icca i laciny c		ed or courc	a Sana Gra		Indicators for Problem	
Histosol (w Surface ((S8) (LRR F	,	2 cm Muck (A10) (LRF	
Histic Epi	ipedon (A2)				149B)				Coast Prairie Redox (A	
Black His	tic (A3)						LRR R, MLR	83	5 cm Mucky Peat or P	
Hydroger	Sulfide (A4)			100000000000000000000000000000000000000) LRR K, L)		Dark Surface (S7) (LR	
Stratified	Layers (A5)				*	Matrix (F2))		Polyvalue Below Surfa	
Depleted	Below Dark S	Surface (A	11)	✓ Deple					Thin Dark Surface (S9	
Thick Dar	rk Surface (A1	.2)				ırface (F6)			-	es (F12) (LRR K, L, R)
Sandy Mu	uck Mineral (S	1)		1		Surface (F	7)			Soils (F19) (MLRA 149B)
Sandy Gle	eyed Matrix (S	54)		Redo	x Depress	sions (F8)				/LRA 144A, 145, 149B)
Sandy Re	edox (S5)								Red Parent Material (F	
Stripped	Matrix (S6)								Very Shallow Dark Su	
	face (S7) (LRR	R R, MLRA	149B)							
	f hydrophytic		White the West Color	nd hydrology	must be p	present, un	less disturb	ed or proble	Other (Explain in Remember ematic.	arks)
	ayer (if obs	erved):								
Type: Depth (inc	-hoc):								Hydric Soil Present?	Yes O No 💿
Remarks:	nes):								10.00 miles	1
	trix was met	within t	hic unland	area						
epieteu mai	uix was ilieu	. within t	ilis uplanu	aica.						

Project/Site: Lincoln Park-Riverbend 138kV	Transmission Line	City/County: Mahoning County	Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Co	ompany	State: OH	Sampling Point: upl-aeh-20200107-05
Investigator(s): AEH, SKM		Section, Township, Range: 9	s. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Hill	Iside	Local relief (concave, convex, n	one): concave Slope: 4.0 % / 0.0
Subregion (LRR or MLRA): LRR K	Lat.:	41.090876 Long	
Soil Map Unit Name: RuB-Rittman-Urba	20 89 AM MINISTER 221		NWI classification: NA
10			<u> </u>
Are climatic/hydrologic conditions on the		Testing and American Company of the	(If no, explain in Remarks.) Circumstances" present? Yes No
Are Vegetation, Soil, o	or Hydrology	ly disturbed? Are "Normal	Circumstances" present?
Are Vegetation , Soil , o	or Hydrology naturally p	roblematic? (If needed, e	explain any answers in Remarks.)
Summary of Findings - Atta	ch site map showing s	sampling point location	ns, transects, important features, et
Hydrophytic Vegetation Present? Y	′es ● No O		
Hydric Soil Present? Y	′es ○ No •	Is the Sampled Area within a Wetland?	Yes ○ No ●
Wetland Hydrology Present?	′es ○ No •	in the control of the	
Hydrology			
Wetland Hydrology Indicators:		,	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one re	equired; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leav	3 5	Drainage Patterns (B10)
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13		Moss Trim Lines (B16)
Water Marks (B1)	Marl Deposits (B15	5 Walio - American	Dry Season Water Table (C2) Cravfish Burrows (C8)
Sediment Deposits (B2)	Hydrogen Sulfide C	odor (C1) eres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)	Presence of Reduce		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	2 To a particular and a second	tion in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	☐ Thin Muck Surface	Property of Man	Shallow Aquitard (D3)
☐ Inundation Visible on Aerial Imagery (B			Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B		(Charley)	FAC-neutral Test (D5)
Field Observations:			
Surface Water Present? Yes	No Depth (inches):		
Water Table Present? Yes	No Depth (inches):		
Saturation Present? (includes capillary fringe)	No Depth (inches):		ology Present? Yes O No •
Describe Recorded Data (stream gauge		, previous inspections), if availab	ole:
Remarks:			
No wetland hydrology was present.			

VEGETATION - Use scientific names of plant

(Distriction 20ff	Absolute	Dominant	Indicato:	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Prunus serotina		✓	FACU	That are OBL, FACW, or FAC:3(A)
2. Quercus palustris	5		FACW	Total Number of Dominant
3. Acer rubrum	35	✓	FAC	Species Across All Strata:4 (B)
4	0			MANA TANAN MANANCANAN
5	0_			Percent of dominant Species That Are OBL_FACW_or_FAC: 75.0% (A/B)
6	0_			That Are OBL, FACW, or FAC: 75.0% (A/B)
7	0_			Prevalence Index worksheet:
(6)	60 =	= Total Cove	r	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)	2000.00			OBL species
1 Acer rubrum		✓	FAC	FACW species
2. Fagus grandifolia	3.5.3		FACU	FAC species60 x 3 =180
3. Quercus palustris	10	✓	FACW	FACU species 25 x 4 = 100
4	0			
5	0_			AND THE STATE OF T
6	0			Column Totals: <u>100</u> (A) <u>310</u> (B)
7	0			Prevalence Index = B/A =3.100_
(District Eff	40 =	= Total Cove	r	Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)	1.00			Rapid Test for Hydrophytic Vegetation
1. Polystichum acrostichoides	0		FACU	(Final 800 8) (7-77 JM) O. Manipari
2	0_			
3	_ 0			Prevalence Index is ≤3.0 ¹
4.				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	0			Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9	T		· ·	Definitions of Vegetation Strata
10		H		
11				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
				breast fielght (DBF), regardless of fielght.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)	=	= Total Cove	5	greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	0	П		size, and woody plants less than 3.28 ft tall.
2	0	Ħ		
3	- 0	H	-	Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0 =	= Total Cove		
				Under white
				Hydrophytic Vegetation
				Present? Yes No
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	50. Q.S.G. (*)	als allowed f	or positive	identification of the species observed within the upland
area.	p.ca.ic		o., poo	
				İ

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-20 **Soil**

Profile Descr	iption: (De	scribe to	the depth	needed to	document	the indic	cator or co	onfirm the	e absence of indicators.)	
Depth		Matrix				lox Featu	res			
(inches)	Color (%_	Color (moist)	%	Type 1	Loc²	Texture Remarks	
0-10	10YR	3/2	100						Silty Clay Loam	
10-18	10YR	4/2	97	10YR	5/4	3	C		Silty Clay Loam	
¹ Type: C=Cond	entration. D	=Depletion	n. RM=Red	uced Matrix, (CS=Covere	d or Coate	d Sand Gra	ins ² Locat	ation: PL=Pore Lining. M=Matrix	
Hydric Soil I	ndicators:								Indicators for Problematic Hydric Soils: 3	
Histosol (A1)				value Belov	v Surface (S8) (LRR R	ι,	2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Epip	pedon (A2)				A 149B)	(50) (1		1 1 100)	Coast Prairie Redox (A16) (LRR K, L, R)	
☐ Black Hist	ic (A3)				Dark Surfa				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
	Sulfide (A4)			-	ny Mucky M				Dark Surface (S7) (LRR K, L, M)	
Stratified	Layers (A5)				ny Gleyed I				Polyvalue Below Surface (S8) (LRR K, L)	
1000	Below Dark S		11)		eted Matrix				Thin Dark Surface (S9) (LRR K, L)	
	k Surface (A1				ox Dark Sur		7\		Iron-Manganese Masses (F12) (LRR K, L, R)	
Sandy Mu	ck Mineral (S	1)		The second secon	eted Dark		()		Piedmont Floodplain Soils (F19) (MLRA 149B)	
Sandy Gle	yed Matrix (S	54)		Redo	x Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
Sandy Red	dox (S5)								Red Parent Material (F21)	
Stripped N	1atrix (S6)								☐ Very Shallow Dark Surface (TF12)	
Dark Surfa	ace (S7) (LRF	R, MLRA	149B)						Other (Explain in Remarks)	
³ Indicators of	hydrophytic	vegetation	and wetl	and hydrology	must be p	resent, unl	less disturb	ed or proble	olematic.	
Restrictive La										
Type:	ayer (ii obs	ci veaj.								
Depth (incl	hes).								Hydric Soil Present? Yes No •	
5550 550 7500	103)								Table and a control of the Control o	
Remarks:	3.8	20		v		20 0	8 8			
Depleted belo	w a dark su	urface and	d deplete	d matrix wei	e met wit	thin the u	pland are	a.		

Upland RLP-21ab

Project/Site: Lincoln Park-Rive	rbend 138kV Transmiss	ion Line	City/County:	Mahoning County	Sampli	ing Date: 07-Jan-20
Applicant/Owner: ATSI, a F	rstEnergy Company			State: OH	Sampling Point:	upl-aeh-20200107-06
Investigator(s): AEH, SKM			Section, To	ownship, Range: S		R. 1W
Landform (hillslope, terrace,	etc.): Flat		1,000,000,000,000,000	oncave, convex, no	7 <u></u>	Slope: 0.0 % / 0.0
Subregion (LRR or MLRA):		1.1.				Datum: WGS 84
	AND CONTROL OF THE CO	Lat.:	41.090846	Long.:		
Soil Map Unit Name: RuB-Ri	ttman-Urban land co	omplex, 2 to 6 percent			NWI classification:	NA
Are climatic/hydrologic cond	litions on the site ty	pical for this time of	year? Ye	s ● No ○ (If no, explain in Remark	
Are Vegetation, Soil	, or Hydrold	ogy 🗌 significant	tly disturbed?	Are "Normal C	ircumstances" present?	Yes 💿 No 🔾
Are Vegetation , Soil	, or Hydrole	naturally i	problematic?	(If needed, ex	plain any answers in Re	emarks.)
Summary of Finding	s - Attach site	map showing	sampling p	20 00 0	AL 9	353
Hydrophytic Vegetation Pre	sent? Yes	No ●				
Hydric Soil Present?	Yes 🔾	No •		Sampled Area n a Wetland?	Yes ○ No ●	
Wetland Hydrology Present	yes 🔾	No •	With	ii a wetianu:		
Hydrology						
Wetland Hydrology Indicate		shook all that apply		-	Secondary Indicators (minir	
Primary Indicators (minimu Surface Water (A1)	m or one required; o		(00)		Surface Soil Cracks (B6	
High Water Table (A2)		Water-Stained Lea		1	Drainage Patterns (B10 Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B1		i	Dry Season Water Tabl	
Water Marks (B1)		Hydrogen Sulfide	A CONTRACTOR OF THE PARTY OF TH		Crayfish Burrows (C8)	0 (02)
Sediment Deposits (B2)		Oxidized Rhizosph	CONTRACTOR OF THE PARTY OF THE	Roots (C3)	Saturation Visible on A	erial Imagery (C9)
Drift deposits (B3)		Presence of Reduc			Stunted or Stressed Pla	ants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduc	ction in Tilled Soi	s (C6)	Geomorphic Position (E)2)
Iron Deposits (B5)		Thin Muck Surface	e (C7)	Į	Shallow Aquitard (D3)	
Inundation Visible on Aeria		Other (Explain in I	Remarks)		Microtopographic Relie	f (D4)
Sparsely Vegetated Concar	e Surface (B8)				FAC-neutral Test (D5)	
Field Observations:	Yes O No •	Depth (inches):				
Surface Water Present?		Depth (inches):				
Water Table Present?	Yes O No •	Depth (inches):	-	Wetland Hydro	logy Present? Yes	○ No •
Saturation Present? (includes capillary fringe)	Yes ○ No ●	Depth (inches):	-	wedana nyaro	logy i resent.	
Describe Recorded Data (str	eam gauge, monitor	ring well, aerial photo	s, previous insp	ections), if availabl	e:	
Remarks:						
No wetland hydrology was p	present.					

VEGETATION - Use scientific names of plant

(District 20ft	Absolute	Dominant Species?	ziidicaco.	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Ulmus rubra	5	✓	FAC	That are OBL, FACW, or FAC:3 (A)
2. Acer rubrum	5	✓	FAC	Total Number of Dominant
3				Species Across All Strata: 7(B)
4	0			W. V.
5				Percent of dominant Species That Are OBL FACW or FAC: 42.9% (A/B)
6	0_			That Are OBL, FACW, or FAC: 42.9% (A/B)
7				Prevalence Index worksheet:
207 11 222 11 2	10 =	Total Cove	r	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15ft)	-			OBL species
1 Rosa multiflora	25	✓	FACU	FACW species
2 Acer rubrum	15	✓	FAC	FAC species 30 x 3 = 90
3. Ulmus rubra	5		FAC	FACU species $65 \times 4 = 260$
4	0			
5	0			UPL species $0 \times 5 = 0$
6	0			Column Totals: <u>95</u> (A) <u>350</u> (B)
7	0			Prevalence Index = B/A =3.684_
		Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: _5ft)				Rapid Test for Hydrophytic Vegetation
1. Solidago canadensis	15	✓	FACU	
2. Glechoma hederacea	15	✓	FACU	Dominance Test is > 50%
3. Poa pratensis	10	✓	FACU	Prevalence Index is ≤3.0 ¹
4				 Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5	-			Problematic Hydrophytic Vegetation ¹ (Explain)
6	AT VICE			Troblemade Hydrophydic Vegetation (Explain)
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9	Vi II			Definitions of Vegetation Strata
		H		200 10 10 10 10 10 10 10 10 10 10 10 10 1
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12		_ 니_		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)	=	= Total Cove		greater than 3.28 ft (1m) tall
particle for the first transfer to the first transfer transfer to the first transfer transfer to the first transfer transfe	0			Herb - All herbaceous (non-woody) plants, regardless of
1		H		size, and woody plants less than 3.28 ft tall.
2		Ħ		
3		H		Woody vine - All woody vines greater than 3.28 ft in
4				height.
	=	= Total Cove		
				Under which
				Hydrophytic Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate si	heet.)			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed f	or positive	identification of the species observed within the upland
area.			84	

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-21ab

Profile Description	•	cribe to Matrix	tne depth	needed to document the ind Redox Feat		π the a	ibsence or indicators.)	
(inches)	Color (ı		%	Color (moist) %		OC ²	Texture	Remarks
0-18	10YR	4/2	100				Silty Clay	
¹ Type: C=Con	centration. D=	=Depletio	n. RM=Red	uced Matrix, CS=Covered or Coat	ed Sand Grains	² Locatio	on: PL=Pore Lining. M=Matrix	(
Hydric Soil	Indicators:			4 <u></u>			Indicators for Problem	atic Hydric Soils: 3
Histosol ((A1)			Polyvalue Below Surface	(S8) (LRR R,		2 cm Muck (A10) (LR	
Histic Epi	pedon (A2)			MLRA 149B)	(IDD D ANDA 140	\D\	Coast Prairie Redox (
Black His	tic (A3)			Thin Dark Surface (S9)		<i>(</i> B)	The second of th	reat (S3) (LRR K, L, R)
Hydroger	Sulfide (A4)			Loamy Mucky Mineral (F			Dark Surface (S7) (LF	사용 (1. 1) (1. 1
Stratified	Layers (A5)			Loamy Gleyed Matrix (F2	!)		Polyvalue Below Surfa	
Depleted	Below Dark S	urface (A	11)	Depleted Matrix (F3)			Thin Dark Surface (S9	
Thick Dar	k Surface (A1	2)		Redox Dark Surface (F6)			-	ses (F12) (LRR K, L, R)
Sandy Mu	uck Mineral (S	1)		Depleted Dark Surface (-/)			Soils (F19) (MLRA 149B)
Sandy Gl	eyed Matrix (S	4)		Redox Depressions (F8)				MLRA 144A, 145, 149B)
Sandy Re	dox (S5)						Red Parent Material (
Stripped	Matrix (S6)						Very Shallow Dark Su	
Dark Surf	ace (S7) (LRR	R, MLRA	149B)				Other (Explain in Ren	
³ Indicators o	f hydrophytic	vegetatio	n and wetla	nd hydrology must be present, u	nless disturbed or	problen		15-1355
				,		p. co.co.		
Restrictive L	ayer (IT obse	ervea):						
Type:	1 9						Hydric Soil Present?	Yes O No •
Depth (inc	thes):						, une som i resont.	163 0 110 0
Remarks:								
No hydric soi	ls were met	within th	he upland	area.				

Project/Site: Lincoln Park-Riv	verbend 138kV Transmiss	sion Line	City/County:	Mahoning County	Samp	ling Date: 07-Jan-20
Applicant/Owner: ATSI, a	FirstEnergy Company			State: OH	Sampling Point:	upl-aeh-20200107-07
Investigator(s): AEH, SKM			Section, To	ownship, Range:	s. T. 2N	R. 1W
Landform (hillslope, terrace	e, etc.): Hillside		Local relief (c	oncave, convex, n	one): concave	Slope: 5.0 % / 0.0 °
Subregion (LRR or MLRA):	LRR K	Lat.:	41.090147	Long	.: -80.610691	Datum: WGS 84
Soil Map Unit Name: RuB-F	Rittman-Urban land c	omplex, 2 to 6 percent	t slopes		NWI classification	: NA
Are climatic/hydrologic con			Ü.	s • No O	(If no, explain in Rema	rke)
Are Vegetation, So	_	_	tly disturbed?		Circumstances" present	· · · · · ·
100 march 100 ma		_				Section 1997
Are Vegetation , So	2.6	27.5	problematic?	20 00	explain any answers in F	
			sampling p	point location	ns, transects, imp	portant features, et
Hydrophytic Vegetation Pr		No •	Is the	e Sampled Area	0 0	
Hydric Soil Present?	Yes O	No ●		n a Wetland?	Yes O No 💿	
Wetland Hydrology Presen	nt? Yes	No •				
Hydrology						
Hydrology	•					
Wetland Hydrology Indica		shock all that apply)			Secondary Indicators (min	
Primary Indicators (minim Surface Water (A1)	um of one required,	Water-Stained Lea	nuos (PO)		Surface Soil Cracks (B Drainage Patterns (B1	50.E
High Water Table (A2)		Aquatic Fauna (B1			Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B1			Dry Season Water Tal	
Water Marks (B1)		Hydrogen Sulfide	and the second		Crayfish Burrows (C8)	
Sediment Deposits (B2)		Oxidized Rhizosph		Roots (C3)	Saturation Visible on A	
Drift deposits (B3)		Presence of Reduc		(Stunted or Stressed P	lants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduc		Is (C6)	Geomorphic Position ((D2)
Iron Deposits (B5)		Thin Muck Surface	e (C7)		Shallow Aquitard (D3))
Inundation Visible on Aer	ial Imagery (B7)	Other (Explain in F	Remarks)		Microtopographic Reli	ef (D4)
Sparsely Vegetated Conce	ave Surface (B8)				FAC-neutral Test (D5))
Field Observations:	200					
Surface Water Present?	Yes No •	Depth (inches):	-			
Water Table Present?	Yes O No 💿	Depth (inches):			100	0 0
Saturation Present? (includes capillary fringe)	Yes ○ No •	Depth (inches):		Wetland Hydr	ology Present? Yes	O No •
Describe Recorded Data (s	tream gauge, monitor	ring well, aerial photos	s, previous insp	pections), if availal	ble:	
Remarks:						
No wetland hydrology was	present.					
, 3,	5					

VEGETATION - Use scientific names of plant

Tree Stratum (Plot size: 30ft)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
	% Cover		Status	Number of Dominant Species
1. Prunus serotina		~	FACU	That are OBL, FACW, or FAC:
2. Ulmus rubra			FAC	Total Number of Dominant
3	0			Species Across All Strata: 4 (B)
4	0_			5
5				Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
6				That Are OBE, FACW, OF FAC.
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15ft)	55 =	= Total Cove	ŕ	Total % Cover of: Multiply by:
(C) 10000000 34	1000	Sec. 10	1212	OBL species 0 x 1 = 0
1. Ulmus rubra		✓	FAC	FACW species 0 x 2 = 0
2. Acer rubrum		✓	FAC	FAC species 30 x 3 = 90
3				FACU species
4	0			UPL species $0 \times 5 = 0$
5	0			
6	0			Column Totals: <u>85</u> (A) <u>310</u> (B)
7	0			Prevalence Index = B/A =
(Plot size: Eft	20 =	= Total Cove	r	Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)	0.000			Rapid Test for Hydrophytic Vegetation
1. Glechoma hederacea	10	✓	FACU	Dominance Test is > 50%
2	0			Prevalence Index is ≤3.0 ¹
3	0			TO A STANDOOD TO CONTROL OF THE CONT
4	•			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6	72			
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata
		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				breast neight (DBH), regardless or neight.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)	=	= Total Cove		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.	-	П		size, and woody plants less than 3.28 ft tall.
2.	0	Ħ		
3		Ħ		Woody vine - All woody vines greater than 3.28 ft in
4			-	height.
	0 =	= Total Cove		
				Hadarahat!
				Hydrophytic Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent		als allowed f	or positive	identification of the species observed within the unland
area.	p.ant. match	and the different	o. positive	

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-22 **Soil**

Profile Desc Depth	ription: (De	escribe to Matrix	cne aepth	neeaea to		t the indi dox Feat		ontirm the	absence of indicators.)			
(inches)	Color	(moist)	%	Color	(moist)	%	Type ¹	Loc2	Texture	Remarks		
0-6	10YR	4/1	100						Silty Clay Loam			
6-18	10YR	4/1	87	10YR	5/4	10	D	М	Silty Clay Loam			
				10YR	5/6	-		M				
1												
			on. RM=Red	uced Matrix,	CS=Covere	ed or Coate	ed Sand Gra	ins ² Loca	ition: PL=Pore Lining. M=Ma			
Hydric Soil						· ·	(CO) (LDD I		Indicators for Proble	ematic Hydric Soils: 3		
Histosol					value Belo A 149B)	w Surface	(S8) (LRR F	ζ,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Black His	ipedon (A2)					ace (S9) ((LRR R, MLF	RA 149B)	Coast Prairie Redo	x (A16) (LRR K, L, R)		
7		v.					1) LRR K, L)		프트 : 1000 1000 1000 1000 1000 1000 1000 1	or Peat (S3) (LRR K, L, R)		
	Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Mucky Mineral (F1) LRR K, L) Loamy Gleyed Matrix (F2)							Dark Surface (S7) (LRR K, L, M)				
Depleted Below Dark Surface (A11) Depleted Matrix (F3)							urface (S8) (LRR K, L)					
100000000000000000000000000000000000000	Thick Dark Surface (A12) Redox Dark Surface (F6)						Thin Dark Surface					
	Sandy Muck Mineral (S1) Depleted Dark Surface (F7)							lasses (F12) (LRR K, L, R)				
_	eyed Matrix (Redo	ox Depress	sions (F8)				in Soils (F19) (MLRA 149B)		
Sandy Re	edox (S5)	50 (8)							Red Parent Materia) (MLRA 144A, 145, 149B)		
Stripped	Matrix (S6)								Very Shallow Dark			
Dark Surf	face (S7) (LR	R R, MLRA	149B)						Other (Explain in R			
³ Indicators o	of hydrophytic	c vegetatio	n and wetla	and hydrology	must be	present, ur	nless disturt	ed or probl				
Restrictive L												
Туре:	12.5	3										
Depth (inc	ches):								Hydric Soil Present?	Yes ○ No •		
Remarks:												
Depleted ma	trix was me	et for this	upland ar	ea								
Depicted ma	CIA WGS IIIC	201 0113	upiana an	cu.								

Project/Site: Lincoln Park-Riverbend 138kV Transmissi	on Line City/County:	Mahoning County	Samplin	ng Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company		State: OH	Sampling Point:	upl-aeh-20200107-08
Investigator(s): AEH, SKM	Section, 1	Township, Range: S.	T. 2N	R. 1W
Landform (hillslope, terrace, etc.): Hillside	1840-1330-2031.3	concave, convex, none):	concave	Slope: 10.0 % / 0.0
Subregion (LRR or MLRA): LRR K	10 A. CONSUMERATION OF THE CONTRACT OF THE CON			Datum: WGS 84
	Lat.: 41.082545		80.610788	
Soil Map Unit Name: CoC-Chili-Urban land compl	5000 (10.12 (10.0000)		NWI classification:	NA
Are climatic/hydrologic conditions on the site type	pical for this time of year?	es No (If no	o, explain in Remark	**************************************
Are Vegetation, Soil, or Hydrolo	ogy significantly disturbed?	Are "Normal Circu	mstances" present?	Yes ● No ○
Are Vegetation , Soil , or Hydrolo	ogy naturally problematic?	(If needed, explai	n any answers in Re	marks.)
Summary of Findings - Attach site	map showing sampling	point locations, t	ransects, imp	ortant features, et
Hydrophytic Vegetation Present? Yes	No ●			
Hydric Soil Present? Yes		e Sampled Area	s ○ No ●	
rest Control of the C	No •	in a Wetland?	, ,,,,	
Remarks: (Explain alternative procedures here				
Hydrology				
Wetland Hydrology Indicators:	C 0200 422002 1000 10 26	Secon	ndarv Indicators (minim	num of 2 reauired)
Primary Indicators (minimum of one required; c			Surface Soil Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (B9)		Drainage Patterns (B10))
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)	- (C2)
Saturation (A3) Water Marks (B1)	Marl Deposits (B15)		Ory Season Water Table Crayfish Burrows (C8)	e (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)Oxidized Rhizospheres along Livin	construction of the constr	Saturation Visible on Ae	erial Imagery (C9)
Drift deposits (B3)	Presence of Reduced Iron (C4)	_	Stunted or Stressed Pla	
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So		Geomorphic Position (D	
☐ Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	_ n	Microtopographic Relief	(D4)
Sparsely Vegetated Concave Surface (B8)		F	FAC-neutral Test (D5)	
Field Observations:				
Surface Water Present? Yes No •	Depth (inches):			
Water Table Present? Yes No •	Depth (inches):			
Saturation Present? (includes capillary frings) Yes No •	Depth (inches):	Wetland Hydrology	Present? Yes	○ No •
(includes capillary fringe)		- If a sallable		
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previous ins	pections), if available:		
Remarks:				
No wetland hydrology was present.				

VEGETATION - Use scientific names of plant

(Plot size, 20ft	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species?	Status	Number of Dominant Species
1 Carya ovata	10	✓	FACU	That are OBL, FACW, or FAC: (A)
2.	0_			Total Number of Devices t
3	0_			Total Number of Dominant Species Across All Strata: 4 (B)
4.	-			
5.	S	H		Percent of dominant Species
		H		That Are OBL, FACW, or FAC: 0.0% (A/B)
6		H		
7	0	Ш		Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15ft)	10=	Total Cover	•	Total % Cover of: Multiply by:
4 Dans	20		FACU	OBL species x 1 =
		✓		FACW species 0 x 2 = 0
2. Quercus alba		✓	FACU	FAC species 0 x 3 = 0
3				FACU species 50 x 4 = 200
4	0	Ш		UPL species $0 \times 5 = 0$
5	0_			THE RESIDENCE OF THE PROPERTY
6	0			Column Totals:50 (A)200 (B)
7				Prevalence Index = B/A = 4,000
		Total Cove		
Herb Stratum (Plot size: 5ft)		- Total Cove		Hydrophytic Vegetation Indicators:
1 Schedonorus arundinaceus	5	~	FACU	Rapid Test for Hydrophytic Vegetation
	-		TACO	Dominance Test is > 50%
2	1	H		Prevalence Index is ≤3.0 ¹
3				Morphological Adaptations ¹ (Provide supporting
4				data in Remarks or on a separate sheet)
5	0	Ц		Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7	00			1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9		П	0.00	Definitions of Vegetation Strata
		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11		Ш	_	breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: _30ft)	5=	Total Cover		greater than 3.28 ft (1m) tall
	100			
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0	Ц		size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0_			height.
	0 =	Total Cover		
			8	
				Hydrophytic
				Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate sh	eet.)			
300 C 500 C		ala allawad f	au maaitii sa	identification of the species about adjusting the unland
Vegetation was disurbed by seasonal conditions. Remanent area.	plant materia	als allowed to	or positive	identification of the species observed within the upland
urcu.				

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Profile Descr	iption: (Desc	ribe to t	he depth	needed to docum	ent the indicato	or or confirm	the	e absence of indicators.)	
Depth		4atrix			Redox Features			_	
(inches)	Color (m		%	Color (moist) %1	ype 1 Loc	C ²	Texture Remarks	
0-4	10YR	2/1	100					Silty Clay Loam	
4-18	10YR	5/4	100					Silty Clay Loam	
¹ Type: C=Cond	centration. D=	Depletion	. RM=Red	uced Matrix, CS=Co	ered or Coated Sa	and Grains ² l	Locat	ation: PL=Pore Lining. M=Matrix	
Hydric Soil I	ndicators:							Indicators for Problematic Hydric Soils: 3	
Histosol (A1)				elow Surface (S8)	(LRR R,		2 cm Muck (A10) (LRR K, L, MLRA 149B)	
Histic Epip	pedon (A2)			MLRA 149B		D 18 D1 140D		Coast Prairie Redox (A16) (LRR K, L, R)	
☐ Black Hist	ic (A3)				urface (S9) (LRR)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4)			The second secon	ky Mineral (F1) LR	R K, L)		Dark Surface (S7) (LRR K, L, M)	
Stratified	Layers (A5)				ed Matrix (F2)			Polyvalue Below Surface (S8) (LRR K, L)	
100000000000000000000000000000000000000	Below Dark Su		1)	Depleted M				Thin Dark Surface (S9) (LRR K, L)	
S-2	k Surface (A12				Surface (F6) ark Surface (F7)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)	
_	ck Mineral (S1				essions (F8)			Piedmont Floodplain Soils (F19) (MLRA 149B)	
	yed Matrix (S4	1)		Redox Depi	essions (Fo)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
Sandy Red								Red Parent Material (F21)	
	Matrix (S6)							Very Shallow Dark Surface (TF12)	
Dark Surfa	ace (S7) (LRR	R, MLRA	149B)					Other (Explain in Remarks)	
³ Indicators of	hydrophytic v	egetation	and wetla	nd hydrology must l	e present, unless	disturbed or p	roble	olematic.	
Restrictive La	aver (if obse	rved):							
Type:									
Depth (incl	hes):							Hydric Soil Present? Yes ○ No ●	
Remarks:	//.							1	
No hydric soil	s were prese	ent withir	n the upia	na area.					

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County:	Mahoning County	Sampli	ng Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company		State: OH	Sampling Point:	upl-aeh-20200107-09
investigator(s): AEH, SKM	Section, To	ownship, Range: S.	T. 2N	R. 1W
andform (hillslope, terrace, etc.): Flat	Local relief (co	oncave, convex, none	e): concave	Slope: 0.0 % / 0.0
Subregion (LRR or MLRA): LRR K Lat.:	41.081772	Long.:	-80.611189	Datum: WGS 84
Goil Map Unit Name: CoC-Chili-Urban land complex, rolling	11.002.72		NWI classification:	<u> </u>
are climatic/hydrologic conditions on the site typical for this time of you	ear? Ye	s • No O (If	no, explain in Remark	
	ly disturbed?		cumstances" present?	·
	· Participal Control Control Control Control			
	roblematic?	2 0 121	lain any answers in Re	
Summary of Findings - Attach site map showing s	ашршу р	onit locations,	, transects, imp	ortant reatures, et
v 0 v 0	Is the	Sampled Area	0 0	
Try and Don't resent.		n a Wetland?	′es ○ No •	
Wetland Hydrology Present? Yes ○ No ●				
Hydrology				
Hydrology				
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		_Se	condary Indicators (minin	
Surface Water (A1) Water-Stained Leav	uec (80)		Surface Soil Cracks (B6) Drainage Patterns (B10)	
High Water Table (A2) Aquatic Fauna (B13	8 6		Moss Trim Lines (B16)	,
Saturation (A3) Marl Deposits (B15			Dry Season Water Table	e (C2)
Water Marks (B1) Hydrogen Sulfide O	Odor (C1)		Crayfish Burrows (C8)	
Sediment Deposits (B2) Oxidized Rhizosphe	eres along Living	Roots (C3)	Saturation Visible on A	erial Imagery (C9)
Drift deposits (B3) Presence of Reduce	ed Iron (C4)		Stunted or Stressed Pla	nts (D1)
Algal Mat or Crust (B4) Recent Iron Reduct	tion in Tilled Soil	s (C6)	Geomorphic Position (D	02)
Iron Deposits (B5) Thin Muck Surface	(C7)	<u>_</u>	Shallow Aquitard (D3)	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Responsely Vegetated Concave Surface (B8)	emarks)		Microtopographic Relief	(D4)
Sparsely vegetated contave surface (bo)			FAC-neutral Test (D5)	
Field Observations:				
Surface Water Present? Yes No Depth (inches):				
Water Table Present? Yes No Depth (inches):		Wetland Hydrolo	gy Present? Yes	○ No •
Saturation Present? (includes capillary fringe) Yes No Depth (inches):		wettand Hydroio	gy Present? Tes	O 110 G
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	, previous insp	ections), if available:		
Remarks:				
No wetland hydrology was present.				

VEGETATION - Use scientific names of plant

Tree Stratum (Plot size: 30ft)	Absolute		Indicator	Dominance Test worksheet:
	% Cover	-	Status	Number of Dominant Species
1. Populus deltoides	40	~	FAC	That are OBL, FACW, or FAC:1(A)
2. Prunus serotina	10		FACU	Total Number of Dominant
3. Ulmus rubra	5		FAC	Species Across All Strata: 3 (B)
4	0			- WA
5	0			Percent of dominant Species
6	de company	一		That Are OBL, FACW, or FAC: 33.3% (A/B)
7.	823	H		Prevalence Index worksheet:
1				
Sapling/Shrub Stratum (Plot size: 15ft)	55=	Total Cover		Total % Cover of: Multiply by:
1,	0			OBL species 0 x 1 = 0
2.		H		FACW species
123				FAC species <u>45</u> x 3 = <u>135</u>
3				FACU species 45 x 4 = 180
4,				UPL species x 5 =
5	0		-	ALL WAS ADDRESS OF THE PROPERTY OF THE PROPERT
6	0_			Column Totals: <u>90</u> (A) <u>315</u> (B)
7	0			Prevalence Index = B/A =3.500_
		Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5ft)				Rapid Test for Hydrophytic Vegetation
1 Solidago canadensis	15	~	FACU	6 300 50 (FEE) (JAM D) EQUIPMENT (ACCUSATION OF ACCUSATION
2. Rosa multiflora	15	✓	FACU	Dominance Test is > 50%
S. Blantons languagets	-	Ē	FACU	Prevalence Index is ≤3.0 ¹
		H	TACO	☐ Morphological Adaptations ¹ (Provide supporting
4		H	-	data in Remarks or on a separate sheet)
5		H	-	Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9	0			Definitions of Vegetation Strata
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12.		H		broadt Holgin (BBH), rogardiodd o'i Holgin.
12	2.0			Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 30ft)	35_ =	Total Cover		greater than 3.28 ft (1m) tall
	0			Herb - All herbaceous (non-woody) plants, regardless of
1		H		size, and woody plants less than 3.28 ft tall.
2		H		, and 1,
3	0_	H	3	Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	Total Cover		
				Hydrophytic
				Vegetation Present? Yes ○ No ●
				Present? Yes O NO 🛡
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed fo	r positive	identification of the species observed within the upland
area.	5V		107	

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-24 **Soil**

Profile Descr	iption: (Des	cribe to	the depth	needed to	document	the indica	ator or co	nfirm the	absence of indicators.)		
Depth		Matrix				lox Featur				_	_
(inches)	Color (%	Color	(moist)	%	Type ¹	Loc ²	Texture	Remar	rks
0-18	10YR	3/2	100						Silty Clay Loam		
										-	
										-	
¹ Type: C=Cond	centration. D	=Depletior	n. RM=Red	uced Matrix,	CS=Covered	d or Coated	Sand Grain	ns ² Locat	tion: PL=Pore Lining. M=M	atrix	
Hydric Soil I	ndicators:								Indicators for Prob	lematic Hydric S	Soils: 3
Histosol (A1)				value Belov	Surface (S	88) (LRR R,		2 cm Muck (A10)		
Histic Epip	pedon (A2)				A 149B)					ox (A16) (LRR K, L	
☐ Black Hist	ic (A3)				Dark Surfa			(149B)	The second secon	or Peat (S3) (LRR	34-51
Hydrogen	Sulfide (A4)			Loa	my Mucky M	lineral (F1)	LRR K, L)		Dark Surface (S7)	내용 시민들은 얼마를 하는데 되었다.	N, L, N)
Stratified	Layers (A5)			Loa	my Gleyed N	1atrix (F2)				Surface (S8) (LRR	V 1)
Depleted I	Below Dark S	urface (A1	1)	Dep	leted Matrix	(F3)					N, L)
100000	k Surface (A1			Red	ox Dark Sur	face (F6)			Thin Dark Surface		
-	ck Mineral (S			Dep	leted Dark S	Surface (F7)		Iron-Manganese i		
_	yed Matrix (S	. 50		Red	ox Depressi	ons (F8)			Piedmont Floodpl		
Sandy Red		15							Mesic Spodic (TA		45, 1498)
The second of the second	Matrix (S6)								Red Parent Mater		
	ace (S7) (LRR	R MIRA	149R)						☐ Very Shallow Dark		
20									Other (Explain in	Remarks)	
³ Indicators of	hydrophytic	vegetation	n and wetla	nd hydrology	must be p	resent, unle	ess disturbe	ed or proble	ematic.		
Restrictive La	ayer (if obs	erved):									
Туре:	1020 60	- 3							A STATE OF THE STA		
Depth (incl	hes):								Hydric Soil Present?	Yes 🔾 N	lo 💿
Remarks:									<u></u>		
No hydric soil	s were pres	ent withi	n the upia	ina area.							

Upland RLP-26

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park-Riverbend 138kV Tra	nsmission Line	City/County:	Mahoning County	Sam	pling Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Comp	any		State: OH	Sampling Point	upl-aeh-20200107-10
Investigator(s): AEH, SKM		Section, To	ownship, Range:	s. T. 2N	R. 1W
Landform (hillslope, terrace, etc.): Flat					Slope: 0.0 % / 0.0
	lat.		10) 100%		
	### State: OH Sampling Point: upl-aeh-202001 ### Section, Township, Range: S. T. 2N R. 1W ### Islope, terrace, etc.): Flat				
Investigator(s): AEH, SKM					
Are climatic/hydrologic conditions on the	site typical for this time of y	year? Ye	s • No 🔾	(If no, explain in Rema	
Are Vegetation , Soil , or H	lydrology significant	ly disturbed?	Are "Normal	Circumstances" preser	ıt? Yes • No 🔾
Are Vegetation , Soil , or H	ydrology naturally p	problematic?	(If needed, e	xplain any answers in	Remarks.)
Summary of Findings - Attach	site map showing	sampling p	oint location	ns, transects, im	portant features, et
Hydrophytic Vegetation Present? Yes	○ No •		2010000		
Hydric Soil Present? Yes	○ No ●			Yes ○ No •	
Wetland Hydrology Present? Yes	○ No ●		u Wedana.		
Hydrology					
■ Table 1				Secondary Indicators (mi	nimum of 2 required)
	ired; check all that apply)			Surface Soil Cracks (B6)
High Water Table (A2)					
Saturation (A3) Water Marks (B1)		San Assessan			
Sediment Deposits (B2)			Poots (C3)	The second secon	15 company and the company of the co
Drift deposits (B3)	A STATE OF THE PROPERTY OF THE		Roots (C3)		
Algal Mat or Crust (B4)	The state of the s		s (C6)		
☐ Iron Deposits (B5)	- Marin Mariner Green Medicales		3 (60)		2030223501
☐ Inundation Visible on Aerial Imagery (B7)	N SHARE WAS PETER BY BE				2060
Sparsely Vegetated Concave Surface (B8)	other (Explain in t	(chars)			
Field Observations:					
Surface Water Present? Yes No	Depth (inches):	-			
Water Table Present? Yes No	Depth (inches):				
Saturation Present? (includes capillary fringe) Yes No	Depth (inches):		Wetland Hydr	ology Present? Ye	s O No 💿
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos	s, previous insp	ections), if availal	ole:	
Remarks:					
No wetland hydrology was present.					

VEGETATION - Use scientific names of plant

(Diet size)	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC: (A)
2.	0_			Total Number of Demisers
3	0_			Total Number of Dominant Species Across All Strata: 3 (B)
4				
5	S	Ħ		Percent of dominant Species
		H		That Are OBL, FACW, or FAC: 0.0% (A/B)
6		H		
7	0	Ш		Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size:)	=	Total Cover		Total % Cover of: Multiply by:
	0			OBL species <u>0</u> x 1 = <u>0</u>
1		님		FACW species 0 x 2 = 0
2			-	FAC species 0 x 3 = 0
3			-	FACU species 40 x 4 = 160
4	0			UPL species $10 \times 5 = 50$
5	0			AND ADDRESS OF THE PROPERTY OF
6	0			Column Totals: <u>50</u> (A) <u>210</u> (B)
7				Prevalence Index = B/A = 4,200
		Total Cover		
Herb Stratum (Plot size:)		- rotal cover		Hydrophytic Vegetation Indicators:
1 Poa pratensis	25	✓	FACU	Rapid Test for Hydrophytic Vegetation
S. Colidore considerale	15	V	FACU	Dominance Test is > 50%
2. Solidago canadensis	1		Assessment Control	Prevalence Index is ≤3.0 ¹
3. Bromus inermis	10	V	UPL	Morphological Adaptations ¹ (Provide supporting
4				data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
7	0			Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
				Definitions of Vegetation Strata
9		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
	50 =	Total Cover		greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size:)				•
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
т.	0 =	Total Cover		
		- Total Cover		
				Hydrophytic Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate sh			e E Care Crigicia, par National and a	
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed fo	r positive	identification of the species observed within the upland
area.				

Sampling Point: upl-aeh-20200107-10

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-26

Sampling Point: upl-aeh-20200107-10

Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type 1 Loc2 Texture Remarks	
0-3 10YR 3/2 100 Silty Clay Loam 50% fill	
¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ² Location: PL=Pore Lining. M=Matrix	
Hydric Soil Indicators: Indicators for Problematic Hydric Soils :	3
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K L MLRA 149R)	
Histic Epipedon (A2)	
Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Som Mucky Peat or Peat (S3) (LRR K, L, R)	i
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L)	1
Dark Surface (57) (LKR K, L, M)	
Depleted Matrix (F3) Depleted Matrix (F3)	
Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L)	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F6) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)	-
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149)	-
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Matrix (F3) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 1449, 145, 1498) Mesic Spodic (TA6) (MLRA 144A, 145, 1498)	9B)
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Upland RLP-27

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County:	Mahoning County	8	Sampling Date: 07-Jan-20
Applicant/Owner: ATSI, a FirstEnergy Company		State: OH	Sampling F	Point: upl-aeh-20200107-03
Investigator(s): AEH, SKM	Section, Te	ownship, Range:	s. T. 21	N R. 2W
Landform (hillslope, terrace, etc.): Mound	1,000,000,000,000,000			Slope: 0.0 % / 0.0 °
Subregion (IRR or MIRA): IDD /		20 2000		Datum: WGS 84
	41.000005	Long	7.000 1000000000000000000000000000000000	
Ua-Udorthents, loamy, 2 to 25 percent slopes	State: OH Sampling Point: upl-aeh- Section, Township, Range: S. T. 2N Local relief (concave, convex, none): none Slope: Lat.: 41.088665 Long.: -80.638127 Dat to 25 percent slopes NWI classification: NA Popical for this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks.) Proposed of this time of year? Yes No (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain any answers in Remarks) Proposed of Reduced Iron (C4) (If no, explain any answers in Remarks) Proposed of Reduced Iron (C4) (If no, explain any answers in Remarks) Proposed of Reduced Iron (C4) (If no, explain any answers in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks) Proposed of Reduced Iron (C4) (If no, explain in Remarks (If no, explain in Remarks) Propos	ation: NA		
tigator(s): AEH, SKM Section, Township, Range: S. T. 2N R form (hillstope, terrace, etc.): Mound Local relief (concave, convex, none): none Slope: sgion (IRR or MLRA): LRR K Lat: 41.088665 Long.: -80.638127 Datum: dar Unit Name:				
Are Vegetation $\ \square$, Soil $\ \square$, or Hydrology $\ \square$ significan	tly disturbed?	Are "Normal	Circumstances" pr	resent? Yes No
Are Vegetation , Soil , or Hydrology naturally	problematic?	(If needed,	explain any answe	rs in Remarks.)
Summary of Findings - Attach site map showing	sampling p	oint locatio	ns, transects,	, important features, et
Hydrophytic Vegetation Present? Yes No •	Harm Service	-0.024		
Hydric Soil Present? Yes ○ No •			Yes O No 💿	
Wetland Hydrology Present? Yes ○ No ●		ii u iveliana.		
Hydrology				
Wetland Hydrology Indicators:			Secondary Indicator	s (minimum of 2 reauired)
Primary Indicators (minimum of one required; check all that apply)			Surface Soil Cra	icks (B6)
	3 5			5 CONT CONT C
				153 5
		Poets (C3)	The same of the same of	and the success of th
		ROOLS (C3)		
		s (C6)		
		is (CO)		00505413040130404541
Trum debies Visible on Assiel Impress (DZ)				500 N 100 S 600
Sparsely Vegetated Concave Surface (B8)	Kenars)			
Field Observations:				2 0
0 0				
C.L. III D. III		Wetland Hydi	ology Present?	Yes ○ No ●
(includes capillary fringe) Yes V No V Depth (inches):			West Transfer of the Control of the	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous insp	ections), if availa	ble:	
s 18				
Remarks:				
No hydrology indicators present.				

VEGETATION - Use scientific names of plant

(Plot size, 20ft	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft)	% Cover	Species	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC:1(A)
2	0			Total Number of Developer
3	0_			Total Number of Dominant Species Across All Strata: 5 (B)
4	-			
5.	FE 100	H		Percent of dominant Species
	-	H		That Are OBL, FACW, or FAC: 20.0% (A/B)
6		H		- 100 CO. A. 200 CO. B.
7		Ш		Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15ft)	0=	= Total Cove	r	Total % Cover of: Multiply by:
1 - 10-11	10		FACU	OBL species 0 x 1 = 0
~ W.L	40	✓		FACW species 0 x 2 = 0
2. Malus pumila		~	UPL	FAC species5 x 3 =15
3. Populus deltoides	2 22 22	~	FAC	FACU species 35 x 4 = 140
4	0	Ш		UPL species $\frac{25}{2}$ x 5 = $\frac{125}{2}$
5	0			
6	0			Column Totals: <u>65</u> (A) <u>280</u> (B)
7				Prevalence Index = B/A = 4,308
		= Total Cove		
Herb Stratum (Plot size: 5ft)		- Total Cove	\$8 	Hydrophytic Vegetation Indicators:
1 Solidago canadensis	20	✓	FACU	Rapid Test for Hydrophytic Vegetation
C. Promus Incomits	10	<u>~</u>	UPL	Dominance Test is > 50%
2. Bromus inermis		_	VI 2000000000	Prevalence Index is ≤3.0 ¹
3. Oxalis corniculata	5		FACU	Morphological Adaptations ¹ (Provide supporting
4. Daucus carota	5		UPL	data in Remarks or on a separate sheet)
5	0_			Problematic Hydrophytic Vegetation ¹ (Explain)
6	0_			3 - 10 - 10 - 3 - 10 - 10 - 10 - 10 - 10
7	0			1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
				Definitions of Vegetation Strata
9		H		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at
11	0_			breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
(8)	40_ =	= Total Cove	r	greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30ft)	, S			<i>y</i>
1				Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine All woody vines greater than 2.29 ft in
1	0		5	Woody vine - All woody vines greater than 3.28 ft in height.
4.		- Total Cava		noight.
	0 =	= Total Cove	0	
				Hydrophytic
				Vegetation Present?
				Tresent.
				<u> </u>
Remarks: (Include photo numbers here or on a separate sh	eet.)			
Vegetation was disurbed by seasonal conditions. Remanent	plant materia	als allowed f	or positive	identification of the species observed within the upland
area.				

Sampling Point: upl-aeh-20200107-03

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Upland RLP-27

Sampling Point: upl-aeh-20200107-03

Profile Descr	iption: (Des	cribe to	the depth	needed to	document	the indic	ator or co	nfirm the	absence of indicators.)		
Depth		Matrix				lox Featui					
(inches)	Color (%	Color	(moist)	%	Type ¹	Loc ² _	Texture	Rem	arks
0-18	10YR	2/1	100						Silty Clay Loam		
										-	
						-					
										,	
¹ Type: C=Cond	centration. D	=Depletion	n. RM=Red	uced Matrix,	CS=Covered	d or Coated	Sand Grain	ns ²Locat	tion: PL=Pore Lining. M=M	atrix	
Hydric Soil I	ndicators:								Indicators for Prob	ematic Hydrig	c Soile · 3
Histosol (A1)			Poly	value Belov	v Surface (S	88) (LRR R,				
	pedon (A2)				RA 149B)	,	,		2 cm Muck (A10)		
Black Hist				Thir	n Dark Surfa	ice (S9) (Li	RR R, MLRA	149B)	Coast Prairie Red		
1	Sulfide (A4)			Loa	my Mucky M	lineral (F1)	LRR K, L)		5 cm Mucky Peat		RR K, L, R)
	Layers (A5)			Loa	my Gleyed N	1atrix (F2)			Dark Surface (S7)		
The state of the s	Below Dark S	urfaco (A1	11)	Dep	leted Matrix	(F3)			Polyvalue Below S	Jurface (S8) (LR	RR K, L)
100000			11)	-	ox Dark Sur				Thin Dark Surface		
	k Surface (A1				leted Dark)		Iron-Manganese I	lasses (F12) (L	RR K, L, R)
	ck Mineral (S				ox Depressi		,		Piedmont Floodpl	ain Soils (F19) ((MLRA 149B)
The second second	yed Matrix (S	64)			ox Depressi	0113 (1.0)			Mesic Spodic (TA	5) (MLRA 144A,	145, 149B)
Sandy Red									Red Parent Mater	ial (F21)	
	4atrix (S6)								Very Shallow Dar	Surface (TF12))
Dark Surfa	ace (S7) (LRR	R, MLRA	149B)						Other (Explain in	Remarks)	
³ Indicators of	hydrophytic	vegetation	n and wetla	nd hydrolog	v must be p	resent, unle	ess disturbe	d or proble		200-000 200-0 000 0 0	
				,	,						
Restrictive La	ayer (if obs	erved):									
Туре:									Hydric Soil Present?	Yes 🔾	No •
Depth (incl	nes):								nyunc son Present:	res 🔾	NO S
Remarks:											
No hydric soil	s present.										
,,											

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning Sampling Date: 20-Aug-20
Applicant/Owner: FirstEnergy	State: Ohio Sampling Point: Upland RLP-28
Investigator(s): M.R.Kline, L.H.Jacks	Section, Township, Range: S. T. 2N R. 1W
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): CONVEX Slope: 1.0 % / 0.6 °
Subregion (LRR or MLRA): LRR R Lat.:	41.101088 Long.: -80.594166 Datum: WGS84
Soil Map Unit Name: JtB; Jimtown loam, 2 to 6 percent slopes	NWI classification: NA
Are climatic/hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
Are Vegetation . , Soil . , or Hydrology . significant	ly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation , Soil , or Hydrology naturally p	problematic? (If needed, explain any answers in Remarks.)
Summary of Findings - Attach site map showing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes ○ No ●	Is the Sampled Area within a Wetland? Yes No •
Wetland Hydrology Present? Yes ○ No ●	
Hydrology	
Wetland Hydrology Indicators:	_Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	ves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B1	3) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15	Participant of the participant o
Water Marks (B1) Hydrogen Sulfide (
	eres along Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3) Presence of Reduc	
	tion in Tilled Soils (C6) Geomorphic Position (D2)
Trundation Visible on Assial Improve (P7)	
Inundation visible on Aerial Imagery (67) Other (Explain in F Sparsely Vegetated Concave Surface (88)	Remarks) FAC-neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	0
Water Table Present? Yes No Depth (inches):	0 Wetland Hydrology Present? Yes ○ No ●
Saturation Present? (includes capillary fringe) Yes No Depth (inches):	0
Describe Recorded Data (stream gauge, monitoring well, aerial photo NA	os, previous inspections), if available:
Remarks:	
No source of hydrology was observed.	

VEGETATION - Use scientific names of plants

201-4	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' radius)	% Cover	Species?	Status	Number of Dominant Species
1. Acer rubrum	75	✓	FAC	That are OBL, FACW, or FAC:3(A)
2	0			
3	0			Total Number of Dominant Species Across All Strata: 3 (B)
4.				Species Across Air Strate.
5		H		Percent of dominant Species
		H		That Are OBL, FACW, or FAC: 100.0% (A/B)
6				1019 10
7			$\overline{}$	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: _15' radius)	=	= Total Cove		Total % Cover of: Multiply by:
A Name A	25		FAC	OBL species
		~	FAC	FACW species $10 \times 2 = 20$
2. Smilax rotundifolia		~		FAC species 120 x 3 = 360
3. Lindera benzoin			FACW	FACU species $0 \times 4 = 0$
4				UPL species $0 \times 5 = 0$
5	0			The second secon
6				Column Totals: <u>130</u> (A) <u>380</u> (B)
7	0			Prevalence Index = B/A = 2.923
		= Total Cove		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: None)				
1	0			Rapid Test for Hydrophytic Vegetation
2				✓ Dominance Test is > 50%
3		Ē		✓ Prevalence Index is ≤3.0 ¹
				Morphological Adaptations ¹ (Provide supporting
4				data in Remarks or on a separate sheet)
5		H		☐ Problematic Hydrophytic Vegetation ¹ (Explain)
6				1- "
7				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				
12		= Total Cove		Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: None)		- Total Cove	10	greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
		Ħ		size, and woody plants less than 3.28 ft tall.
2				And the control of th
3	0_		$\overline{}$	Woody vine - All woody vines greater than 3.28 ft in
4				height.
	0 =	= Total Cove		
			Š	
				Hydrophytic
				Vegetation Present? Yes • No O
				Present?
Remarks: (Include photo numbers here or on a separate s	heet.)			
	nydrophytic ve	egetation, the	e convex la	andscape prevents consistent hydrology from precipitation
to collect and develop hydric soils.				

Sampling Point: Upland RLP-28

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Upland RLP-28

Depth (inches) Color 0-3 10R 2.5Y	Matrix (moist) 0 3/2 100	Kec	lox Features			
	3/2 100	% Color (moist)	%Type_1	Loc2	Texture	Remarks
3-14 2.5Y					Silt Loam	
	6/3 100				Silt Loam	
						-
Type: C=Concentration	D=Denletion PM	=Reduced Matrix, CS=Covere	d or Coated Sand Grain	s 21 ocat	ion: PI =Pore Lining M	-Matrix
Hydric Soil Indicators:	<u> </u>	- Reduced Platrix, C3=Covere	a or coated salid Grall	is -LOCAL		
Histosol (A1)		Polyvalue Below	Surface (S8) (LRR R,			blematic Hydric Soils: 3
Histic Epipedon (A2)		MLRA 149B)				0) (LRR K, L, MLRA 149B)
Black Histic (A3)			ce (S9) (LRR R, MLRA	149B)		edox (A16) (LRR K, L, R) at or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)		lineral (F1) LRR K, L)			67) (LRR K, L, M)
Stratified Layers (A5)		Loamy Gleyed N	Contract of Contra			v Surface (S8) (LRR K, L)
Depleted Below Dark		Depleted Matrix Redox Dark Sur	10812005 N			ice (S9) (LRR K, L)
Thick Dark Surface (A		Depleted Dark S			I The forest and the second and the	e Masses (F12) (LRR K, L, R)
Sandy Muck Mineral (Sandy Gleyed Matrix		Redox Depressi	100 100 100 100 100 100 100 100 100 100			plain Soils (F19) (MLRA 149B)
Sandy Redox (S5)	(34)					A6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6)					Red Parent Mat	eriai (F21) ark Surface (TF12)
Dark Surface (S7) (LR	R R, MLRA 149B)			Other (Explain i	
³ Indicators of hydrophyti	c vegetation and	wetland hydrology must be p	resent, unless disturbe	d or proble		ir remarks)
Restrictive Layer (if ob					000000000000000000000000000000000000000	
Туре:	er ROM stake Roma (#100 A					
Depth (inches):					Hydric Soil Present	? Yes ○ No •
Remarks:			ed located adjacent	to Wetlan	15	ated on a convex landscape w

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park-Riverbend 1	38kV Transmissi	on Line	City/County: Mahoning Sampling Date: 06-Oct-20)	
Applicant/Owner: ATSI, a FirstEner	gy Company		State: Oh	nio Sampling P	oint:		Wet	land 29 U	IPL	
Investigator(s): Brian Miller			Section	n, Township, Range:	s		T. 2N			R. 1W
Landform (hillslope, terrace, etc.):	Hillside		_	f (concave, convex,	_	none		Slope	5.0 %	6 / 2.9°
Subregion (LRR or MLRA): LRR F	-	Lat.:	41.096313			80.61193	25	_	atum: NA	-
Soil Map Unit Name: Dekalb very	er to noon	Maria America			-		ssification			
·			****** *******************************	Yes No						= = = = = = = = = = = = = = = = = = = =
Are climatic/hydrologic conditions	V2 S 50	- 1 5 75°55					n in Rema	V	No	\cap
Are Vegetation ☐ , Soil ✓	, or Hydrolo		itly disturbed		al Circu	mstance	es" present	? 165	· NO	
Are Vegetation, Soil	, or Hydrolo	gy naturally	problematic	? (If needed,	explai	n any ar	nswers in R	temarks.)		
Summary of Findings - A		- 101 - 170	sampling	g point locatio	ns, tı	ransec	cts, imp	ortant f	eature	s, etc.
Hydrophytic Vegetation Present?		No •		the Complet Aven						
Hydric Soil Present?		No O		the Sampled Area ithin a Wetland?	Ye	s O No	,			
Wetland Hydrology Present?	Yes 🔾	No •	Porce							
Hydrology										
Wetland Hydrology Indicators:					Seco	ndarv Ind	dicators (mir	nimum of 2 r	eauired)	
Primary Indicators (minimum of o	one required;	check all that apply)				Surface S	oil Cracks (E	36)		
Surface Water (A1)		Water-Stained Le					Patterns (B1			
High Water Table (A2) Saturation (A3)		Aquatic Fauna (B:					n Lines (B16	-		
Water Marks (B1)					-	57.45.2000.000.000	on Water Ta Burrows (C8)			
Sediment Deposits (B2)		Oxidized Rhizosph	. 189 4	iving Roots (C3)	T I			, Aerial Image	erv (C9)	
Drift deposits (B3)		Presence of Redu		# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			r Stressed P		., (,	
Algal Mat or Crust (B4)		Recent Iron Redu					hic Position			
Iron Deposits (B5)		Thin Muck Surface		2.2 5550 to ± 200.		Shallow A	quitard (D3))		
Inundation Visible on Aerial Image		Other (Explain in	Remarks)				graphic Reli			
Sparsely Vegetated Concave Surfa	ice (B8)					FAC-neutr	ral Test (D5))		
Field Observations:										
Surface Water Present? Yes	○ No •	Depth (inches):	0							
Water Table Present? Yes	⊃ No ●	Depth (inches):	0				V	O No		
Saturation Present? (includes capillary fringe) Yes	0530	Depth (inches):		Wetland Hyd	We sens	Present	t? Yes	O No		
Describe Recorded Data (stream of N/A	jauge, monito	ring well, aerial phot	os, previous	s inspections), if ava	ilable:					
Remarks:										
No sources of hydrology were obs	erved.									

VEGETATION - Use scientific names of plants

Tree Stratum (Plot size: 30 ft radius)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
THE STREET	% Cover		Status	Number of Dominant Species
1. Acer saccharum		~	FACU	That are OBL, FACW, or FAC:0(A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4	•			
5	0			Percent of dominant Species
6				That Are OBL, FACW, or FAC: 0.0% (A/B)
7.	_			Prevalence Index worksheet:
Officer of the Control of the Contro	The same of the sa	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)		- Total Cover		OBL species $0 \times 1 = 0$
1,	0_			
2		Ē		FACW species
3		Ħ		FAC species15 x 3 =45
4.	2	Ħ		FACU species $90 \times 4 = 360$
5				UPL species $0 \times 5 = 0$
				Column Totals: 120 (A) 435 (B)
6		Ħ		Parameter 1
7				Prevalence Index = B/A = 3.625
Herb Stratum (Plot size: 5ft radius)	=	= Total Cover		Hydrophytic Vegetation Indicators:
A CANADA AND AND AND AND AND AND AND AND AN	6E		FACU	Rapid Test for Hydrophytic Vegetation
1 Dactylis glomerata	45	~		Dominance Test is > 50%
2. Verbesina alternifolia			FACW	Prevalence Index is ≤3.0 ¹
3. Solidago rugosa			FAC	Morphological Adaptations ¹ (Provide supporting
4. Persicaria virginiana			FAC	data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				1
7				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9	0			Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12		Ħ		
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size:)				greater than 3.20 ft (fiff) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2.				size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
71.	0 =	= Total Cover		
		- Total Cover		
				Hydrophytic
				Vegetation
				Present? Yes No •
Remarks: (Include photo numbers here or on a separate sl	neet.)			
A dominance of hydrophytic vegetation was not observed	along the hill	side adjacent	to the we	etland/stream complex.

Sampling Point: Wetland 29 UPL

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Wetland 29 UPL

Profile Descri	iption: (Desc	cribe to t	he depth	needed to	locument	the indic	cator or co	onfirm the	absence of indicator	rs.)		
Depth		Matrix				dox Featı						
(inches)	Color (m		%		moist)	%_	Type 1		<u>Texture</u>	la	Remarks	
0-18	10YR	4/1	70	10YR	5/4		C	<u>M</u>	Loam	la la	rge rocks and fill	
				10YR	4/3	10	C	M	Loam			
									-			
¹ Type: C=Cond	centration. D=	Depletion	n. RM=Red	uced Matrix,	CS=Covere	ed or Coate	ed Sand Gr	ains ² Loca	ation: PL=Pore Lining.	M=Matr	ix	
Hydric Soil I	10000	•		,					ST4			. 3
Histosol (A				Poly	value Belov	w Surface	(S8) (LRR I	2			atic Hydric Soils	
Histic Epip					A 149B)	V Suriuce	(55) (2/4/)	·/			R K, L, MLRA 1491	
Black Histi				Thin	Dark Surfa	ace (S9) (LRR R, ML	RA 149B)			A16) (LRR K, L, R)	
-	Sulfide (A4)			Loar	ny Mucky I	Mineral (F1	L) LRR K, L)			Peat (S3) (LRR K, I	_, R)
	Layers (A5)			Loar	ny Gleyed	Matrix (F2)		Dark Surface			201
	Below Dark Su	ırface (A1	.1)	✓ Dep	eted Matri	x (F3)					ace (S8) (LRR K, L)
	k Surface (A12			Red	ox Dark Su	rface (F6)					9) (LRR K, L)	. 22
	ck Mineral (S1	100		Dep	eted Dark	Surface (F	7)				ses (F12) (LRR K,	7139 N 10 1390
	yed Matrix (S4			Red	x Depress	ions (F8)					Soils (F19) (MLRA	
Sandy Rec		.,									MLRA 144A, 145,	149B)
Stripped M									Red Parent M		50 55	
	ace (S7) (LRR	R MIRA	149R)						- 1		ırface (TF12)	
35.32	(127 127)		- 6	ad budanları	married less married		lane dieb o	and an analal	Other (Expla	in in Rer	narks)	
³ Indicators of	nyuropnyuc v	regetation	i and wella	na nyarology	must be p	resent, ur	iless disturi	bed or probl	ematic.			-
Restrictive La	ayer (if obse	rved):										
Туре:												`
Depth (inch	nes):								Hydric Soil Prese	nt?	Yes No	<i>)</i>
Remarks:												
	ogy, hydrop	hytic ve	getation,						nas been deposited on to the stream and			

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park-Rive	erbend 138kV Transmissi	on Line	City/County: Maho	ning	Samp	ling Date: 06-Oct-20
Applicant/Owner: ATSI, a F	irstEnergy Company		State: Ohio Sa	ampling Point:	Wetland	RLP-30/31 UPL
Investigator(s): Brian Miller			Section, Townsh	ip, Range: S.	T. 2N	R. 1W
Landform (hillslope, terrace,	, etc.): Valley		Local relief (concave	e, convex, none): flat	Slope: 1.0 % / 0.6°
Subregion (LRR or MLRA):	-	Lat.:	41.095273	Long.:	-80.612737	Datum: NAD83
Soil Map Unit Name: Charg	The second second				NWI classification	
_			year? Yes	No O (If		
Are Vegetation Sei				\-	no, explain in Remai	V (A) N (
Are Vegetation, Soi			AND THE RESIDENCE OF THE PROPERTY OF THE PROPE		cumstances" present	•
Are Vegetation, Soi		19 999			ain any answers in R	a James Solo
Summary of Finding		15% 17%	sampling point	locations,	transects, imp	ortant features, etc.
Hydrophytic Vegetation Pre		No •	V. M. C.			
Hydric Soil Present?		No •	Is the Samp within a We		'es 🔾 No 🖲	
Wetland Hydrology Present	t? Yes	No 💿	15/2000000000000000000000000000000000000			
Hydrology						
Wetland Hydrology Indicat	ors:			_Sec	condary Indicators (min	imum of 2 required)
Primary Indicators (minim	um of one required; o	check all that apply)			Surface Soil Cracks (B	96)
Surface Water (A1)		Water-Stained Lea	aves (B9)		Drainage Patterns (B1	.0)
High Water Table (A2)		Aquatic Fauna (B1	13)		Moss Trim Lines (B16	
Saturation (A3)		Marl Deposits (B1	viensono monte establica		Dry Season Water Tal	
Water Marks (B1)		Hydrogen Sulfide	. 1959 12 200000 2000 10 2		Crayfish Burrows (C8)	
Sediment Deposits (B2) Drift deposits (B3)			neres along Living Roots	(C3)	Saturation Visible on A Stunted or Stressed P	
Algal Mat or Crust (B4)		Presence of Redu	ced Iron (C4) ction in Tilled Soils (C6)	~	Geomorphic Position	
Iron Deposits (B5)		Thin Muck Surface			Shallow Aquitard (D3)	
Inundation Visible on Aeria	al Imagery (B7)	Other (Explain in			Microtopographic Reli	
Sparsely Vegetated Conca	ve Surface (B8)		norman and		FAC-neutral Test (D5)	
Field Observations:						
Surface Water Present?	Yes ○ No •	Depth (inches):	0			
Water Table Present?	Yes O No •	Depth (inches):	0			
Saturation Present? (includes capillary fringe)	Yes O No •	Depth (inches):	We	etland Hydrolog	gy Present? Yes	○ No ●
Describe Recorded Data (st N/A	ream gauge, monito	ring well, aerial phot	os, previous inspectio	ns), if available	2:	
Remarks:						
Only geomorphic position v	vas observed as a sec	condary indicator for	wetland hydrology.			

VEGETATION - Use scientific names of plants

Sampling Point: Wetland RLP-30/31 UPL Dominant Indicator **Dominance Test worksheet:** Absolute Tree Stratum (Plot size: 30 ft radius) Species? % Cover Status Number of Dominant Species 1 Platanus occidentalis 20 FACW That are OBL, FACW, or FAC: 2 (A) 20 ~ **FACU** 2. Prunus serotina Total Number of Dominant 3. Acer saccharum ~ **FACU** 15 Species Across All Strata: 8 (B) 0 Percent of dominant Species 0 25.0% (A/B) That Are OBL, FACW, or FAC: 0 0 Prevalence Index worksheet: 55 Total % Cover of: Multiply by: = Total Cover Sapling/Shrub Stratum (Plot size: 15ft radius) OBL species _____ x 1 = ____0 **FACU** 1 Acer saccharum 15 20 x 2 = FACW species 2. Robinia pseudoacacia 10 **FACU** 5 x 3 = <u>15</u> FAC species 3. Prunus serotina 5 **FACU** $0 \times 5 = 0$ UPL species ____ Column Totals: 100 (A) 355 0 Prevalence Index = B/A = 3.55030 = Total Cover Herb Stratum (Plot size: 5ft radius) Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation 1 Poa pratensis FACU Dominance Test is > 50% 2. Agrimonia striata 5 **FACU** Prevalence Index is ≤3.0 1 3. Persicaria virginiana FAC 5 Morphological Adaptations ¹ (Provide supporting 0 data in Remarks or on a separate sheet) 0 Problematic Hydrophytic Vegetation 1 (Explain) 7.____ 1 Indicators of hydric soil and wetland hydrology must 0 be present, unless disturbed or problematic. 0 **Definitions of Vegetation Strata:** 0 9.____ 0 Tree - Woody plants, 3 in. (7.6 cm) or more in diameter 11._____ at breast height (DBH), regardless of height. 12._____ 0 Sapling/shrub - Woody plants less than 3 in. DBH and = Total Cover greater than 3.28 ft (1m) tall... Woody Vine Stratum (Plot size:) 0 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 0 0 Woody vine - All woody vines greater than 3.28 ft in 0 height 0 = Total Cover Hydrophytic Vegetation Yes O No • Present? Remarks: (Include photo numbers here or on a separate sheet.) A dominance of hydrophytic vegetation was not observed within the stream valley adjacent to Stream RLP-13.

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Wetland RLP-30/31 UPL

Popular Native Color (moleta) % Type Loc? Loan Loan	Profile Descript	tion: (Describe	to the depth	needed to document	the indica	ator or co	nfirm the a	absence of indicators.)
1 Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains 2 Location: PL=Pore Lining. M=Matrix Hydric Soil Indicators: Histosol (A1)				Red	ox Featu	res		-
1 Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains 2 Location: PL=Pore Lining. M=Matrix Hydric Soil Indicators:	(inches)	Color (moist	t)	Color (moist)	%	Type ¹	Loc2_	<u>Texture</u> Remarks
¹ Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains **Pulliprocessor	0-3	10YR 3/	3 100					Loam
Hydric Soil Indicators: Histosol (A1)	3-18	10YR 5/	4 100					Loam
Hydric Soil Indicators: Histosol (A1)								,
Hydric Soil Indicators: Histosol (A1)								
Hydric Soil Indicators: Histosol (A1)								
Hydric Soil Indicators: Histosol (A1)								
Hydric Soil Indicators: Histosol (A1)								
Hydric Soil Indicators: Histosol (A1)								-
Hydric Soil Indicators: Histosol (A1)								·
Hydric Soil Indicators: Histosol (A1)								· · · · · · · · · · · · · · · · · · ·
Hydric Soil Indicators: Histosol (A1)								
Hydric Soil Indicators: Histosol (A1) Histosol (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Thin Dark Surface (F7) Redox Dark Surface (S7) (LRR K, L, R) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Polyvalue Surface (S9) (LRR K, L) Polyvalue								
Hydric Soil Indicators: Histosol (A1) Histosol (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Thin Dark Surface (F7) Redox Dark Surface (S7) (LRR K, L, R) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Polyvalue Surface (S9) (LRR K, L) Polyvalue								
Hydric Soil Indicators: Histosol (A1) Histosol (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Thin Dark Surface (F7) Redox Dark Surface (S7) (LRR K, L, R) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L) Polyvalue Surface (S9) (LRR K, L) Polyvalue								
Hydric Soil Indicators: Histosol (A1)	1							
Histosol (A1)			letion. RM=Redi	uced Matrix, CS=Covere	d or Coate	d Sand Gra	ins ² Loca	X5
Histic Epipedon (A2) Histic Epipedon (A2)								Indicators for Problematic Hydric Soils: 3
Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Sardy Redox (S5) Sardy Redox (S5) Thin Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:					Surface (58) (LRR R	,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Hydrogen Sulfide (A4)					co (SO) (I	DD D MID	A 140B)	Coast Prairie Redox (A16) (LRR K, L, R)
Stratified Layers (A5) Depleted Matrix (F2) Depleted Below Dark Surface (S7) (LRR K, L, M) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR K, L) Find Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Type: Depth (inches): Remarks: Hydric Soil Present? Yes No No							A 1430)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Thin Dark Surface (S8) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Type: Depth (inches): Hydric Soil Present? Yes No Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Type: Depth (inches): Hydric Soil Present? Yes No Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L) Iron-						LKK K, L)		Dark Surface (S7) (LRR K, L, M)
Depleted Dark Surface (A12) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox Depressions (F8) Redox Depression (and the second second			
Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (F7) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Type: T			e (A11)		1,1812,403.5			Thin Dark Surface (S9) (LRR K, L)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Redox Depressions (F8) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144B, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydric Soil Present? Yes No Remarks:						v		Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Hydric Soil Present? Yes No						,		Piedmont Floodplain Soils (F19) (MLRA 149B)
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No •	_			Redox Depressi	UIS (FO)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (Sandy Redox	x (S5)						
Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil Present? Yes No •	Stripped Mat	trix (S6)						Very Shallow Dark Surface (TF12)
Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil Present? Yes No •	☐ Dark Surface	e (S7) (LRR R, M	ILRA 149B)					Other (Explain in Remarks)
Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil Present? Yes No •	³ Indicators of h	ydrophytic veget	tation and wetla	nd hydrology must be p	resent, unl	ess disturb	ed or proble	ematic.
Type:	Restrictive I av	er (if observed	D:					
Depth (inches): Yes No • No •		rei (ii observed	.,.					
Remarks:		ve).						Hydric Soil Present? Yes No •
		:5)						1000 0000
Due to the lack of hydorlogy, hydrophytic vegetation, and hydric soils, the sample point located adjacent to the stream a								
	Due to the lack	of hydorlogy,	hydrophytic v	egetation, and hydric	soils, the	e sample	point locat	ted adjacent to the stream a

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park-Riverbend 138kV Transmission Line	City/County: Mahoning Sampling Date: 0	6-Oct-20
Applicant/Owner: ATSI, a FirstEnergy Company	State: Ohio Sampling Point: Wetland RLP-32	JPL
Investigator(s): Brian Miller	Section, Township, Range: S. T. 2N	R. 1W
Landform (hillslope, terrace, etc.): Valley	Local relief (concave, convex, none): none Slope:	1.0 % / 0.6°
Subregion (LRR or MLRA): LRR R	Lat.: 41.101088151 Long.: -80.594166257 Dat	um: NAD83
Soil Map Unit Name: Chargin Loam - Ck	NWI classification: N/A	
Are climatic/hydrologic conditions on the site typical for thi	s time of year? Yes No (If no, explain in Remarks.)	
Are Vegetation ✓ , Soil ✓ , or Hydrology	significantly disturbed? Are "Normal Circumstances" present? Yes	No O
	naturally problematic? (If needed, explain any answers in Remarks.)	
52: 540540 MM HTS 15V WE W	owing sampling point locations, transects, important fe	atures, etc.
Hydrophytic Vegetation Present? Yes No •		
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No	
	within a Wetland?	
Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a sep		
Hydrology		
Wetland Hydrology Indicators:	_Secondary Indicators (minimum of 2 rec	uired)
Primary Indicators (minimum of one required; check all the		
	Stained Leaves (B9) Drainage Patterns (B10)	
	c Fauna (B13) Moss Trim Lines (B16) eposits (B15) Dry Season Water Table (C2)	
	eposits (B15)	
	ed Rhizospheres along Living Roots (C3) Saturation Visible on Aerial Imagery	(C9)
	ice of Reduced Iron (C4) Stunted or Stressed Plants (D1)	
	t Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)	
☐ Iron Deposits (B5) ☐ Thin N	luck Surface (C7) Shallow Aquitard (D3)	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other	(Explain in Remarks) Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (B8)	FAC-neutral Test (D5)	
Field Observations:		
Surface Water Present? Yes No Dept	h (inches):0	
Water Table Present? Yes No O Dept	h (inches): 0	
Saturation Present? (includes capillary fringe) Yes No Dept	h (inches): 0 Wetland Hydrology Present? Yes No	ž
Describe Recorded Data (stream gauge, monitoring well, a	erial photos, previous inspections), if available:	
D I .		
Remarks:		
No sources of hydrology were observed.		

VEGETATION - Use scientific names of plants

Dominant Indicator **Dominance Test worksheet:** Absolute Tree Stratum (Plot size: ____) Species? % Cover Status Number of Dominant Species 0 That are OBL, FACW, or FAC: 0 (A) Total Number of Dominant 0 Species Across All Strata: 2___ (B) Percent of dominant Species 0 0.0% (A/B) That Are OBL, FACW, or FAC: 0 **Prevalence Index worksheet:** 0 Total % Cover of: Multiply by: Sapling/Shrub Stratum (Plot size: _____) = Total Cover OBL species ______ x 1 = _______ FACW species ___0 x 2 = ____5 x 3 = ___15__ FAC species 0 105 x 4 = 420FACU species 0 x 5 = 0UPL species 5._____ Column Totals: 110 (A) 435 0 Prevalence Index = B/A = 3.955= Total Cover 0 Herb Stratum (Plot size: 5ft radius) Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation 1 Dactylis glomerata 35 ~ FACU Dominance Test is > 50% 2 Poa pratensis 25 **FACU** Prevalence Index is ≤3.0 1 3 Taraxacum officinale FACU 15 Morphological Adaptations 1 (Provide supporting 4. Plantago major 10 FACU data in Remarks or on a separate sheet) 5. Galium aparine 10 **FACU** Problematic Hydrophytic Vegetation 1 (Explain) 6. Trifolium pratense FACU 1 Indicators of hydric soil and wetland hydrology must 7. Geum canadense FAC be present, unless disturbed or problematic. 0 **Definitions of Vegetation Strata:** 0 0 Tree - Woody plants, 3 in. (7.6 cm) or more in diameter 11._____ at breast height (DBH), regardless of height. 12._____ 0 Sapling/shrub - Woody plants less than 3 in. DBH and 110 = Total Cover greater than 3.28 ft (1m) tall... Woody Vine Stratum (Plot size: _____) 0 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 0 0 Woody vine - All woody vines greater than 3.28 ft in 0 height. 0 = Total Cover Hydrophytic Vegetation Yes O No • Present? Remarks: (Include photo numbers here or on a separate sheet.)

Sampling Point: Wetland RLP-32 UPL

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: Wetland RLP-32 UPL

Profile Descr	iption: (Desc	ribe to t	he depth	needed to d	ocument	the indica	ator or co	nfirm the	absence of indi	cators.)	
Depth		1atrix			Red	lox Featu					
(inches)	Color (m	oist)	%_	Color (moist)	%	Type 1	Loc2	Texture		Remarks
0-3	10YR	3/3	100						Loam		
3-8	10YR	5/2	100						Loamy Sand		many fine gravel particles.
		227 700 4 70 2700 00 00 00 00		accompanies of subsets of				1000+02 W200250+02	eranor e erano nananto en esta) Advantagement
- 222	10000	Depletior	n. RM=Re	duced Matrix, (CS=Covere	d or Coate	d Sand Gra	ains ² Loca	tion: PL=Pore Li	ining. M=M	latrix
Hydric Soil I				-					Indicators	for Probl	ematic Hydric Soils: 3
Histosol (A1)					v Surface (58) (LRR F	₹,			(LRR K, L, MLRA 149B)
Histic Epip	pedon (A2)				A 149B)	(00) (1			-		ox (A16) (LRR K, L, R)
Black Hist	tic (A3)					ce (S9) (L		. 50			or Peat (S3) (LRR K, L, R)
Hydrogen	Sulfide (A4)					lineral (F1)					(LRR K, L, M)
Stratified	Layers (A5)				Accesses to the second	Matrix (F2)					Surface (S8) (LRR K, L)
Depleted	Below Dark Su	rface (A1	.1)		eted Matrix	0.0802005.0					(S9) (LRR K, L)
☐ Thick Dar	k Surface (A12)			x Dark Sur						Masses (F12) (LRR K, L, R)
Sandy Mu	ick Mineral (S1)				Surface (F7	')				ain Soils (F19) (MLRA 149B)
Sandy Gle	eyed Matrix (S4	+)		Redo	x Depressi	ons (F8)					6) (MLRA 144A, 145, 149B)
Sandy Re	dox (S5)									rent Materi	
Stripped N	Matrix (S6)										Surface (TF12)
☐ Dark Surfa	ace (S7) (LRR	R, MLRA	149B)							Explain in f	
76.00	0.27 (20.20		- 10	and budgets are	and the second		ana diabah			схрын ш і	Remarks)
Indicators of	f hydrophytic v	egetation	and weu	and nydrology	must be p	resent, uni	ess disturt	bed or proble	ematic.		
Restrictive L	ayer (if obser	ved):									
Type: <u>ro</u>	ock and gravel										
Depth (incl	hes): <u>8</u>								Hydric Soil F	resent?	Yes ● No ○
Remarks:											
	of inundatio	n. As a	precaut	ionary measi	ire, the d	epleted n	natrix ind	icator was	selected. How		ttributed to the fine gravel and due to the absence of



APPENDIX B OEPA WETLAND ORAM FORMS



	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: http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx

Background Information

Name: LINCOLN PARK-RIVERBEND 138 kV TRANSMISSION LINE PROJECT

Date: January 6-8, August 20, October 06, and November 3, 2020

Affiliation:

AECOM Technical Services, Incorporated

Address: 525 Vine Street, Suite 1800, Cincinnati, OH 45202

Phone Number: 1-513-419-3450

e-mail address:

jake.lubbers@aecom.com

Name of Wetland: Wetland RLP-01, 02, 03, 04, 05, 06, 07, 08a/b, 09a/b, 10, 11, 12, 13, 14, 15a/b, 16a/b/c, 17a/b/c,

18a/b, 19a/b, 20, 21a/b, 22, 23, 24, 25, 26, 27, 28, 29a/b, 30, 31, 32

Vegetation Communit(ies): PEM/PSS/PFO (see Table 2 for complete designations)

HGM Class(es):

Depressional

Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.

See Figure 1, 2, and 3 of Wetland Delineation and Stream Assessment Report. The first 10-page form of this attachment is representative of all delineated wetlands and all subsequent wetlands are represented by a four-page form.

Lat/Long or UTM Coordinate	See Table 2
USGS Quad Name	Youngstown and Campbell, Ohio
County	Mahoning
Township	City of Youngstown
Section and Subsection	
Hydrologic Unit Code Dry Run-Mahoning River (050301030807) and Crab Creek (050301030807)	50301030804)
Site Visit January 6th to 8th, August 20th, October 6th, and November 3rd, 2020	
National Wetland Inventory Map	See Figure 2
Ohio Wetland Inventory Map	See Figure 2
Soil Survey	See Figure 2
Delineation report/map	See Figure 3

Name of Wetland: RLP-01, 02, 03, 04, 05, 06, 07, 08a/b, 09a/b, 10, 11, 12, 13, 14, 15a/b, 16a/b/19a/b, 20, 21a/b, 22, 23, 24, 25, 26, 27	c, 17 a/b/c, 18a/b,
Wetland Size (acres, hectares):	See Table 2
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.	
See Figure 1, 2, and 3 of Wetland Delineation and Stream Assessme	ent Report
Comments, Narrative Discussion, Justification of Category Changes:	
Comments, Narrative Discussion, Justinication of Category Changes.	
See Appendix A: USACE Wetland Delineation Data Forms for Descripti	on of Wetlands
	1
Final score : Category:	

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 Unit 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 mitigation 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.	×	
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.	х	
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.	х	
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.		х

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 a 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 Reynoldsburg 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	
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 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 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).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	NO 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 threatened or endangered plant or animal species?	YES 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 quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	NO Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	NO Go to Question 5
5	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 <i>Phalaris arundinacea, Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 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 Wetland is a Category 3 wetland Go to Question 7	NO Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is the 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%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8

#	Question	Circle one
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a 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?	YES Wetland is a Category 3 wetland. 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 deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status. Go to Question 9a
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 9d
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES NO Go to Question 9d Go to Question 9d
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10
e Pe	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio, Erie County, and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating

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		0
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

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

Wetland RLP-01

Site: FE	Lincoln Park-Riverbend	Rater(s): Audrey F	lanner	Date:	1/8/2020
		· · · · · · · · · · · · · · · · · · ·	Field Id:		
	1 1 Metric	1. Wetland Area (size).	w-aeh-20200108-	01	
max 6 pts	>50 acres (25 to <50 acres) (25 to <50 acres) (10 to <25 acres) (3 to <10 acres) (3 to <3 acres) (3 to <3 acres) (3 to <3 acres) (4 to <0.3 acres) (5 to <0.	size class and assign score. •20.2ha) (6 pts) cres (10.1 to <20.2ha) (5 pts) cres (4 to <10.1ha) (4 pts) es (1.2 to <4ha) (3 pts) res (0.12 to <1.2ha) (2pts) cres (0.04 to <0.12ha) (1 pt) 0.04ha) (0 pts)	0.17 a	ocres	
	1 2 Metric	2. Upland buffers and surre	ounding land use.		
max 14 pts.	WIDE. Buffe MEDIUM. B NARROW. × VERY NAR 2b. Intensit VERY LOW LOW. Old fi MODERATI	te average buffer width. Select only one ers average 50m (164ft) or more around we uffers average 25m to <50m (82 to <164ft) Buffers average 10m to <25m (32ft to <82f ROW. Buffers average <10m (<32ft) aroun y of surrounding land use. Select one or . 2nd growth or older forest, prairie, savanr eld (>10 years), shrubland, young second of ELY HIGH. Residential, fenced pasture, pai	etland perimeter (7) around wetland perimeter (4) t) around wetland perimeter (1) d wetland perimeter (0) d detland perimeter (0) d double check and average. hah, wildlife area, etc. (7) growth forest. (5) rk, conservation tillage, new fallow field		
	The second second	n, industrial, open pasture, row cropping, m	nining, construction. (1)		
max 30 pts.		3. Hydrology. s of Water. Score all that apply.	3b. Connectivity. Score all	I that apply	
	High pH gro Other groun X Precipitation Seasonal/In Perennial st 3c. Maximu >0.7 (27.6in 0,4 to 0.7m X <0.4m (<15 3e. Modific None or nor Recovered X Recovering X Recent or n	undwater (5) dwater (3) (1) (1) termittent surface water (3) urface water (lake or stream) (5) m water depth. Select one. () (3) (15,7 to 27.6in) (2) 7in) (1) ations to natural hydrologic regime. Sco te apparent (12) (7)	100 year floodplain (1) Between stream/lake and of Part of wetland/upland (e.g. Part of riparian or upland co 3d. Duration inundation/sa Semi- to permanently inund. Regularly inundated/saturate Seasonally inundated/saturate in upper one or double check and average Check all disturbances ob ditch tile dike weir x stormwater input	ther human use (1) forest), complex (1) prridor (1) aturation. Score one or dbl check ated/saturated (4) ed (3) per 30cm (12in) (1) e.	
max 20 pts.	STATE	te disturbance. Score one or double che			
-tean and \$100.	None or nor Recovered X Recovering Recent or n 4b. Habitat Excellent (7 Very good (6 Good (5) Moderately Fair (3) Poor to fair X Poor (1) 4c. Habitat None or nor Recovered Recovering	te apparent (4) (3) (2) (2) o recovery (1) development. Select only one and assig (5) (6) good (4) (7) alteration. Score one or double check as the apparent (9) (6)	nd average. Check all disturbances obse mowing grazing x clearcutting	erved x shrub/sapling removal herbaceous/aquatic bed remov x sedimentation dredging farming nutrient enrichment	ral
		0 Field Form Quantitative Rating			

w-aeh-20200108-01.xlsm | test_Field 1/27/2020

Site: FE Lincoln Park-Riverbend	Rater(s): Audrey Han	ner		Date:	1/8/2020
	•		Field Id:		
11			w-aeh-20200108-01		
subtotal this page					
0 11	Metric 5. Special Wetlands.				
max 10 pts. subtotal	Check all that apply and score as indicated				
	Bog (10)				
	Fen (10)				
	Old growth forest (10)				
	Mature forested wetland (5)	0.28			
Н	Lake Erie coastal/tributary wetland-unrestricted hydrology (1	10)			
H	Lake Erie coastal/tributary wetland-restricted hydrology (5)				
Н	Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)				
H	Known occurrence state/federal threatened or endangered	sneci	es (10)		
Н	Significant migratory songbird/water fowl habitat or usage (1		33 (13)		
	Category 1 Wetland. See Question 5 Qualitative Rating (-10	0.00			
-4 7	Metric 6. Plant communities, interspe	ers	ion, microtopography.		
max 20pts. subtotal	6a. Wetland Vegetation Communities.	71.7	Vegetation Community Cove	er Scale	
max zopts. Subtotal	Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 ad		
	Aquatic bed	1	Present and either comprises small par		
1	Emergent	-tr	vegetation and is of moderate quality, of		
	Shrub		significant part but is of low quality	0.000.000 \$000.000.000	
	Forest	2	Present and either comprises significan	t part of wetland's 2	- 23
	Mudflats		vegetation and is of moderate quality or	comprises a small	
	Open water		part and is of high quality	N. 10-10-10-10-10-10-10-10-10-10-10-10-10-1	12
	Other	3	Present and comprises significant part,	or more, of wetland's 3	
	6b. horizontal (plan view) Interspersion. Select only one.		vegetation and is of high quality		
	High (5)		Narrative Description of Vegetation (Quality	
	Moderately high(4)		Low spp diversity and/or predominance		"
	Moderate (3)		disturbance tolerant native species		
	Moderately low (2)		Native spp are dominant component of	(T)	
	Low (1)		although nonnative and/or disturbance	3.73.73.23.73.73.73.73.73.73.73.73.73.73.73.73.73	
L X	None (0)		can also be present, and species diver-		
	6c. Coverage of invasive plants. Refer		moderately high, but generallyw/o prese	ence of rare	
	Table 1 ORAM long form for list. Add or deduct points for coverage		threatened or endangered spp to A predominance of native species, with	nonnative can high	- 9
×	Extensive >75% cover (-5)		and/or disturbance tolerant native spe		
	Moderate 25-75% cover (-3)		absent, and high spp diversity and ofter	47 NOTE AND SOME STATE OF SOME	
	Sparse 5-25% cover (-1)		the presence of rare, threatened, or end		
	Nearly absent <5% cover (0)			5 69	25
	Absent (1)		Mudflat and Open Water Class Quali	ty	
	6d. Microtopography.	_	Absent <0.1ha (0.247 acres)		
	Score all present using 0 to 3 scale.		Low 0.1 to <1ha (0.247 to 2.47 acres)		
	Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)	
	Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more		
0	Standing dead >25cm (10in) dbh Amphibian breeding pools		Microtopography Cover Scale		
	rampinolan di deding pools	0	Microtopography Cover Scale Absent		
		1	Present very small amounts or if more	common	
			of marginal quality	70 15	
		2	Present in moderate amounts, but not of	of highest	
Category 1		_	quality or in small amounts of highest q	uality	- 70
7 GRAND TO	TAL(max 100 pts)	3	Present in moderate or greater amount	S	
			and of highest quality		

w-aeh-20200108-01.xlsm | test_Field 1/27/2020

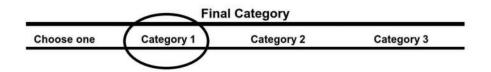
ORAM Summary Worksheet

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	1	
	Metric 3. Hydrology	5	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-4	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its	7	Category based on score breakpoints Category 1

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	\odot	Is quantitative rating score less than the Category 2 scoring threshold (excluding 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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Wetland RLP-02

incoln Park-Riv	erbend Rater(s): J. Lubber	s; J. Tucker	Date:	1/6/2020
	,	Field Id:	•	
0 (Metric 1. Wetland Area (size).	w-jbl-20200106-01		
subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) x <0.1 acres (0.04ha) (0 pts)	0.07 acres		
8 8	Metric 2. Upland buffers and surro	ounding land use.		
subtotal	WIDE. Buffers average 50m (164ft) or more around wet x MEDIUM. Buffers average 25m to <50m (82 to <164ft) NARROW. Buffers average 10m to <25m (32ft to <82ft)	land perimeter (7) around wetland perimeter (4) around wetland perimeter (1)		
	VERY LOW. 2nd growth or older forest, prairie, savann. x LOW. Old field (>10 years), shrubland, young second g x MODERATELY HIGH. Residential, fenced pasture, parl	ah, wildlife area, etc. (7) rowth forest. (5) k, conservation tillage, new fallow field. (3)		
12.0 20.0	Metric 3. Hydrology.			
subtotal	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Scor None or none apparent (12) X Recovered (7) Recovering (3) Recent or no recovery (1)	100 year floodplain (1) x Between stream/lake and other h Part of wetland/upland (e.g. fores x Part of riparian or upland corridor 3d. Duration inundation/saturat Semi- to permanently inundated/s Regularly inundated/saturated (3) Seasonally inundated (2) x Seasonally saturated in upper 30 to one or double check and average. Check all disturbances observed ditch tile dike weir	uman use (1) it), complex (1) (1) iton. Score one or dbl check saturated (4) cm (12in) (1) ed oint source (nonstormwater) liling/grading oad bed/RR track lredging	k.
12 3	Metric 4. Habitat Alteration and De	velopment.		
subtotal	4a. Substrate disturbance. Score one or double chee None or none apparent (4) X Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign Excellent (7) Very good (6) Good (5) Moderately good (4) X Fair (3) Poor to fair (2) Poor (1)	d average. Check all disturbances observed mowing sprazing help clearcutting x selective cutting woody debris removal file.	erbaceous/aquatic bed remo edimentation lredging arming	val
	8 subtotal 12.0 20.1 subtotal	Select one size class and assign score. So acres (>20.2ha) (6 pts)	Select one size class and assign score. Select one size class and assign score. Sol acres (>20.2ha) (6 pts) 25 to <50 acres (>10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.1 to <0.3 acres (0.0 4 to <0.12ha) (1 pt) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) 4 col. acres (0.04ha) (0 pts) Metric 2. Upland buffers and surrounding land use. 2a. Calculate average buffer width. Select only one and assign score. Do not double check. WIDE. Buffers average off on to <58m (32 to <56m) (32 to <164th) around welland perimeter (7) MEDIUM. Buffers average 50m to <58m (32 to <164th) around welland perimeter (1) VERY NARROW. Buffers average 50m to <58m (32 to <56m) (32 to <164th) around welland perimeter (1) VERY LOW. Old field (~10 years), shrubland, young second growth forest. (5) X hope fartz HyliGH. Residential, fanced pasture, park, conservation inliage, new fallow field (3) High. Urban, industrial, open pasture, park, conservation inliage, new fallow field (3) Metric 3. Hydrology. 3a. Sources of Water. Score all that apply. High pri groundwater (5) Other groundwater (5) Other groundwater (5) A. Machinemiters surface water (3) Perennial surface water (ate) Seasonally insurated adultive depth. Select one. -0.7 (27.6in) (3) A. Modernia surface water (3) Perennial surface water (3) Recent or no recovery (1) Metric 4. Habitat Alteration and Development. 4a. Substrate disturbance. Score one or double check and average. None or none apparent (4) None or none apparent (4) A. Substrate disturbance. Score one or double check and average. None or none apparent (6) A. Habitat alteration. Score one or double check and average. None or none apparent (9) A. Habitat development. Select only one and assign score. Excellent (7) Very good (6) Good (5) Moderately good (4) Fine (3) Poor to fair (2) Poor to fair (2) Poor (1) A. Habitat alteration. Score one or double check and average. None or none appare	Metric 1. Wetland Area (size). Select one size class and assign score. >50 acros (>20 22na) (g lps) 25 to <50 acros (>20 22na) (5 pts) 10 to <52 acros (>20 22na) (5 pts) 20 to 50 acros (>20 22na) (5 pts) 10 to <52 acros (>20 22na) (5 pts) 10 to <52 acros (>20 22na) (5 pts) 10 to <52 acros (>20 22na) (5 pts) 10 to <53 acros (>20 22na) (5 pts) 10 to <20 acros (>20

subtotal this page ORAM v. 5.0 Field Form Quantitative Rating

Site: FE Lincoln F	Park-Riverber	nd Ra	ter(s): J. Lubbers; J	. Tucker	Date:	1/6/2020
				Field Id:		
	32			w-jbl-20200106-01		
	subtotal this page					
0	32	Metric 5. Special V	Vetlands.			
max 10 pts.	subtotal	Check all that apply a	nd score as indicated.			
		Bog (10)				
		Fen (10)				
	_ ⊢	Old growth forest (10)				
	-	Mature forested wetland (5)	tland-unrestricted hydrology (10	N.		
	_ <u>_</u>	Lake Erie coastal/tributary we		9		
		Lake Plain Sand Prairies (Oak	200 PH 200 C C C C C C C C C C C C C C C C C C			
		Relict Wet Praires (10)	3-7 (1-1)			
		Known occurrence state/fede	ral threatened or endangered sp	pecies (10)		
			/water fowl habitat or usage (10)		
		Category 1 Wetland. See Que	estion 5 Qualitative Rating (-10)			
6	38	Metric 6. Plant cor	nmunities, interspe	rsion, microtopography.		
max 20pts.	subtotal	6a. Wetland Vegetatio	n Communities.	Vegetation Community Co	ver Scale	
	-	Score all present using 0 to 3	scale.	0 Absent or comprises <0.1ha (0.2471		
	<u> </u>	Aquatic bed		1 Present and either comprises small p		
	- ⊢	Emergent		vegetation and is of moderate quality	, or comprises a	
	1	Shrub Forest		significant part but is of low quality Present and either comprises significant	ant part of wotland's 2	
	<u> </u>	Mudflats		vegetation and is of moderate quality		
		Open water		part and is of high quality		
		Other		3 Present and comprises significant pa	rt, or more, of wetland's 3	
	25	6b. horizontal (plan view) In	terspersion.	vegetation and is of high quality		
		Select only one. High (5)		Narrative Description of Vegetation	Quality	
		Moderately high(4)		Low spp diversity and/or predominan		
		Moderate (3)		disturbance tolerant native species		
		Moderately low (2)		Native spp are dominant component	(75)) (9)	
	×	Low (1)		although nonnative and/or disturband	경기 경기 있다면 내가 있는 것이 없는 것이 없는 것이 없다.	
		None (0)	unto Defer	can also be present, and species div	. 19 19 19 19 19 19 19 19 19 19 19 19 19	
		6c. Coverage of invasive pla Table 1 ORAM long form for I		moderately high, but generallyw/o pre threatened or endangered spp to	ssence of fare	
		or deduct points for coverage	100	A predominance of native species, w	ith nonnative spp high	
		Extensive >75% cover (-5)		and/or disturbance tolerant native sp	absent or virtually	
		Moderate 25-75% cover (-3)		absent, and high spp diversity and of		
	_	Sparse 5-25% cover (-1)		the presence of rare, threatened, or e	endangered spp	
	X	Nearly absent <5% cover (0) Absent (1)		Mudflat and Open Water Class Qua	alita	
		6d. Microtopography.		0 Absent <0.1ha (0.247 acres)	inty	
		Score all present using 0 to 3	scale.	1 Low 0.1 to <1ha (0.247 to 2.47 acres)	
	1	Vegetated hummucks/tussucl	«s	2 Moderate 1 to <4ha (2.47 to 9.88 acr	es)	
	2	Coarse woody debris >15cm		3 High 4ha (9.88 acres) or more	- 5:	
	_1		dbh			
	<u> </u>	Amphibian breeding pools		Microtopography Cover Scale 0 Absent		
			-	Absent Present very small amounts or if more	e common	
				of marginal quality	2007	
			_	2 Present in moderate amounts, but no		
Category 2	100		_	quality or in small amounts of highest	quality	
38	GRAND TO	OTAL(max 100 pts)		3 Present in moderate or greater amou	nts	
				and of highest quality		

ORAM Summary Worksheet

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	12	
	Metric 4. Habitat	12	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	6	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	38	Category based on score breakpoints Category 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	\odot	Is quantitative rating score less than the Category 2 scoring threshold (excluding 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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Final Category					
Choose one	Category 1	Category 2	Category 3		

End of Ohio Rapid Assessment Method for Wetlands.

ITT Lineals		03				
site: FE Lincolr	n Park-Riverbend	Rater(s):	J. Lubbers; J. Tuc	cker; B. Miller	Date:	1/7 and 10/6/2020
2000 PART 2000 PART	Metric 1. Wetl		ACC ASSESSMENT	Field ID: W-JBL-20200107-02		
ax 6 pts subtotal	>50 acres (>20.2ha) (25 to <50 acres (10.1	6 pts) to <20.2ha) (5 pts)		Delineated acres:	1.35	1
	10 to <25 acres (4 to < 3 to <10 acres (1.2 to x 0.3 to <3 acres (0.12 to	<4ha) (3 pts) o <1.2ha) (2pts)		Total acres:	2.00	_
5.0 7	0.1 to <0.3 acres (0.04 <0.1 acres (0.04ha) (0	pts)	and surrounding	g land use.		
x 14 pts. subtotal	2a. Calculate average WIDE. Buffers average MEDIUM. Buffers ave X NARROW. Buffers ave VERY NARROW. Buffers ave VERY LOW. 2nd grow X LOW. Old field (>10 ye X MODERATELY HIGH	e buffer width. See e 50m (164ft) or m rage 25m to <50m erage 10m to <25r fers average <10m unding land use. th or older forest, ears), shrubland, y Residential, fence	elect only one and assig- ore around wetland perii (82 to <164ft) around wi (32ft to <82ft) around vi (<32ft) around wetland Select one or double co- prairie, savannah, wildliff oung second growth fore	gr score. Do not double check meter (7'; etland perimeter (4 vetland perimeter (1); perimeter (0); check and average. e area, etc. (7'; sst. (5) vation tillage, new fallow field. (3		
9.0 16	0 Metric 3. Hydr	ology.				
ax 30 pts. subtotal	3a. Sources of Water High pH groundwater (3) Verecipitation (1) Seasonal/Intermittent Perennial surface water 3c. Maximum water (2) >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 2) X <0.4m (<15.7in) (1) 3e. Modifications to None or none apparer Recovered (7) X Recovering (3) Recent or no recovery	(5) surface water (3) er (lake or stream) lepth. Select one 7.6in) (2) natural hydrologi tt (12)	(5)	3b. Connectivity. Score al 100 year floodplain (1) x Between stream/lake and o x Part of wetland/upland (e.g. Part of riparian or upland oc 3d. Duration inundation/s Semi- to permanently inund x Regularly inundated/satural Seasonally inundated (2) x Seasonally saturated in upp double check and average. Check all disturbances of ditch title dike weir stormwater input	ther human use (1) forest), complex (1) orridor (1) aturation. Score one or ated/saturated (4) ed (3) per 30cm (12in) (1)	stormwater)
7.0 23	10.00 P 40.00 P 50.00		n and Develop			
ax 20 pts. subtotal	None or none apparer Recovered (3) x Recovering (2) Recent or no recovery 4b. Habitat developm Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) x Poor to fair (2) Poor (1)	(1) ent. Select only	or double check and a control of the check and average the check and average.		erved	oval

ORAM v. 5.0 Field Form Quantitative Rating

Wetland ID:		Wetland RLP-03	Wetland RLP-03								
0.1	Ice or a	D D:	In (()	1		15.	14/7 140/0/0000				
Site:	FE LINCOIN	Park-Riverbend	Rater(s):	J. I	ubbers; J. Tucker; B. Miller	Date:	1/7 and 10/6/2020				
		_			Field ID:						
	23.0	7			W-JBL-20200107-02						
	subtotal this page	•									
	subtotal tris page				de .						
	0 00 0	1									
0.	.0 23.0	Metric 5. Special V	Vetlands.								
max 10 pts.	subtotal	Check all that apply a	nd score as indicated.								
		Bog (10)									
		Fen (10) Old growth forest (10)									
		Mature forested wetland (5)									
			tland-unrestricted hydrology (1	0)							
		Lake Erie coastal/tributary we									
		Lake Plain Sand Prairies (Oal	k Openings) (10)								
		Relict Wet Praires (10)		49.0	***						
]	ral threatened or endangered s I/water fowl habitat or usage (1	200	(10)						
			estion 5 Qualitative Rating (-10								
			3,11	1							
4.	0 27.0	Metric 6 Plant con	nmunities interene	reion	, microtopography.						
	27.0			3101							
max 20pts.	subtotal	6a. Wetland Vegetation			Vegetation Community Cov						
		Score all present using 0 to 3 Aquatic bed	scale.		Absent or comprises <0.1ha (0.2471 a Present and either comprises small pa						
		Emergent Aquatic bed			vegetation and is of moderate quality,						
		1 Shrub			significant part but is of low quality	or comprises a					
		Forest		2	Present and either comprises significa	nt part of wetla	nd's 2				
		Mudflats			vegetation and is of moderate quality	or comprises a	small				
		Open water		_	part and is of high quality						
		Other 6b. horizontal (plan view) In	terenersion	3	Present and comprises significant part vegetation and is of high quality	t, or more, of we	etland's 3				
		Select only one.	ner operation.		regetation and to or might quality						
		High (5)			Narrative Description of Vegetation	Quality					
		Moderately high(4)			Low spp diversity and/or predominance	e of nonnative	or low				
		Moderate (3)			disturbance tolerant native species	f.11	and the second				
		x Moderately low (2) Low (1)			Native spp are dominant component of although nonnative and/or disturbance	0.0					
		None (0)			can also be present, and species dive						
		6c. Coverage of invasive pla	ants. Refer		moderately high, but generallyw/o pre-						
		Table 1 ORAM long form for I	ist. Add		threatened or endangered spp to						
		or deduct points for coverage			A predominance of native species, wit						
		Extensive >75% cover (-5) Moderate 25-75% cover (-3)			and/or disturbance tolerant native spp absent, and high spp diversity and often						
		x Sparse 5-25% cover (-1)			the presence of rare, threatened, or er		ys,				
		Nearly absent <5% cover (0)				Serve opp	•				
		Absent (1)			Mudflat and Open Water Class Qual	lity					
		6d. Microtopography.			Absent < 0.1ha (0.247 acres)						
		Score all present using 0 to 3			Low 0.1 to <1ha (0.247 to 2.47 acres)	-1	_				
		Vegetated hummucks/tussucl Coarse woody debris >15cm			Moderate 1 to <4ha (2.47 to 9.88 acre High 4ha (9.88 acres) or more	5)	_				
		0 Standing dead >25cm (10in)		~	riigii 41la (8.00 acres) or more						
		Amphibian breeding pools	0000000		Microtopography Cover Scale						
		3			Absent						
				1	Present very small amounts or if more	common					
				- 2	of marginal quality Present in moderate amounts, but not	of highest					
	27.0	TOTAL (Max 100 pts)		2	TO A STREET AND A	and the same of th					
				-	quality or in small amounts of highest						
	1	Category		3	Present in moderate or greater amoun	its					
				and of highest quality							

Wetland ID: Wetland RLP-03

ORAM Summary Worksheet

		answ	rcle ver or score	Result
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	YES	*NO	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		5	
	Metric 3. Hydrology	(9	
	Metric 4. Habitat	,	7	
	Metric 5. Special Wetland Communities		0	
	Metric 6. Plant communities, interspersion, microtopography		4	
	TOTAL SCORE	2	:7	Category based on score breakpoints

Wetland ID: Wetland RLP-03

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 less than the Category 2 scoring threshold (excluding 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 (including 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 "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.
	-	-	
		Final Categor	у

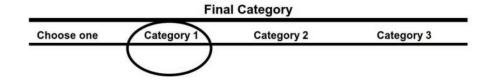
		pers; J. Tucker	Date:	1/7/2020
		Field Id:	•	
0	0 Metric 1. Wetland Area (size).	w-jbl-20200107-01		
max 6 pts subtot	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) x <0.1 acres (0.04ha) (0 pts)	0.04 acres		
4	4 Metric 2. Upland buffers and su	rrounding land use.		
max 14 pts. subtol	2a. Calculate average buffer width. Select only of WIDE. Buffers average 50m (164ft) or more around MEDIUM. Buffers average 25m to <50m (82 to <16 NARROW. Buffers average 10m to <25m (32ft to < x VERY NARROW. Buffers average <10m (<32ft) arc	wetland perimeter (7) 4ft) around wetland perimeter (4) 82ft) around wetland perimeter (1)		
	2b. Intensity of surrounding land use. Select one VERY LOW. 2nd growth or older forest, prairie, sav X LOW. Old field (>10 years), shrubland, young secon MODERATELY HIGH. Residential, fenced pasture, HIGH. Urban, industrial, open pasture, row cropping	annah, wildlife area, etc. (7) nd growth forest. (5) park, conservation tillage, new fallow field. (3)		
10.0 1	4.0 Metric 3. Hydrology.			
max 30 pts. subtol	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) Precipitation (1) X Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. S None or none apparent (12) Recovered (7) Recovering (3) X Recent or no recovery (1)	Check all disturbances observed x ditch x tile dike weir	numan use (1) st), complex (1) r (1) tition. Score one or dbl check. saturated (4)) ccm (12in) (1)	
5	19 Metric 4. Habitat Alteration and	Development.		
max 20 pts. subtol	4a. Substrate disturbance. Score one or double of None or none apparent (4) x Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and as Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) x Poor (1) 4c. Habitat alteration. Score one or double check None or none apparent (9) Recovering (3) x Recent or no recovery (1)	k and average. Check all disturbances observed mowing grazing clearcutting selective cutting woody debris removal fr	shrub/sapling removal nerbaceous/aquatic bed remov sedimentation dredging arming nutrient enrichment	al

subtotal this page ORAM v. 5.0 Field Form Quantitative Rating

Site:FFE Lincoln Park-Riverb	end Rater(s): J. Lu	bbers; J. Tucker	Date:	1/7/2020
	•	Field Id:	•	
19		w-jbl-20200107	-01	
subtotal this pa	age			
0 19	Metric 5. Special Wetlands.			
max 10 pts. subtotal	Check all that apply and score as in	dicated.		
	Bog (10)			
[Fen (10)			
-	Old growth forest (10) Mature forested wetland (5)			
F	Lake Erie coastal/tributary wetland-unrestricted h	vdrology (10)		
ı	Lake Erie coastal/tributary wetland-restricted hyd	(T/L) 7577		
	Lake Plain Sand Prairies (Oak Openings) (10)			
1	Relict Wet Praires (10)			
-	Known occurrence state/federal threatened or er Significant migratory songbird/water fowl habitat	1777 CONTO		
l l	Category 1 Wetland. See Question 5 Qualitative			
2 21	Metric 6. Plant communities, i	nterspersion, microtopog	raphy.	
max 20pts. subtotal	6a. Wetland Vegetation Communitie		nunity Cover Scale	
man Eupla.	Score all present using 0 to 3 scale.		1ha (0.2471 acres) contiguous area	
	Aquatic bed		rises small part of wetland's 1	
	1 Emergent		lerate quality, or comprises a	
	Shrub	significant part but is of I		
	Forest Mudflats	100	rises significant part of wetland's 2 lerate quality or comprises a small	
- t	Open water	part and is of high quality	동네이 되지만 30대 등 45대 전 11대 등 22대 등 22대 등 1 대한 대한 대한 대한 12대 등 12대 등 1 대한	
t	Other		significant part, or more, of wetland's	3
- 3	6b. horizontal (plan view) Interspersion.	vegetation and is of high	quality	
г	Select only one. High (5)	Narrative Description of	of Vegetation Quality	
ŀ	Moderately high(4)		predominance of nonnative or low	
[Moderate (3)	disturbance tolerant nati	ve species	
Į.	Moderately low (2)	A Paris	component of the vegetation, mod	
-	Low (1)	[] [] [] [] [] [] [] [] [] []	or disturbance tolerant native spp	
L.	x None (0) 6c. Coverage of invasive plants. Refer	[[[[[[[[[[[[[[[[[[[I species diversity moderate to erallyw/o presence of rare	
	Table 1 ORAM long form for list. Add	threatened or endangere		
_	or deduct points for coverage	A predominance of nativ	e species, with nonnative spp high	
Į.	Extensive >75% cover (-5)		ant native spp absent or virtually	
-	Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		ersity and often, but not always, eatened, or endangered spp	
ŀ	Nearly absent <5% cover (0)	are presence or rare, an	cateries, or endangered app	
į	x Absent (1)	Mudflat and Open Water	er Class Quality	
-	6d. Microtopography.	0 Absent < 0.1ha (0.247 ac	to de referencia de la constanta de la constan	
-	Score all present using 0 to 3 scale.	1 Low 0.1 to <1ha (0.247 t		
-	0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6in)	2 Moderate 1 to <4ha (2.4 3 High 4ha (9.88 acres) or		
†	0 Standing dead >25cm (10in) dbh	3 Flight 4fla (9.00 acres) of	more	
t	Amphibian breeding pools	Microtopography Cove	r Scale	
ver.		0 Absent		
		1 Present very small amou	unts or if more common	
		of marginal quality 2 Present in moderate am	ounts, but not of highest	
Category 1		quality or in small amour	사람이 아무슨 얼마 맛있다면서 사람이 되었다면 하다 때 ^^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^	
	TOTAL(max 100 pts)	3 Present in moderate or o	NOTE OF THE PROPERTY OF THE PR	
		NL 585570 W		
		and of highest quality		

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	4	
	Metric 3. Hydrology	10	
	Metric 4. Habitat	5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	21	Category based on score breakpoints Category 1

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	\odot	Is quantitative rating score less than the Category 2 scoring threshold (excluding 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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.



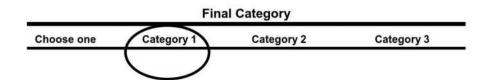
Site:FFE	Lincoln Park-Riv	erbend Rater(s): J. Lubbe	rs; J. Tucker	Date:	1/7/2020
		• ` ` `	Field Id:	•	
	1	Metric 1. Wetland Area (size).	w-jbl-20200107-03		
max 6 pts	subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) x 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)	0.14 acres extends outside SC	es	
	5 (Metric 2. Upland buffers and surre	ounding land use.		
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one WIDE. Buffers average 50m (164ft) or more around we MEDIUM. Buffers average 25m to <50m (82 to <164ft) x NARROW. Buffers average 10m to <25m (32ft to <82ft) VERY NARROW. Buffers average <10m (<32ft) around	etland perimeter (7) around wetland perimeter (4) t) around wetland perimeter (1)	k.	
2		VERY LOW. 2nd growth or older forest, prairie, savanr LOW. Old field (>10 years), shrubland, young second of MODERATELY HIGH. Residential, fenced pasture, pall HIGH. Urban, industrial, open pasture, row cropping, management of the same second of the s	nah, wildlife area, etc. (7) growth forest. (5) rk, conservation tillage, new fallow field. (3)	
	10.5 16.	Metric 3. Hydrology.			
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Scolone or none apparent (12) Recovered (7) X Recovering (3) Recent or no recovery (1)	x Semi- to permanently inundate x Regularly inundated/saturated Seasonally inundated (2) Seasonally saturated in upper	er human use (1) rest), complex (1) dor (1) tration. Score one or dbl chec dd/saturated (4) (3) 30cm (12in) (1) treved point source (nonstormwater) filling/grading	
	8 24.	Metric 4. Habitat Alteration and De	evelopment.		
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double che None or none apparent (4) X Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assig Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) X Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check as None or none apparent (9) Recovered (6) X Recovering (3) Recent or no recovery (1)	n score.	shrub/sapling removal herbaceous/aquatic bed remo	oval
	24.	5	toxic pollutants	nutrient enrichment	

subtotal this page ORAM v. 5.0 Field Form Quantitative Rating

Site:FFE Lincoln Park-Riverbend	Rater(s): J. Lub	bers; J. Tucker	Date:	1/7/2020
	` '	Field Id:	•	
24.5		w-jbl-20200107	-03	
subtotal this page				
0 24.5 Metric 5. S	Special Wetlands.			
max 10 pts. subtotal Check all the	at apply and score as inc	licated.		
Bog (10)				
Fen (10)	Charles			
Old growth fores				
Mature forested	wetland (5) il/tributary wetland-unrestricted hy	rdrology (10)		
—	l/tributary wetland-restricted hydro			
	Prairies (Oak Openings) (10)			
Relict Wet Praire				
	ce state/federal threatened or end			
	tory songbird/water fowl habitat o and. See Question 5 Qualitative F			
		Agrantia de la	ranhy	
		iterspersion, microtopog		
	Vegetation Communities			
Aquatic bed	t using 0 to 3 scale.		1ha (0.2471 acres) contiguous area rises small part of wetland's 1	1
1 Emergent		하시 [] [[[[[[[[[[[[[[[[[erate quality, or comprises a	
Shrub		significant part but is of lo		
Forest			rises significant part of wetland's 2	
Mudflats		vegetation and is of mod	erate quality or comprises a small	
Open water		part and is of high quality		
Other	plan view) Interspersion.	3 Present and comprises s vegetation and is of high	significant part, or more, of wetland's	s 3
Select only one.	bian view) interspersion.	vegetation and is of riight	quanty	
High (5)		Narrative Description o	f Vegetation Quality	
Moderately high	(4)		predominance of nonnative or low	
Moderate (3)	01	disturbance tolerant nativ		
Moderately low (2)		component of the vegetation, mod or disturbance tolerant native spp	
x None (0)		[] # [[] [] [] [] [] [] [] []	species diversity moderate to	
	invasive plants. Refer	[] [[[[[[[[[[[[[[[[[[erallyw/o presence of rare	
Table 1 ORAM lo	ong form for list. Add	threatened or endangere	d spp to	
or deduct points			e species, with nonnative spp high	
Extensive >75%			int native spp absent or virtually	
x Moderate 25-75° Sparse 5-25% or			ersity and often, but not always, eatened, or endangered spp	
Nearly absent <		are processed or rais, and	satisfied, or oridarigorou opp	
Absent (1)		Mudflat and Open Water	r Class Quality	
6d. Microtopog		0 Absent < 0.1ha (0.247 ac		
	t using 0 to 3 scale.	1 Low 0.1 to <1ha (0.247 to		
1 Vegetated humn 1 Coarse woody d	nucks/tussucks ebris >15cm (6in)	2 Moderate 1 to <4ha (2.47 3 High 4ha (9.88 acres) or		
0 Standing dead >		3 Flight 4fla (9.00 acres) or	more	
0 Amphibian breed		Microtopography Cove	r Scale	
	no a re lati de mandr 2007	0 Absent		
		Present very small amount	ints or if more common	
		of marginal quality	contact but not of birt-or	
Category 1		2 Present in moderate amount quality or in small amount	막 2000 - T. 1 (1 (2)) : [- 1]	
24.5 GRAND TOTAL(max 100	nte)	The state of the s	VOLUME AND SERVICE AND SERVICE	
24.3 GRAND TOTAL(max 10)	hra)	3 Present in moderate or g	reater amounts	
		and of highest quality		

		circle answer or insert	
a		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	5	
	Metric 3. Hydrology	10.5	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx_to	24.5	Category based on score breakpoints
	determine the wetland's category based on its quantitative score	24.5	Category 1

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	\odot	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 overcategorized 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.



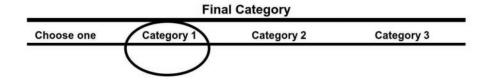
Site:FFE	Lincoln Park-River	bend	Rater(s): J. Lubbe	rs; J. Tucker	Date:	1/7/2020
			. ,	Field Id:	•	
	0 0	Metric 1. Wetla	nd Area (size).	w-jbl-20200107-04	Į.	
max 6 pts	subtotal	Select one size class a >50 acres (>20.2ha) (6 p 25 to <50 acres (10.1 to 10 to <25 acres (4 to <11 3 to <10 acres (1.2 to <4 0.3 to <3 acres (0.12 to < 0.1 to <0.3 acres (0.04 to x <0.1 acres (0.04 to)	tsts) <20.2ha) (5 pts) 0.1ha) (4 pts) ha) (3 pts) t-1.2ha) (2pts) 0 <0.12ha) (1 pt)	0.03 ad	cres	
	5 5	Metric 2. Uplan	d buffers and surre	ounding land use.		
max 14 pts.	subtotal	WIDE. Buffers average ! MEDIUM. Buffers average : x NARROW. Buffers average :	50m (164ft) or more around we ge 25m to <50m (82 to <164ft)	around wetland perimeter (4) t) around wetland perimeter (1)	ok.	
		VERY LOW. 2nd growth x LOW. Old field (>10 yea x MODERATELY HIGH. 6	ding land use. Select one or or older forest, prairie, savanr rs), shrubland, young second of lesidential, fenced pasture, par open pasture, row cropping, m	nah, wildlife area, etc. (7) growth forest. (5) rk, conservation tillage, new fallow field.	(3)	
	9.0 14.0	Metric 3. Hydro	logy.			
max 30 pts.	subtotal	None or none apparent (Recovered (7) X Recovering (3) Recent or no recovery (1)	rface water (3) (lake or stream) (5) th. Select one. in) (2) tural hydrologic regime. Sco 12)	Semi- to permanently inunda	ner human use (1) forest), complex (1) fridor (1) futuration. Score one or dbl check ted/saturated (4) d (3) er 30cm (12in) (1)	
	9 23		at Alteration and Do	- No. 100 (March 1997)		
max 20 pts.	subtotal	None or none apparent (x Recovered (3) Recovering (2) Recent or no recovery (1 4b. Habitat development Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)	t. Select only one and assign the select only one and assign the select only one and assign the select one or double check are selected as selected the selected are selected as selected	nd average. Check all disturbances obsermowing grazing	rved x shrub/sapling removal herbaceous/aquatic bed remo x sedimentation dredging farming nutrient enrichment	oval
	23	ORAM v. F.O. Field Form	Overthether Better	CONTRACTOR POSITION	- Jacob Contoninent	

subtotal this page ORAM v. 5.0 Field Form Quantitative Rating

Site:FFE Lincoln Park-Riverbeno	Rater(s): J. Lubbers;	J. T	ucker	Date:	1/7/2020
	•		Field Id:		
23			w-jbl-20200107-04		
subtotal this page					
	Metric 5. Special Wetlands.				
max 10 pts. subtotal	Check all that apply and score as indicated.				
	Bog (10)				
	Fen (10)				
	Old growth forest (10)				
\vdash	Mature forested wetland (5)				
——	Lake Erie coastal/tributary wetland-unrestricted hydrology (1	10)			
	Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10)				
	Relict Wet Prairies (10)				
	Known occurrence state/federal threatened or endangered s	specie	es (10)		
	Significant migratory songbird/water fowl habitat or usage (1		- NF		
	Category 1 Wetland. See Question 5 Qualitative Rating (-10				
3 26	Metric 6. Plant communities, interspe	ersi	on, microtopography.		
	6a. Wetland Vegetation Communities.		Vegetation Community Cove	er Scale	
	Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 ac		
	Aquatic bed		Present and either comprises small par		
	Emergent		vegetation and is of moderate quality, o		
	Shrub		significant part but is of low quality		
	Forest	2	Present and either comprises significan	t part of wetland's 2	
	Mudflats		vegetation and is of moderate quality or	comprises a small	
	Open water		part and is of high quality		
	Other	3	Present and comprises significant part,	or more, of wetland's 3	
	6b. horizontal (plan view) Interspersion. Select only one.		vegetation and is of high quality		
	High (5)		Narrative Description of Vegetation C	Quality	
	Moderately high(4)	- 1	Low spp diversity and/or predominance	of nonnative or low	
	Moderate (3)		disturbance tolerant native species		
	Moderately low (2)		Native spp are dominant component of	2000 : [18] 11 [18] 11 [18] 12 [18] 12 [18] 12 [18] 12 [18] 12 [18] 12 [18] 12 [18] 12 [18] 12 [18] 12 [18] 12	
	Low (1)		although nonnative and/or disturbance t		
	None (0) 6c. Coverage of invasive plants. Refer		can also be present, and species divers moderately high, but generallyw/o prese	•	
	Table 1 ORAM long form for list. Add		threatened or endangered spp to	ance of fale	
	or deduct points for coverage		A predominance of native species, with	nonnative spp high	
	Extensive >75% cover (-5)		and/or disturbance tolerant native spp a	9.15.10.70.10.00.00.00.00.00.00.00.00.00.00.00.00	
x	Moderate 25-75% cover (-3)		absent. and high spp diversity and often	. but not always.	
	Sparse 5-25% cover (-1)		the presence of rare, threatened, or end	langered spp	
	Nearly absent <5% cover (0)				
	Absent (1)	0	Mudflat and Open Water Class Qualit	у	
	6d. Microtopography.		Absent <0.1ha (0.247 acres) Low 0.1 to <1ha (0.247 to 2.47 acres)		
	Score all present using 0 to 3 scale. Vegetated hummucks/tussucks	_	Moderate 1 to <4ha (2.47 to 9.88 acres)	ve ====================================	
	Coarse woody debris >15cm (6in)		High 4ha (9.88 acres) or more	<u> </u>	
	Standing dead >25cm (10in) dbh		riigir ma (elee delee) el more		
-	Amphibian breeding pools		Microtopography Cover Scale		
	. 88 55%		Absent		
		1	Present very small amounts or if more of marginal quality	common	
		2	Present in moderate amounts, but not o	f highest	
Category 1		-	quality or in small amounts of highest qu	(777)	
	TAL(max 100 pts)	3	Present in moderate or greater amounts		
			and of highest quality		

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	5	
	Metric 3. Hydrology	9	
	Metric 4. Habitat	9	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx , to determine the wetland's category based on its quantitative score	26	Category based on score breakpoints Category 1

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	\odot	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 overcategorized 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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, loca 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.



Site:FFE Lincoln Park-Riverl	bend Rater(s): J. Lubbers	; J. Tucker	Date:	1/7/2020
		Field Id:	-	-
2 2	Metric 1. Wetland Area (size).	w-jbl-20200107-05		
max 6 pts subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) x 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)	0.55 acr	es	
11 13	Metric 2. Upland buffers and surrou	ınding land use.		
max 14 pts. subtotal	Za. Calculate average buffer width. Select only one an WIDE. Buffers average 50m (164ft) or more around wetla MEDIUM. Buffers average 25m to <50m (82 to <164ft) an NARROW. Buffers average 10m to <25m (32ft to <82ft) a VERY NARROW. Buffers average <10m (<32ft) around w 2b. Intensity of surrounding land use. Select one or do	nd perimeter (7) ound wetland perimeter (4) uround wetland perimeter (1) wetland perimeter (0)	.	
	VERY LOW. 2nd growth or older forest, prairie, savannah x LOW. Old field (>10 years), shrubland, young second gro x MODERATELY HIGH. Residential, fenced pasture, park, HIGH. Urban, industrial, open pasture, row cropping, mini	wth forest. (5) conservation tillage, new fallow field. (3	3)	
8.0 21.0	Metric 3. Hydrology.			
max 30 pts. subtotal	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) Percipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) < 0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Score None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	Semi- to permanently inundate Regularly inundated/saturated Seasonally inundated (2) X Seasonally saturated in upper one or double check and average. Check all disturbances obse ditch tile dike X weir stormwater input X	r human use (1) rest), complex (1) dor (1) ration. Score one or dbl check. d/saturated (4) (3) 30cm (12in) (1) rved point source (nonstormwater) filling/grading road bed/RR track dredging	
8 29	Metric 4. Habitat Alteration and Dev	relopment.		
max 20 pts. subtotal	4a. Substrate disturbance. Score one or double check None or none apparent (4) X Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign s Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) X Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and None or none apparent (9) Recovered (6) X Recovering (3) Recent or no recovery (1)	score.	shrub/sapling removal herbaceous/aquatic bed remov sedimentation dredging farming	al

Site:FFE Lincoln Park-Riverbe	Rater(s): J. Lubbers; J	J. Tu	ıcker	Date:	1/7/2020
	•	- 1	Field Id:		
29		,	w-jbl-20200107-05		
subtotal this page					
0 29	Metric 5. Special Wetlands.				
max 10 pts. subtotal	Check all that apply and score as indicated.				
	Bog (10)				
	Fen (10)				
	Old growth forest (10)				
	Mature forested wetland (5)				
_	Lake Erie coastal/tributary wetland-unrestricted hydrology (10	0)			
-	Lake Erie coastal/tributary wetland-restricted hydrology (5)				
-	Lake Plain Sand Prairies (Oak Openings) (10)				
⊢	Relict Wet Praires (10) Known occurrence state/federal threatened or endangered sp	nacios	(10)		
<u> </u>	Significant migratory songbird/water fowl habitat or usage (10		s (10)		
-	Category 1 Wetland. See Question 5 Qualitative Rating (-10)				
2 31	Metric 6. Plant communities, interspe		n microtonography		
				w Caala	
max 20pts. subtotal	6a. Wetland Vegetation Communities.	200	Vegetation Community Cove		
_	Score all present using 0 to 3 scale. Aquatic bed		Absent or comprises <0.1ha (0.2471 ac Present and either comprises small part		
<u> </u>	Emergent		vegetation and is of moderate quality, or		
	Shrub		significant part but is of low quality	comprises a	
	Forest	$\overline{}$	Present and either comprises significan	t part of wetland's 2	
	Mudflats	100	vegetation and is of moderate quality or		
	Open water	t	part and is of high quality		
	Other	3 F	Present and comprises significant part,	or more, of wetland's 3	
	6b. horizontal (plan view) Interspersion. Select only one.	١	vegetation and is of high quality		
	High (5)	1	Narrative Description of Vegetation C	uality	
_	Moderately high(4)	-	Low spp diversity and/or predominance		
	Moderate (3)		disturbance tolerant native species		
	Moderately low (2)	1	Native spp are dominant component of	the vegetation, mod	
)	Low (1)		although nonnative and/or disturbance t		
	None (0)		can also be present, and species divers		
	6c. Coverage of invasive plants. Refer		moderately high, but generallyw/o prese	ence of rare	
	Table 1 ORAM long form for list. Add		threatened or endangered spp to	acceptive one blob	
	or deduct points for coverage Extensive >75% cover (-5)	100	A predominance of native species, with and/or disturbance tolerant native spp a) [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]	
3	Moderate 25-75% cover (-3)		absent, and high spp diversity and often		
	Sparse 5-25% cover (-1)		the presence of rare, threatened, or end		
	Nearly absent <5% cover (0)	10.			
	Absent (1)		Mudflat and Open Water Class Qualit	у	
	6d. Microtopography.		Absent <0.1ha (0.247 acres)		
_	Score all present using 0 to 3 scale.	-	Low 0.1 to <1ha (0.247 to 2.47 acres)		
	-	_	Moderate 1 to <4ha (2.47 to 9.88 acres)	<u> </u>	
7.1		3 1	High 4ha (9.88 acres) or more		
	O Amphibian breeding pools	1	Microtopography Cover Scale		
	. I suprassian drooding poore		Absent		
	•		Present very small amounts or if more of	common	
			of marginal quality	era emperitario	
			Present in moderate amounts, but not o	0005	
Category 2			quality or in small amounts of highest qu	uality	
31 GRAND T	OTAL(max 100 pts)	3	Present in moderate or greater amounts	1	
- N		ē	and of highest quality		

		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	11	
	Metric 3. Hydrology	8	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to	31	Category based on score breakpoints
	determine the wetland's category based on its quantitative score	1079L351	Category 2

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	(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 overcategorized 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 (including 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 an quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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, loca 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.

Final Category			
Choose one	Category 1	Category 2	Category 3

Wetland RLP-08ab

Site: FE Lincoln F	Park-Riverbe	nd Rater(s): JTT, JBL		Date:	1/7/2020
		, (., ,	Field Id:	•	
2	2	Metric 1. Wetland Area (size).	w-jbl-20200107-06ab		
max 6 pts	subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) <0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)	0.35 acres extends outside SC		
11	13	Metric 2. Upland buffers and surrou	unding land use.		
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one an WIDE. Buffers average 50m (164ft) or more around wetla MEDIUM. Buffers average 25m to <50m (82 to <164ft) an NARROW. Buffers average 10m to <25m (32ft to <82ft) a VERY NARROW. Buffers average <10m (<32ft) around w	and perimeter (7) cound wetland perimeter (4) around wetland perimeter (1)		
	2		n, wildlife area, etc. (7) wth forest. (5) conservation tillage, new fallow field. (3)		
11.0	24.0	Metric 3. Hydrology.			
max 30 pts.		Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Score None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	Check all disturbances observed x ditch tile x fillir dike x roar weir dret stormwater input Oth	nan use (1) complex (1) n. Score one or dbl check. urated (4) i (12in) (1) int source (nonstormwater) g/grading d bed/RR track dging	
8	32	Metric 4. Habitat Alteration and Dev	elopment.		
max 20 pts.	subtotal	Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign s Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3)	average. Check all disturbances observed mowing x shr grazing her clearcutting x sed x selective cutting woody debris removal farm	ub/sapling removal paceous/aquatic bed removal imentation dging ning ient enrichment	
å.	32				

subtotal this page ORAM v. 5.0 Field Form Quantitative Rating

Wetland RLP-08ab

Site: FE Lincoln Park-Riverbend Rater(s): JTT, JBL		Date:	1/7/2020
Fie	eld ld:		
32 w-j	-jbl-20200107-06ab		
subtotal this page			
0 32 Metric 5. Special Wetlands.			
max 10 pts. subtotal Check all that apply and score as indicated.			
Bog (10)			
Fen (10)			
Old growth forest (10)			
Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10)			
Lake Erie coastal/tributary wetland-restricted hydrology (5)			
Lake Plain Sand Prairies (Oak Openings) (10)			
Relict Wet Praires (10)			
Known occurrence state/federal threatened or endangered species (10	10)		
Significant migratory songbird/water fowl habitat or usage (10)			
Category 1 Wetland. See Question 5 Qualitative Rating (-10)	10 0		
4 36 Metric 6. Plant communities, interspersion,	i, microtopography.		
max 20pts. subtotal 6a. Wetland Vegetation Communities. Veg	egetation Community Cove	r Scale	
	sent or comprises <0.1ha (0.2471 acr		
	esent and either comprises small part		
	getation and is of moderate quality, or	comprises a	
	nificant part but is of low quality esent and either comprises significant	nart of wetland's 2	
I	getation and is of moderate quality or		
	t and is of high quality		
Other 3 Pres	esent and comprises significant part, of	or more, of wetland's 3	
	getation and is of high quality		
Select only one.			
	rrative Description of Vegetation Q w spp diversity and/or predominance		
	turbance tolerant native species	or normalive or low	
1	tive spp are dominant component of t	he vegetation, mod	
x Low (1) altho	nough nonnative and/or disturbance to	olerant native spp	
- In the second of the second	n also be present, and species diversi	27. (20.0) (1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
######################################	derately high, but generallyw/o prese	nce of rare	
	eatened or endangered spp to predominance of native species, with	nonnative can high	
	d/or disturbance tolerant native spp al		
	sent, and high spp diversity and often	CONTROL (CONTROL OF CONTROL OF CO	
x Sparse 5-25% cover (-1) the p	presence of rare, threatened, or end	angered spp	
Nearly absent <5% cover (0)			
	dflat and Open Water Class Quality	1	
	sent <0.1ha (0.247 acres) w 0.1 to <1ha (0.247 to 2.47 acres)		
	derate 1 to <4ha (2.47 to 9.88 acres)	_	
	gh 4ha (9.88 acres) or more		
0 Standing dead >25cm (10in) dbh			
	crotopography Cover Scale		
0 Abse	sent esent very small amounts or if more o	ommon	
	esent very small amounts or if more of marginal quality	ommon	
	esent in moderate amounts, but not of	f highest	
1000 M	ality or in small amounts of highest qu	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
36 GRAND TOTAL(max 100 pts) 3 Pres	esent in moderate or greater amounts		
and	d of highest quality		

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	11	
	Metric 3. Hydrology	11	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	4	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	36	Category based on score breakpoints Category 2

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	0	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 overcategorized 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Final Category			
Choose one	Category 1	Category 2	Category 3

Wetland RLP-09ab

Metric 1. Wetland Area (size). Select one size class and assign score. -50 acras (-20 27 20) (6 pt) 2 to 40 acras (-10 1 to -40 270) (6 pt) 3 to -40 acras (-10 1 to -40 270) (6 pt) 3 to -40 acras (-10 1 to -40 270) (6 pt) 3 to -40 acras (-10 27 20) (6 pt) 3 to -40 acras (-10 27 20) (6 pt) 3 to -40 acras (-10 27 20) (6 pt) 3 to -40 acras (-10 27 20) (6 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 3 to -40 acras (-10 27 20) (10 pt) 4 to -	Site: FE Lincoln Park-Rive	erbend Rater(s): Bi	II Leopold (AECOM)	Date:	1/8/2020
Select one size class and assign score. Select one size class and assign score. 25 one 36 parts 30 20 mg (35 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 25 one 36 parts (10 ft or 50 20 mg) 26 one 36 parts (10 ft or 50 20 mg) 26 one 36 parts (10 ft or 50 20 mg) 26 one 36 parts (10 ft or 50 20 mg) 26 one 36 parts (10 ft or 50 20 mg) 26 one 36 parts (10 ft or 50 20 mg) 26 one 36 parts (10 ft or 50 20 mg) 26 one 36 parts (10 ft or 50 20 mg) 26 one 36 parts (10 ft or 50 20 mg) 26 parts (10 ft or 50 20 mg) 27 parts (10 ft or 50 20 mg) 28 parts (10 ft or 50 20 mg) 29 parts (10 ft or 50 20 mg) 20 parts (10 ft or 50 20 mg)			Field Id:	•	
250 acres (P.20 Zha) (6 pts) 0.06 acres 250 acres (1.0 + 2.01 acres (1.2 bc. 4.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 + 2.01 kg) 5 pts 10 to 4.25 acres (1.0 kg) 5 pts 10 to 4.25 acres	0	0 Metric 1. Wetland Area (size	e). w-bl-20200108-02ab		
### Procedure of the Processing Source of Water. Select only one and assign score. Do not double check. WIDE: Buffers average Som (164ft) or more arroand welfand perimeter (7) MEDIUMS. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (4) WERY NARROW. Buffers average 75m to 55m (62 to 154ft) and velocity perimeter (7) VERY NARROW. Buffers average 75m to 55m (62 to 154ft) and velocity perimeter (7) VERY NARROW. Buffers average 75m to 55m (62 to 154ft) and velocity perimeter (7) VERY NARROW. Buffers average 75m to 55m (62 to 154ft) and velocity perimeter (7) VERY NARROW. Buffers average 75m to 55m (62 to 154ft) and velocity perimeter (7) VERY NARROW. Buffers average 75m to 55m (62 to 154ft) and velocity perimeter (8) VERY NARROW. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (8) VERY NARROW. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (8) VERY NARROW. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (8) VERY NARROW. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (8) VERY NARROW. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (8) VERY NARROW. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (8) VERY NARROW. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (9) VERY NARROW. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (9) VERY NARROW. Buffers average 25m to 55m (62 to 154ft) and velocity perimeter (9) VERY NARROW. Buffers average 35m (62 to 154ft) and velocity perimeter (9) VERY NARROW. Buffers average 35m (62 to 154ft) and velocity perimeter (9) VERY NARROW. Buffers average 35m (62 to 154ft) and velocity perimeter (9) VERY LOW. Buffers average 35m (62 to 154ft) and velocity perimeter (9) VERY LOW. Buffers average 35m (62 to 154ft) and velocity perimeter (9) VERY LOW. Buffers average 35m (62 to 154ft) and velocity perimeter (9) Very Low. Buffers average 35m (62 to 154ft) and velocity perimeter (9) Very Low. Buffers ave	max 6 pts subtotal	>50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)	0.06 acres		
WIDE. Buffers average 50m (164ft) or more around wetland perimeter (1) X MEDIUM. Buffers average 25m to <25m (128 to 164ft) around wetland perimeter (4) NARROW. Buffers average 10m to <25m (128 to 428ft) around wetland perimeter (1) VERY NARROW. Buffers average 10m to <25m (128 to 428ft) around wetland perimeter (1) 2b. Intensity of surrounding land use. Select one or double check and average. VERY LOW. 3d field (-10 years), shrubland, young second growth forest, (6) X MODERATELY HIGH. Residential, riceoed pasture, pank, conservation stillage, new failew field. (3) HIGH. Libran, industrial, open pasture, row cropping, mining, construction. (1) 10.0 18.0 Metric 3. Hydrology. 3b. Sources of Water. Score all that apply. High pit groundwater (5) Perceptiation (1) Seasonal/Intermittent surface water (3) Perceptiation (1) Seasonal/Intermittent surface water (3) Percential surface water (ake or stream) (5) 3c. Maximum water depth. Select one. -0.7 (27 files) (5) -0.7 (27 files) (5) -0.7 (27 files) (5) -0.7 (27 files) (5) Recovered (7) Reco	8	8 Metric 2. Upland buffers an	d surrounding land use.		
VERY LOW. 20th growth or older forest, prairie, savannah, wildlie area, etc. (7)	max 14 pts. subtotal	WIDE. Buffers average 50m (164ft) or more X MEDIUM. Buffers average 25m to <50m (82 NARROW. Buffers average 10m to <25m (32 VERY NARROW. Buffers average <10m (<	around wetland perimeter (7) 2 to <164ft) around wetland perimeter (4) s2ft to <82ft) around wetland perimeter (1) 32ft) around wetland perimeter (0)		
### Sources of Water. Score all that apply. #### High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (as) Regularly inundated/saturation (as) Perennial surface water (as) Research (as) Perennial surface water (as) Research (as) Perennial surface water (as) Perennial surface water (as) Research (as) Perennial surface water (as) Research (as) Perennial surface water (as) Research (as) Perennial surface water (as) Perennial surface water (as) Research (as) Research (as) Perennial surface water (as) Research (as) Researc		VERY LOW. 2nd growth or older forest, prai x LOW. Old field (>10 years), shrubland, youn x MODERATELY HIGH. Residential, fenced p	rie, savannah, wildlife area, etc. (7) g second growth forest. (5) pasture, park, conservation tillage, new fallow field. (3)		
High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (ake or stream) (5) S. Maximum water depth. Select one. D-0.7 (27.6 in) (3) D. 4 to 0.7 m (15.7 to 27.5 in) (2) X 0-4 m (15.7 m) (1) Sa. Modifications to natural hydrologic regime. Score one or double check and average. None or none apparent (12) Recovered (7) Recovered (7) Recovered (8) Recovered (9) Rev	10.0 18.	Metric 3. Hydrology.			
### As Substrate disturbance. Score one or double check and average. None or none apparent (4)	70 SSE	High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic re None or none apparent (12) Recovered (7) X Recovering (3) Recent or no recovery (1)	100 year floodplain (1) x Between stream/lake and other hu x Part of wetland/upland (e.g. forest x Part of riparian or upland corridor 3d. Duration inundation/saturati Semi- to permanently inundated/s Regularly inundated/saturated (3) x Seasonally inundated (2) Seasonally saturated in upper 30c gime. Score one or double check and average. Check all disturbances observeditch tile ditch tile dike weir stormwater input	iman use (1)), complex (1) (1) on. Score one or dbl checaturated (4) m (12in) (1) d d int source (nonstormwater) ing/grading ad bed/RR track edging	
None or none apparent (4) x Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign score. Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) x Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and average. None or none apparent (9) x Recovered (6) Recovered (6) Recovering (3) Recent or no recovery (1) Recent or no recovery (1) Recent or no recovery (1) Recovered (6) Recovered (6) Recovered (6) Recovered (6) Recovered (6) Recovered (6) Recovered (7) Recovered (8) Recovered (9) Recovere	SER RE MONTH		() - (
		None or none apparent (4) x Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) x Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or doubl None or none apparent (9) x Recovered (6) Recovering (3) Recent or no recovery (1)	and assign score. e check and average. Check all disturbances observed x mowing sh grazing he clearcutting se x selective cutting dr woody debris removal fair	erbaceous/aquatic bed remo dimentation edging rming	oval

w-bl-20200108-02ab_ORAM.xlsm | test_Field

Wetland RLP-09ab

Site: FE Li	ncoln Park-Rive	rbend Rater(s): Bill Leopol	d (AECOM)	Date:	1/8/2020
		-	Field Id:	-	
	29	1	w-bl-20200108-02	Σab	
		•			
	subtotal this				
max 10 pts.	subtotal	Check all that apply and score as indicate	d.		
		Bog (10)			
		Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5)			
		Lake Erie coastal/tributary wetland-unrestricted hydrology	517 P. 7		
		Lake Erie coastal/tributary wetland-restricted hydrology (5)		
		Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)			
		Known occurrence state/federal threatened or endangere	d species (10)		
		Significant migratory songbird/water fowl habitat or usage	10.70		
		Category 1 Wetland. See Question 5 Qualitative Rating (
	4 33			inhv.	
		2014011797111 2:E111E11112 11111110 11111110 1111112 211 22 22 22 2111112 211 174 1111112 111112 111112 111112 21			
max 20pts.	subtotal	6a. Wetland Vegetation Communities. Score all present using 0 to 3 scale.	Vegetation Commu O Absent or comprises < 0.1ha	a (0.2471 acres) contiguous area	-9
		Aquatic bed	Present and either comprise		
		0 Emergent	vegetation and is of modera	전 3명하는 전 5일 4 3일 5명 2명 교회 대한다면서는 대한 경험 등이 된 보기로 하였다. 하고	
		1 Shrub	significant part but is of low	The state of the s	
		Forest	2 Present and either comprise		
		Mudflats	100	ite quality or comprises a small	
		Open water	part and is of high quality	en de menuestre de menuestre de la companya del companya del companya de la companya del la companya de la comp	i i
		Other		ificant part, or more, of wetland's 3	3
		6b. horizontal (plan view) Interspersion.	vegetation and is of high qu	ality	
		Select only one. High (5)	Narrative Description of V	egetation Quality	
		Moderately high(4)		edominance of nonnative or low	
		Moderate (3)	disturbance tolerant native s		
		Moderately low (2)	Native spp are dominant co	mponent of the vegetation, mod	
		x Low (1)	although nonnative and/or of	listurbance tolerant native spp	
		None (0)	can also be present, and sp	(1) : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 :	
		6c. Coverage of invasive plants. Refer	moderately high, but genera		
		Table 1 ORAM long form for list. Add	threatened or endangered s		3
		or deduct points for coverage		pecies, with nonnative spp high	
		Extensive >75% cover (-5) Moderate 25-75% cover (-3)		native spp absent or virtually ity and often, but not always,	
		x Sparse 5-25% cover (-1)	the presence of rare, threate		
		Nearly absent <5% cover (0)	3		
		Absent (1)	Mudflat and Open Water C	Class Quality	
		6d. Microtopography.	0 Absent < 0.1ha (0.247 acres		
		Score all present using 0 to 3 scale.	1 Low 0.1 to <1ha (0.247 to 2		
		0 Vegetated hummucks/tussucks	2 Moderate 1 to <4ha (2.47 to		
		1 Coarse woody debris >15cm (6in)	3 High 4ha (9.88 acres) or mo	ore	
		1 Standing dead >25cm (10in) dbh 1 Amphibian breeding pools	Microtopography Cover S	cale	
			0 Absent	out o	
			Present very small amounts	or if more common	
			of marginal quality	San Markey 10	
			2 Present in moderate amoun	its, but not of highest	
Category 2			quality or in small amounts	of highest quality	
	33 GRANI	D TOTAL(max 100 pts)	3 Present in moderate or great	ater amounts	
	,		and of highest quality		

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	10	
	Metric 4. Habitat	11	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	4	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	33	Category based on score breakpoints Category 2

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	(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 overcategorized 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 (including 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 an quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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, loca 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.

	Fin	al Category	
Choose one	Category 1	Category 2	Category 3

Site: FE Lincoln Pa	rk-Riverbend	Rater(s): Bill Leopo	old (AECOM)	Date:	1/8/2020
	445		Field Id:		
1	1 Metric 1. Wetla	and Area (size).	w-bl-20200108-0	1	
max 6 pts su	Select one size class >50 acres (>20.2ha) (6 25 to <50 acres (10.1 t 10 to <25 acres (4 to < 3 to <10 acres (1.2 to < 0.3 to <3 acres (0.12 to x 0.1 to <0.3 acres (0.04 <0.1 acres (0.04ha) (0	pts) o <20.2ha) (5 pts) 10.1ha) (4 pts) -44ha) (3 pts) o <1.2ha) (2pts) to <0.12ha) (1 pt)	0.18 extends outside SC	acres	
9	10 Metric 2. Upla	nd buffers and surro	ounding land use.		
max 14 pts. si	WIDE. Buffers average x MEDIUM. Buffers aver NARROW. Buffers ave VERY NARROW. Buffer 2b. Intensity of surrou x VERY LOW. 2nd grow	e 50m (164ft) or more around wel age 25m to <50m (82 to <164ft) is grage 10m to <25m (32ft to <82ft) ers average <10m (<32ft) around unding land use. Select one or th or older forest, prairie, savanna	around wetland perimeter (4) a around wetland perimeter (1) wetland perimeter (0) double check and average. ah, wildlife area, etc. (7)	neck.	
		ars), shrubland, young second g Residential, fenced pasture, parl	rowth forest. (5) k, conservation tillage, new fallow fiel	d. (3)	
1000	HIGH. Urban, industria	I, open pasture, row cropping, mi	ning, construction. (1)		
13.0	23.0 Metric 3. Hydr	ology.			
max 30 pts. si	None or none apparent Recovered (7) x Recovering (3) Recent or no recovery	ourface water (3) r (lake or stream) (5) epth. Select one. Gin) (2) satural hydrologic regime. Score	Semi- to permanently inun- Regularly inundated/satura x Seasonally inundated (2) Seasonally saturated in up e one or double check and average Check all disturbances o ditch tile dike weir stormwater input	other human use (1) is, forest), complex (1) orridor (1) saturation. Score one or db dated/saturated (4) ited (3) per 30cm (12in) (1) e.	
max 20 pts. st	x None or none apparent Recovered (3) Recovering (2) Recent or no recovery 4b. Habitat developm Excellent (7) Very good (6) Good (5) Moderately good (4) x Fair (3) Poor to fair (2) Poor (1)	(1) ent. Select only one and assign Score one or double check an	n score.	served shrub/sapling removal herbaceous/aquatic be- sedimentation dredging farming nutrient enrichment	d removal
L	btotal this page ORAM v. 5.0 Field For	m Quantitative Rating			

Field Id: w-bI-20200108-01 Metric 5. Special Wetlands. Check all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (0ak Openings) (10) Relict Wet Praires (10) Known occurrence state/federal threatened or endangered species (10)
max 10 pts. Metric 5. Special Wetlands. Check all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
max 10 pts. Metric 5. Special Wetlands. Check all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Metric 5. Special Wetlands. Check all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Check all that apply and score as indicated. Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)
Relict Wet Praires (10)
Significant migratory songbird/water fowl habitat or usage (10)
Category 1 Wetland. See Question 5 Qualitative Rating (-10)
5 41 Metric 6. Plant communities, interspersion, microtopography.
max 20pts. subtotal 6a. Wetland Vegetation Communities. Vegetation Community Cover Scale
Score all present using 0 to 3 scale. 0 Absent or comprises <0.1ha (0.2471 acres) contiguous area
Aquatic bed 1 Present and either comprises small part of wetland's 1 Vegetation and is of moderate quality, or comprises a
1 Shrub significant part but is of low quality
Forest 2 Present and either comprises significant part of wetland's 2
Mudflats vegetation and is of moderate quality or comprises a small
Open water part and is of high quality
Other 3 Present and comprises significant part, or more, of wetland's 3
6b. horizontal (plan view) Interspersion. vegetation and is of high quality
Select only one.
High (5) Narrative Description of Vegetation Quality
Moderately high(4) Low spp diversity and/or predominance of nonnative or low
Moderate (3) disturbance tolerant native species
Moderately low (2) x Low (1) Native spp are dominant component of the vegetation, mod although nonnative and/or disturbance tolerant native spp
None (0) can also be present, and species diversity moderate to
6c. Coverage of invasive plants. Refer moderately high, but generallyw/o presence of rare
Table 1 ORAM long form for list. Add threatened or endangered spp to
or deduct points for coverage A predominance of native species, with nonnative spp high
Extensive >75% cover (-5) and/or disturbance tolerant native spp absent or virtually
Moderate 25-75% cover (-3) absent. and high spp diversity and often, but not always.
Sparse 5-25% cover (-1) the presence of rare, threatened, or endangered spp
Nearly absent <5% cover (0)
x Absent (1) Mudflat and Open Water Class Quality 6d. Microtopography. 0 Absent < 0.1ha (0.247 acres)
Score all present using 0 to 3 scale. 1 Low 0.1 to <1ha (0.247 to 2.47 acres)
0 Vegetated hummucks/tussucks 2 Moderate 1 to <4ha (2.47 to 9.88 acres)
1 Coarse woody debris >15cm (6in) 3 High 4ha (9.88 acres) or more
1 Standing dead >25cm (10in) dbh
Amphibian breeding pools Microtopography Cover Scale
0 Absent
1 Present very small amounts or if more common
of marginal quality
2 Present in moderate amounts, but not of highest
Category 2 quality or in small amounts of highest quality
41 GRAND TOTAL(max 100 pts) 3 Present in moderate or greater amounts
and of highest quality

		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	9	
	Metric 3. Hydrology	13	
	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	5	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to	41	Category based on score breakpoints
	determine the wetland's category based on its quantitative score	30.20	Category 2

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	0	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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

	Fin	al Category	
Choose one	Category 1	Category 2	Category 3

Site: IFE	Lincoln Park-Riv	verbend	Rater(s): Bill Leo	pold (AECOM)	Date:	1/7/2020
			1 /	Field Id:	•	
	0	0 Metric 1. W	etland Area (size).	w-bl-20200107-05	5	
max 6 pts	subtotal	>50 acres (>20.2h 25 to <50 acres (1) 10 to <25 acres (4) 3 to <10 acres (1.2 0.3 to <3 acres (0.	0.1 to <20.2ha) (5 pts) to <10.1ha) (4 pts) to <4ha) (3 pts) 12 to <1.2ha) (2pts) 0.04 to <0.12ha) (1 pt)	0.01 a	acres	
	8	8 Metric 2. Up	oland buffers and sur	rounding land use.		
max 14 pts.	subtotal	WIDE. Buffers ave x MEDIUM. Buffers ave NARROW. Buffers VERY NARROW.	rage 50m (164ft) or more around vaverage 25m to <50m (82 to <164ft average 10m to <25m (32ft to <8; Buffers average <10m (<32ft) arou	ft) around wetland perimeter (4) 2ft) around wetland perimeter (1) and wetland perimeter (0)	eck.	
	2023	VERY LOW. 2nd g X LOW. Old field (>1 X MODERATELY HI	prounding land use. Select one of crowth or older forest, prairie, savar 0 years), shrubland, young second GH. Residential, fenced pasture, pstrial, open pasture, row cropping,	nnah, wildlife area, etc. (7) I growth forest. (5) ark, conservation tillage, new fallow field	i. (3)	
	13.0 21.	0 Metric 3. Hy	drology.			
max 30 pts.	subtotal	High pH groundwater x Precipitation (1) Seasonal/Intermitt Perennial surface of the seasonal	ent surface water (3) water (lake or stream) (5) er depth. Select one. 0 27.6in) (2)) to natural hydrologic regime. So arent (12)	Semi- to permanently inundated/saturate X Seasonally inundated (2) Seasonally saturated in upp core one or double check and average. Check all disturbances ob ditch tile dike weir stormwater input	ther human use (1) forest), complex (1) pridor (1) aturation. Score one or dbl che ated/saturated (4) ed (3) er 30cm (12in) (1)	
max 20 pts.		None or none appar x Recovering (2) Recovering (2) Recent or no recovered to the second secon	opment. Select only one and ass ion. Score one or double check arent (9)	ign score.	erved shrub/sapling removal herbaceous/aquatic bed rem sedimentation dredging farming nutrient enrichment	oval

w-bl-20200107-05_ORAM.xlsm | test_Field

Site: IFE Li	ncoln Park-R	liverbend	Rater(s): Bill Led	opold (AE	ECOM)	Date:	1/7/2020
			•	•	Field Id:	-	
		34			w-bl-20200107-05		
	subtotal	this page					
			Metric 5. Special Wetlands.				
max 10 pts.	subtotal		Check all that apply and score as indi	cated.			
			Bog (10)				
		-	Fen (10) Old growth forest (10)				
		-	Mature forested wetland (5)				
		_	Lake Erie coastal/tributary wetland-unrestricted hyd	rology (10)			
		-	Lake Erie coastal/tributary wetland-restricted hydrole				
			Lake Plain Sand Prairies (Oak Openings) (10)				
			Relict Wet Praires (10)				
			Known occurrence state/federal threatened or enda	ngered speci	es (10)		
		_	Significant migratory songbird/water fowl habitat or				
		_	Category 1 Wetland. See Question 5 Qualitative Ra	iting (-10)	2 5		
	3 :	37	Metric 6. Plant communities, int	erspersi	on, microtopography.		
max 20pts.	subtotal	1	6a. Wetland Vegetation Communities.		Vegetation Community Cove	er Scale	
			Score all present using 0 to 3 scale.	_ 0	Absent or comprises <0.1ha (0.2471 ac	cres) contiguous area	
		_	Aquatic bed	1	Present and either comprises small par		
		_	Emergent		vegetation and is of moderate quality, of	or comprises a	
		_	Shrub	-	significant part but is of low quality		
			Forest	2	Present and either comprises significar		
		_	Mudflats		vegetation and is of moderate quality of	r comprises a small	
			Open water Other	-3	part and is of high quality Present and comprises significant part,	or more of wetland's 3	
			6b. horizontal (plan view) Interspersion.	3	vegetation and is of high quality	of filore, of wedarid's 3	
			Select only one.		vegetation and is of riight quality		
			High (5)		Narrative Description of Vegetation 6	Quality	
			Moderately high(4)		Low spp diversity and/or predominance	of nonnative or low	
			Moderate (3)		disturbance tolerant native species		
			Moderately low (2)		Native spp are dominant component of		
			Low (1)		although nonnative and/or disturbance		
			None (0)		can also be present, and species diver-	-	
			6c. Coverage of invasive plants. Refer		moderately high, but generallyw/o pres-	ence of rare	
			Table 1 ORAM long form for list. Add or deduct points for coverage		threatened or endangered spp to A predominance of native species, with	nonnative ann high	
			Extensive >75% cover (-5)		and/or disturbance tolerant native spe	5000 NO 1000 N	
			Moderate 25-75% cover (-3)		absent, and high spp diversity and ofter	[III] [CONT. 1] [III] [CONT. CONT. C	
		_	Sparse 5-25% cover (-1)		the presence of rare, threatened, or en-		
			Nearly absent <5% cover (0)				
		×	Absent (1)		Mudflat and Open Water Class Quali	ty	
		60	6d. Microtopography.		Absent <0.1ha (0.247 acres)		
			Score all present using 0 to 3 scale.		Low 0.1 to <1ha (0.247 to 2.47 acres)		
		-	Vegetated hummucks/tussucks		Moderate 1 to <4ha (2.47 to 9.88 acres)	
			Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more		
			Standing dead >25cm (10in) dbh		Microtopography Cover Scale		
		0	Amphibian breeding pools	0	Microtopography Cover Scale Absent		
				1	Present very small amounts or if more	common	
					of marginal quality		
				2	Present in moderate amounts, but not of	of highest	
Category 2	940			-	quality or in small amounts of highest q	0.0075	
	37 GRA	ND TO	TAL(max 100 pts)	3	Present in moderate or greater amount	s	
					and of highest quality		
					land or midlicat quality		

		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	13	
	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	37	Category based on score breakpoints Category 2

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	0	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 overcategorized 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 (including 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?	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 an quantitative score.		
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.		

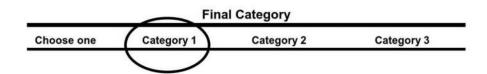
Final Category			
Choose one	Category 1	Category 2	Category 3

Site: FE Li	ncoln Park-Rive	erbend	Rater(s): Bill Leop	old (AECOM)	Date:	1/7/2020
				Field Id:	•	
	0 0	Metric 1. Wetla	nd Area (size).	w-bl-20200107	7-04	
max 6 pts	subtotal	Select one size class a >50 acres (>20.2ha) (6) 25 to <50 acres (10.1 to 10 to <25 acres (4 to <1 3 to <10 acres (1.2 to <- 0.3 to <3 acres (0.12 to 0.1 to <0.3 acres (0.04 t x <0.1 acres (0.04ha) (0 p	ots) <20.2ha) (5 pts) 0.1ha) (4 pts) tha) (3 pts) t<1.2ha) (2pts) o <0.12ha) (1 pt)	0.03	acres	
	6 6	Metric 2. Uplan	d buffers and surr	ounding land use.		
max 14 pts.	subtotal	WIDE. Buffers average MEDIUM. Buffers avera x NARROW. Buffers aver VERY NARROW. Buffer	50m (164ft) or more around w ge 25m to <50m (82 to <164ft) age 10m to <25m (32ft to <82f rs average <10m (<32ft) aroun	around wetland perimeter (4) t) around wetland perimeter (1) d wetland perimeter (0)	e check.	
	2000	x VERY LOW. 2nd growth LOW. Old field (>10 year x MODERATELY HIGH. F	nding land use. Select one or or older forest, prairie, savant rs), shrubland, young second of Residential, fenced pasture, pa open pasture, row cropping, n	nah, wildlife area, etc. (7) growth forest. (5) rk, conservation tillage, new fallow	r field. (3)	
	13.0 19.0	Metric 3. Hydro	ology.			
max 30 pts.	subtotal	None or none apparent x Recovered (7) Recovering (3) Recent or no recovery (rface water (3) (lake or stream) (5) pth. Select one. iin) (2) tural hydrologic regime. Scc. (12)	x Part of wetland/upland x Part of riparian or uplar 3d. Duration inundatiin Semi- to permanently i Regularly inundated/sa x Seasonally inundated (Seasonally saturated in re one or double check and ave Check all disturbance ditch tile dike weir stormwater input	ind other human use (1) (e.g. forest), complex (1) nd corridor (1) on/saturation. Score one or dbl chec nundated/saturated (4) tturated (3) (2) n upper 30cm (12in) (1) rage.	
max 20 pts.	subtotal	None or none apparent x Recovered (3) Recovering (2) Recent or no recovery (4b. Habitat developme Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) x Poor (1) 4c. Habitat alteration. S None or none apparent Recovered (6) x Recovering (3) Recent or no recovery (nt. Select only one and assign. Score one or double check and	n score.	observed Shrub/sapling removal herbaceous/aquatic bed rem sedimentation dredging farming nutrient enrichment	oval

Site: FE Lincoln Park-Riverbend	Rater(s): Bill Leopol	ld (AE	COM)	Date:	1/7/2020
			Field Id:		
26			w-bl-20200107-04		
subtotal this page					
	ic 5. Special Wetlands.				
max 10 pts. subtotal Check	all that apply and score as indicate	ed.			
Bog (10					
Fen (10					
	wth forest (10)				
—	forested wetland (5)	(40)			
	ie coastal/tributary wetland-unrestricted hydrology	7000 CO CO			
	ie coastal/tributary wetland-restricted hydrology (5 ain Sand Prairies (Oak Openings) (10)	5)			
	Vet Prairies (10)				
	occurrence state/federal threatened or endangere	ed snecie	s (10)		
	ant migratory songbird/water fowl habitat or usage		3 (10)		
	y 1 Wetland. See Question 5 Qualitative Rating (
	ic 6. Plant communities, inters	· E	on, microtopography.		
max 20pts. subtotal 6a. W	etland Vegetation Communities.		Vegetation Community Cove	er Scale	
Score a	Il present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 ac	res) contiguous area	
Aquatic	bed	1	Present and either comprises small par	of wetland's 1	
1 Emerge	ent		vegetation and is of moderate quality, o	r comprises a	
Shrub			significant part but is of low quality		
Forest		7.7	Present and either comprises significan	11. The state of t	
Mudflats			vegetation and is of moderate quality or	comprises a small	
Open w	ater		part and is of high quality		
Other_			Present and comprises significant part,	or more, of wetland's 3	
	izontal (plan view) Interspersion. only one.		vegetation and is of high quality		
High (5)	pa		Narrative Description of Vegetation C	tuality	
	tely high(4)		Low spp diversity and/or predominance		
Modera	te (3)		disturbance tolerant native species		
Modera	tely low (2)	1	Native spp are dominant component of	the vegetation, mod	
Low (1)			although nonnative and/or disturbance t	olerant native spp	
x None (0))		can also be present, and species divers	ity moderate to	
	erage of invasive plants. Refer		moderately high, but generallyw/o prese	ence of rare	
	ORAM long form for list. Add		threatened or endangered spp to		
	ct points for coverage		A predominance of native species, with) () [[[[[[[[[[[[[[[[[
	ve >75% cover (-5)		and/or disturbance tolerant native spp a	다 남성(10g) 15 (10g) 15 (10g) 10g	
	te 25-75% cover (-3) 5-25% cover (-1)		absent, and high spp diversity and often		
	absent <5% cover (0)	L	the presence of rare, threatened, or end	angered spp	
x Absent			Mudflat and Open Water Class Qualit	v	
	rotopography.		Absent <0.1ha (0.247 acres)	,	
	Il present using 0 to 3 scale.		Low 0.1 to <1ha (0.247 to 2.47 acres)		
	ed hummucks/tussucks	_	Moderate 1 to <4ha (2.47 to 9.88 acres)	N	
	woody debris >15cm (6in)		High 4ha (9.88 acres) or more	···	
0 Standin	g dead >25cm (10in) dbh				
0 Amphib	ian breeding pools		Microtopography Cover Scale		
: 			Absent		
		-	Present very small amounts or if more of	common	
			of marginal quality	****	
Catamani 1			Present in moderate amounts, but not o	0.00	
Category 1		_	quality or in small amounts of highest qu		
28 GRAND TOTAL(n	nax 100 pts)	3	Present in moderate or greater amounts	i e	
			and of highest quality		

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	6	
	Metric 3. Hydrology	13	
	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	28	Category based on score breakpoints Category 1

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	(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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.



Wetland RLP-13

Site: FE L	incoln Park-River	bend	Rater(s): Bill Leop	old (AE	COM)		Date:	1/6/2020
				,	Field ld:		•	
	2 2	Metric 1. Wetla	nd Area (size).		w-bl-20200106-	01		
max 6 pts	subtotal	Select one size class a >50 acres (>20.2ha) (6 p 25 to <50 acres (10.1 to 10 to <25 acres (4 to <1 3 to <10 acres (1.2 to <4 x 0.3 to <3 acres (0.04 to <0.1 acres (0.04 to <0.1 acres (0.04 ha) (0 p	ots) <20.2ha) (5 pts) 0.1ha) (4 pts) (.ha) (3 pts) c1.2ha) (2pts) 0 <0.12ha) (1 pt)	Ì	0.31	acres		
	8 10	Metric 2. Uplan	d buffers and surr	oundir	ng land use.			
max 14 pts.	subtotal	WIDE. Buffers average: x MEDIUM. Buffers avera NARROW. Buffers avera VERY NARROW. Buffer	ouffer width. Select only one 50m (164ft) or more around we ge 25m to <50m (82 to <164ft) age 10m to <25m (32ft to <82f s ourrage <10m (<32ft) aroun	etland peri around w ft) around w id wetland	meter (7) etland perimeter (4) wetland perimeter (1) perimeter (0)	check.		
		VERY LOW. 2nd growth x LOW. Old field (>10 yea x MODERATELY HIGH. F	nding land use. Select one or or older forest, prairie, savanr rs), shrubland, young second g cesidential, fenced pacture, pa open pasture, row cropping, n	nah, wildlif growth for rk, conser	e area, etc. (7) est. (5) vation tillage, new fallow f	ield. (3)		
	12.0 22.0	Metric 3. Hydro	ology.					
max 30 pts.	subtotal	None or none apparent (x) Recovered (7) Recovering (3) Recent or no recovery (1)	rface water (3) (lake or stream) (5) pth. Select one. pin) (2) tural hydrologic regime. Sco 12)	ore one or	Check all disturbances ditch tile dike weir stormwater input	d other human .g. forest), co corridor (1) //saturation. 9 //s	ause (1) mplex (1) Score one or dbl check. Ited (4) 2in) (1) ource (nonstormwater) rading ed/RR track	
	9 31	Metric 4. Habita	at Alteration and D	evelop	ment.			
max 20 pts.	subtotal	None or none apparent (x Recovered (3) Recovering (2) Recent or no recovery (' 4b. Habitat developmed Excellent (7) Very good (6) Good (5) Moderately good (4) x Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. \$ None or none apparent (Recovered (6)	nt. Select only one and assig	gn score.	e. Check all disturbances ol mowing	x shrub/s	sapling removal	
	31	x Recovering (3) Recent or no recovery (1)		x	grazing clearcutting selective cutting woody debris removal toxic pollutants	sedime dredgir farming		I

w-bl-20200106-01_ORAM.xlsm | test_Field

Site: FE Lind	coln Park-Riverbe	nd R	later(s):	Bill Leopold (AECOM)		Date:	1/6/2020
		•			Field Id:			
	31				w-bl-2020	0106-01		
	subtotal this pag		Wotland	do				
	0 31	Metric 5. Special						
max 10 pts.	subtotal	Check all that apply	and scor	e as indicated.				
		Bog (10)						
	-	Fen (10) Old growth forest (10)						
	-	Mature forested wetland (5)						
	1	Lake Erie coastal/tributary v		stricted hydrology (10)			
		Lake Erie coastal/tributary v		F10 - C.				
	<u> </u>	Lake Plain Sand Prairies (C	ak Openings	s) (10)				
	-	Relict Wet Praires (10)	danal thursday		(40)			
	-	Known occurrence state/fed Significant migratory songbi			5 50 50			
		Category 1 Wetland. See Q			,			
	6 37	Metric 6. Plant co		Marina Marina Marina di Partina d	rsion, micro	topography.		
max 20pts.	subtotal	6a. Wetland Vegetati				Community Cov	or Scale	
max 20pts.	subtotal	Score all present using 0 to		numues.		orises <0.1ha (0.2471 ac	Section of the sectio	7
		Aquatic bed	o scarc.	9 2		her comprises small par		- 3
		0 Emergent				is of moderate quality, o		
		1 Shrub		_		but is of low quality		
		Forest				her comprises significar		
	-	Mudflats				is of moderate quality o	r comprises a small	
		Open water Other		-	part and is of hi 3 Present and co		or more, of wetland's 3	
		6b. horizontal (plan view)	- Interspersio	n.	120 120	is of high quality	of more, of wedand's 3	
		Select only one.	Mil			Mark IAI 937A		
		High (5)			Narrative Desc	ription of Vegetation (Quality	
		Moderately high(4)				ty and/or predominance	of nonnative or low	
	-	Moderate (3)				erant native species	1h	
	-	Moderately low (2) Low (1)			7,63	dominant component of tive and/or disturbance	(70)	
	<u> </u>	x None (0)				sent, and species diver-	경영화 경영화 시간 이 경영 영영하다 지수 있다.	
		6c. Coverage of invasive p	olants. Refer	t		n, but generallyw/o pres	50 B (10 B))))))))))))))))))))))))))))))))))))	
		Table 1 ORAM long form fo	r list. Add		threatened or e	ndangered spp to	- 95	
	_	or deduct points for coverage	ge			e of native species, with		
	-	Extensive >75% cover (-5)				nce tolerant native spp	14 CONTRACTOR OF THE STATE OF T	
	-	Moderate 25-75% cover (-3 Sparse 5-25% cover (-1))			h spp diversity and ofter rare, threatened, or en-		
		Nearly absent <5% cover (0	0)					- 12
		x Absent (1)			Mudflat and O	pen Water Class Quali	ty	
		6d. Microtopography.		_	0 Absent < 0.1ha			
	-	Score all present using 0 to		_		a (0.247 to 2.47 acres)		
	_	 Vegetated hummucks/tussu Coarse woody debris >15cr 		-	2 Moderate 1 to 3 High 4ha (9.88)	4ha (2.47 to 9.88 acres)	
		 Coarse woody debris >15cr Standing dead >25cm (10in 			3 migri 4na (9.00	acres) or more		
	_	1 Amphibian breeding pools	, doi		Microtopograp	hy Cover Scale		
					0 Absent	100 ■ 10.5000 y el + 20.000 como como		
				·-		nall amounts or if more	common	
				52	of marginal qua		f Link	
Category 2						erate amounts, but not of all amounts of highest of		
Category 2	27 CDANG 7	OTAL (may 400 -4-)		-			March .	
	37 GRAND T	OTAL(max 100 pts)			3 Present in mod	erate or greater amount	S	
					and of highest of	quality		

w-bl-20200106-01_ORAM.xlsm | test_Field

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	12	
	Metric 4. Habitat	9	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	6	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	37	Category based on score breakpoints Category 2

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	0	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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Final Category					
Choose one	Category 1	Category 2	Category 3		

Wetland RLP-14

Site: IFE	Lincoln Park-Ri	verbend	Rater(s): Bill Leop	old (AECOM)	Date:	1/7/2020
				Field Id:	•	
	2	2 Metric 1. Wetla	nd Area (size).	w-bl-20200107-	03	
max 6 pts	subtotal	Select one size class a >50 acres (>20.2ha) (6) 25 to <50 acres (10.1 to 10 to <25 acres (4 to <1) 3 to <10 acres (1.2 to <4) x 0.3 to <3 acres (0.12 to 0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 p	ots) <20.2ha) (5 pts) 0.1ha) (4 pts) tha) (3 pts) <1.2ha) (2pts) o <0.12ha) (1 pt)	0.36	acres	
	9 1	1 Metric 2. Uplar	d buffers and surr	ounding land use.		
max 14 pts.	subtotal	WIDE. Buffers average x MEDIUM. Buffers avera NARROW. Buffers aver VERY NARROW. Buffe 2b. Intensity of surrou	50m (164ft) or more around w ge 25m to <50m (82 to <164ft) age 10m to <25m (32ft to <82ft) rs average <10m (<32ft) aroun nding land use. Select one of	around wetland perimeter (4) t) around wetland perimeter (1) d wetland perimeter (0) r double check and average.	check.	
		LOW. Old field (>10 year MODERATELY HIGH. F	n or older forest, prairie, savan rs), shrubland, young second Residential, fenced pasture, pa open pasture, row cropping, n	growth forest. (5) rk, conservation tillage, new fallow fi	eld. (3)	
	13.0 24	.0 Metric 3. Hydro	ology.			
max 30 pts.	subtotal	None or none apparent x Recovered (7) Recovering (3) Recent or no recovery (orface water (3) (lake or stream) (5) pth. Select one. Sin) (2) ttural hydrologic regime. Sco	Semi- to permanently inu Regularly inundated/satu x Seasonally inundated (2) Seasonally saturated in u ore one or double check and avera Check all disturbances x ditch tile dike weir stormwater input	d other human use (1) .g. forest), complex (1) .corridor (1) /saturation. Score one or dbl check ndated/saturated (4) rated (3) .pper 30cm (12in) (1) .ge.	κ.
max 20 pts.	subtotal	WAR AS ASSESSED MINE OF	nce. Score one or double che	8285 AV		
		Excellent (7) Very good (6) Good (5) Moderately good (4) X Fair (3) Poor to fair (2) Poor (1)	nt. Select only one and assignt. Select only one and assignt. Select only one and assignt.		shrub/sapling removal herbaceous/aquatic bed remo sedimentation dredging farming nutrient enrichment	val
	eubtotal t	his page ORAM v 5.0 Field Form	Quantitative Rating			

w-bl-20200107-03_ORAM.xlsm | test_Field

Wetland RLP-14

Site: IFE Li	ncoln Park-Riverbe	end Rater(s): Bill I	Leopold (AE	ECOM)	Date:	1/7/2020
		•		Field Id:		
	40			w-bl-20200107-03		
	subtotal this pag	e				
	0 40	Metric 5. Special Wetlands.				
max 10 pts.	subtotal	Check all that apply and score as in	ndicated			
max to pts.	Subibilai	Bog (10)	indicated.			
		Fen (10)				
		Old growth forest (10)				
		Mature forested wetland (5)				
		Lake Erie coastal/tributary wetland-unrestricted	hydrology (10)			
	_	Lake Erie coastal/tributary wetland-restricted hy	drology (5)			
	<u>_</u>	Lake Plain Sand Prairies (Oak Openings) (10)				
	- ⊢	Relict Wet Praires (10)		(40)		
	-	Known occurrence state/federal threatened or e		es (10)		
	-	Significant migratory songbird/water fowl habital Category 1 Wetland. See Question 5 Qualitative				
-	51 45					
	5 45	Metric 6. Plant communities,	interspers	ion, microtopography.		
max 20pts.	subtotal	6a. Wetland Vegetation Communitie	es.	Vegetation Community Cov	er Scale	
	<u></u>	Score all present using 0 to 3 scale.	_ 0	Absent or comprises <0.1ha (0.2471 a	cres) contiguous area	
		Aquatic bed	1	Present and either comprises small pa		
	1	Emergent		vegetation and is of moderate quality, or	or comprises a	
	-	Shrub	-	significant part but is of low quality		
	F-	2 Forest	2	Present and either comprises significant		
	-	Mudflats Open water		vegetation and is of moderate quality o	r comprises a small	
	-	Other	- 3	part and is of high quality Present and comprises significant part	or more of wetland's 3	
	_	6b. horizontal (plan view) Interspersion.	3	vegetation and is of high quality	of more, or welland 3 3	
		Select only one.		regetation and to or riight quality		
	Г	High (5)		Narrative Description of Vegetation	Quality	
		Moderately high(4)		Low spp diversity and/or predominance	e of nonnative or low	
		Moderate (3)		disturbance tolerant native species		
	_	Moderately low (2)		Native spp are dominant component of	the vegetation, mod	
		Low (1)		although nonnative and/or disturbance		
	L	x None (0)		can also be present, and species diver	-	
		6c. Coverage of invasive plants. Refer		moderately high, but generallyw/o pres	ence of rare	
		Table 1 ORAM long form for list. Add		threatened or endangered spp to	nonnative ann high	
		or deduct points for coverage Extensive >75% cover (-5)		A predominance of native species, with and/or disturbance tolerant native spp	5000 N 전 대, HOUSE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOT	
	- H	Moderate 25-75% cover (-3)		absent, and high spp diversity and ofte] [] [] [] [] [] [] [] [] [] [
		Sparse 5-25% cover (-1)		the presence of rare, threatened, or en	25	
		Nearly absent <5% cover (0)		<u> </u>		
		x Absent (1)		Mudflat and Open Water Class Quali	ty	
	0	6d. Microtopography.	_ 0	Absent <0.1ha (0.247 acres)		
	_	Score all present using 0 to 3 scale.	_1	La Company Com		
		1 Vegetated hummucks/tussucks	_2	Moderate 1 to <4ha (2.47 to 9.88 acres	3)	
	_	Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more		
	_	Standing dead >25cm (10in) dbh		Missats as a same Court Saula		
		0 Amphibian breeding pools	0	Microtopography Cover Scale Absent		
			1	Present very small amounts or if more	common	
				of marginal quality		
			2	Present in moderate amounts, but not	of highest	
Category 2				quality or in small amounts of highest of	0.005	
	45 GRAND T	FOTAL(max 100 pts)	3	Present in moderate or greater amount		
		(man 144 ptd)	,			
				and of highest quality		

		circle answer or insert	
ii		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	9	
	Metric 3. Hydrology	13	
	Metric 4. Habitat	16	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	5	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx_to	45	Category based on score breakpoints
	determine the wetland's category based on its quantitative score	2.5	Category 2

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	(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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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, loca 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.

Choose one Category 1 Category 2 Category 3				

Wetland RLP-15ab

Site: FE	Lincoln Park-Rive	Rater(s): Bill Leopo	old (AECOM)	Date:	1/7/2020
			Field Id:	•	
	1 1	Metric 1. Wetland Area (size).	w-bl-20200107-02a	b	
max 6 pts	subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) x 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)	0.24 acre	es	
	8 9	Metric 2. Upland buffers and surro	ounding land use.		
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one a WIDE. Buffers average 50m (164ft) or more around wet X MEDIUM. Buffers average 25m to <50m (82 to <164ft). NARROW. Buffers average 10m to <25m (32ft to <82ft). VERY NARROW. Buffers average <10m (<32ft) around	tland perimeter (7) around wetland perimeter (4)) around wetland perimeter (1)	к.	
		Intensity of surrounding land use. Select one or VERY LOW. 2nd growth or older forest, prairie, savann LOW. Old field (>10 years), shrubland, young second g MODERATELY HIGH. Residential, fenced pasture, par HIGH. Urban, industrial, open pasture, row cropping, m	ah, wildlife area, etc. (7) rowth forest. (5) k, conservation tillage, new fallow field. (3	3)	
	13.0 22.0	Metric 3. Hydrology.			
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) x <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Scorn None or none apparent (12) x Recovered (7) Recovering (3) Recent or no recovery (1) Metric 4. Habitat Alteration and De	Check all disturbances obser ditch tile	r human use (1) rest), complex (1) for (1) ration. Score one or dbl chec d/saturated (4) (3) 30cm (12in) (1)	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double chee None or none apparent (4) x Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) x Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and None or none apparent (9) x Recovered (6) Recovering (3) Recent or no recovery (1)	n score.	ed shrub/sapling removal herbaceous/aquatic bed remo sedimentation dredging farming nutrient enrichment	oval
	72.000	s page ORAM v. 5.0 Field Form Quantitative Rating			

w-bl-20200107-02_ORAM.xlsm | test_Field

Site: FE Lincoln Park-Riverber	nd Rater(s): E	Bill Leopold (AECOM)	Date:	1/7/2020
	1 , ,	Field Id:		
33		w-bl-20200107-0)2ab	
subtotal this page	e			
0 33	Metric 5. Special Wetlands	S.		
max 10 pts. subtotal	Check all that apply and score			
max to pis. subtotal	Bog (10)	as maleated.		
_	Fen (10)			
	Old growth forest (10)			
	Mature forested wetland (5)			
<u> </u>	Lake Erie coastal/tributary wetland-unrestr			
	Lake Erie coastal/tributary wetland-restrict Lake Plain Sand Prairies (Oak Openings)	N (1) (4) (5) (7) (7) (7) (7) (7) (7) (7) (7)		
	Relict Wet Prairies (10)	(10)		
	Known occurrence state/federal threatene	d or endangered species (10)		
	Significant migratory songbird/water fowl h	abitat or usage (10)		
	Category 1 Wetland. See Question 5 Qual	itative Rating (-10)		
4 37	Metric 6. Plant communiti	es, interspersion, microtopogr	aphy.	
max 20pts. subtotal	6a. Wetland Vegetation Commu			
	Score all present using 0 to 3 scale.		ha (0.2471 acres) contiguous are	a
L.	Aquatic bed	그리는 [ses small part of wetland's 1	
1 0	Emergent Shrub	significant part but is of lov	rate quality, or comprises a	
-	Forest		ses significant part of wetland's 2	,
—	Mudflats	107	rate quality or comprises a small	
	Open water	part and is of high quality		7
	Other	The state of the s	gnificant part, or more, of wetland	's 3
	6b. horizontal (plan view) Interspersion. Select only one.	vegetation and is of high o	quality	
T .	High (5)	Narrative Description of	Vegetation Quality	
	Moderately high(4)		predominance of nonnative or low	
	Moderate (3)	disturbance tolerant native		
-	Moderately low (2)	A.C.	component of the vegetation, mod	1
L×	Low (1) None (0)		disturbance tolerant native spp	
<u> </u>	6c. Coverage of invasive plants. Refer	moderately high, but gene	species diversity moderate to	
	Table 1 ORAM long form for list. Add	threatened or endangered	Salah Salah	
	or deduct points for coverage		species, with nonnative spp high	-
	Extensive >75% cover (-5)	and/or disturbance toleran	t native spp absent or virtually	
	Moderate 25-75% cover (-3)		rsity and often, but not always,	
x	Sparse 5-25% cover (-1) Nearly absent <5% cover (0)	the presence of rare, threa	atened, or endangered spp	
F-	Absent (1)	Mudflat and Open Water	Class Quality	
	6d. Microtopography.	0 Absent < 0.1ha (0.247 acre		
	Score all present using 0 to 3 scale.	1 Low 0.1 to <1ha (0.247 to	2.47 acres)	
_1		2 Moderate 1 to <4ha (2.47		
	Coarse woody debris >15cm (6in)	3 High 4ha (9.88 acres) or n	nore	
0	Standing dead >25cm (10in) dbh Amphibian breeding pools	Microtopography Cover	Scale	
<u></u>	Amphilolan breeding pools	0 Absent	Scale	
		Present very small amount	nts or if more common	
		of marginal quality	WW. 1990.000	
		2 Present in moderate amou		
Category 2		quality or in small amounts		
37 GRAND T	OTAL(max 100 pts)	3 Present in moderate or gr	eater amounts	
		and of highest quality		

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	13	
	Metric 4. Habitat	11	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	4	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	37	Category based on score breakpoints Category 2

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	(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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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, loca 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.

Final Category			
Choose one	Category 1	Category 2	Category 3

Wetland RLP-16abc

Site: FE l	incoln Park-Riverbe	end Rater(s): Bill Leopol	d (AECOM)	Date:	1/6/2020
		· · · · · · · · · · · · · · · · · · ·	Field Id:	•	
	3 3	Metric 1. Wetland Area (size).	w-bl-20200106-02		
max 6 pts	subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) x 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)	6.04 acres extends outside SC		
	7 10	Metric 2. Upland buffers and surro	unding land use.		
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one ar WIDE. Buffers average 50m (164ft) or more around wetle x MEDIUM. Buffers average 25m to <50m (82 to <164ft) at NARROW. Buffers average 10m to <25m (32ft to <82ft) VERY NARROW. Buffers average -10m (<31ft to <82ft) 2b. Internation of surrounding lend was Select as a select and select and select are selected.	and perimeter (7) round wetland perimeter (4) around wetland perimeter (1) wetland perimeter (0)		
_		Note that the second seco	h, wildlife area, etc. (7) owth forest. (5) conservation tillage, new fallow field. (3)		
	12.0 22.0	Metric 3. Hydrology.			
max 30 pts.		3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Score None or none apparent (12) Recovering (3) Recent or no recovery (1)	Check all disturbances observed ditch poi tile x filli dike x roa weir dre x stormwater input Ott	man use (1) , complex (1) n. Score one or dbl check. turated (4) m (12in) (1)	
	9 31	Metric 4. Habitat Alteration and Dev	velopment.		
max 20 pts.		4a. Substrate disturbance. Score one or double check None or none apparent (4) Recovered (3) X Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign Excellent (7) Very good (6) Good (5) X Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and None or none apparent (9) Recovered (6) X Recovering (3) Recent or no recovery (1)	average. Check all disturbances observed x mowing x shi grazing here x clearcutting set	rub/sapling removal rbaceous/aquatic bed removal dimentation	
	31]	one ORAM v. 5.0 Field Form Quantitative Rating	x woody debris removal far	odging ming rient enrichment	

Wetland RLP-16abc

Site: FE Li	ncoln Park-River	bend Rater(s): Bill Leopo	ld (AECOM)	Date:	1/6/2020
		* ` ` `	Field Id:	I	
	31	ľ	w-bl-20200106-0	12	
		E.	W DI 20200 100-0	— gi	
	subtotal this	TANKS PARTY PARTY OF THE TANK DOTE TO THE TRANSPORT OF THE TANKS OF TH			
	0 31	Metric 5. Special Wetlands.			
max 10 pts.	subtotal	Check all that apply and score as indicat	ed.		
		Bog (10)			
		Fen (10)			
		Old growth forest (10)			
		Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrological control of the contr	v (10)		
		Lake Erie coastal/tributary wetland-restricted hydrology	\$100 TO		
		Lake Plain Sand Prairies (Oak Openings) (10)	*		
		Relict Wet Praires (10)			
		Known occurrence state/federal threatened or endanger	100 At 10		
		Significant migratory songbird/water fowl habitat or usag			
	0 40	Category 1 Wetland. See Question 5 Qualitative Rating	Manager High and the		
	9 40	Metric 6. Plant communities, inters	spersion, microtopogi	rapny.	
max 20pts.	subtotal	6a. Wetland Vegetation Communities.	Vegetation Comm		
		Score all present using 0 to 3 scale.		ha (0.2471 acres) contiguous area	
		Aquatic bed		ises small part of wetland's 1	
		0 Emergent 1 Shrub	significant part but is of lo	erate quality, or comprises a	
		2 Forest		ises significant part of wetland's 2	- 5%
		Mudflats	107	erate quality or comprises a small	
		Open water	part and is of high quality		18
		Other		gnificant part, or more, of wetland's 3	- 25
		6b. horizontal (plan view) Interspersion.	vegetation and is of high	quality	
		Select only one. High (5)	Narrative Description of	Vegetation Quality	
		Moderately high(4)		predominance of nonnative or low	
		Moderate (3)	disturbance tolerant nativ		
		x Moderately low (2)	Native spp are dominant	component of the vegetation, mod	- 8
		Low (1)		r disturbance tolerant native spp	
		None (0)		species diversity moderate to	
		6c. Coverage of invasive plants. Refer Table 1 ORAM long form for list. Add	moderately high, but gene threatened or endangered		
		or deduct points for coverage		species, with nonnative spp high	33
		Extensive >75% cover (-5)		nt native spp absent or virtually	
		Moderate 25-75% cover (-3)		ersity and often, but not always,	
		Sparse 5-25% cover (-1)	the presence of rare, thre	atened, or endangered spp	
		x Nearly absent <5% cover (0)		0	
		Absent (1) 6d. Microtopography.	Mudflat and Open Water 0 Absent <0.1ha (0.247 acr	(c) [18] [18] [18] [18] [18] [18] [18] [18]	
		Score all present using 0 to 3 scale.	1 Low 0.1 to <1ha (0.247 acr		
		1 Vegetated hummucks/tussucks	2 Moderate 1 to <4ha (2.47		
		1 Coarse woody debris >15cm (6in)	3 High 4ha (9.88 acres) or r		
		0 Standing dead >25cm (10in) dbh			
		2 Amphibian breeding pools	Microtopography Cover	Scale	
			Absent Present very small amount	ate or if more commen	
			of marginal quality	nts or it more common	
			Present in moderate amo	unts, but not of highest	
Category 2			quality or in small amount	원하게 하면서 얼마 하다 하면 어린이 하면 어느에게 하는 것으로 보고 보고 있다.	
	40 GRAND	TOTAL(max 100 pts)	3 Present in moderate or gr	reater amounts	
		92	and of highest quality		

		circle answer or insert score	Result
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	YES NO	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.	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	3	
	Metric 2. Buffers and surrounding land use	7	
	Metric 3. Hydrology	12	
	Metric 4. Habitat	9	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	9	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx_to	40	Category based on score breakpoints
	determine the wetland's category based on its quantitative score	3.5	Category 2

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	0	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 overcategorized 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Final Category			
Choose one	Category 1	Category 2	Category 3

Wetland RLP-17abc

Site: FE	Lincoln Park-Riverbend	Rater(s): Bill Leop	oold (AECOM)	Date:	1/7/2020
			Field Id:	•	
	2 2 Metric 1. V	Vetland Area (size).	w-bl-20200107-01abo	3	
max 6 pts	subtotal Select one size	class and assign score.			
	>50 acres (>20.2		1.08 acres		
		(10.1 to <20.2ha) (5 pts) (4 to <10.1ha) (4 pts)			
		.2 to <4ha) (3 pts)			
	x 0.3 to <3 acres (0.12 to <1.2ha) (2pts)			
		(0.04 to <0.12ha) (1 pt)			
	<0.1 acres (0.04				
	ACTION AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF	Ipland buffers and sur			
max 14 pts.		400 PT 1970 PR 1980 PT 1980 PR 1980 PT	e and assign score. Do not double check.		
		verage 50m (164ft) or more around v s average 25m to <50m (82 to <164f			
		ers average 10m to <25m (32ft to <82			
	VERY NARROW	/. Buffers average <10m (<32ft) arou	nd wetland perimeter (0)		
		surrounding land use. Select one			
		I growth or older forest, prairie, savar			
		>10 years), shrubland, young second HIGH, Residential, fenced pasture, p	ark, conservation tillage, new fallow field. (3)		
		dustrial, open pasture, row cropping,	하는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 되었다면 이 아이를 하는 것이 없는 것이 없는데 없다면		
	13.0 23.0 Metric 3. H	lydrology.			
max 30 pts.	subtotal 3a. Sources of V	Water. Score all that apply.	3b. Connectivity. Score all that	apply.	
	High pH groundy		100 year floodplain (1)		
	Other groundwar	er (3)	x Between stream/lake and other hi	3000 3 TA THE TOTAL STATE OF THE STATE OF TH	
	x Precipitation (1) Seasonal/Interm	ittent surface water (3)	x Part of wetland/upland (e.g. forest x Part of riparian or upland corridor		
		e water (lake or stream) (5)	3d. Duration inundation/saturat	7.07	
		ater depth. Select one.	Semi- to permanently inundated/s		
	>0.7 (27.6in) (3) 0.4 to 0.7m (15.7	to 27.6in) (2)	Regularly inundated/saturated (3) Seasonally inundated (2)		
	x <0.4m (<15.7in)		x Seasonally saturated in upper 300	cm (12in) (1)	
			ore one or double check and average.		
	x Recovered (7)	parent (12)	Check all disturbances observe	oint source (nonstormwater)	
	Recovering (3)			ling/grading	
	Recent or no rec	overy (1)	dike x ro	ad bed/RR track	
				redging	
		u ana samara oran u a		ther:	
58.0	VARIANTA AND CONTRACTOR CONTRACTO	labitat Alteration and D	4.000000 1949 1949		
max 20 pts.	subtotal 4a. Substrate di	sturbance. Score one or double ch	neck and average.		
	x Recovered (3)	paroni (1)			
	Recovering (2)	(028)			
	Recent or no rec				
	Excellent (7)	elopment. Select only one and assi	ign score.		
	Very good (6)				
	Good (5)	(4)			
	x Moderately good Fair (3)	(4)			
	Poor to fair (2)				
	Poor (1)	ation Casas and and death at the			
	4c. Habitat alter	ation. Score one or double check a parent (9)	and average. Check all disturbances observed		
	x Recovered (6)	parent (o)		nrub/sapling removal	
	x Recovering (3)			erbaceous/aquatic bed removal	
	Recent or no rec	overy (1)		edimentation	
				redging irming	
	×			utrient enrichment	
	34.5				
	subtotal this page. ORAM v. 5.0 Fie	ld Form Quantitative Rating			

w-bl-20200107-01abc_ORAM.xlsm | test_Field

Wetland RLP-17abc

Site: FE Lincoln Park-Riverbend	Rater(s): Bill Leopold (AECOM)	Date:	1/7/2020
		Field Id:		
34.5		w-bl-20200107-01ab	•	
34.3		W-DI-20200107-01ab	C	
subtotal this page				
0 34.5	Metric 5. Special Wetlands.			
max 10 pts. subtotal	Check all that apply and score as indicated.			
	Bog (10)			
	Fen (10)			
	Old growth forest (10)			
	Mature forested wetland (5)			
_	Lake Erie coastal/tributary wetland-unrestricted hydrology (10)		
<u> </u>	Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10)			
_	Relict Wet Prairies (10)			
· ·	Known occurrence state/federal threatened or endangered sp	pecies (10)		
<u> </u>	Significant migratory songbird/water fowl habitat or usage (10	S 30 50		
	Category 1 Wetland. See Question 5 Qualitative Rating (-10)			
11 45.5	Metric 6. Plant communities, interspe	rsion, microtopograph	y.	
max 20pts. subtotal	6a. Wetland Vegetation Communities.	Vegetation Community	Cover Scale	
	Score all present using 0 to 3 scale.	0 Absent or comprises <0.1ha (0.2	471 acres) contiguous area	12
	Aquatic bed	1 Present and either comprises sn	nall part of wetland's 1	
	Emergent	vegetation and is of moderate qu	ality, or comprises a	
0	Shrub _	significant part but is of low quali		
1	1	2 Present and either comprises sig	23 1/50	
	Mudflats	vegetation and is of moderate qu	ality or comprises a small	
_	Open water	part and is of high quality 3 Present and comprises significant	at part or more of watland's 2	
	6b. horizontal (plan view) Interspersion.	vegetation and is of high quality	it part, or more, or wettarid's 3	
	Select only one.	vegetation and is or night quality		
	High (5)	Narrative Description of Veget	ation Quality	
	Moderately high(4)	Low spp diversity and/or predom	inance of nonnative or low	"
x	Moderate (3)	disturbance tolerant native speci		
	Moderately low (2)	Native spp are dominant compor		
	Low (1)	although nonnative and/or distur	장마다 하시아들이 열리면 하시아 있다면 하시아 하시아 하시아 하지만 해요?	
	None (0)	can also be present, and species		
	6c. Coverage of invasive plants. Refer	moderately high, but generallyw/		
	Table 1 ORAM long form for list. Add or deduct points for coverage	A predominance of native species	### ### ##############################	- 9
	Extensive >75% cover (-5)	and/or disturbance tolerant native	상태 영 한 일반이 되었다면 하는 경험이 가장하게 되었다면 하는데	
<u> </u>	Moderate 25-75% cover (-3)	absent, and high spp diversity ar	50000000000000000000000000000000000000	
	Sparse 5-25% cover (-1)	the presence of rare, threatened		
х	Nearly absent <5% cover (0)	1.		235
	Absent (1)	Mudflat and Open Water Class	Quality	
	6d. Microtopography.	0 Absent < 0.1ha (0.247 acres)		
		1 Low 0.1 to <1ha (0.247 to 2.47 a		
		2 Moderate 1 to <4ha (2.47 to 9.88	acres)	
	Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh	3 High 4ha (9.88 acres) or more		
	Amphibian breeding pools	Microtopography Cover Scale		
	J. M. P. M. S. C.	0 Absent		
	-	Present very small amounts or if	more common	
	经 基本	of marginal quality	(C151)	
	_	2 Present in moderate amounts, b	ut not of highest	
Category 2	_	quality or in small amounts of hig	hest quality	
45.5 GRAND TO	OTAL(max 100 pts)	3 Present in moderate or greater a	mounts	
		and of highest quality		

		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	13	
	Metric 4. Habitat	11.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	11	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx_to	45.5	Category based on score breakpoints
	determine the wetland's category based on its quantitative score	10.0	Category 2

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	0	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 overcategorized 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Final Category			
Choose one	Category 1	Category 2	Category 3

Wetland RLP-18ab

Site: FE	Lincoln Park-Riverbe	Rater(s): Audrey H	anner	Date:	1/7/2020
		, , , , ,	Field ld:	•	
	2 2	Metric 1. Wetland Area (size).	w-aeh-20200107-09	ab	
max 6 pts	subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) x 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)	1.06 acres extends outside SC	5	
	8 10	Metric 2. Upland buffers and surro	ounding land use.		
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one at WIDE. Buffers average 50m (164ft) or more around wet x MEDIUM. Buffers average 25m to <50m (82 to <164ft) at NARROW. Buffers average 10m to <25m (32ft to <82ft) VERY NARROW. Buffers average <10m (<32ft) around	land perimeter (7) around wetland perimeter (4) around wetland perimeter (1)		
	· -	2b. Intensity of surrounding land use. Select one or over the control of the	ah, wildlife area, etc. (7) rowth forest. (5) k, conservation tillage, new fallow field. (3))	
	11.0 21.0	Metric 3. Hydrology.			
max 30 pts.	E	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) x Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) x <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Scor None or none apparent (12) x Recovered (7) Recovering (3) Recent or no recovery (1) Metric 4. Habitat Alteration and De	Check all disturbances observed title	human use (1) est), complex (1) or (1) ation. Score one or dbl check. //saturated (4) 3) 0cm (12in) (1)	
max 20 pts.		4a. Substrate disturbance. Score one or double check None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign Excellent (7) Very good (6) Good (5) Moderately good (4) x Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and None or none apparent (9) x Recovered (6) Recovering (3) Recent or no recovery (1)	d average. Check all disturbances observer mowing x grazing x clearcutting x selective cutting x woody debris removal	d shrub/sapling removal herbaceous/aquatic bed remova sedimentation dredging farming nutrient enrichment	ı
		ge ORAM v. 5.0 Field Form Quantitative Rating			

w-aeh-20200107-09.xlsm | test_Field 1/27/2020

Site: FE Li	ncoln Park-Riverb	end Rater(s): Audrey Ha	anner		Date:	1/7/2020
				Field Id:		<u>"</u>
	33			w-aeh-20200107-09ab		
	subtotal this p	age				
	0 33	Metric 5. Special Wetlands.				
max 10 pts.	subtotal	Check all that apply and score as indicate	ed.			
	1	Bog (10)				
	[Fen (10)				
	-	Old growth forest (10)				
	-	Mature forested wetland (5)	(40)			
		Lake Erie coastal/tributary wetland-unrestricted hydrology (
	1	Lake Plain Sand Prairies (Oak Openings) (10)	5)			
	- 1	Relict Wet Praires (10)				
	1	Known occurrence state/federal threatened or endangere	ed spec	ies (10)		
		Significant migratory songbird/water fowl habitat or usage	e (10)			
		Category 1 Wetland. See Question 5 Qualitative Rating ((-10)			
	6 39	Metric 6. Plant communities, inters	pers	ion, microtopography.		
max 20pts.	subtotal	6a. Wetland Vegetation Communities.		Vegetation Community Cov	er Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 ac		
	1	Aquatic bed	1	Present and either comprises small par		
		1 Emergent		vegetation and is of moderate quality, or	or comprises a	
	1	Shrub	-	significant part but is of low quality		
	-	1 Forest Mudflats	2	Present and either comprises significar vegetation and is of moderate quality o	1,77	
	1	Open water		part and is of high quality	r comprises a small	
	ŀ	Other	3	Present and comprises significant part,	or more, of wetland's 3	
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality		
	54 <u>4</u>	Select only one.		E (E) (E) (E) (E) (E) (E) (E) (E) (E) (E		
	1	High (5)		Narrative Description of Vegetation		
		Moderately high(4)		Low spp diversity and/or predominance	e of nonnative or low	
	-	Moderate (3)		disturbance tolerant native species	the upgetation mad	
	+	x Moderately low (2) Low (1)		Native spp are dominant component of although nonnative and/or disturbance	(T)	
	1	None (0)		can also be present, and species diver-	7.00 Profesional (1.00 Profesional Confesional Confesi	
		6c. Coverage of invasive plants. Refer		moderately high, but generallyw/o pres		
		Table 1 ORAM long form for list. Add		threatened or endangered spp to		
	142	or deduct points for coverage		A predominance of native species, with	nonnative spp high	33
	[Extensive >75% cover (-5)		and/or disturbance tolerant native spp a	absent or virtually	
	1	Moderate 25-75% cover (-3)		absent, and high spp diversity and ofter		
		Sparse 5-25% cover (-1)		the presence of rare, threatened, or en	dangered spp	
	-	x Nearly absent <5% cover (0) Absent (1)		Mudflat and Open Water Class Quali	to a	
	riL.	6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	ıy	
		Score all present using 0 to 3 scale.	_	Low 0.1 to <1ha (0.247 to 2.47 acres)		
	Г	Vegetated hummucks/tussucks	2)	
	1	1 Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more		
		Standing dead >25cm (10in) dbh		•		
	[Amphibian breeding pools	7,95201	Microtopography Cover Scale		
			0	Absent	common	-
			40	Present very small amounts or if more of marginal quality	COMMINIT	
			2	Present in moderate amounts, but not	of highest	
Category 2				quality or in small amounts of highest q	Control of the Contro	
	39 GRAND	TOTAL(max 100 pts)	3	Present in moderate or greater amount	s	10
		, , , , , , , , , , , , , , , , , , , ,	_	N 985000 85		
				and of highest quality		

w-aeh-20200107-09.xlsm | test_Field 1/27/2020

		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	11	
	Metric 4. Habitat	12	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	6	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	39	Category based on score breakpoints Category 2

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	(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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Final Category			
Choose one	Category 1	Category 2	Category 3

Wetland RLP-19ab

Metric 1. Wetland Area (size). Select one size class and assign score. 350 acres (2-20 hg) (6 pb) 25 to 50 acres (10 4 kg 20 hg) (5 pb) 31 s x 3 to 50 acres (12 kg 4 hg) (2 pb) 31 s x 3 to 50 acres (12 kg 4 hg) (2 pb) 31 s x 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 5 kg 1 hg) 40 to 4 acres (0.04 kg 1 hg) 41 to 4 acres (0.04 kg 1 hg) 42 to 4 acres (0.04 kg 1 hg) 43 to 4 acres (0.04 kg 1 hg) 44 to 4 acres (0.04 kg 1 hg) 45 to 4 acres (0.04 kg 1 hg) 46 to 4 acres (0.04 kg 1 hg) 47 to 4 acres (0.04 kg 1 hg) 48 to 4 acres (0.04 kg 1 hg) 49 to 4 acres (0.04 kg 1 hg) 40 to 4 acres (0.04 kg 1 hg) 40 to 4 acres (0.04 kg 1 hg) 41 to 4 acres (0.04 kg 1 hg) 42 to 4 acres (0.04 kg 1 hg) 43 to 4 acres (0.04 kg 1 hg) 44 to 4 acres (0.04 kg 1 hg) 45 to 4 acres (0.04 kg 1 hg) 46 to 4 acres (0.04 kg 1 hg) 47 to 4 acres (0.04 kg 1 hg) 48 to 4 acres (0.04 kg 1 hg) 49 to 4 acres (0.04 kg 1 hg) 40 to 4 acres (0	Site: FE Lincoln Park-Rive	rbend Rater(s): Audrey I	Hanner	Date:	1/7/2020
Select one size class and assign acore. Select are size class and assign acore. 2		• ` ` ,			
2-50 arcss (20.20a) (6 pts) 2-50 c 40 acres (10 to 1-20.20a) (5 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <25 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 to <10 arcss (4 to <10.1 ha) (4 pts) 10 arcss (4 to <10.1 ha) (4 pts) 10 arcss (4 to <10.1 ha) (4 pts) 10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pts) 11 to <10 arcss (4 to <10.1 ha) (4 pt	2 2	Metric 1. Wetland Area (size).	w-aeh-20200107-10a	ab	
### 20 pts. ### 2	max 6 pts subtotal	>50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) x 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)			
WIDE. Buffers average Som (164ft) or more around wetland perimeter (7)	8 10	Metric 2. Upland buffers and surr	ounding land use.		
Metric 3. Hydrology. 3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) Percipitation (1) Seasonal/Intermittent surface water (3) Seasonal/Intermittent surface water	max 14 pts. subtotal	WIDE. Buffers average 50m (164ft) or more around w X MEDIUM. Buffers average 25m to <50m (82 to <164ft NARROW. Buffers average 10m to <25m (32ft to <82 VERY NARROW. Buffers average <10m (<32ft) around 2b. Intensity of surrounding land use. Select one of VERY LOW. 2nd growth or older forest, prairie, savan X LOW. Old field (>10 years), shrubland, young second MODERATELY HIGH. Residential, fenced pasture, pages of the same of the sa	retland perimeter (7) t) around wetland perimeter (4) eff) around wetland perimeter (1) nd wetland perimeter (0) or double check and average. enah, wildlife area, etc. (7) growth forest. (5) ark, conservation tillage, new fallow field. (3)		
Subtotal 3a. Sources of Water. Score all that apply. High pH groundwater (3)	11 0 21 0	TO VARIA SERVICES AND	mining, construction. (1)		
max 20 pts. 4a. Substrate disturbance. Score one or double check and average. None or none apparent (4) x Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign score. Excellent (7) Very good (6) Good (5) Moderately good (4) x Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Check all disturbances observed x Recovered (6) mowing x shrub/sapling removal	max 30 pts. subtotal	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) < 0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Sci None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	100 year floodplain (1) x Between stream/lake and other I Part of wetland/upland (e.g. fore: Part of riparian or upland corrido 3d. Duration inundation/satura Semi- to permanently inundated. Regularly inundated/saturated (3 Seasonally inundated (2) x Seasonally saturated in upper 30 ore one or double check and average. Check all disturbances observ x ditch tile dike weir stormwater input	human use (1) st), complex (1) or (1) ation. Score one or dbl check //saturated (4) 3) 0cm (12in) (1) //ed point source (nonstormwater) filling/grading road bed/RR track dredging	i.
Recent or no recovery (1) X Clearcutting X selective cutting dredging farming nutrient enrichment 33 subtotal this page ORAM v. 5.0 Field Form Quantitative Rating	33	4a. Substrate disturbance. Score one or double chemostrate (4) None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assistance (5) Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check at None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	and average. Check all disturbances observed mowing x sprazing x clearcutting x solective cutting x woody debris removal for the control of	shrub/sapling removal herbaceous/aquatic bed remov sedimentation dredging farming	ral

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Site: FE Lincoln Park-Riverber	nd Rater(s): Audi	ey Hanner		Date:	1/7/2020
			eld ld:		
33		w-	-aeh-20200107-10ab		
subtotal this pag	e				
0 33	Metric 5. Special Wetlands.				
max 10 pts. subtotal	Check all that apply and score as ir	ndicated.			
	Bog (10)				
	Fen (10)				
	Old growth forest (10)				
_	Mature forested wetland (5)	D 40 40 120426			
<u> </u>	Lake Erie coastal/tributary wetland-unrestricted				
	Lake Erie coastal/tributary wetland-restricted hy	drology (5)			
-	Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)				
_	Known occurrence state/federal threatened or e	ndangered species (*	10)		
	Significant migratory songbird/water fowl habitat	1000	776		
	Category 1 Wetland. See Question 5 Qualitative	Rating (-10)			
8 41	Metric 6. Plant communities,	interspersion	, microtopography.		
max 20pts. subtotal	6a. Wetland Vegetation Communitie	es. Ve	getation Community Cov	er Scale	
	Score all present using 0 to 3 scale.	0 Abs	sent or comprises <0.1ha (0.2471 a	cres) contiguous area	
	Aquatic bed	40 F 1 1 1 1 1 1 1 1 1	sent and either comprises small pa		
_	Emergent	50.00	etation and is of moderate quality,	or comprises a	
_	Shrub		nificant part but is of low quality		
<u> </u>	Forest		sent and either comprises significal		
-	Mudflats Open water		etation and is of moderate quality on t and is of high quality	r comprises a smail	
-	Other		sent and comprises significant part	or more, of wetland's 3	- K
	6b. horizontal (plan view) Interspersion.		etation and is of high quality	, 5, 11,5,5, 5, 11,5,5,5	
	Select only one.				
_	High (5)		rative Description of Vegetation		
H-	Moderately high(4)		v spp diversity and/or predominance	e of nonnative or low	
<u> </u>	Moderate (3) Moderately low (2)		urbance tolerant native species ive spp are dominant component or	the vegetation med	
-	Low (1)		ough nonnative and/or disturbance		
	None (0)	11000000	also be present, and species diver		
<u>-</u>	6c. Coverage of invasive plants. Refer	117.200	derately high, but generallyw/o pres		
	Table 1 ORAM long form for list. Add		eatened or endangered spp to		
	or deduct points for coverage	A pr	redominance of native species, with	n nonnative spp high	-33
	Extensive >75% cover (-5)	17.000	/or disturbance tolerant native spp	TI () TI	
<u> </u>	Moderate 25-75% cover (-3)		ent, and high spp diversity and ofte		
L.	Sparse 5-25% cover (-1) Nearly absent <5% cover (0)	tne	presence of rare, threatened, or en	dangered spp	
H ²	Absent (1)	Mu	dflat and Open Water Class Quali	itv	
_	6d. Microtopography.		sent <0.1ha (0.247 acres)	·y	
	Score all present using 0 to 3 scale.		v 0.1 to <1ha (0.247 to 2.47 acres)		
1	Vegetated hummucks/tussucks		derate 1 to <4ha (2.47 to 9.88 acres	s)	
	Coarse woody debris >15cm (6in)	3 High	h 4ha (9.88 acres) or more	5 	
	Standing dead >25cm (10in) dbh				
_	Amphibian breeding pools		rotopography Cover Scale		
		0 Abs	sent sent very small amounts or if more	common	
			narginal quality	COMMUNI	
			sent in moderate amounts, but not	of highest	
Category 2		10.000	lity or in small amounts of highest of	Section 1 to the section of the sect	
41 GRAND T	OTAL(max 100 pts)	3 Pre	sent in moderate or greater amoun	ts	
	8	70	of highest quality		
		and	d		

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		circle answer or insert	
		score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	11	
	Metric 4. Habitat	12	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	8	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx_to	41	Category based on score breakpoints
	determine the wetland's category based on its quantitative score	71	Category 2

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	(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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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, loca 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.

Final Category					
Choose one	Category 1	Category 2	Category 3		

Site: FE Lincoln Park-	Riverbend	Rater(s): Audrey H	anner	Date:	1/7/2020
			Field Id:	•	
2	2 Metric 1. Wetla	and Area (size).	w-aeh-20200107	7-02	
max 6 pts subtot	Select one size class >50 acres (>20.2ha) (6 25 to <50 acres (10.1 to 10 to <25 acres (4 to <' 3 to <10 acres (1.2 to <' x 0.3 to <3 acres (0.12 to 0.1 to <0.3 acres (0.04 <0.1 acres (0.04ha) (0	pts) 0 <20.2ha) (5 pts) 10.1ha) (4 pts) 4/ha) (3 pts) 1<1.2ha) (2pts) 10 <0.12ha) (1 pt)	0.31 extends outside SC	acres	
8	10 Metric 2. Uplai	nd buffers and surro	ounding land use.		
max 14 pts. subto	WIDE. Buffers average x MEDIUM. Buffers avera NARROW. Buffers aver VERY NARROW. Buffes 2b. Intensity of surrou VERY LOW. 2nd growt X LOW. Old field (>10 ye. MODERATELY HIGH.	50m (164ft) or more around we age 25m to <50m (82 to <164ft) rage 10m to <25m (32ft to <82ft ers average <10m (<32ft) around runding land use. Select one or h or older forest, prairie, savannars), shrubland, young second g	around wetland perimeter (4)) around wetland perimeter (1) d wetland perimeter (0) double check and average. ah, wildlife area, etc. (7) rrowth forest. (5) k, conservation tillage, new fallow fie		
15.0 2	5.0 Metric 3. Hydro		ining, construction. (1)		
max 30 pts. subto	3a. Sources of Water. High pH groundwater (4 Other groundwater (3) X Precipitation (1) X Seasonal/Intermittent s Perennial surface water 3c. Maximum water de >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27. X <0.4m (<15.7in) (1) 3e. Modifications to non None or none apparent Recovered (7) Recovering (3) Recent or no recovery in the surface water (3) Recent or no recovery in the surface water (3) Recent or no recovery in the surface water (4) Recovering (3)	Score all that apply. 5) urface water (3) r (lake or stream) (5) epth. Select one. 6in) (2) atural hydrologic regime. Scor. (12)	Semi- to permanently inun Regularly inundated/satura X Seasonally inundated (2) Seasonally saturated in up re one or double check and average Check all disturbances of X ditch tile dike weir stormwater input	other human use (1) g. forest), complex (1) corridor (1) saturation. Score one or dbl chec idated/saturated (4) ated (3) oper 30cm (12in) (1) ge.	
max 20 pts. subto	None or none apparent x Recovered (3) Recovering (2) Recor or no recovery 4b. Habitat developme Excellent (7) Very good (6) Good (5) Moderately good (4) x Fair (3) Poor to fair (2) Poor (1)	(1) ent. Select only one and assign Score one or double check an (9)	n score.	served x shrub/sapling removal herbaceous/aquatic bed remo x sedimentation dredging farming nutrient enrichment	oval

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Site: FE Lincoln Park-Riverbend	Rater(s): Audre	y Hanner		Date:	1/7/2020
	•		Field Id:		
34			w-aeh-20200107-02		
subtotal this page					
0 34 1	Metric 5. Special Wetlands.				
max 10 pts. subtotal (Check all that apply and score as ind	licated.			
	Bog (10)				
□F	Fen (10)				
	Old growth forest (10)				
	Mature forested wetland (5) .ake Erie coastal/tributary wetland-unrestricted hy	drology (10)			
	ake Erie coastal/tributary wetland-restricted hydro	R (2021) (20			
—	ake Plain Sand Prairies (Oak Openings) (10)				
□F	Relict Wet Praires (10)				
	Known occurrence state/federal threatened or end	10,000	es (10)		
	Significant migratory songbird/water fowl habitat or				
	Category 1 Wetland. See Question 5 Qualitative R	NATIONAL PROPERTY.	ian miawatanaawanku		
	Metric 6. Plant communities, in				
	6a. Wetland Vegetation Communities	i.	Vegetation Community Cov		
	Score all present using 0 to 3 scale. Aquatic bed	1	Absent or comprises <0.1ha (0.2471 at Present and either comprises small pa		-
—	Emergent	*	vegetation and is of moderate quality, of		
	Shrub		significant part but is of low quality		
1 F	Forest	2	Present and either comprises significant	nt part of wetland's 2	,
:	Mudflats		vegetation and is of moderate quality o	r comprises a small	
	Open water	_	part and is of high quality		-
	Other 6b. horizontal (plan view) Interspersion.	3	Present and comprises significant part, vegetation and is of high quality	or more, of wetland's 3	
	Select only one.		vegetation and is of riight quality		
	High (5)		Narrative Description of Vegetation	Quality	
	Moderately high(4)		Low spp diversity and/or predominance	e of nonnative or low	
	Moderate (3)		disturbance tolerant native species		-
	Moderately low (2) Low (1)		Native spp are dominant component of although nonnative and/or disturbance		
	None (0)		can also be present, and species diver		
	Sc. Coverage of invasive plants. Refer		moderately high, but generallyw/o pres		
Т	Table 1 ORAM long form for list. Add		threatened or endangered spp to	200	
	or deduct points for coverage		A predominance of native species, with		
	Extensive >75% cover (-5)		and/or disturbance tolerant native spp	16 1 NOTE 15 N	
—	Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		absent, and high spp diversity and ofte the presence of rare, threatened, or en		
	Nearly absent <5% cover (0)		are precented of fairs, arreatened, or on	dangorod opp	- 2
	Absent (1)		Mudflat and Open Water Class Quali	ty	
	6d. Microtopography.	_	Absent <0.1ha (0.247 acres)		
	Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)		
	/egetated hummucks/tussucks Coarse woody debris >15cm (6in)	3	Moderate 1 to <4ha (2.47 to 9.88 acres High 4ha (9.88 acres) or more	5)	
	Standing dead >25cm (10in) dbh	3	riigii 4ila (9.00 acres) di filore		
	Amphibian breeding pools		Microtopography Cover Scale		
_		0	Absent		
		1	Present very small amounts or if more	common	
		-	of marginal quality	of highest	
Category 2		2	Present in moderate amounts, but not quality or in small amounts of highest of	Salar Sa	
	TAL(max 100 pts)	-		94.5	
42 GRAND TO	AL(IIIAX 100 pts)	3	Present in moderate or greater amount	3	
			and of highest quality		

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		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	15	
	Metric 4. Habitat	9	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	8	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	42	Category based on score breakpoints Category 2

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	\odot	Is quantitative rating score less than the Category 2 scoring threshold (excluding 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 overcategorized 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	20	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	20	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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 N	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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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, loca 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.

Final Category					
Choose one	Category 1	Category 2	Category 3		

Wetland RLP-21ab

Site: FE Lincoln Park	Riverbend	Rater(s): Audrey F	lanner	Date:	1/7/2020
			Field Id:		
1	1 Metric 1. We	etland Area (size).	w-aeh-20200107	-03	
max 6 pts subto	>50 acres (>20.2ha 25 to <50 acres (10 10 to <25 acres (4 3 to <10 acres (1.2 0.3 to <3 acres (0.1	0.1 to <20.2ha) (5 pts) to <10.1ha) (4 pts) to <4ha) (3 pts) 12 to <1.2ha) (2pts) 0.04 to <0.12ha) (1 pt)	0.25	acres	
8	9 Metric 2. Up	land buffers and surre	ounding land use.		
max 14 pts. subt	WIDE. Buffers average with the second of the	rage 50m (164ft) or more around we average 25m to <50m (82 to <164ft) average 10m to <25m (32ft to <82ft suffers average <10m (<32ft) aroun rrounding land use. Select one or rowth or older forest, prairie, savanr 0 years), shrubland, young second GH. Residential, fenced pasture, pai	around wetland perimeter (4) t) around wetland perimeter (1) d wetland perimeter (0) f double check and average. hah, wildlife area, etc. (7) growth forest. (5) rk, conservation tillage, new fallow fie		
		strial, open pasture, row cropping, m	nining, construction. (1)		
	19.5 Metric 3. Hy	m serio Tilanes on se		92730707111 N	
max 30 pts. subt	High pH groundwal Other groundwater x Precipitation (1) Seasonal/Intermitte Perennial surface v 3c. Maximum wate >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to x <0.4m (<15.7in) (1) 3e. Modifications None or none appa x Recovered (7) Recovering (3) Recent or no recov	(3) ent surface water (3) evater (lake or stream) (5) er depth. Select one. 2.27.6in) (2) to natural hydrologic regime. Sco	Semi- to permanently inun Regularly inundated/sature x Seasonally inundated (2) x Seasonally saturated in up ore one or double check and average Check all disturbances of ditch tile dike weir stormwater input	other human use (1) g. forest), complex (1) corridor (1) saturation. Score one or dbl check idated/saturated (4) ated (3) oper 30cm (12in) (1) ge.	c.
max 20 pts. subt		urbance. Score one or double che			
	None or none appa x Recovered (3) Recovering (2) Recent or no recov 4b. Habitat develor Excellent (7) Very good (6) Good (5) Moderately good (4 x Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alterat None or none appa Recovered (6) x Recovering (3) Recent or no recov	ery (1) pment. Select only one and assign i) ion. Score one or double check are rent (9)	in score.	served x shrub/sapling removal herbaceous/aquatic bed removed sed removed sed removed sed removed sed redging farming nutrient enrichment	val
	28.5 Ital this page ORAM v. 5.0 Field	Form Quantitative Rating			

w-aeh-20200107-03.xlsm | test_Field 1/27/2020

Site: FE Lincoln Park-Riverbend	Rater(s): A	Audrey Hanner		Date:	1/7/2020
			Field Id:		
28.5			w-aeh-20200107-03		
subtotal this page					
0 28.5	Metric 5. Special Wetlands	s.			
max 10 pts. subtotal	Check all that apply and score				
max to pis. Subtotal	Bog (10)	as malcatca.			
	Fen (10)				
	Old growth forest (10)				
	Mature forested wetland (5)				
_	Lake Erie coastal/tributary wetland-unrestri				
_	Lake Erie coastal/tributary wetland-restricte Lake Plain Sand Prairies (Oak Openings) (4 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)			
_	Relict Wet Prairies (10)	(10)			
_	Known occurrence state/federal threatened	d or endangered speci	es (10)		
	Significant migratory songbird/water fowl ha	abitat or usage (10)	5) 5)		
	Category 1 Wetland. See Question 5 Quali	itative Rating (-10)			
6 34.5	Metric 6. Plant communitie	es, interspersi	on, microtopography.		
max 20pts. subtotal	6a. Wetland Vegetation Commu	ınities.	Vegetation Community Cov	er Scale	
	Score all present using 0 to 3 scale.		Absent or comprises <0.1ha (0.2471 ac		
	Aquatic bed	1	Present and either comprises small par		
1			vegetation and is of moderate quality, o	or comprises a	
0	Shrub Forest	2	significant part but is of low quality Present and either comprises significan	at part of wotland's 2	
<u> </u>	Mudflats	2	vegetation and is of moderate quality o		
	Open water	Ni	part and is of high quality	oompriood a ornair	
	Other	3	Present and comprises significant part,	or more, of wetland's 3	
5-7	6b. horizontal (plan view) Interspersion.	S	vegetation and is of high quality		
	Select only one. High (5)		Narrative Description of Vegetation (Quality	
_	Moderately high(4)		Low spp diversity and/or predominance	urus and a second	
	Moderate (3)		disturbance tolerant native species		
х	Moderately low (2)		Native spp are dominant component of		
_	Low (1)		although nonnative and/or disturbance		
	None (0)		can also be present, and species diver-		
	6c. Coverage of invasive plants. Refer Table 1 ORAM long form for list. Add		moderately high, but generallyw/o pres- threatened or endangered spp to	ence of rare	
	or deduct points for coverage		A predominance of native species, with	nonnative spp high	- 3
	Extensive >75% cover (-5)		and/or disturbance tolerant native spp a		
	Moderate 25-75% cover (-3)		absent, and high spp diversity and ofter		
×	Sparse 5-25% cover (-1)		the presence of rare, threatened, or en	dangered spp	
	Nearly absent <5% cover (0)		Mudflet and Open Water Class Quali	ho.	
-	Absent (1) 6d. Microtopography.	0.1	Mudflat and Open Water Class Quali Absent <0.1ha (0.247 acres)	ıy	
	Score all present using 0 to 3 scale.		Low 0.1 to <1ha (0.247 to 2.47 acres)		
	Vegetated hummucks/tussucks		Moderate 1 to <4ha (2.47 to 9.88 acres)	
1		3	High 4ha (9.88 acres) or more		
1	Standing dead >25cm (10in) dbh				
1	Amphibian breeding pools	0.1	Microtopography Cover Scale		
			Absent Present very small amounts or if more	common	
			of marginal quality	W	
		2	Present in moderate amounts, but not	of highest	-
Category 2			quality or in small amounts of highest q	uality	
34.5 GRAND TO	OTAL(max 100 pts)	3	Present in moderate or greater amount	S	
			and of highest quality		

w-aeh-20200107-03.xlsm | test_Field 1/27/2020

		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	10.5	
	Metric 4. Habitat	9	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	6	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to	34.5	Category based on score breakpoints
c.	determine the wetland's category based on its quantitative score	navana eri 2004/400.	Category 2

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	0	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 overcategorized 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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Final Category				
Choose one	Category 1	Category 2	Category 3	

Site: IFE	Lincoln Park-Riverbend	Rater(s): Audrey H	lanner	Date:	1/7/2020
		, ,	Field Id:	•	
	1 1 Metric	1. Wetland Area (size).	w-aeh-20200107	-04	
max 6 pts	>50 acres (: 25 to <50 ac 10 to <25 ac 3 to <10 ac 0.3 to <3 ac x 0.1 to <0.3 ac	size class and assign score. >20.2ha) (6 pts) cres (10.1 to <20.2ha) (5 pts) cres (4 to <10.1ha) (4 pts) cres (1.2 to <4ha) (3 pts) cres (0.12 to <1.2ha) (2pts) acres (0.04 to <0.12ha) (1 pt) 0.04ha) (0 pts)	0.13	acres	
	8 9 Metric	2. Upland buffers and surro	ounding land use.		
max 14 pts.	WIDE. Buffe x MEDIUM. B NARROW. VERY NAR 2b. Intensit VERY LOW x LOW. Old fi x MODERATI	te average buffer width. Select only one a ers average 50m (164ft) or more around we uffers average 25m to <50m (82 to <164ft) Buffers average 10m to <25m (32ft to <82ft ROW. Buffers average <10m (<32ft) around y of surrounding land use. Select one or . 2nd growth or older forest, prairie, savann eld (>10 years), shrubland, young second g ELY HIGH. Residential, fenced pasture, par n, industrial, open pasture, row cropping, m	tland perimeter (7) around wetland perimeter (4)) around wetland perimeter (1) d wetland perimeter (0) double check and average. ah, wildlife area, etc. (7) rowth forest. (5) k, conservation tillage, new fallow fiel		
	13.0 22.0 Metric	3. Hydrology.			
max 30 pts.	High pH gro Other groun X Precipitation X Seasonal/In Perennial si 3c. Maximu >0.7 (27.6in 0.4 to 0.7m X <0.4m (<15 3e. Modific None or nor X Recovered Recovering Recent or n	n (1) termittent surface water (3) urface water (lake or stream) (5) urface water (lake or stream) (5) urface water depth. Select one.) (3) (15.7 to 27.6in) (2) .7in) (1) ations to natural hydrologic regime. Score apparent (12) (7) (3) or recovery (1)	Semi- to permanently inun Regularly inundated/satura Seasonally inundated (2) X Seasonally saturated in up re one or double check and averag Check all disturbances of X ditch tile dike weir stormwater input	other human use (1) g. forest), complex (1) corridor (1) saturation. Score one or dbl chec dated/saturated (4) ated (3) oper 30cm (12in) (1) e.	
max 20 pts.		 Habitat Alteration and Detection and Detectio			
	None or nor Recovered X Recovering Recent or n 4b. Habitat Excellent (7 Very good (6 Good (5) Moderately Fair (3) Poor to fair X Poor (1) 4c. Habitat None or nor Recovered X Recovering	ne apparent (4) (3) (2) (2) o recovery (1) development. Select only one and assign (6) (2) good (4) (2) alteration. Score one or double check an ne apparent (9) (6)	n score.	served x shrub/sapling removal herbaceous/aquatic bed removed sedimentation dredging farming nutrient enrichment	oval
		0 Field Form Quantitative Rating			

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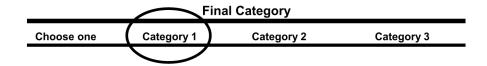
Site: IFE L	incoln Park-Rive	rbend Rater(s): Audrey H	anner		Date:	1/7/2020
	1810	•		Field Id:		
	28			w-aeh-20200107-04		
	subtotal this	page				
	0 28	Metric 5. Special Wetlands.				
max 10 pts.	subtotal	Check all that apply and score as indicate	ed.			
		Bog (10)				
		Fen (10)				
		Old growth forest (10)				
		Mature forested wetland (5)				
		Lake Erie coastal/tributary wetland-unrestricted hydrolog				
		Lake Erie coastal/tributary wetland-restricted hydrology	(5)			
		Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Praires (10)				
		Known occurrence state/federal threatened or endanger	rad enaci	es (10)		
		Significant migratory songbird/water fowl habitat or usag		63 (10)		
		Category 1 Wetland. See Question 5 Qualitative Rating	The state of the s			
7	-2 26			on microtonography		
			spers		• 1	
max 20pts.	subtotal	6a. Wetland Vegetation Communities.		Vegetation Community Cove		
		Score all present using 0 to 3 scale.	-	Absent or comprises <0.1ha (0.2471 ac		
		Aquatic bed	1	Present and either comprises small par		
		1 Emergent Shrub		vegetation and is of moderate quality, or significant part but is of low quality	or comprises a	
		Forest	2	Present and either comprises significan	nt nart of wetland's 2	
		Mudflats	5	vegetation and is of moderate quality or		
		Open water		part and is of high quality		
		Other	3	Present and comprises significant part,	or more, of wetland's 3	
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality		
		Select only one.				
		High (5)		Narrative Description of Vegetation C		
		Moderately high(4)		Low spp diversity and/or predominance	of nonnative or low	
		Moderately law (2)		disturbance tolerant native species	the vegetation mad	
		Moderately low (2) Low (1)		Native spp are dominant component of although nonnative and/or disturbance		
		x None (0)		can also be present, and species divers	F1 (7) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	
		6c. Coverage of invasive plants. Refer		moderately high, but generallyw/o prese	-	
		Table 1 ORAM long form for list. Add		threatened or endangered spp to		
		or deduct points for coverage		A predominance of native species, with	nonnative spp high	
		Extensive >75% cover (-5)		and/or disturbance tolerant native spp a	absent or virtually	
		x Moderate 25-75% cover (-3)		absent, and high spp diversity and ofter	200	
		Sparse 5-25% cover (-1)		the presence of rare, threatened, or end	dangered spp	
		Nearly absent <5% cover (0)		M 45-4		
		Absent (1)	0	Mudflat and Open Water Class Quality Absent <0.1ha (0.247 acres)	ty	
		6d. Microtopography. Score all present using 0 to 3 scale.	1			
		Vegetated hummucks/tussucks	_	Moderate 1 to <4ha (2.47 to 9.88 acres)	
		Coarse woody debris >15cm (6in)		High 4ha (9.88 acres) or more		
		Standing dead >25cm (10in) dbh				
		Amphibian breeding pools		Microtopography Cover Scale		
		. 	_0	Absent		
			1	Present very small amounts or if more	common	
				of marginal quality		
0-1			2	Present in moderate amounts, but not o	1777	
Category 1	need the same of the		-	quality or in small amounts of highest q		
	26 GRANI	D TOTAL(max 100 pts)	3	Present in moderate or greater amount	S	
				and of highest quality		

w-aeh-20200107-04.xlsm | test_Field 1/22/2020

		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	8	
	Metric 3. Hydrology	13	
	Metric 4. Habitat	6	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-2	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	26	Category based on score breakpoints Category 1

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	\bigcirc	Is quantitative rating score less than the Category 2 scoring threshold (excluding 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 overcategorized 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 (including 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 N	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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.



Wetland RLP-23

Site: IFE	Lincoln F	Park-Rive	erben	d	Rater(s): Audrey	Hanner			Date:	1/7/2020
							Field Id:			
	1	1	1	Metric 1. Wetlan	nd Area (size).		w-aeh-2020010	7-05		
max 6 pts		subtotal	x	Select one size class ar >50 acres (>20.2ha) (6 pl 25 to <50 acres (10.1 to 10 to <25 acres (4 to <10 3 to <10 acres (1.2 to <4 0.3 to <3 acres (0.12 to < 0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 pb	ts) <20.2ha) (5 pts) .1ha) (4 pts) ha) (3 pts) 1.2ha) (2pts) <0.12ha) (1 pt)		0.13	acres		
	5	6		Metric 2. Uplane	d buffers and sur	roundin	g land use.			
max 14 pts.		subtotal	x	WIDE. Buffers average 5 MEDIUM. Buffers averag NARROW. Buffers avera VERY NARROW. Buffers	uffer width. Select only or 0m (164ft) or more around to e 25m to <50m (82 to <164 ge 10m to <25m (32ft to <8 s average <10m (<32ft) around	wetland pering ft) around wo (2ft) around wo (und wetland	meter (7) etland perimeter (4) vetland perimeter (1) perimeter (0)	check.		
			×	VERY LOW. 2nd growth LOW. Old field (>10 year MODERATELY HIGH. R. HIGH. Urban, industrial, (ding land use. Select one or older forest, prairie, savan s), shrubland, young secon esidential, fenced pasture, popen pasture, row cropping,	nnah, wildlife d growth fore park, conserv	e area, etc. (7) est. (5) vation tillage, new fallow f	field. (3)		
	14.5	20.5		Metric 3. Hydro	logy.					
max 30 pts.	40	subtotal	x	None or none apparent (* Recovered (7) Recovering (3) Recent or no recovery (1	face water (3) lake or stream) (5) th. Select one. n) (2) ural hydrologic regime. So 12)	x x x	Semi- to permanently in Regularly inundated/satt Seasonally inundated (2 Seasonally saturated in double check and avera Check all disturbances ditch tile dike weir stormwater input	d other human e.g. forest), co d corridor (1) n/saturation. undated/satura urated (3)) upper 30cm (1 age. point s x filling/g	n use (1) mplex (1) Score one or dbl check. ated (4) 12in) (1) source (nonstormwater) grading ted/RR track ing	
	12	32.5			t Alteration and I					
max 20 pts.		32.5	x	None or none apparent (4) Recovering (2) Recovering (2) Recent or no recovery (1) 4b. Habitat developmen Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)	t. Select only one and ass	and averag		x shrub/ herbac x sedim dredgi farmin		
	10	subtotal this	page	ORAM v. 5.0 Field Form	Quantitative Rating					

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Site: IFE Lincoln P	ark-River	bend	Rater(s):	Audrey Hanne	er		Date:	1/7/2020
				-	2	Field Id:		
[32.5				1	w-aeh-20200107-05		
	subtotal this p	age						
0	32.5	Metric 5. Spe	cial Wetlan	ds.				
max 10 pts.	subtotal	Check all that a	pply and scor	e as indicated.				
		Bog (10)						
		Fen (10)						
		Old growth forest (10						
	1	Mature forested wetla	2000	stricted hydrology (10)	į.			
		Lake Erie coastal/trib		나는 이 이번 경기를 내려가 되었다. 그리고 있는데 없는데 다른데 다른데 없는데 없는데 없는데 없는데 없는데 없는데 없다면	8			
		Lake Plain Sand Prai	ries (Oak Opening	s) (10)				
		Relict Wet Praires (1	0)					
				ned or endangered spe		s (10)		
				/I habitat or usage (10) ualitative Rating (-10)	į.			
31	35.5				o i	an microtonography		
		March 12 of Salvino 12 of Calculation (12 of Calculation)				on, microtopography.	C1-	
max 20pts.	subtotal	6a. Wetland Veg	5	nunities.	100	Vegetation Community Cov		
	1	Score all present using Aquatic bed	ig 0 to 3 scale.	-	$\overline{}$	Absent or comprises <0.1ha (0.2471 ac Present and either comprises small par		
		1 Emergent				vegetation and is of moderate quality, of		
		Shrub			- 1	significant part but is of low quality		
	l	0 Forest		_	2	Present and either comprises significar	nt part of wetland's 2	
		Mudflats				vegetation and is of moderate quality of	r comprises a small	
		Open water			$\overline{}$	part and is of high quality		
	Į.	Other 6b. horizontal (plan	viow) Interenersia			Present and comprises significant part, vegetation and is of high quality	or more, of wetland's 3	
		Select only one.	view) interspersit	JII.		vegetation and is of high quality		
	1	High (5)			1	Narrative Description of Vegetation 6	Quality	
		Moderately high(4)			- 1	Low spp diversity and/or predominance	of nonnative or low	
		Moderate (3)			-	disturbance tolerant native species		
	-	Moderately low (2) Low (1)			- 1	Native spp are dominant component of although nonnative and/or disturbance		
		x None (0)			- 1	can also be present, and species diver-	F1 10 70 70 70 70 70 70 70 70 70 70 70 70 70	
	,	6c. Coverage of inva	sive plants. Refe	r	- 1	moderately high, but generallyw/o pres	-	
		Table 1 ORAM long f	orm for list. Add			threatened or endangered spp to		
		or deduct points for c			- 1	A predominance of native species, with	5000 K 700 K 500 K 500 K 600 K 600 K 600 K	
		Extensive >75% cove			- 1	and/or disturbance tolerant native spp	[III]	
		x Sparse 5-25% cover			- 1	absent, and high spp diversity and often the presence of rare, threatened, or en-	23. 55. 55.	
	1	Nearly absent <5% o			L		aungored opp	
		Absent (1)			1	Mudflat and Open Water Class Quali	ty	
	5	6d. Microtopograph		_	\rightarrow	Absent <0.1ha (0.247 acres)		
	ĭ	Score all present using	1754	_	\rightarrow	Low 0.1 to <1ha (0.247 to 2.47 acres)		
		1 Coarse woody debris		_	$\overline{}$	Moderate 1 to <4ha (2.47 to 9.88 acres High 4ha (9.88 acres) or more)	
	1	1 Standing dead >25cn			٥ ١	riigii 4ila (5.00 acres) oi more		
		1 Amphibian breeding				Microtopography Cover Scale		
				<u>,2</u>		Absent		
						Present very small amounts or if more	common	
				_	_	of marginal quality Present in moderate amounts, but not o	of highest	
Category 2						Present in moderate amounts, but not of quality or in small amounts of highest q		
	GRAND	TOTAL(max 100 pt	s)	-	_	Present in moderate or greater amount		
33.3	CIVAIID	TOTAL (max 100 pt	-,					
						and of highest quality		

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		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	5	
	Metric 3. Hydrology	14.5	
	Metric 4. Habitat	12	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	35.5	Category based on score breakpoints Category 2

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	0	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 overcategorized 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Final Category				
Choose one	Category 1	Category 2	Category 3	

Wetland RLP-24

Site: FE Lincoln Park-	Riverbend	Rater(s): Audrey H	anner	Date:	1/7/2020
		•	Field Id:	•	
0	0 Metric 1. Wetla	and Area (size).	w-aeh-2020010	7-06	
max 6 pts subto	Select one size class >50 acres (>20.2ha) (6 25 to <50 acres (10.1 t 10 to <25 acres (4 to < 3 to <10 acres (1.2 to < 0.3 to <3 acres (0.12 t 0.1 to <0.3 acres (0.04 x <0.1 acres (0.04ha) (0	pts) p <20.2ha) (5 pts) 10.1ha) (4 pts) 44ha) (3 pts) <1.2ha) (2pts) to <0.12ha) (1 pt)	0.08	acres	
5	5 Metric 2. Upla	nd buffers and surro	ounding land use.		
max 14 pts. subt	WIDE. Buffers average MEDIUM. Buffers aver X NARROW. Buffers ave VERY NARROW. Buffer 2b. Intensity of surrou VERY LOW. 2nd grow X LOW. Old field (>10 ye	e 50m (164ft) or more around wet age 25m to <50m (82 to <164ft) a trage 10m to <25m (32ft to <82ft) ers average <10m (<32ft) around unding land use. Select one or other or older forest, prairie, savannars), shrubland, young second gi	around wetland perimeter (4) a around wetland perimeter (1) wetland perimeter (0) double check and average. ah, wildlife area, etc. (7)		
		I, open pasture, row cropping, mi	경기 : (2015년 1일 : 1915년 - 1916년 - 1916년 - 1916년 - 1916년		
14.5	9.5 Metric 3. Hydr	ology.			
max 30 pts. subt	High pH groundwater (Other groundwater (3) X Precipitation (1) X Seasonal/Intermittent s Perennial surface wate 3c. Maximum water d >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27 X <0.4m (<15.7in) (1) 3e. Modifications to m None or none apparent X Recovered (7) Recovering (3) Recent or no recovery	urface water (3) r (lake or stream) (5) epth. Select one. 6in) (2) atural hydrologic regime. Score	Semi- to permanently inu. Regularly inundated/satu X Seasonally inundated (2) X Seasonally saturated in use one or double check and avera Check all disturbances X ditch title dike weir stormwater input	d other human use (1) e.g. forest), complex (1) i corridor (1) n/saturation. Score one or dbl checlundated/saturated (4) prated (3) pupper 30cm (12in) (1) age.	k.
max 20 pts. subtr		ance. Score one or double chec			
	None or none apparent x Recovered (3) Recovering (2) Recent or no recovery 4b. Habitat developm Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) x Poor to fair (2) Poor (1) 4c. Habitat alteration. None or none apparent x Recovered (6) Recovering (3) Recent or no recovery	(1) ent. Select only one and assign Score one or double check and	n score.	observed x shrub/sapling removal herbaceous/aquatic bed remo x sedimentation dredging farming nutrient enrichment	val
	60.5 tal this page ORAM v. 5.0 Field For	m Quantitative Rating			

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Site: FE Lin	coln Park-Riverbe	Rater(s): Audrey Ha	nner		Date:	1/7/2020
		<u> </u>		Field Id:		<u>"</u>
	30.5			w-aeh-20200107-06		
	subtotal this pag	ne e				
	0 30.5	Metric 5. Special Wetlands.				
max 10 pts.	subtotal	Check all that apply and score as indicate	d.			
		Bog (10)				
	_	Fen (10)				
	_	Old growth forest (10)				
	-	Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology	(10)			
	-	Lake Erie coastal/tributary wetland-restricted hydrology (5				
		Lake Plain Sand Prairies (Oak Openings) (10)	180			
		Relict Wet Praires (10)				
		Known occurrence state/federal threatened or endangere		es (10)		
	-	Significant migratory songbird/water fowl habitat or usage				
	0 20 5	Category 1 Wetland. See Question 5 Qualitative Rating (-	CONTRACTOR OF			
	0 30.5	Metric 6. Plant communities, inters	pers	ion, microtopograpny.		
max 20pts.	subtotal	6a. Wetland Vegetation Communities.		Vegetation Community Cove	er Scale	
	_	Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 ac		
		Aquatic bed	1	Present and either comprises small par		
		1 Emergent Shrub		vegetation and is of moderate quality, or significant part but is of low quality	r comprises a	
	-	Forest	2	Present and either comprises significan	t part of wetland's 2	
		Mudflats	_	vegetation and is of moderate quality or		
		Open water	10	part and is of high quality		10
		Other	3	Present and comprises significant part,	or more, of wetland's 3	
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality		
		Select only one. High (5)		Narrative Description of Vegetation 0	Quality	
		Moderately high(4)		Low spp diversity and/or predominance		
		Moderate (3)		disturbance tolerant native species		
	_	Moderately low (2)		Native spp are dominant component of	(T) (1)	
	F	x Low (1)		although nonnative and/or disturbance	33333300 D (37735) D (7755)	
	_	None (0) 6c. Coverage of invasive plants. Refer		can also be present, and species diver- moderately high, but generallyw/o prese		
		Table 1 ORAM long form for list. Add		threatened or endangered spp to	slice of fale	
		or deduct points for coverage		A predominance of native species, with	nonnative spp high	33
		Extensive >75% cover (-5)		and/or disturbance tolerant native spp a	absent or virtually	
		x Moderate 25-75% cover (-3)		absent, and high spp diversity and ofter		
	_	Sparse 5-25% cover (-1) Nearly absent <5% cover (0)		the presence of rare, threatened, or end	langered spp	
	-	Absent (1)		Mudflat and Open Water Class Quali	hv	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	•	
	_	Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)		
		Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)	
	E	1 Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more		
	-	Standing dead >25cm (10in) dbh Amphibian breeding pools		Microtopography Cover Scale		
	_	Amphibian breeding pools	0	Microtopography Cover Scale Absent		
			1	Present very small amounts or if more	common	-
				of marginal quality	21. 10	
			2	Present in moderate amounts, but not o	Control of the Contro	
Category 2			_	quality or in small amounts of highest q		-
	30.5 GRAND 1	ΓΟΤΑL(max 100 pts)	3	Present in moderate or greater amount	S	
				and of highest quality		

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Question 1 Critical Habitat Question 2. Threatened or Endangered	YES NO	Result
Ougstion 2 Threatened or Endangered	ILO (NO)	If yes, Category 3.
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	YES NO	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.	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.
Metric 1. Size	0	
Metric 2. Buffers and surrounding land use	5	
Metric 3. Hydrology	14.5	
Metric 4. Habitat	11	
Metric 5. Special Wetland Communities	0	
Metric 6. Plant communities, interspersion, microtopography	0	
TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its	30.5	Category based on score breakpoints Category 2
	Question 3. High Quality Natural Wetland Question 4. Significant bird habitat Question 5. Category 1 Wetlands Question 6. Bogs Question 7. Fens Question 8a. Old Growth Forest Question 8b. Mature Forested Wetland Question 9b. Lake Erie Wetlands - Restricted Question 9d. Lake Erie Wetlands - Unrestricted Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants Question 10. Oak Openings Question 11. Relict Wet Prairies Metric 1. Size Metric 2. Buffers and surrounding land use Metric 3. Hydrology Metric 4. Habitat Metric 5. Special Wetland Communities Metric 6. Plant communities, interspersion, microtopography TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to	Question 3. High Quality Natural Wetland Question 4. Significant bird habitat Question 5. Category 1 Wetlands Question 6. Bogs Question 7. Fens Question 8a. Old Growth Forest Question 8b. Mature Forested Wetland Question 9b. Lake Erie Wetlands - Restricted Question 9b. Lake Erie Wetlands - WES Question 9c. Lake Erie Wetlands - WES Question 9c. Lake Erie Wetlands - Unrestricted Question 9c. Lake Erie Wetlands - Unrestricted With invasive plants Question 10. Oak Openings Question 11. Relict Wet Prairies Metric 1. Size Question 12. Buffers and surrounding land use Metric 3. Hydrology Metric 4. Habitat Metric 5. Special Wetland Communities Metric 6. Plant communities, interspersion, microtopography TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx. to determine the wetland's category based on its

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	\bigcirc	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 overcategorized 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 (including 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 an quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.

Final Category				
Choose one	Category 1	Category 2	Category 3	

Wetland RLP-25

Site: FE Lincoln Park-Rive	erbend Rater(s): Audrey I	Hanner	Date:	1/7/2020
	• ` ` , _ •	Field Id:	•	
0 (Metric 1. Wetland Area (size).	w-aeh-20200107-07	7	
max 6 pts subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) x <0.1 acres (0.04ha) (0 pts)	0.03 acre	es	
3 3	Metric 2. Upland buffers and surr	rounding land use.		
max 14 pts. subtotal	2a. Calculate average buffer width. Select only one WIDE. Buffers average 50m (164ft) or more around w MEDIUM. Buffers average 25m to <50m (82 to <164ft NARROW. Buffers average 10m to <25m (32ft to <82 x VERY NARROW. Buffers average <10m (<32ft) aroun 2b. Intensity of surrounding land use. Select one o VERY LOW. 2nd growth or older forest, prairie, savan x LOW. Old field (>10 years), shrubland, young second MODERATELY HIGH. Residential, fenced pasture, ps x HIGH. Urban, industrial, open pasture, row cropping, r	retland perimeter (7) t) around wetland perimeter (4) th) around wetland perimeter (1) nd wetland perimeter (0) or double check and average. Inah, wildlife area, etc. (7) growth forest. (5) ark, conservation tillage, new fallow field. (3)		
10.5 13.5	Metric 3. Hydrology.			
max 30 pts. subtotal	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) x <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Sco. None or none apparent (12) Recovered (7) x Recovering (3) Recent or no recovery (1)	Semi- to permanently inundate Regularly inundated/saturated X Seasonally inundated (2) X Seasonally saturated in upper one one or double check and average. Check all disturbances observed title X ditch Utile X weir Stormwater input	r human use (1) rest), complex (1) dor (1) ration. Score one or dbl check. d/saturated (4) (3) 30cm (12in) (1) rved point source (nonstormwater)	
max 20 pts. subtotal	4a. Substrate disturbance. Score one or double che None or none apparent (4) Recovered (3) x Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assigned the select only one of (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check at None or none apparent (9) Recovered (6) x Recovering (3) Recent or no recovery (1)	gn score.	ed shrub/sapling removal herbaceous/aquatic bed remova sedimentation dredging farming nutrient enrichment	al
20.5 subtotal thi	5 s page ORAM v. 5.0 Field Form Quantitative Rating			

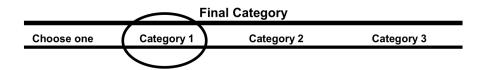
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Site: FE Lir	ncoln Park-Riverbe	Rater(s): Audrey Ha	nner		Date:	1/7/2020
		•		Field Id:		
	20.5			w-aeh-20200107-07		
	subtotal this page	na e				
	0 20.5	Metric 5. Special Wetlands.				
max 10 pts.	subtotal	Check all that apply and score as indicate	d.			
		Bog (10)				
		Fen (10)				
		Old growth forest (10)				
	-	Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology	. (40)			
	-	Lake Erie coastal/tributary wetland-restricted hydrology (5				
		Lake Plain Sand Prairies (Oak Openings) (10)	- /			
		Relict Wet Praires (10)				
		Known occurrence state/federal threatened or endangere	ed speci	ies (10)		
		Significant migratory songbird/water fowl habitat or usage				
	11 10 5	Category 1 Wetland. See Question 5 Qualitative Rating (100000000000000000000000000000000000000			
	-1 19.5	Metric 6. Plant communities, inters	pers	ion, microtopography.		
max 20pts.	subtotal	6a. Wetland Vegetation Communities.		Vegetation Community Cove	er Scale	
	_	Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 ac		- 70
	_	Aquatic bed	1	Present and either comprises small par		
		1 Emergent		vegetation and is of moderate quality, of	r comprises a	
	-	Shrub	2	significant part but is of low quality Present and either comprises significan	t part of wetland's 2	
		Mudflats		vegetation and is of moderate quality or		
	-	Open water		part and is of high quality	dompriodo a dinam	
		Other	3	Present and comprises significant part,	or more, of wetland's 3	25
	4.7	6b. horizontal (plan view) Interspersion.		vegetation and is of high quality		
	-	Select only one.			Later motive	
	-	High (5) Moderately high(4)		Narrative Description of Vegetation C Low spp diversity and/or predominance		
		Moderate (3)		disturbance tolerant native species	Of Hormative of low	
	-	Moderately low (2)		Native spp are dominant component of	the vegetation, mod	
	1	x Low (1)		although nonnative and/or disturbance	tolerant native spp	
		None (0)		can also be present, and species diver-		
		6c. Coverage of invasive plants. Refer		moderately high, but generallyw/o prese	ence of rare	
		Table 1 ORAM long form for list. Add		threatened or endangered spp to	nametica and bish	33
	Г	or deduct points for coverage Extensive >75% cover (-5)		A predominance of native species, with and/or disturbance tolerant native spp a		
	T-	x Moderate 25-75% cover (-3)		absent, and high spp diversity and ofter	47 NOTES AND STATE OF	
		Sparse 5-25% cover (-1)		the presence of rare, threatened, or end		-
		Nearly absent <5% cover (0)				
	_	Absent (1)		Mudflat and Open Water Class Quali	ty	
		6d. Microtopography. Score all present using 0 to 3 scale.	_	Absent <0.1ha (0.247 acres) Low 0.1 to <1ha (0.247 to 2.47 acres)		
		Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)	
	-	Coarse woody debris >15cm (6in)		High 4ha (9.88 acres) or more		
		Standing dead >25cm (10in) dbh				
		Amphibian breeding pools		Microtopography Cover Scale		
			0	Absent		
			1	Present very small amounts or if more of marginal quality	common	
			2	Present in moderate amounts, but not o	of highest	
Category 1				quality or in small amounts of highest q	Control of the Contro	
	19.5 GRAND	FOTAL(max 100 pts)	3	Present in moderate or greater amount	s	10
		,	-	N 200000 W		
				and of highest quality		

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		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	3	
	Metric 3. Hydrology	10.5	
	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to	19.5	Category based on score breakpoints
	determine the wetland's category based on its quantitative score	10.0	Category 1

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	\bigcirc	Is quantitative rating score less than the Category 2 scoring threshold (excluding 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 overcategorized 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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	20	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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.



Site: FE	incoln Park-Rivert	pend Rater(s): Audrey F	Hanner	Date:	1/7/2020
		• , ,	Field Id:	•	
	0 0	Metric 1. Wetland Area (size).	w-aeh-20200107-08		
max 6 pts	subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) x <0.1 acres (0.04ha) (0 pts)	0.04 acres extends outside SC		
	2 2	Metric 2. Upland buffers and surr	ounding land use.		
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one WIDE. Buffers average 50m (164ft) or more around w MEDIUM. Buffers average 25m to <50m (82 to <164ft NARROW. Buffers average 10m to <25m (32ft to <82' x VERY NARROW. Buffers average <10m (<32ft) arour	etland perimeter (7)) around wetland perimeter (4) ft) around wetland perimeter (1)		
		2b. Intensity of surrounding land use. Select one of VERY LOW. 2nd growth or older forest, prairie, savan LOW. Old field (>10 years), shrubland, young second MODERATELY HIGH. Residential, fenced pasture, pax HIGH. Urban, industrial, open pasture, row cropping, r	nah, wildlife area, etc. (7) growth forest. (5) rk, conservation tillage, new fallow field. (3)		
	6.0 8.0	Metric 3. Hydrology.			
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Sco. None or none apparent (12) Recovered (7) X Recovering (3) Recent or no recovery (1) Metric 4. Habitat Alteration and D	Check all disturbances observ x ditch tile x f dike x r weir community stormwater input	numan use (1) st), complex (1) r (1) tion. Score one or dbl check. (saturated (4)) com (12in) (1)	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double che None or none apparent (4) Recovered (3) X Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assignment (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or double check and None or none apparent (9) Recovered (6) Recovering (3) X Recent or no recovery (1)	nd average. Check all disturbances observed x mowing yrazing x clearcutting x selective cutting x woody debris removal	I shrub/sapling removal nerbaceous/aquatic bed removal sedimentation dredging arming uutrient enrichment	

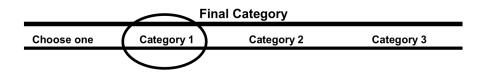
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Site: FE Lincoln Park-Riverben	d Rater(s): A	Audrey Hanner		Date:	1/7/2020
	• · · · · · · · · · · · · · · · · · · ·		Field Id:	-	
12			w-aeh-20200107-08		
subtotal this page					
0 12	Metric 5. Special Wetlands				
100 Maria 1	Check all that apply and score				
max 10 pts. subtotal	Bog (10)	as muicateu.			
_	Fen (10)				
<u> </u>	Old growth forest (10)				
	Mature forested wetland (5)				
	Lake Erie coastal/tributary wetland-unrestri	500 ESSENCE 100			
_	Lake Erie coastal/tributary wetland-restricte	4 (19) (19) (19) (19) (19) (19) (19) (19)			
<u> </u>	Lake Plain Sand Prairies (Oak Openings) (Relict Wet Praires (10)	(10)			
_	Known occurrence state/federal threatened	d or endangered speci	es (10)		
_	Significant migratory songbird/water fowl h	0.00	55 (15)		
	Category 1 Wetland. See Question 5 Quali				
-4 8	Metric 6. Plant communitie	es, interspers	ion, microtopography.		
max 20pts. subtotal	6a. Wetland Vegetation Commu	ınities.	Vegetation Community Cov	er Scale	
	Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 a	cres) contiguous area	- 12
	Aquatic bed	1	Present and either comprises small pa		
1	4		vegetation and is of moderate quality,	or comprises a	
<u> </u>	Shrub	-	significant part but is of low quality		
<u> </u>	Forest Mudflats	2	Present and either comprises significate vegetation and is of moderate quality of present and its of moderate quality of present and either comprises significant vegetation and its of moderate quality of present and either comprises significant vegetation and its of moderate quality of present and either comprises significant vegetation and its of moderate quality of present and either comprises significant vegetation and its of moderate quality of present vegetation and its of moderate vegetation and its of moderate vegetation and its of moderate vegetation and its of moderate vegetation and its of moderate vegetation vegetatio		
 	Open water		part and is of high quality	i comprises a smail	
_	Other	3	Present and comprises significant part	, or more, of wetland's 3	
	6b. horizontal (plan view) Interspersion.		vegetation and is of high quality		
_	Select only one.		64 645 BI 957		
<u> </u>	High (5)		Narrative Description of Vegetation		
_	Moderately high(4) Moderate (3)		Low spp diversity and/or predominand disturbance tolerant native species	e or nonnative or low	
	Moderately low (2)		Native spp are dominant component o	f the vegetation, mod	
	Low (1)		although nonnative and/or disturbance		
x	None (0)		can also be present, and species diver	sity moderate to	
	6c. Coverage of invasive plants. Refer		moderately high, but generallyw/o pres	ence of rare	
	Table 1 ORAM long form for list. Add		threatened or endangered spp to		
X	or deduct points for coverage Extensive >75% cover (-5)		A predominance of native species, wit and/or disturbance tolerant native spp		
<u> </u>	Moderate 25-75% cover (-3)		absent, and high spp diversity and often		
	Sparse 5-25% cover (-1)		the presence of rare, threatened, or er		
	Nearly absent <5% cover (0)			S: 30%	- 22
	Absent (1)		Mudflat and Open Water Class Qual	ity	
	6d. Microtopography.		Absent <0.1ha (0.247 acres)		
_	Score all present using 0 to 3 scale. Vegetated hummucks/tussucks	2	Low 0.1 to <1ha (0.247 to 2.47 acres) Moderate 1 to <4ha (2.47 to 9.88 acres	=1	
	Coarse woody debris >15cm (6in)		High 4ha (9.88 acres) or more	.,	
	Standing dead >25cm (10in) dbh	530			
	Amphibian breeding pools		Microtopography Cover Scale		
0	=1	0	Absent		
		1	Present very small amounts or if more	common	
		2	of marginal quality Present in moderate amounts, but not	of highest	
Category 1		-	quality or in small amounts of highest	State of the state	
	OTAL(max 100 pts)	3	Present in moderate or greater amoun	25.2	(9)
0 0.0.00		3.	M ASSEMBLE WILLIAM		
			and of highest quality		

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		circle answer or insert score	Result
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	YES NO	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.	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
2	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	
	Metric 2. Buffers and surrounding land use	2	
	Metric 3. Hydrology	6	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-4	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	8	Category based on score breakpoints Category 1

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	\bigcirc	Is quantitative rating score less than the Category 2 scoring threshold (excluding 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 overcategorized 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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	20	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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.



Site: FE L	incoln Park-River	bend Rater(s): Audrey H	lanner	Date:	1/7/2020
		, , ,	Field Id:	•	
	0 0	Metric 1. Wetland Area (size).	w-aeh-20200107-01		
max 6 pts	subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) x <0.1 acres (0.04ha) (0 pts)	0.01 acres		
	3 3	Metric 2. Upland buffers and surre	ounding land use.		
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one WIDE. Buffers average 50m (164ft) or more around we MEDIUM. Buffers average 25m to <50m (82 to <164ft) X NARROW. Buffers average 10m to <25m (32ft to <82ft) VERY NARROW. Buffers average <10m (<32ft) aroun	etland perimeter (7) around wetland perimeter (4) t) around wetland perimeter (1)		
		2b. Intensity of surrounding land use. Select one or VERY LOW. 2nd growth or older forest, prairie, savanr LOW. Old field (>10 years), shrubland, young second of MODERATELY HIGH. Residential, fenced pasture, par X HIGH. Urban, industrial, open pasture, row cropping, m	nah, wildlife area, etc. (7) growth forest. (5) rk, conservation tillage, new fallow field. (3)		
	6.0 9.0	Metric 3. Hydrology.			
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) x <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Sco None or none apparent (12) Recovered (7) x Recovering (3) Recent or no recovery (1) Metric 4. Habitat Alteration and De	Check all disturbances observ x ditch tile dike weir stormwater input	human use (1) st), complex (1) r (1) tion. Score one or dbl check. /saturated (4) s)	
max 20 pts.	subtotal 16	4a. Substrate disturbance. Score one or double che None or none apparent (4) Recovered (3) X Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assig Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check at None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	nd average. Check all disturbances observed mowing x selective cutting woody debris removal	d shrub/sapling removal nerbaceous/aquatic bed removal sedimentation dredging farming nutrient enrichment	

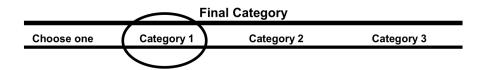
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Site: FE Lincoln Park-Riverbend	Rater(s): Aud	lrey Hanner		Date:	1/7/2020
		-	Field Id:		
16			w-aeh-20200107-01		
subtotal this page					
0 16	Metric 5. Special Wetlands.				
max 10 pts. subtotal	Check all that apply and score as i	ndicated.			
	Bog (10)				
	Fen (10)				
	Old growth forest (10)				
	Mature forested wetland (5)	I bundanda ayı (40)			
—	Lake Erie coastal/tributary wetland-unrestricted Lake Erie coastal/tributary wetland-restricted by	. TeX			
—	Lake Plain Sand Prairies (Oak Openings) (10)	ydrology (5)			
	Relict Wet Praires (10)				
	Known occurrence state/federal threatened or e	1000	es (10)		
	Significant migratory songbird/water fowl habita				
	Category 1 Wetland. See Question 5 Qualitative	A TO THE STATE OF	F		
3 19	Metric 6. Plant communities,	interspers	ion, microtopography.		
	6a. Wetland Vegetation Communiti	10.00	Vegetation Community Cov		
	Score all present using 0 to 3 scale.		Absent or comprises <0.1ha (0.2471 ac		
	Aquatic bed Emergent	1	Present and either comprises small par vegetation and is of moderate quality, or		
	Shrub		significant part but is of low quality	or comprises a	
	Forest	2	Present and either comprises significan	nt part of wetland's 2	-
	Mudflats		vegetation and is of moderate quality o		
	Open water	4 <u></u>	part and is of high quality	No. 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	
	Other	3	Present and comprises significant part	or more, of wetland's 3	
	6b. horizontal (plan view) Interspersion. Select only one.		vegetation and is of high quality		
	High (5)		Narrative Description of Vegetation	Quality	
	Moderately high(4)		Low spp diversity and/or predominance	e of nonnative or low	
	Moderate (3)		disturbance tolerant native species		
	Moderately low (2)		Native spp are dominant component of		
	Low (1) None (0)		although nonnative and/or disturbance can also be present, and species diver-		
	6c. Coverage of invasive plants. Refer		moderately high, but generallyw/o pres		
	Table 1 ORAM long form for list. Add		threatened or endangered spp to	(CO P + AGE - CO - C + C + C + C + C + C + C + C + C + C	
	or deduct points for coverage		A predominance of native species, with		
	Extensive >75% cover (-5)		and/or disturbance tolerant native spp	16 1 NOTE 15 N	
	Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		absent, and high spp diversity and ofte the presence of rare, threatened, or en		
	Nearly absent <5% cover (0)		are presented of fare, arreatened, or arr	dangered spp	- 2
	Absent (1)		Mudflat and Open Water Class Quali	ty	
	6d. Microtopography.		Absent <0.1ha (0.247 acres)		
	Score all present using 0 to 3 scale.		Low 0.1 to <1ha (0.247 to 2.47 acres)	-	
	Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres High 4ha (9.88 acres) or more	3)	
	Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh	3	riigii 4fia (9.86 acres) or more		
	Amphibian breeding pools		Microtopography Cover Scale		
		0	Absent		
		1	Present very small amounts or if more	common	
		-	of marginal quality	of biobook	
Category 1		2	Present in moderate amounts, but not quality or in small amounts of highest of	Salar Sa	
	TAL(max 100 pts)	-		94.5	-
19 GRAND TO	TAL(max 100 pts)	3	Present in moderate or greater amount	S	
			and of highest quality		

w-aeh-20200107-01.xlsm | test_Field 1/27/2020

		circle answer or insert score	Result
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	YES NO	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.	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	
	Metric 2. Buffers and surrounding land use	3	
	Metric 3. Hydrology	6	
	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE Consult most recent score calibration report at http://www.epa.ohio.gov/dsw/401/index.aspx to determine the wetland's category based on its quantitative score	19	Category based on score breakpoints Category 1

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	\bigcirc	Is quantitative rating score less than the Category 2 scoring threshold (excluding 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 overcategorized 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?	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 an quantitative score.
Does the quantitative score fall with the "gray zone" 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	20	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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.



Wetland I	D:	Wetland RLP-28					
Site: FE	E Lincoln Park	-Riverbend	Rater(s):	M.R.Kline, L.H.Ja	acks	Dat	te: 8/20/2020
1.0	1.0	Metric 1. Wetlan		dinació sacco g itario. Social	Field ID: W-200820-MRK-001 PF	FO	
2000 (N. 1400) - 14000		>50 acres (>20.2ha) (6 pt 25 to <50 acres (10.1 to < 10 to <25 acres (4 to <10.	s) 20.2ha) (5 pts		Delineated acres:	0.10	- A2
	x	3 to <10 acres (1.2 to <4h 0.3 to <3 acres (0.12 to <1 0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 pts	a) (3 pts) I.2ha) (2pts) <0.12ha) (1 pt	t)	Total acres:	0.10	
9.0 ax 14 pts. sut	10.0	WIDE. Buffers average 50 MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surround VERY LOW. 2nd growth of LOW. Old field (>10 years MODERATELY HIGH. Re	offer width. So lm (164ft) or no 25m to <50m te 10m to <25 average <10m ding land use or older forest,), shrubland, y sidential, fend	elect only one and assi nore around wetland per n (82 to <164ft) around w m (32ft to <82ft) around in (<32ft) around wetland . Select one or double prairie, savannah, wildli young second growth for ted pasture, park, conser	gn score. Do not double check. imeter (7; vetland perimeter (4 wetland perimeter (1) perimeter (0) check and average. (e area, etc. (7) est. (5) vation tillage, new fallow field. (3		
9.0 sx 30 pts. sut	19.0	Metric 3. Hydrolo 3a. Sources of Water. So High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surf Perennial surface water (la 3c. Maximum water dept 20.7 (27.6in) (3)	ocre all that a ace water (3) ake or stream h. Select one	pply.	3b. Connectivity. Score all t 100 year floodplain (1) Between stream/lake and oth Part of wetland/upland (e.g. fc x Part of riparian or upland corr 3d. Duration inundation/sat Semi- to permanently inundat Regularly inundated/saturatev	er human use (1) orest), complex (1 idor (1) uration. Score or ted/saturated (4)	
	x x	0.4 to 0.7m (15.7 to 27.6ir <0.4m (<15.7in) (1) 3e. Modifications to natu None or none apparent (1 Recovered (7) Recovering (3) Recent or no recovery (1)	ıral hydrolog	ic regime. Score one o	Seasonally inundated (2) X Seasonally saturated in upper r double check and average. Check all disturbances obs- ditch tile dike weir stormwater input	erved	
11.0 sut 20 pts. sut		Metric 4. Habitat 4a. Substrate disturband None or none apparent (4 Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor (1)	se. Score one	or double check and a			
Г	30.0	4c. Habitat alteration. Sc None or none apparent (9 Recovered (6) Recovering (3) Recent or no recovery (1))	ouble check and avera	Check all disturbances observations of the control	shrub/sapling	aquatic bed removal n

ORAM v. 5.0 Field Form Quantitative Rating

Wetla	and ID:	Wetland RLP-28					
Site:	EE Lincoln	Park-Riverbend	Deter(e)	l		Date:	8/20/2020
Site:	FE LINCOIN	raik-Niverbellu	Rater(s):	IVI.	R.Kline, L.H.Jacks	Date:	8/20/2020
					Field ID:		
	20.6	ส			W-200820-MRK-001 PFO	2	
	30.0	<u> </u>			W-200620-WIKK-001 PFO		
	subtotal this page						
E	0.01	J					
	0.0 30.0						
max 10 pts.	subtotal		and score as indicated.				
		Bog (10) Fen (10)					
		Old growth forest (10)					
		Mature forested wetland (5		401			
			wetland-unrestricted hydrology (wetland-restricted hydrology (5)	10)			
		Lake Plain Sand Prairies ([입어하는][[[의				
		Relict Wet Praires (10)		- 20	100		
			deral threatened or endangered bird/water fowl habitat or usage ((10)		
			Question 5 Qualitative Rating (-1				
	1.0 31.0	Metric 6. Plant co	ommunities, interspe	ersion	, microtopography.		
max 20pts.	subtotal	6a. Wetland Vegetat	ion Communities.		Vegetation Community	Cover Scale	
		Score all present using 0 to	o 3 scale.	_0	Absent or comprises <0.1ha (0.2		
		0 Aquatic bed		1	Present and either comprises sm	50.50 (\$\dag{\$}) (\$\da	
		0 Emergent 0 Shrub			vegetation and is of moderate quesignificant part but is of low quali		
		1 Forest		2		•	-
		0 Mudflats			vegetation and is of moderate qu	ality or comprises a small	
		0 Open water Other		3	part and is of high quality Present and comprises significan	at part or more of wetland's 3	
		6b. horizontal (plan view) Interspersion.	3	vegetation and is of high quality	it part, or more, or wettand's 3	
		Select only one.				100 101 UN	
		High (5) Moderately high(4)			Narrative Description of Veget Low spp diversity and/or predom	, , , , , , , , , , , , , , , , , , ,	-
		Moderate (3)			disturbance tolerant native speci		
		Moderately low (2)			Native spp are dominant compor	nent of the vegetation, mod	
		Low (1)			although nonnative and/or distur		
		x None (0) 6c. Coverage of invasive	plants. Refer		can also be present, and species moderately high, but generallyw/		
		Table 1 ORAM long form f			threatened or endangered spp to		
		or deduct points for covera			A predominance of native specie	01.74 (19.19)	
		Extensive >75% cover (-5) Moderate 25-75% cover (-			and/or disturbance tolerant nativ absent, and high spp diversity ar		
		Sparse 5-25% cover (-1)	3)		the presence of rare, threatened		
		x Nearly absent <5% cover	(0)			***************************************	
		Absent (1)			Mudflat and Open Water Class	Quality	
		6d. Microtopography. Score all present using 0 to	n 3 scale	1	Absent <0.1ha (0.247 acres) Low 0.1 to <1ha (0.247 to 2.47 a	cres)	
		Vegetated hummucks/tuss			Moderate 1 to <4ha (2.47 to 9.88		
		0 Coarse woody debris >150		3	High 4ha (9.88 acres) or more	<u></u>	
		Standing dead >25cm (10i Amphibian breading pools	(0.400.000.000.000.000.000.000.000.000.0		Migratopagraphy Cause C1-		
		Amphibian breeding pools		0	Microtopography Cover Scale Absent		
				1	Present very small amounts or if	more common	57
				_	of marginal quality	of and of blobant	
_	24.4	TOTAL (May 400 mts)		2	Present in moderate amounts, b	and the second s	
4		TOTAL (Max 100 pts)			quality or in small amounts of hig		
1 or	2 Gray Zone	Category		3	Present in moderate or greater a	mounts	
					and of highest quality		

Wetland ID: Wetland RLP-28

ORAM Summary Worksheet

		Circle answer or insert score		Result
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	YES	*NO	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	
	Metric 2. Buffers and surrounding land use		9	
	Metric 3. Hydrology		9	
	Metric 4. Habitat	1	1	
	Metric 5. Special Wetland Communities		0	
	Metric 6. Plant communities, interspersion, microtopography		1	
	TOTAL SCORE		1	Category based on score breakpoints

Wetland ID: Wetland RLP-28

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 (excluding 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 "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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 one or more superior functions, e.g. a wetland's biotic communimay be degraded by human activities, but the wetland may still esuperior hydrologic functions because of its type, landscape possize, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are control and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.		
		Final Category			

Vetland ID: Wetland RLP-29a/b	
te: FE Lincoln Park-Riverbend Rater(s): Brian J. Miller	Date: 10/6/2020
2000000 36 Au 2000000 04440 6440 66	Field ID:
1.0 1.0 Metric 1. Wetland Area (size).	W-2020-10-06-BJM-001
pts subtotal Select one size class and assign score.	
>50 acres (>20.2ha) (6 pts)	
25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts)	Delineated acres: 0.17
3 to <10 acres (1.2 to <4ha) (3 pts)	Total acres: 0.17
0.3 to <3 acres (0.12 to <1.2ha) (2pts) x 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)	
<0.1 acres (0.04ha) (0 pts)	
9.0 10.0 Metric 2. Upland buffers and surrounding	ng land usa
4 pts. subtotal 2a. Calculate average buffer width. Select only one and ass WIDE. Buffers average 50m (164ft) or more around wetland pe	
x MEDIUM. Buffers average 25m to <50m (82 to <164ft) around	
NARROW. Buffers average 10m to <25m (32ft to <82ft) around VERY NARROW. Buffers average <10m (<32ft) around wetlan	
2b. Intensity of surrounding land use. Select one or double	- 14
VERY LOW. 2nd growth or older forest, prairie, savannah, wild	
x LOW. Old field (>10 years), shrubland, young second growth for MODERATELY HIGH. Residential, fenced pasture, park, consi	
HIGH. Urban, industrial, open pasture, row cropping, mining, o	
19.5 29.5 Metric 3. Hydrology.	
pts. subtotal 3a. Sources of Water. Score all that apply.	3b. Connectivity. Score all that apply.
High pH groundwater (5)	x 100 year floodplain (1)
Other groundwater (3) x Precipitation (1)	Between stream/lake and other human use (1) x Part of wetland/upland (e.g. forest), complex (1)
Seasonal/Intermittent surface water (3)	x Part of riparian or upland corridor (1)
x Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one.	3d. Duration inundation/saturation. Score one or dbl check. Semi- to permanently inundated/saturated (4)
>0.7 (27.6in) (3)	x Regularly inundated/saturated (3)
0.4 to 0.7m (15.7 to 27.6in) (2) x <0.4m (<15.7in) (1)	x Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1)
3e. Modifications to natural hydrologic regime. Score one	
x Recovered (7)	Check all disturbances observed ditch point source (nonstormwater)
Recovering (3)	tile x filling/grading
Recent or no recovery (1)	dike x road bed/RR track weir dredging
	stormwater input Other:
40.01	Control on Art
10.0 39.5 Metric 4. Habitat Alteration and Develop	
20 pts. subtotal 4a. Substrate disturbance. Score one or double check and None or none apparent (4)	average.
Recovered (3)	
x Recovering (2) Recent or no recovery (1)	
4b. Habitat development. Select only one and assign score).
Excellent (7) Very good (6)	
x Good (5)	
Moderately good (4) Fair (3)	
Poor to fair (2)	
Poor (1) 4c. Habitat alteration. Score one or double check and aver	age.
None or none apparent (9)	Check all disturbances observed
Recovered (6) x Recovering (3)	mowing x shrub/sapling removal grazing herbaceous/aquatic bed removal
Recent or no recovery (1)	x clearcutting x sedimentation
	selective cutting dredging woody debris removal farming
	x toxic pollutants Inutrient enrichment
	A 244 - ACAST TATE.
39.5	
subtotal this page ORAM v. 5.0 Field Form Quantitative Rating	

Wetland RLP-29.xlsx | Quantitative Form 12/10/2020

Wetla	and ID:	Wetland RLP-29a	a/b				
Site:	FE Lincoln F	Park-Riverbend	Dotor(o):	Deine	I Millan	Data	10/6/2020
Site.	I L LINCOINT	aik-itiveibeilu	Rater(s):	Brian	J. Miller	Date:	10/6/2020
				F	ield ID:		
	39.5			V	/-2020-10-06-BJM-001		-
	subtotal this page	ı					
	Subtotal this page						
	0.0 39.5	Metric 5. Special	Wetlands.				
max 10 pts.	subtotal		and score as indicated.				
man re pio	Sudicion	Bog (10)	and score as marcacca.				
		Fen (10)					
		Old growth forest (10) Mature forested wetland (5)	5)				
			wetland-unrestricted hydrology (1	0)			
			wetland-restricted hydrology (5)				
		Lake Plain Sand Prairies (Relict Wet Praires (10)	Oak Openings) (10)				
			deral threatened or endangered s	species (10)		
			bird/water fowl habitat or usage (1				
		Category 1 Wetland. See	Question 5 Qualitative Rating (-10)			
	4 0 42 5	Matria C Dlant a		!_			
	4.0 43.5		ommunities, interspe				
max 20pts.	subtotal	6a. Wetland Vegetat			egetation Community		
	1	Score all present using 0 to Aquatic bed	o 3 scale.		osent or comprises <0.1ha (0.2 resent and either comprises sm		
	1	1 Emergent		100	getation and is of moderate qu		
		1 Shrub			gnificant part but is of low quali		
		Forest Mudflats			resent and either comprises sign egetation and is of moderate qu		
		Open water			art and is of high quality	ianty or comprises a small	
		Other			esent and comprises significar	nt part, or more, of wetland's 3	7
		6b. horizontal (plan view Select only one.	Interspersion.	Ve	egetation and is of high quality		
	1	High (5)		N	arrative Description of Veget	ation Quality	
		Moderately high(4)		200	ow spp diversity and/or predom		
		Moderate (3) x Moderately low (2)		_	sturbance tolerant native speci- ative spp are dominant compor		
		Low (1)			though nonnative and/or distur		
		None (0)		100	in also be present, and species		
		6c. Coverage of invasive Table 1 ORAM long form f		100	oderately high, but generallyw/ reatened or endangered spp to		
		or deduct points for covera		_	predominance of native specie		
		Extensive >75% cover (-5)		10.00	nd/or disturbance tolerant native	50 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
		Moderate 25-75% cover (- x Sparse 5-25% cover (-1)	3)	0.81	esent, and high spp diversity ar e presence of rare, threatened	(B) 10 (14) (B) 10 (B)	
		Nearly absent <5% cover ((0)	[11]	e presence of rare, uneateries,	, or endangered app	
		Absent (1)			udflat and Open Water Class	Quality	
		6d. Microtopography. Score all present using 0 to	o 3 coale		osent <0.1ha (0.247 acres) ow 0.1 to <1ha (0.247 to 2.47 a	orac)	
	j	Vegetated hummucks/tuss			oderate 1 to <4ha (2.47 to 9.88		
		1 Coarse woody debris >15c			gh 4ha (9.88 acres) or more	-	
		Standing dead >25cm (10i Amphibian breeding pools	n) dbh	**	icrotopography Cover Scale		
	ļ	0 Amphibian breeding pools		0 A	osent		
				1 P	resent very small amounts or if	more common	51
					marginal quality resent in moderate amounts, but	ut not of highest	-
	13.5	TOTAL (Max 100 pts)				CU social and an analysis of the control of the con	
 	Modified 2			D	uality or in small amounts of hig resent in moderate or greater a		
	woulled 2	oalegoly		44		iniounts	
				ar	nd of highest quality		

Wetland RLP-29.xlsx | Quantitative Form 12/10/2020

Wetland ID: Wetland RLP-29a/b

ORAM Summary Worksheet

		Circle answer or insert score		Result
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	YES	*NO	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	
	Metric 2. Buffers and surrounding land use	9	9	
	Metric 3. Hydrology	19	0.5	
	Metric 4. Habitat	1	0	
	Metric 5. Special Wetland Communities		0	
	Metric 6. Plant communities, interspersion, microtopography		4	
	TOTAL SCORE		3.5	Category based on score breakpoints

Wetland ID: Wetland RLP-29a/b

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 (excluding 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 the wetland using the narrative criteria in OAC Rule 3745-1-54 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 particular category, the wetland should be assigned to that categ In all instances however, the narrative criteria described in OAC 3745-1-54(C) can be used to clarify or change a categorization b on a quantitative score.			
Does the quantitative score fall with the "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.			
		Final Category	,			

Wetland ID: Wetland RLP-30	
Site: FE Lincoln Park-Riverbend Rater(s): Brian J. Mi	Date: 10/6/2020
0000000 98 April 99 00000 00000 00000 00	Field ID:
0.0 0.0 Metric 1. Wetland Area (size).	W-2020-10-06-BJM-002
Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts)	
10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts)	Delineated acres: 0.04
0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) x <0.1 acres (0.04ha) (0 pts)	Total acres: 0.04
9.0 9.0 Metric 2. Upland buffers and surrou	unding land use.
ax 14 pts. subtotal 2a. Calculate average buffer width. Select only one a WIDE. Buffers average 50m (164ft) or more around wetl X MEDIUM. Buffers average 25m to <50m (82 to <164ft) a NARROW. Buffers average 10m to <25m (32ft to <82ft) VERY NARROW. Buffers average <10m (<32ft) around	tland perimeter (7'; around wetland perimeter (4) around wetland perimeter (1') wetland perimeter (0')
2b. Intensity of surrounding land use. Select one or VERY LOW. 2nd growth or older forest, prairie, savanna x LOW. Old field (≻10 years), shrubland, young second gr MODERATELY HIGH. Residential, fenced pasture, park HIGH. Urban, industrial, open pasture, row cropping, mi	ah, wildlife area, etc. (7) rowth forest. (5) k, conservation tillage, new fallow field. (3
15.0 24.0 Metric 3. Hydrology.	
3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) A Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) X < 0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Score None or none apparent (12) Recovered (7)	3b. Connectivity. Score all that apply. x 100 year floodplain (1) Between stream/lake and other human use (1) x Part of wetland/upland (e.g. forest), complex (1) x Part of riparian or upland corridor (1) 3d. Duration inundation/saturation. Score one or dbl check. Semi- to permanently inundated/saturated (4) Regularly inundated/saturated (3) x Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1) re one or double check and average. Check all disturbances observed ditch
Recovering (3) Recent or no recovery (1)	tile x filling/grading dike x road bed/RR track weir dredging stormwater input Other:
6.0 30.0 Metric 4. Habitat Alteration and Dev	velopment.
4a. Substrate disturbance. Score one or double check None or none apparent (4) Recovered (3) X Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or double check and None or none apparent (9) Recovered (6) X Recovering (3) Recent or no recovery (1)	n score.
30.0 subtotal this page ORAM v. 5.0 Field Form Quantitative Rating	

Wetland RLP-30.xlsx | Quantitative Form 12/10/2020

Wetla	and ID:	Wetland RLP-30					
Site:	FE Lincoln Pa	ark-Riverbend	Rater(s):	Bris	an J. Miller	Date:	10/6/2020
Oito:	1 2 200		Traici(s).	1.3116	or or winer	Date.	16/6/2626
					Field ID:		
	30.0				W-2020-10-06-BJM-002	2	
	subtotal this page						
							-
	0.0 30.0	Metric 5. Special W	letlands.				
max 10 pts.	subtotal	Check all that apply ar	nd score as indicated.				
		Bog (10) Fen (10)					
	- t	Old growth forest (10)					
	Ī	Mature forested wetland (5)					
		Lake Erie coastal/tributary wet		0)			
	-	Lake Erie coastal/tributary wet Lake Plain Sand Prairies (Oak	[2012]				
	l l	Relict Wet Praires (10)	Openings) (10)				
		Known occurrence state/feder	al threatened or endangered s	pecies	10)		
		Significant migratory songbird					
	L	Category 1 Wetland. See Que	stion 5 Qualitative Rating (-10)			
	4 0 04 0	Matria C. Diant assu					
	1.0 31.0	Metric 6. Plant com		sion	- 19 19 19 19 19 19 19 19 19 19 19 19 19	2 21 2	
max 20pts.	subtotal	6a. Wetland Vegetation			Vegetation Communit		
	Г	Score all present using 0 to 3 : Aquatic bed	scale.	1	Present and either comprises	0.2471 acres) contiguous area	
	- t	1 Emergent			vegetation and is of moderate		
		Shrub			significant part but is of low qu	uality	
	1	Forest		2	Present and either comprises		
	-	Mudflats Open water			vegetation and is of moderate part and is of high quality	quality or comprises a small	
	- t	Other		3		cant part, or more, of wetland's 3	-
	_	6b. horizontal (plan view) Int	terspersion.		vegetation and is of high qual		
	_	Select only one.			N		
		High (5) Moderately high(4)			Narrative Description of Veg Low spp diversity and/or pred		
	T T	Moderate (3)			disturbance tolerant native sp		
		Moderately low (2)			Native spp are dominant com	ponent of the vegetation, mod	*
	-	x Low (1)			although nonnative and/or dis		
	<u>L</u>	None (0) 6c. Coverage of invasive pla	ints Refer		can also be present, and spec moderately high, but generally		
		Table 1 ORAM long form for lis			threatened or endangered spi		
	<u></u>	or deduct points for coverage			A predominance of native spe	cies, with nonnative spp high	
	-	Extensive >75% cover (-5)			and/or disturbance tolerant na		
	1	Moderate 25-75% cover (-3) x Sparse 5-25% cover (-1)			absent, and high spp diversity the presence of rare, threaten	다 원인 하면 어느 없는 것이 없는데 사람이 있는데 없는데 사람이 없는데	
	i t	Nearly absent <5% cover (0)				and the same of th	*
		Absent (1)			Mudflat and Open Water Cla	ass Quality	
		6d. Microtopography. Score all present using 0 to 3:	anala.		Absent <0.1ha (0.247 acres) Low 0.1 to <1ha (0.247 to 2.4	7 00000	
	Г	Vegetated hummucks/tussuck			Moderate 1 to <4ha (2.47 to 9		
	1	0 Coarse woody debris >15cm (_	High 4ha (9.88 acres) or more		
	_	0 Standing dead >25cm (10in) d	lbh				
	L	Amphibian breeding pools		0	Microtopography Cover Sca Absent	ale	
				1	Present very small amounts of	or if more common	
					of marginal quality		
				2	Present in moderate amounts	, but not of highest	-
		TOTAL (Max 100 pts)		_	quality or in small amounts of	highest quality	
1 or	2 Gray Zone	Category		3	Present in moderate or greate	er amounts	
					and of highest quality		

Wetland RLP-30.xlsx | Quantitative Form 12/10/2020

ORAM Summary Worksheet

		answ	rcle ver or score	Result
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	YES	*NO	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	
	Metric 2. Buffers and surrounding land use	9	9	
	Metric 3. Hydrology	1	.5	
	Metric 4. Habitat	(6	
	Metric 5. Special Wetland Communities		0	
	Metric 6. Plant communities, interspersion, microtopography		1	
	TOTAL SCORE	3	1	Category based on score breakpoints

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 (excluding 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 "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.
		Final Categor	v
			V

Wetland ID: Wetland RLP-31	
Site: Licoln Park Riverbend Rater(s): Brian J. Miller	Date: 9/8/2020
nata(o).	Bate. 10.0/2020
	Field ID:
0.0 0.0 Metric 1. Wetland Area (size).	W-2020-10-06-BJM-003
nax 6 pts subtotal Select one size class and assign score.	
>50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts)	[B.II
10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts)	Delineated acres: 0.10
0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) x <0.1 acres (0.04ha) (0 pts)	Total acres: 0.10
9.0 9.0 Metric 2. Upland buffers and surroundi	nα land use.
2a. Calculate average buffer width. Select only one and as WIDE. Buffers average 50m (164ft) or more around wetland pe x MEDIUM. Buffers average 25m to <50m (82 to <164ft) around NARROW. Buffers average 10m to <25m (32ft to <82ft) around VERY NARROW. Buffers average <10m (<32ft) around wetlan 2b. Intensity of surrounding land use. Select one or double VERY LOW. 2nd growth or older forest, prairie, savannah, wild	sign score. Do not double check. erimeter (7'; wetland perimeter (4') d wetland perimeter (1') d perimeter (0') e check and average.
LOW. Old field (-10 years), shrubland, young second growth for MODERATELY HIGH. Residential, fenced pasture, park, considerity. HIGH. Urban, industrial, open pasture, row cropping, mining, considerity.	orest. (5) ervation tillage, new fallow field. (3
15.0 24.0 Metric 3. Hydrology.	
3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Score one None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	3b. Connectivity. Score all that apply. X
6.0 30.0 Metric 4. Habitat Alteration and Develop	oment.
4a. Substrate disturbance. Score one or double check and None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign score Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or double check and aver None or none apparent (9) Recovered (6) X Recovering (3) Recent or no recovery (1)	2.
30.0 subtotal this page ORAM v. 5.0 Field Form Quantitative Rating	

Wetland RLP-31.xlsx | Quantitative Form 12/10/2020

Wetla	and ID:	Wetland RLP-31					
Site:	I icoln Park	Riverbend	Rater(s):	Bris	ın J. Miller	Date:	9/8/2020
Gito:	I LICOM I BIN	Taverbena	rate (5).	Time	or of white	Date.	3/0/2020
					Field ID:		
	30.0				W-2020-10-06-BJM-0	03	
	subtotal this page						
	V63				20.		
	0.0 30.0	Metric 5. Special V	Vetlands.				
max 10 pts.	subtotal	Check all that apply a	nd score as indicated.				
	F	Bog (10)					
		Fen (10) Old growth forest (10)					
	ŀ	Mature forested wetland (5)					
			etland-unrestricted hydrology (1	0)			
	-	Lake Erie coastal/tributary we	[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]				
		Lake Plain Sand Prairies (Oa Relict Wet Praires (10)	k Openings) (10)				
	- H		ral threatened or endangered s	pecies (10)		
			/water fowl habitat or usage (10	233 23	TM		
		Category 1 Wetland. See Qu	estion 5 Qualitative Rating (-10))			
		10/2 (c) 10 (12) (20) (c)	610 10000	68	1151 67 69		
	1.0 31.0	Metric 6. Plant cor	nmunities, intersper	rsion	, microtopography	y.	
max 20pts.	subtotal	6a. Wetland Vegetatio	n Communities.		Vegetation Commun		-
	_	Score all present using 0 to 3	scale.	0		a (0.2471 acres) contiguous area	
	H	Aquatic bed		1	Present and either compris- vegetation and is of modera		
	- H	1 Emergent Shrub			significant part but is of low		
		Forest		2		es significant part of wetland's 2	-
		Mudflats				ate quality or comprises a small	
		Open water			part and is of high quality	Manatana and an arrange of continuous 2	
	Ļ	Other 6b. horizontal (plan view) Ir	terspersion.	3	vegetation and is of high qu	nificant part, or more, of wetland's 3	
	_	Select only one.				ar cannon sono bure	
	-	High (5)			Narrative Description of V		
	-	Moderately high(4) Moderate (3)			Low spp diversity and/or pri disturbance tolerant native	edominance of nonnative or low	
	ŀ	Moderately low (2)				emponent of the vegetation, mod	· · · · · · · · · · · · · · · · · · ·
		x Low (1)			1 Court 1960 Court 1960 Court	disturbance tolerant native spp	
	L	None (0)				pecies diversity moderate to	
		6c. Coverage of invasive pl Table 1 ORAM long form for			moderately high, but generative threatened or endangered s		
		or deduct points for coverage				species, with nonnative spp high	
		Extensive >75% cover (-5)				native spp absent or virtually	
	-	Moderate 25-75% cover (-3)				sity and often, but not always,	
	H	x Sparse 5-25% cover (-1) Nearly absent <5% cover (0)			the presence of rare, threat	tened, or endangered spp	
	1	Absent (1)			Mudflat and Open Water (Class Quality	
	_	6d. Microtopography.		_ 0	Absent < 0.1ha (0.247 acres	s)	
	-	Score all present using 0 to 3			Low 0.1 to <1ha (0.247 to 2		
	-	 Vegetated hummucks/tussuc Coarse woody debris >15cm 		_	Moderate 1 to <4ha (2.47 to High 4ha (9.88 acres) or me		
	H	0 Standing dead >25cm (10in)		9	I was the (0.00 doles) of file	X1.X	
	—	Amphibian breeding pools			Microtopography Cover S	Scale	
				0	Absent Present very small amounts	a at if mass sammer	-
				1	of marginal quality	s or it more common	
				2	Present in moderate amour	nts, but not of highest	
	31.0	TOTAL (Max 100 pts)			quality or in small amounts	of highest quality	
1 or	2 Gray Zone			3	Present in moderate or great		
		W. 1950 W. 1950 W.		57	and of highest quality	2 december 2000 T-000 (100 december 2000 december 2000 december 2000 december 2000 december 2000 december 2000	
					and or nighest quality		

Wetland RLP-31.xlsx | Quantitative Form 12/10/2020

ORAM Summary Worksheet

		answ	cle /er or score	Result
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	YES	*NO	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	
	Metric 2. Buffers and surrounding land use		9	
	Metric 3. Hydrology	1	.5	
	Metric 4. Habitat		6	
	Metric 5. Special Wetland Communities		0	
	Metric 6. Plant communities, interspersion, microtopography		1	
	TOTAL SCORE	3	1	Category based on score breakpoints

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 (excluding 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 "gray zone" 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 moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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.
		Final Category	
		· · · · · · · · · · · · · · · · · · ·	

e: Licoln Park Riverbend Rater(s): Brian J. M	iller Date: 10/6/2020	
0.0 0.0 Metric 1. Wetland Area (size). 6 pts subtotal Select one size class and assign score.	Field ID: W-2020-10-06-BJM-004	
>50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts)	Delineated acres: 0.08	
3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) x <0.1 acres (0.04ha) (0 pts)	Total acres: 0.08	
5.0 5.0 Metric 2. Upland buffers and surrout 2a. Calculate average buffer width. Select only one a WIDE. Buffers average 50m (164ft) or more around wet	and assign score. Do not double check.	
MEDIUM. Buffers average 25m to <50m (82 to <164ft): x NARROW. Buffers average 10m to <25m (32ft to <82ft) VERY NARROW. Buffers average <10m (<32ft) around 2b. Intensity of surrounding land use. Select one or VERY LOW. 2nd growth or older forest, prairie, savann.	around wetland perimeter (1) wetland perimeter (0) double check and average.	
x LOW. Old field (>10 years), shrubland, young second gr x MODERATELY HIGH. Residential, fenced pasture, part HIGH. Urban, industrial, open pasture, row cropping, mi	rowth forest. (5) c, conservation tillage, new fallow field. (3	
16.0 21.0 Metric 3. Hydrology.		
3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface water (3) X Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select one. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Score None or none apparent (12) Recovered (7) X Recovering (3) Recent or no recovery (1)	3b. Connectivity. Score all that apply. X 100 year floodplain (1) Between stream/lake and other human use (1) X Part of wetland/upland (e.g. forest), complex (1) X Part of ipraina or upland corridor (1) 3d. Duration inundation/saturation. Score one or dbl check. Semi- to permanently inundated/saturated (4) X Regularly inundated/saturated (3) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1) The one or double check and average. Check all disturbances observed ditch tile ditch tile dike X filling/grading dike Weir dredging stormwater input Other:	
6.0 27.0 Metric 4. Habitat Alteration and De-	velopment.	
20 pts. subtotal 4a. Substrate disturbance. Score one or double che None or none apparent (4) Recovered (3) x Recovering (2) Recent or no recovery (1)	ck and average.	

ORAM v. 5.0 Field Form Quantitative Rating

Wetland RLP-32.xlsx | Quantitative Form 12/10/2020

Wetla	nd ID:	Wetland RLP-32				
Site:	l ioola Do	ırk Riverbend	Dotor(a):	Deine I Miller	Date:	10/6/2020
one.	LICOIN PA	irk Riverbend	Rater(s):	Brian J. Miller	Date.	10/6/2020
				Field ID:		
	27.0	7		W-2020-10-06-BJM	-004	
	subtotal this page	•				
	7/20	■ Politica (10 1000 1000 1000 100 1000)		CARCO		
	0.0 27.0					
max 10 pts.	subtotal		nd score as indicated.			
		Bog (10) Fen (10)				
		Old growth forest (10)				
		Mature forested wetland (5)				
]	etland-unrestricted hydrology (16 etland-restricted hydrology (5)))		
		Lake Plain Sand Prairies (Oa				
		Relict Wet Praires (10)		A 1900		
			ral threatened or endangered s d/water fowl habitat or usage (10	SS 30 M		
			estion 5 Qualitative Rating (-10)	"		
5	32.0	Metric 6. Plant cor	nmunities, intersper	sion, microtopograp	hy.	
max 20pts.	subtotal	6a. Wetland Vegetatio	n Communities.	Vegetation Comm	unity Cover Scale	
		Score all present using 0 to 3	scale.		1ha (0.2471 acres) contiguous area	
		Aquatic bed			rises small part of wetland's 1	
		Emergent Shrub		vegetation and is of mod significant part but is of le	erate quality, or comprises a	
		1 Forest			rises significant part of wetland's 2	-
		Mudflats			erate quality or comprises a small	
		Open water Other		part and is of high quality 3 Present and comprises s	/ significant part, or more, of wetland's 3	
		6b. horizontal (plan view) Ir	nterspersion.	vegetation and is of high		
		Select only one.				
		High (5) Moderately high(4)		Narrative Description of	predominance of nonnative or low	
		Moderate (3)		disturbance tolerant nativ		
		x Moderately low (2)		1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	component of the vegetation, mod	*
		Low (1) None (0)			or disturbance tolerant native spp I species diversity moderate to	
		6c. Coverage of invasive pl	ants. Refer		erallyw/o presence of rare	
		Table 1 ORAM long form for		threatened or endangere		
		or deduct points for coverage			e species, with nonnative spp high	
		Extensive >75% cover (-5) Moderate 25-75% cover (-3)			ant native spp absent or virtually ersity and often, but not always,	
		Sparse 5-25% cover (-1)			eatened, or endangered spp	
		Nearly absent <5% cover (0)		M - 40-1 4 0 W-1	- Class Overline	
		Absent (1) 6d. Microtopography.		Mudflat and Open Wate 0 Absent < 0.1ha (0.247 ac	400 MM PROPER - 100 BEST 100 BUTTO	
		Score all present using 0 to 3		1 Low 0.1 to <1ha (0.247 t	o 2.47 acres)	
		Vegetated hummucks/tussuc		2 Moderate 1 to <4ha (2.4)		
		1 Coarse woody debris >15cm 0 Standing dead >25cm (10in)		3 High 4ha (9.88 acres) or	more	
		Amphibian breeding pools		Microtopography Cove	r Scale	
		39		0 Absent	in tradition to the same of th	
				 Present very small amount of marginal quality 	ints or it more common	
		_		Present in moderate amo	ounts, but not of highest	
	32.0	TOTAL (Max 100 pts)		quality or in small amoun	nts of highest quality	
1 or 2	2 Gray Zone	Category		3 Present in moderate or g	reater amounts	
	-	504		and of highest quality		

Wetland RLP-32.xlsx | Quantitative Form 12/10/2020

ORAM Summary Worksheet

		answ	cle /er or score	Result
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	YES	*NO	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	
	Metric 2. Buffers and surrounding land use	:	5	
	Metric 3. Hydrology	1	.6	
	Metric 4. Habitat	,	6	
	Metric 5. Special Wetland Communities		0	
	Metric 6. Plant communities, interspersion, microtopography		5	
	TOTAL SCORE	3	2	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one			Evaluation of Cate	gorization 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	ı	(excluding gray zor using the narrative of	g score <i>less</i> than the Category 2 scoring threshold ne)? If yes, reevaluate the category of the wetland criteria in OAC Rule 3745-1-54(C) and biological sessments to determine if the wetland has been y 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		1-54(C) and 2) the o determined to be a be categorized as a	d using the 1) narrative criteria in OAC Rule 3745- quantitative rating score. If the wetland is Category 3 wetland using either of these, it should Category 3 wetland. Detailed biological and/or ents may also be used to determine the wetland's
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	*NO		threshold (including of the wetland using and biological and/o	g score <i>greater</i> than the Category 2 scoring any gray zone)? If yes, reevaluate the category the narrative criteria in OAC Rule 3745-1-54(C) or functional assessments to determine if the nder-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		particular category, In all instances how	retland is located within the scoring range for a the wetland should be assigned to that category. rever, the narrative criteria described in OAC Rule e used to clarify or change a categorization based ore.
Does the quantitative score fall with the "gray zone" 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			categories or to ass wetland assessmen	n of assigning the wetland to the higher of the two ign a category based on the results of a nonrapid it method, e.g. functional assessment, biological and a consideration of the narrative criteria in OAC
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not 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 as category as d the ORAM.		one or more superionay be degraded be superior hydrologic size, local or regionarrative criteria in and the under-cates	indercategorized using this method, but still exhibited functions, e.g. a wetland's biotic communities by human activities, but the wetland may still exhibit functions because of its type, landscape position, al significance, etc. In this circumstance, the OAC Rule 3745-1-54(C)(2) and (3) are controlling, gorization should be corrected. A written opporting reasons or information for this d be provided.
	<u> </u>				
		Fina	I Category	•	



APPENDIX C OEPA QHEI AND HHEI STREAM FORMS



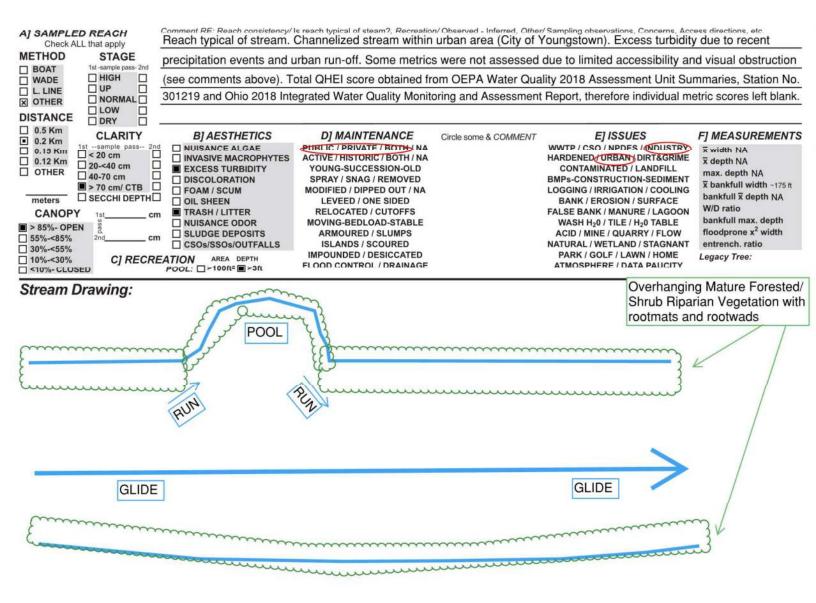


Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score:

B		Ġ
	02 50	
	83.50	
		Į

Stream & Location: FE Lincoln Park-Riverbend 138kV Transmission Line	_ RM: 19.5 _ Date:1 / 6 / 20
Line - Mahoning River Scorers Full Name & Affiliation	: Audrey Hanner, AECOM
River Code: 18 - 001 - 000 STORET #: Lat./ Long.: 41.1038	/8_0.6597 Office verified location
11 SUBSTRATE Check ONLY Two substrate TYPE BOXES:	ONE (Or 2 & average)
BEST TYPES POOL RIFFLE OTHER TYPES POOL RIFFLE ORIGIN	QUALITY
□ BLDR /SLABS [10] □ HARDPAN [4] □ LIMESTONE [1] □ BOULDER [9] □ DETRITUS [3] □ TILLS [1] □ COBBLE [8] □ MUCK [2] □ WETLANDS [0] □ GRAVEL [7] □ SILT [2] □ HARDPAN [0] □ SAND [6] □ ARTIFICIAL [0] □ SANDSTONE [0] □ BEDROCK [5] (Score natural substrates; ignore □ RIP/RAP [0]	MODERATE [-1] Maximum
NUMBER OF BEST TYPES: 4 or more [2] sludge from point-sources) LACUSTURINE [0] SHALE [-1]	0] □ OS □ NORMAL [0] 20
Comments 3 or less [0] SHALE [-1] COAL FINES [-2]	I NONE [1]
Substrates not assessed due to channel inaccessibility and visual obstruction	
2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more community, 2-Moderate amounts, but not of highest quality or in small amount quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional UNDERCUT BANKS [1]	check ONE (<i>Or 2 & average</i>) Check ONE (<i>Or 2 & average</i>)
Comments	Maximum
	20
3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average) SINUOSITY DEVELOPMENT CHANNELIZATION STABILITY	
□ HIGH [4] □ EXCELLENT [7] □ NONE [6] □ HIGH [3] □ MODERATE [3] □ GOOD [5] □ RECOVERED [4] ☑ MODERATE [2] ☑ LOW [2] □ FAIR [3] ☑ RECOVERING [3] □ LOW [1] □ NONE [1] ☑ POOR [1] □ RECENT OR NO RECOVERY [1] Comments	Channel Maximum
Stable riparian border of mature trees, but still has poor channel characteristics/development due to continue	nuous channelization via urban surroundings.
4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (I	
RIVER right looking downstream RIPARIAN WIDTH REROSION WIDE > 50m [4] SIMMODERATE [3] RIPARIAN WIDTH REROSION RIPARIAN WIDTH REROSION RIPARIAN WIDTH REPORT STATES	CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] D [1] MINING / CONSTRUCTION [0] Indicate predominant land use(s)
Comments	past 100m riparian. Riparian Maximum
Floodplain predominantly contains successional/mature forested and shrub habitat.	10
5] POOL / GLIDE AND RIFFLE / RUN QUALITY MAXIMUM DEPTH Check ONE (ONLY!) > 1m [6] 0.7-<1m [4] 0.4-<0.7m [2] 0.2-<0.4m [1] 0.2-0.2m [0] CHANNEL WIDTH CHECK ONE (Or 2 & average) Check ALL that apply	Primary Contact Secondary Contact (circle one and comment on back) TTENT [-2] [1] Pool/
Comments No riffles observed within 200 ft reach.	Maximum 12
Indicate for functional riffles; Best areas must be large enough to support of riffle-obligate species: Check ONE (Or 2 & average).	t a population ⊠NO RIFFLE [metric=0]
	FLE / RUN EMBEDDEDNESS
□ BEST AREAS > 10cm [2] □ MAXIMUM > 50cm [2] □ STABLE (e.g., Cobble, Boulder) [2] □ BEST AREAS 5-10cm [1] □ MAXIMUM < 50cm [1]	FFLE / RUN EMBEDDEDNESS NONE [2] LOW [1] MODERATE [0] EXTENSIVE [-1]
□ BEST AREAS > 10cm [2] □ MAXIMUM > 50cm [2] □ STABLE (e.g., Cobble, Boulder) [2] □ BEST AREAS 5-10cm [1] □ MAXIMUM < 50cm [1] □ MOD. STABLE (e.g., Large Gravel) [1] □ UNSTABLE (e.g., Fine Gravel, Sand) [0] Comments Run substrates not assessed due to inaccessibility and visual obstruction. No riffles observed within 20	FFLE / RUN EMBEDDEDNESS NONE [2] LOW [1] MODERATE [0] EXTENSIVE [-1]
□ BEST AREAS > 10cm [2] □ MAXIMUM > 50cm [2] □ STABLE (e.g., Cobble, Boulder) [2] □ BEST AREAS 5-10cm [1] □ MAXIMUM < 50cm [1]	FFLE / RUN EMBEDDEDNESS NONE [2] LOW [1] MODERATE [0] EXTENSIVE [-1]





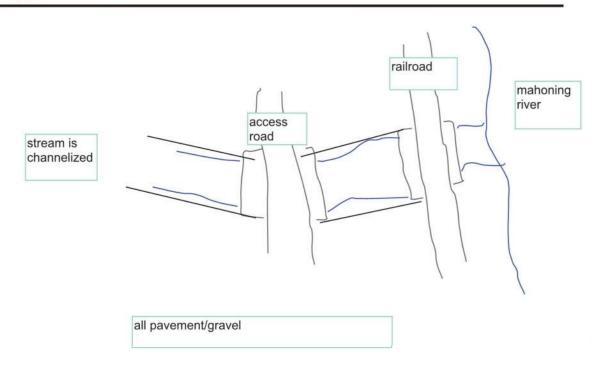
Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 22

Stream & Location	on: FE Lincoln Par	k-Riverbend 138kV Ti	ransmission Line	RM:	Date: 01/08/2020
\$	*··	Sco	orers Full Name & Affil	liation: Audrey H	anner AECOM
River Code:		STORET #:	Lat./ Long.: 41.0	9543, -80.64044	Office verified location
11 SUBSTRATE	Check ONLY Two substimate % or note even by POOL RIFFLE [10]	strate TYPE BOXES; ery type present OTHER TYPES HARDPAN [4] DETRITUS [3] MUCK [2] SILT [2] ARTIFICIAL [0]	POOL RIFFLE ORIG	Check ONE (Or 2 & a GIN NE [1] DS [0] N [0] DNE [0] JRINE [0]	
quality; 3-Highest quadiameter log that is stUNDERCUT B/OVERHANGIN	quality; 2-Mo ality in moderate or g able, well developed ANKS [1] G VEGETATION [1] N SLOW WATER) [1]	reater amounts, but no reater amounts (e.g., ve rootwad in deep / fast POOLS > 70c ROOTWADS		amounts of nignest cast water, large unctional pools.	AMOUNT heck ONE (Or 2 & average) EXTENSIVE >75% [11] MODERATE 25-75% [7] SPARSE 5-<25% [3] NEARLY ABSENT <5% [1] Cover Maximum 20 1
SINUOSITY I HIGH [4] MODERATE [3] LOW [2]	RPHOLOGY Chee DEVELOPMENT EXCELLENT [7] GOOD [5] FAIR [3] POOR [1]	CK ONE in each categor CHANNELIZ NONE [6] RECOVERED [4] RECOVERING [7] RECENT OR NO	ATION STABIL HIGH [3] MODEF 3] LOW [1]	3] RATE [2]	Channel Maximum 20 4
EROSION NONE / LITTLE MODERATE [2] HEAVY / SEVER	RIPA RIPA RIPA RIPA RIPA RIPA RIPA RIPA	RIAN WIDTH 2 50m [4]	FLOOD PLAIN FLOOD PLAIN FOREST, SWAMP [3] SHRUB OR OLD FIELD [RESIDENTIAL, PARK, NE FENCED PASTURE [1] OPEN PASTURE, ROWC	QUALITY R C2 21 W FIELD [1] Indicate to	ONSERVATION TILLAGE [1] RBAN OR INDUSTRIAL [0] NING / CONSTRUCTION [0] oredominant land use(s) or riparian. Riparian
Comments					Maximum 10
	PTH CHA (!) Check O POOL WIDT POOL WIDT POOL WIDT	NNEL WIDTH NE (Or 2 & average) TH > RIFFLE WIDTH [2] TH = RIFFLE WIDTH [1] TH < RIFFLE WIDTH [0] TH S RIFFLE WIDTH [0]	VERY FAST [1] IN	apply LOW [1] ITERSTITIAL [-1] ITERMITTENT [-2] DDIES [1] ols and riffles.	Recreation Potential Primary Contact Secondary Contact (circle one and comment on back) Pool / Current Maximum 12 On
of riffle-oblig RIFFLE DEPTI BEST AREAS > 100 BEST AREAS 5-100 BEST AREAS < 50 [metr	ate species: H RUN [m [2]	Check C DEPTH RIFF M > 50cm [2] STAB M < 50cm [1] MOD.	DNE (Or 2 & average). LE / RUN SUBSTRATE LE (e.g., Cobble, Boulder) [2 STABLE (e.g., Large Gravel ABLE (e.g., Fine Gravel, San	E RIFFLE / RUN 2]	EMBEDDEDNESS NE [2]
6] GRADIENT	38.3 ft/mi)	RY LOW - LOW [2-4]	0/2001	0/0/105/	
DRAINAGE AF	REA MC	DDERATE [6-10] GH - VERY HIGH [10-6]	%POOL:(%RUN: (%GLIDE:(Gradient Maximum 10

BOAT 1st-sam WADE HIG	Poply FAGE ple pass- 2nd FRMAL	Comment RE: Reach consistency/	Is reach typical of steam?, Recreation	n/ Observed - Inferred, Other	/Sampling observations, Concerns, Acc	ess directions, etc.
□ 0.5 Km □ 0.2 Km □ 0.15 Km □ 0.15 Km □ 0.12 Km □ 0.12 Km □ 20 c □ 0.74 H □ 0THER □ 40-70 200 feet □ > 70 c	ARITY ple pass 2nd m	BJ AESTHETIC NUISANCE ALGAE INVASIVE MACROPHYTES EXCESS TURBIDITY DISCOLORATION FOAM / SCUM OIL SHEEN	DJ MAINTENANCE PUBLIC / PRIVATE / BOTH / NA ACTIVE / HISTORIC / BOTH / NA YOUNG-SUCCESSION-OLD SPRAY / SNAG / REMOVED MODIFIED / DIPPED OUT / NA LEVEED / ONE SIDED	Circle some & COMMENT	EJ ISSUES WWTP / CSO / NPDES / INDUSTRY HARDENED / URBAN / DIRT&GRIME CONTAMINATED / LANDFILL BMPs-CONSTRUCTION-SEDIMENT LOGGING / IRRIGATION / COOLING BANK / EROSION / SURFACE	F] MEASUREMENTS \overline{\tilde{x}} width \overline{\tilde{x}} depth max. depth \overline{\tilde{x}} bankfull width bankfull \overline{\tilde{x}} depth
CANOPY 1st_ □ > 85%- OPEN	cm	☐ TRASH / LITTER ☐ NUISANCE ODOR ☐ SLUDGE DEPOSITS ☐ CSOs/SSOs/OUTFALLS	RELOCATED / CUTOFFS MOVING-BEDLOAD-STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED		FALSE BANK / MANURE / LAGOON WASH H ₂ 0 / TILE / H ₂ 0 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME	W/D ratio bankfull max. depth floodprone x ² width entrench. ratio
☐ 10%-<30% ☐ <10%- CLOSED	C] REC	ION AREA DEPTH POOL: □>100tt²□>3tt	FLOOD CONTROL / DRAINAGE		ATMOSPHERE / DATA PAUCITY	Le Tree:

Stream Drawing:





Primary Headwater Habitat Evaluation Form

Γ	25

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-aeh-20200108-01 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²) 0	.14
LENGTH OF STREAM REACH (ft) 200 LAT. 41.08684 LONG80.62863 RIVER CODE NA RIVER MILE N	A
DATE 01/08/20 SCORER AEH/SKM COMMENTS Ephemeral	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instru	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING RECOVERING RECENT OR NO RECOVERING RECOVERING RECOVERING RECENT OR NO RECOVERING RECOVERING RECOVERING RECENT OR NO RECOVERING RECOVERING RECENT OR NO RECOVERING R	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock O.00% Substrate Percentage 100% Substrate Percentage 100% Substrate Percentage 100% Substrate Percentage 100% (B)	HHEI Metric Points Substrate Max = 40 15
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 TOTAL NUMBER OF SUBSTRATE TYPES: 3	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts] COMMENTS MAXIMUM POOL DEPTH (Inches): 0.25	Pool Depth Max = 30
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 0.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] (Check ONLY one box): > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (Feet): 0.50	5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ♣NOTE: River Left (L) and Right (R) as looking downstream ♣ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant per Bank) L R Wide >10m Mature Forest, Wetland Conservation Tillage Moderate 5-10m Immature Forest, Shrub or Old Field Narrow <5m Residential, Park, New Field Open Pasture, Row Cro None Fenced Pasture Mining or Construction COMMENTS	op.
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS The control of Evaluation (Check ONLY one box): Moist Channel, isolated pools, no flow (Intermittent) Dry channel, no water (Ephemeral)	ii
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 0.5 1.5 2.5 >3	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/10	00 ft)

	NAL STREAM INFORMATION (This Information I		on Completed OHEL Form
	QHEI PERFORMED? - Yes ✓ No QHEI So	ore(If Yes, Atta	ch Completed QHEI Form)
√ ww⊦	DOWNSTREAM DESIGNATED USE(S) Name: Mahoning River		Distance from Evaluated Stream 0.30
	Name:		Distance from Evaluated Stream
EWH	Name:		Distance from Evaluated Stream
	MAPPING: ATTACH COPIES OF MAPS, INCLUDIN	IG THE ENTIRE WATERSHEE	AREA. CLEARLY MARK THE SITE LOCATION
LISGS O	uadrangle Name: Youngstown	NRCS Soil Map P	
	Mahoning		
County:		_ Township / City:_ Young	
	MISCELLANEOUS		
	w Conditions? (Y/N):_Y Date of last precipita	25	Quantity: 0.10
Photogra	ph Information: 3 photos, upstream, downsteam	and substrate	
Elevated	Turbidity? (Y/N): N Canopy (% open):	90%	
Were sa	mples collected for water chemistry? (Y/N):	(Note lab sample no. or id.	and attach results) Lab Number:
Field Me			Conductivity (µmhos/cm)
			Conductivity (µ/mics/cm)
Is the sa	mpling reach representative of the stream (Y/N) Y	If not, please explain:	
Overall	Stability of BOTH Stream Banks (check one): S	table Moderat	tely Stable Unstable
	BIOTIC EVALUATION		
Performe	ed? (Y/N): N (If Yes, Record all observations	s. Voucher collections optional	. NOTE: all voucher samples must be labeled with
		Total Control of the	mary Headwater Habitat Assessment Manual)
Fish Obs	erved? (Y/N) N Voucher? (Y/N) N Salam	nanders Observed? (Y/N) N	Voucher? (Y/N) N
Frogs or	radpoles Observed? (Y/N) N Voucher? (Y/N) N	Aquatic Macroinvertebrat	tes Observed? (Y/N) N Voucher? (Y/N)
Commer	ts Regarding Biology:		
<u>(</u> (
	DRAWING AND NADDATIVE DESCR	IPTION OF STREAM F	REACH (This <u>must</u> be completed):
	DRAWING AND NARRATIVE DESCR		
Inc	lude important landmarks and other features of in		d a narrative description of the stream's location
Inc		nterest for site evaluation an	d a narrative description of the stream's location
Inc			
		nterest for site evaluation an	d a narrative description of the stream's location
		nterest for site evaluation an	
	clude important landmarks and other features of in	nterest for site evaluation an	
and	clude important landmarks and other features of in	nterest for site evaluation an	
and	clude important landmarks and other features of in	nterest for site evaluation an	

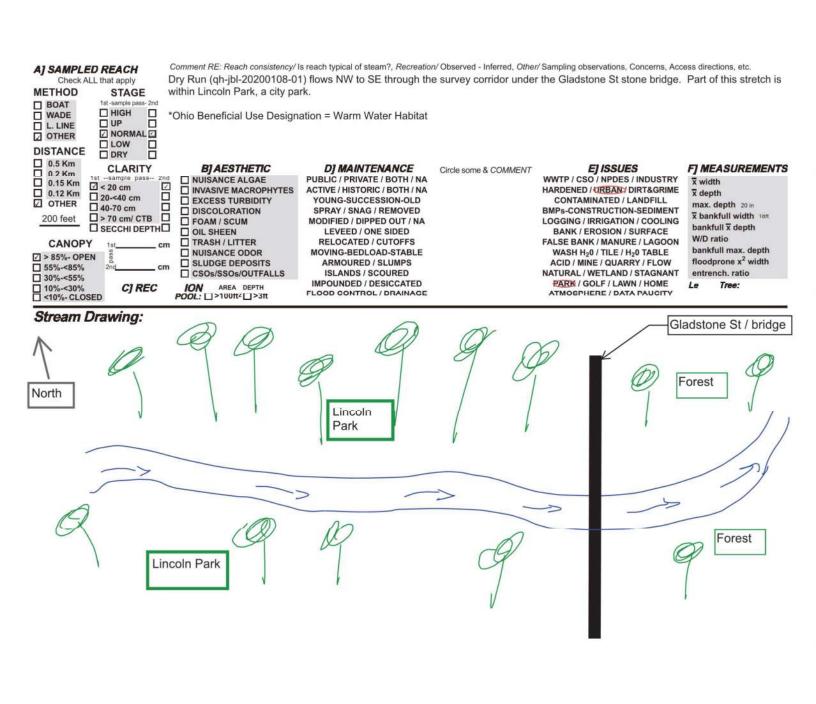




Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 51

Stream & Location	FE Lincoln Park-Riverbend 1	138kV Transmission Line	RM: N/A Date: 01/08/2020
qh-JBL-20200108-01	- DRY RUN	Scorers Full Name & Affiliation	JTT, JBL / AECOM
River Code:_N/A	STORET #:_		3, -80.619971 Office verified location
1] SUBSTRATE Che	ck ONLYTwo substrate <i>TYPE BC</i> mate % or note every type preser	OXES;	ONE (Or 2 & average)
BEST TYPES	POOL RIFFLE OTHER T		QUALITY
BLDR /SLABS [10 BOULDER [9] COBBLE [8] GRAVEL [7] SAND [6] BEDROCK [5] NUMBER OF BEST	15	AN [4]	Maximum O] NORMAL [0] NONE [1]
			-
	quality; 2-Moderate amounts in moderate or greater amounts le, well developed rootwad in dee KS [1] POOL /EGETATION [1] ROOT	Absent; 1-Very small amounts or if more comms, but not of highest quality or in small amounts (e.g., very large boulders in deep or fast water / fast water, or deep, well-defined, function	check ONE (<i>Or 2 & average</i>) er, large al pools. EXTENSIVE >75% [11] FERS [1] MODERATE 25-75% [7] YTES [1] SPARSE 5-<25% [3]
Comments			Maximum 3
31 CHANNEL MODE	PHOLOGY Check ONE in each	category (Or 2 & average)	
SINUOSITY DE HIGH [4] MODERATE [3] LOW [2]	EXCELLENT [7] NONE [6] GOOD [5] RECOVE FAIR [3] RECOVE	INELIZATION STABILITY In In In In In In In I	Channel Maximum 20
		heck ONE in each category for EACH BANK (
River right looking downstr EROSION NONE / LITTLE [3] MODERATE [2] HEAVY / SEVERE	□ R WIDE > 50m [4]	☐ ☐ FOREST, SWAMP [3] [3] ☐ ☐ SHRUB OR OLD FIELD [2] ☐ ☐ RESIDENTIAL PARK, NEW FIEL	CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] D [1] MINING / CONSTRUCTION [0]
Comments			Maximum 8
MAXIMUM DEPTH Check ONE (ONLY!) ☐ > 1m [6] ☐ 0.7-<1m [4] ☑ 0.4-<0.7m [2] ☐ 0.2-<0.4m [1] ☐ < 0.2m [0]	MD RIFFLE / RUN QUALIT CHANNEL WIDT Check ONE (Or 2 & ave POOL WIDTH > RIFFLE WI POOL WIDTH > RIFFLE WI POOL WIDTH > RIFFLE WI	CURRENT VELOCIT (rage) Check ALL that apply IDTH [2] TORRENTIAL [-1] SLOW [1] IDTH [1] VERY FAST [1] INTERST	Primary Contact Secondary Contact (circle one and comment on back) TITIENT [-2] [1] Pool/
Comments			12
Indicate for fun- of riffle-obligate RIFFLE DEPTH BEST AREAS > 10cm BEST AREAS 5-10cm BEST AREAS < 5cm [metric=	RUN DEPTH [2] MAXIMUM > 50cm [2] [1] MAXIMUM < 50cm [1] [s must be large enough to suppor Check ONE (Or 2 & average). RIFFLE / RUN SUBSTRATE RII ☑ STABLE (e.g., Cobble, Boulder) [2] ☐ MOD. STABLE (e.g., Large Gravel) [1] ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]	The proposition Interpretation Inter
6] GRADIENT (34.			%GLIDE: 0 Gradient
DRAINAGE ARE (9.6			%RIFFLE: 30 Maximum 4



Stream RLP-05



Primary Headwater Habitat Evaluation Form

33

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-jbl-20200108-02 SITE NUMBER 02 RIVER BASIN Mahoning River DRAINAGE AREA (mi²)	
LENGTH OF STREAM REACH (ft) 200 LAT. 41.08964 LONG80.61954 RIVER CODE NA RIVER MILE	IA
DATE 01/08/20 SCORER JTT, JBL COMMENTS Intermittent	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING Channelized, box culvert	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of 0.00% (A) Substrate Percentage 100% Substrate Percentage 100% (B)	HHEI Metric Points Substrate Max = 40
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 TOTAL NUMBER OF SUBSTRATE TYPES: 4	A * B
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (Inches): 1.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (Feet): 4.00	15
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m Residential, Park, New Field Narrow <5m None Residential, Park, New Field Residential, Park, New Field Completed Moderate Solution Residential, Park, New Field Residential, Park, New Field Completed None Residential, Park, New Field Penced Pasture COMMENTS Stream cuts through steep hill slope FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermittent)	
Subsurface flow with isolated pools (Interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 3.0	L
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/1	00 ft)

runsafe for vehicles Large box culvert		M INFORMATION (This Information	Must Also b	e Completed):		
Distance from Evaluated Stream	QHEI PERF	ORMED? - Yes V No QHEIS	Score	(If Yes, Attach Complete	d QHEI Form)	
Courts Name: Distance from Evaluated Stream MA NRCS Sol Map Page NA NRCS Sol Map						440.0
MAPPING: ATTACH COPES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION USGS Quadrangle Name. Campbell NRCS Soil Map Page NA NRCS Soil Map Stream Order NA County. Mahoning Township / City. Volungstrown MISCELLANEOUS Base Flow Conditions? (Y/N): N Date of last precipitation: 01/05/20 Quantity. 0.16in Photograph Information: 3 photos, upstream, downsteam and substrate Elevated Turbidity? (Y/N): N Canopy (% open): 85% Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number. NA Field Measures: Temp (*C): NA Dissolved Oxygen (mg/l): NA pH (S.U.) NA Conductivity (umhos/cm) NA Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable BIOTIC EVALUATION Performed? (*Y/N): N (if Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site in the Compact of the Stream (*Y/N) N (*Y*N) N (Kun				440 11
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION USGS Quadrangle Name: Campbell NRCS Soil Map Page NA NRCS Soil Map Stream Order NA TOWNShip / City. Visuagetnwn MISCELLANEOUS Base Flow Conditions? (V/N): N Date of last precipitation: 01/05/20 Quantity: 0.16in Photograph Information: 3 photos, upstream, downsteam and substrate Elevated Turbidity? (V/N): N Canopy (%, open): 85% Were samples collected for water chemistry? (V/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Field Measures: Temp (*C; NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA Is the sampling reach representative of the stream (V/N) If not, please explain: Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NO TE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habital Assessment Manual) Fish Observed? (Y/N): N Voucher? (Y/N): N Salamanders Observed? (Y/N): N Voucher? (Y/N): N Voucher? (Y/N): N Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location proposed access FLOW				T	- Company of the Comp	
USGS Quadrangle Name: Campbell NRCS Soil Map Page: NA NRCS Soil Map Stream Order NA County: Mahoning Township / City: Volungshrwm MISCELLANEOUS Base Flow Conditions? (Y/N): N Date of last precipitation: 01/05/20 Quantity: 0.16in Photograph Information: 3 photos, upstream, downsteam and substrate Elevated Turbidity? (Y/N): N Canopy (% open): 85% Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number. NA Field Measures: Temp (**O, NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (jumhos/cm) NA Is the sampling reach representative of the stream (Y/N) If not, please explain: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable V BIOTIC EVALUATION Performed? (Y/N): N (if Yes, Record all observations, Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N): N Voucher? (Y/N) N						
County: Mahaning Township / City: Vorungstown MISCELLANEOUS Base Flow Conditions? (Y/N): N Date of last precipitation: 01/05/20 Quantity: 0.16in Photograph Information: 3 photos, upstream, downsteam and substrate Elevated Turbidity? (Y/N): N Canopy (% open): 85% Were samples collected for water chemistry? (Y/N): N Obsolved Oxygen (mg/l) NA PH (S.U.) NA Conductivity (jumbos/cm) NA Is the sampling reach representative of the stream (Y/N) If not, please explain: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations, Voucher collections optional, NOTE: all voucher samples must be labeled with the site D number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Outher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location ding soils, poten- / unsafe for vehicles FLOW	MAPPING:		ING THE ENTI	IRE WATERSHED AREA. CLE	ARLY MARK THE SITE L	OCATION
Base Flox Conditions? (Y/N): N Date of last precipitation: 01/05/20 Quantity: 0.16in Photograph Information: 3 photos, upstream, downsteam and substrate Elevated Turbidity? (Y/N): N Canopy (% open): 85% Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Field Measures: Temp (*C) NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA Is the sampling reach representative of the stream (Y/N) If not, please explain: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable BIOTIC EVALUATION Performed? (Y/N): N (if Yes. Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site 10 number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual). Fish Observed? (Y/N): N Voucher? (Y/N): N Salamanders Observed? (Y/N): N Voucher? (Y/N): N Voucher? (Y/N): N Aquatic Macroinvertebrates Observed? (Y/N): N Voucher? (Y/N): N Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location ding soils, poten- / unsafe for vehicles FLOW Proposed access	USGS Quadrangle Na	me: Campbell		NRCS Soil Map Page: NA	NRCS Soil Map Stream	Order NA
Base Flow Conditions? (Y/N): N Date of last precipitation: 01/05/20 Quantity: 0.16in Photograph Information: 3 photos, upstream, downsteam and substrate Elevated Turbidity? (Y/N): N Canopy (% open): 85% Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Field Measures: Temp (*C) NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA Is the sampling reach representative of the stream (Y/N) If not, please explain: Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable V BIOTIC EVALUATION Performed? (Y/N) N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location ding soils, poten- / unsafe for vehicles FLOW Proposed access	County: Mahoning		Township	p / City: Youngstown		
Photograph Information: B photos, upstream, downsteam and substrate Elevated Turbidity? (Y/N): N Canopy (% open): 85% Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Field Measures: Temp (*C NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA Is the sampling reach representative of the stream (Y/N) If not, please explain: Overall Stability of BOTH Stream Banks (check one): BIOTIC EVALUATION Performed? (Y/N) N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site of number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Land to the primary Headwater Habitat Assessment Manual) DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location proposed access FLOW Proposed access	MISCELLA	NEOUS				
Elevated Turbidity? (Y/N): N Canopy (% open): 85% Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Field Measures: Temp ("C) NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (jumhos/cm) NA Is the sampling reach representative of the stream (Y/N) If not, please explain: Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N): N Voucher? (Y/N) N Salamanders Observed? (Y/N): N Voucher? (Y/N)			tation	Quantity	y:0.16in	
Elevated Turbidity? (Y/N): N Canopy (% open): 85% Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Field Measures: Temp ("C) NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (jumhos/cm) NA Is the sampling reach representative of the stream (Y/N) If not, please explain: Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N): N Voucher? (Y/N) N Salamanders Observed? (Y/N): N Voucher? (Y/N)	Photograph Informatic	n: 3 photos, upstream, downsteam	m and substr	rate		
Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Field Measures: Temp (*C) NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA Is the sampling reach representative of the stream (Y/N) If not, please explain: Additional comments/description of pollution impacts:	Elevated Turbidity? (Y	(/N): N Canopy (% open)	85%			
Is the sampling reach representative of the stream (Y/N) Is the sampling reach representative of the stream (Y/N) If not, please explain: Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable BIOTIC EVALUATION Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N): Voucher? (Y/N): N Salamanders Observed? (Y/N): Voucher? (Y/N): N Aquatic Macroinvertebrates Observed? (Y/N): N Voucher? (Y/N): DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location dring soils, potenty unsafe for vehicles FLOW Proposed access		1142		ample no or id and attach re-	sults) Lab Number: NA	
Is the sampling reach representative of the stream (Y/N) If not, please explain: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable		NIA				NA
Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable	Field Measures: Te	emp (°C) Dissolved Oxygen ((mg/l) NA	pH (S.U.)	ductivity (µmhos/cm)	NA .
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's location ding soils, poten- y unsafe for vehicles FLOW Proposed access Proposed access	Is the sampling reach	representative of the stream (Y/N)	If not, pl	ease explain:		
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's location ding soils, poten- y unsafe for vehicles FLOW Proposed access Proposed access						
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream's location ding soils, poten- y unsafe for vehicles FLOW Proposed access Proposed access						
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Vo	Additional comments/	description of pollution impacts:				
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Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location ding soils, poten-y unsafe for vehicles Large box culvert	BIOTIC EV Performed? (Y/N): Fish Observed? (Y/N) Frogs or Tadpoles Ob	ALUATION (If Yes, Record all observation ID number. Include appropriation Noucher? (Y/N) Noucher? (Y/N) Voucher? (Y/N)	ns. Voucher cate field data samanders Obs	collections optional. NOTE: all volumets from the Primary Headwa	oucher samples must be later Habitat Assessment Ma	abeled with the site anual)
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Stream RLP-06



Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-jbl-20200108-03 SITE NUMBER 03 RIVER BASIN Mahoning River DRAINAGE ARE	A (mi²) 0.00
	R MILE NA
DATE 01/08/20 SCORER JTT, JBL COMMENTS Intermittent	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams"	for Instructions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OF MODIFICATIONS: top of stream is covered in junk/garbage	R NO RECOVERY
SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE	
(Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & I TYPE PERCENT TYPE PERCE	NT Metric
BLDR SLABS [16 pts]	Points
BOULDER (>256 mm) [16 pts]	Substrate
COBBLE (65-256 mm) [12 pts] 0% CLAY or HARDPAN [0 pt] 0%	Max = 40
☐ ☐ GRAVEL (2-64 mm) [9 pts] ☐ ☐ MUCK [0 pts] ☐ 0% ☐ ARTIFICIAL [3 pts] ☐ 0%	9
Total of Percentages of 0.00% (A) Substrate Percentage 100% (B)	A + B
Bldr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES:	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time	
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts]	5
COMMENTS MAXIMUM POOL DEPTH (Inches)	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (> 3' 3" - 4' 8") [5 pts] \(\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Width Max=30
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	
COMMENTS AVERAGE BANKFULL WIDTH (Feet)	1.00
This information <u>must</u> also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ♣NOTE: River Left (L) and Right (R) as looking downst	ream 🍾
RIPARIAN WIDTH FLOODPLAIN QUALITY	
L R (Per Bank) L R (Most Predominant per Bank) L R Wide >10m	Tillage
Moderate 5-10m Immature Forest, Shrub or Old Urban or Indu	ustrial
Narrow <5m Residential, Park, New Field Open Pastur	e, Row Crop
None Fenced Pasture Mining or Co COMMENTS	nstruction
FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	
Stream Flowing Moist Channel, isolated pools, no flow (Ir	termittent)
Subsurface flow with isolated pools (Interstitial) COMMENTS Dry channel, no water (Ephemeral)	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	
None 2.0 3.0 3.0 0.5 1.5 2.5 3.0	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate Moderate (2 ft/100 ft) Moderate to Severe	vere (10 ft/100 ft)

QHEI PERFORMED? - Yes V No QHEI Score	so be Completed): (If Yes, Attach Completed	QHEI Form)
DOWNSTREAM DESIGNATED USE(S)		estation and a contraversal fin
WWH Name: Dry Run	Distance from	om Evaluated Stream 600 ft
CWH Name:	T to the second	om Evaluated Stream
EWH Name:	Distance fro	m Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE	ENTIRE WATERSHED AREA. CLEA	ARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Campbell	NRCS Soil Map Page: NA	NRCS Soil Map Stream Order NA
County: Mahoning Tow	nship / City: Youngstown	
MISCELLANEOUS		
Base Flow Conditions? (Y/N): N Date of last precipitation:	01/05/20 Quantity:	0.16in
Photograph Information: 3 photos, upstream, downsteam and su	bstrate	
	5%	
Lievated fulbidity: (1714).		NA NA
N/A	lab sample no. or id. and attach res	
Field Measures: Temp (°C) NA Dissolved Oxygen (mg/l)	NA pH (S.U.) NA Cond	uctivity (µmhos/cm) NA
Is the sampling reach representative of the stream (Y/N) If no	ot, please explain:	
Additional comments/description of pollution imports:		
Additional comments/description of pollution impacts:		
Overall Stability of BOTH Stream Banks (check one): Stable BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Vouc	Moderately Stable her collections optional. NOTE: all vo	Unstable ucher samples must be labeled with the site
Performed? (Y/N): N (If Yes, Record all observations. Voucle ID number. Include appropriate field date of the first Observed? (Y/N) N Voucher? (Y/N) N Salamanders Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aqu	her collections optional. NOTE: all vo	ucher samples must be labeled with the site er Habitat Assessment Manual) (Y/N)
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BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucil ID number. Include appropriate field day of the Voucher? (Y/N) N Salamanders Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquicomments Regarding Biology:	her collections optional. NOTE: all vo ata sheets from the Primary Headwate Observed? (Y/N) N Voucher? uatic Macroinvertebrates Observed?	ucher samples must be labeled with the site or Habitat Assessment Manual) (Y/N) (Y/N) (Y/N) Voucher? (Y/N) is must be completed):
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucil D number. Include appropriate field date of the first Observed? (Y/N) N (Y/N)	her collections optional. NOTE: all vo ata sheets from the Primary Headwate Observed? (Y/N) N Voucher? uatic Macroinvertebrates Observed?	ucher samples must be labeled with the site or Habitat Assessment Manual) (Y/N) (Y/N) (Y/N) Voucher? (Y/N) is must be completed):
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Stream RLP-07 Class 1



Primary Headwater Habitat Evaluation Form

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ı	25	

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
s-bl-20200108 SITE NUMBER 02 RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²)	.10
LENGTH OF STREAM REACH (ft) 100 LAT. 41.09164 LONG80.61846 RIVER CODE RIVER MILE	.04
DATE 01/08/20 SCORER BL, RM COMMENTS ephemeral	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING Old, failed culvert crosses channel	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes	
(Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE PERCENT TYPE PERCENT	HHEI Metric
□ BLDR SLABS [16 pts] 0% SILT [3 pt] 10%	Points
BOULDER (>256 mm) [16 pts]	Substrate
BEDROCK [16 pt]	Max = 40
GRAVEL (2-64 mm) [9 pts] 40% MUCK [0 pts] 0%	20
SAND (<2 mm) [6 pts] ARTIFICIAL [3 pts] 0%	20
Total of Percentages of 0.00% (A) Substrate Percentage 100% (B)	A + B
Bidr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 TOTAL NUMBER OF SUBSTRATE TYPES: 5	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dept
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):	Max = 30
> 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts] > 22.5 - 30 cm [30 pts] < 5 cm [5 pts]	
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	0
COMMENTS OWHM=2.1'w x 0.2'd MAXIMUM POOL DEPTH (Inches): 0.00	
BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width
> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Max=30
COMMENTS BF=2.4'w x 0.9'd AVERAGE BANKFULL WIDTH (Feet): 2.40	5
AVERAGE BARRI GEE WIDTH (Feet).	
This information must also be completed	
RIPARIAN ZONE AND FLOODPLAIN QUALITY \$\text{NOTE}: River Left (L) and Right (R) as looking downstream \$\text{\$\delta}\$	
RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) L R	
RIPARIAN WIDTH L R (Per Bank) V Wide >10m FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R Mature Forest, Wetland Conservation Tillage	
RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) L R	
RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m RIPARIAN WIDTH L R (Most Predominant per Bank) Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Urban or Industrial	qc
RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m None FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R Most Predominant per Bank) L R Conservation Tillage Urban or Industrial Open Pasture, Row Cre Mining or Construction	
RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R Mature Forest, Wetland Conservation Tillage Urban or Industrial Open Pasture, Row Cr	
RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None Comments or Construction COMMENTS scrubby woods all around, within old roadway bridge crossing FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	
RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Narrow <5m None Fenced Pasture COMMENTS scrubby woods all around, within old roadway bridge crossing FIGOODPLAIN QUALITY L R (Most Predominant per Bank) L R Conservation Tillage Urban or Industrial Open Pasture, Row Cr	
RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None COMMENTS scrubby woods all around, within old roadway bridge crossing FLOW REGIME (At Time of Evaluation) Residential Park (Most Predominant per Bank) L R (Most Predominant per Bank) L R (Conservation Tillage Urban or Industrial Open Pasture, Row Cr	
RIPARIAN WIDTH (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None COMMENTS scrubby woods all around, within old roadway bridge crossing FLOW REGIME (At Time of Evaluation) Stream Flowing Subsurface flow with isolated pools (Interstitial) FIGURALITY L R (Most Predominant per Bank) Moture Predominant per Bank} Moture Predominant per Bank} Moture Predominant p	
RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None COMMENTS scrubby woods all around, within old roadway bridge crossing FLOW REGIME (At Time of Evaluation) Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS ephemeral, dry channel SINUOSITY (Number of bends per 61 m (200 ft) of channel) None CIRC (Most Predominant per Bank) L R (Per Bank) L R (Most Predominant per Bank) L R (Per Bank) L R (Most Predominant per Bank) L R (Per Bank) L R (Per Bank) L R (Per Bank) Conservation Tillage Urban or Industrial Open Pasture, Row Cr Mindustrial Open P	
RIPARIAN WIDTH (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None COMMENTS crubby woods all around, within old roadway bridge crossing FLOW REGIME (At Time of Evaluation) Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS ephemeral, dry channel SINUOSITY (Number of bends per 61 m (200 ft) of channel) None 1.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3	
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ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
QHEI PERFORMED? - Yes ✓ No QHEI Score (If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)
WWH Name: Dry Run Distance from Evaluated Stream 0.04
CWH Name: Distance from Evaluated Stream
EWH Name: Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Campbell NRCS Soil Map Page: NA NRCS Soil Map Stream Order NA
County: Mahoning Township / City: Youngstown
MISCELLANEOUS
Base Flow Conditions? (Y/N): Y Date of last precipitation: 01/05/20 Quantity: 0.16 in
Photograph Information: 451-upstream, 452-downsteam 453-substrate
Elevated Turbidity? (Y/N): N Canopy (% open): 30%
Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA
Field Measures: Temp (°C) NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA
Is the sampling reach representative of the stream (Y/N) If not, please explain:
Additional comments/description of pollution impacts:
Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable
Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N N Voucher? (Y/N) N Voucher? (Y/N
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) In clude important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

Stream RLP-08

Class 1



ChieFPA Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION FE LINCOIN PARK-RIVERDEND 138KV Transmission Line hh-jbl-20200108-01 SITE NUMBER 01 RIVER BASIN Mahoning River DRAINAGE AREA (mi²) 0.1	
	0030
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09282 LONG80.61554 RIVER CODE NA RIVER MILE NA	Α
DATE 01/08/20 SCORER JTT, JBL COMMENTS Ephemeral	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instru	ctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING RECENT OR NO RECOVERED RECOVE	VERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes	HHEI
(Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE PERCENT PERCENT	Metri
□ □ BLDR SLABS [16 pts] 0% SILT [3 pt] 40%	Point
BOULDER (>256 mm) [16 pts]	Substrat
COBBLE (65-256 mm) [12 pts] 0% CLAY or HARDPAN [0 pt] 0%	Max = 40
GRAVEL (2-64 mm) [9 pts] 30% MUCK [0 pts] 0%	17
SAND (<2 mm) [6 pts] 20% ARTIFICIAL [3 pts] 0%	
Total of Percentages of 1.00% (A) Substrate Percentage 100% (B) Check	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 TOTAL NUMBER OF SUBSTRATE TYPES: 5	
	Pool Dep
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 3
> 22.5 - 30 cm [30 pts] < 5 cm [5 pts]	222
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	5
COMMENTS MAXIMUM POOL DEPTH (Inches): 1.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankful
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width Max=30
> 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Max=30
COMMENTSAVERAGE BANKFULL WIDTH (Feet): 1.50	5
AVERAGE BANKFOLE WIDTH (Feet).	3
This information must also be completed	
This information <u>must</u> also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream ☆	
RIPARIAN ZONE AND FLOODPLAIN QUALITY \$\frac{1}{2}\text{NOTE: River Left (L) and Right (R) as looking downstream \$\frac{1}{2}\text{RIPARIAN WIDTH} \text{FLOODPLAIN QUALITY}	
RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) Wide >10m V ✓ Mature Forest, Wetland Conservation Tillage	
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RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m RIPARIAN QUALITY FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R (Done Pasture, Row Crope Pasture, Row C	
RIPARIAN ZONE AND FLOODPLAIN QUALITY **NOTE: River Left (L) and Right (R) as looking downstream ** RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m **NOTE: River Left (L) and Right (R) as looking downstream ** FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Field Onen Pasture Row Cror)
RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R (Conservation Tillage Immature Forest, Shrub or Old Field Open Pasture, Row Crop	,
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	RFORMED? -	_	HEI Score	(If Yes, Atta				
		NATED USE(S)			1			
WWH Name: D	ry Run					m Evaluated St	ream .	550 ft
EWH Name:					Ī.	n Evaluated Str n Evaluated Str	7	
MAPPING			LUDING THE <u>E</u>	NTIRE WATERSHED		RLY MARK THE	SITE LOC	
JSGS Quadrangle N	Name: Campb	eII		NRCS Soil Map P	Page: NA	NRCS Soil Map	Stream Or	rder NA
County: Mahoning	l.		Town	ship / City: Young	stown			
MISCELL	ANEOUS							
Base Flow Condition		Date of last pr		01/05/20	_ Quantity:_	0.16in		
Photograph Informa	tion: 3 photos	s, upstream, downs	steam and sub	strate				
Elevated Turbidity?	N	Canopy (% o	000					
_			N		and attack	lte) I ab M	r. NA	
Were samples colle	_ N	chemistry? (Y/N):	(Note la	b sample no. or id. a				N/A
	remp (*C)	Dissolved Oxy	gen (mg/l)	NA pH (S.U.)	NA Condu	ctivity (µmhos/c	m)	NA
s the sampling read	ch representativ	e of the stream (Y/N	N) If not	, please explain:				
Additional ac	e/docorintia	f pollution impact						
Overall Stability of	F BOTH Stream EVALUATION N (If Y	n Banks (check one	vations. Vouch	er collections optional		cher samples m		
BIOTIC E Performed? (Y/N): _ Fish Observed? (Y/Frogs or Tadpoles C	N (If Y Voc Observed? (Y/N)	Yes, Record all obsertumber. Include appurcher? (Y/N)	vations. Voucheropriate field dat		I. NOTE: all vou mary Headwater Voucher? (cher samples m Habitat Assess Y/N)	ust be label	al)
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BIOTIC E Performed? (Y/N): _ Fish Observed? (Y/N) Frogs or Tadpoles Comments Regarding	F BOTH Stream EVALUATION N (If Y ID n N) Voc Observed? (Y/N ng Biology:	res, Record all obsernment. Include appropriate (Y/N) N Voucher? (Y/N) N	vations. Voucheropriate field dat Salamanders (Y/N) N	er collections optional a sheets from the Pri Observed? (Y/N)	I. NOTE: all vou imary Headwater Voucher? (tes Observed?	cher samples m Habitat Assess Y/N) N Vot	ust be label ment Manua ucher? (Y/N	al) N
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BIOTIC E Performed? (Y/N): _ Fish Observed? (Y/N) Frogs or Tadpoles C Comments Regardin	N (If Y ID IN Votable Biology:	res, Record all obsernment. Include appropriate (Y/N) N Voucher? (Y/N) N V	vations. Voucheropriate field date Salamanders (Y/N) N Aqua	er collections optional a sheets from the Pri Dbserved? (Y/N) Natic Macroinvertebrat	I. NOTE: all vou imary Headwater Voucher? (tes Observed?	cher samples m Habitat Assess Y/N) N Vot s must be coescription of the	ust be label ment Manus ucher? (Y/N	d):

Stream RLP-09 Modified Class 1



ChieFPA Primary Headwater Habitat Evaluation Form

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ı	23

SITE NAME/LOCATION FE Lincoln Park-River	bend 138kV Transmission Line		
hh-jbl-20200106-01 SITE NUMBER 01	RIVER BASIN Mah	oning River DRAIN	AGE AREA (mi²) < .01
· · · · · · · · · · · · · · · · · · ·	AT. 41.09396 LONG80.6		RIVER MILE NA
DATE 01/06/20 SCORER jbl,jtt	COMMENTS Ephemera		
NOTE: Complete All Items On This Form	- Refer to "Field Evaluation M	lanual for Ohio's PHWH S	treams" for Instructions
STREAM CHANNEL NONE / NATE MODIFICATIONS: extensive garbage dum	DRAL CHANNEL RECOVERED Ping	D RECOVERING RE	ECENT OR NO RECOVERY
SUBSTRATE (Estimate percent of ever (May of 32) Add total number of similing			
(Max of 32). Add total number of significa TYPE PE	RCENT TYPE	Final metric score is sum of b	PERCENT Metric
BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts]	0% SILT [3 pt	t] .CK/WOODY DEBRIS [3 pts]	10% 30%
		TRITUS [3 pts]	0% Substrat
CODDET (OF TOO HIM) [12 big]		HARDPAN [0 pt]	0% Max = 4
= STOTTE (E ST IIIII) [S SIG]	5% MUCK [0 MUCK [0 ARTIFICI		25% 13
	.00% (A) Substrate Pe	nemerina a	(B)
Bidr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBST	Check	AL NUMBER OF SUBSTRATI	
 Maximum Pool Depth (Measure the ma evaluation. Avoid plunge pools from road 			at the time of Pool Dep Max = 3
> 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts]	> 5 cm - < 5 cm [- 10 cm [15 pts]	
> 10 - 22.5 cm [25 pts]		TER OR MOIST CHANNEL [0	pts]5
COMMENTS	M.	AXIMUM POOL DEPTH	(Inches): 1.00
3. BANK FULL WIDTH (Measured as the a	verage of 3-4 measurements)	(Check ONLY one box):	Bankful
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]		- 1.5 m (> 3' 3" - 4' 8") [15 pts] (<-3' 3") [5 pts]	Width Max=30
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]			
COMMENTS	A	VERAGE BANKFULL WIDTH	(Feet): 3.00 5
*			
DIDADIAN ZONE AND ELOODDI	This information must als		an downstroam A
RIPARIAN ZONE AND FLOODPI RIPARIAN WIDTH	FLOODPLAIN QUALITY	Left (L) and Right (R) as looking	ig downstream &
L R (Per Bank) Wide >10m	L R (Most Predominant per Mature Forest, Wetland		nservation Tillage
Moderate 5-10m	Immature Forest, Wetland	h or Old	pan or Industrial
Narrow <5m	Field Residential, Park, New	— 00	en Pasture, Row Crop
None Nanow Sill	Fenced Pasture		ning or Construction
COMMENTS	T enced rastate		ing or construction
FLOW REGIME (At Time of Evalu			
Stream Flowing Subsurface flow with isolated pools		Moist Channel, isolated pools, Dry channel, no water (Ephem	
COMMENTS_recent rain			
	r 61 m (200 ft) of channel) (Check		3.0
None 0.5	1.0 1.5 2.		3.0 >3
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate	Moderate (2 ft/100 ft)	Moderate to Severe	Severe (10 ft/100 ft)

QHEI PERFORMED? - Yes 1	o QHEI Score(If Yes, Attach Comple	eted QHEI Form)	
DOWNSTREAM DESIGNATED USE	S)			
WWH Name: Dry Run			e from Evaluated Stream	290 [[
CWH Name:		Ī	from Evaluated Stream _	
EWH Name:		Distance	from Evaluated Stream _	
MAPPING: ATTACH COPIES OF MAP	S, INCLUDING THE ENTIRE W	ATERSHED AREA. C	LEARLY MARK THE SITE	LOCATION
USGS Quadrangle Name: Campbell	NRCS	Soil Map Page: NA	NRCS Soil Map Stream	m Order N
County: Mahoning	Township / Cit	y:Youngstown		
MISCELLANEOUS				
N	act prodicitation: 01/05	5/20	11hv: 0.16 in	
	ast precipitation	0/20 Quan	tity:	
Photograph Information: 3 photos, upstream,				
Elevated Turbidity? (Y/N): N Cano	y (% open): 20%			
Were samples collected for water chemistry? (Y	N): N (Note lab sample	e no. or id. and attach	results) Lab Number: NA	١
NA.		2.2	onductivity (µmhos/cm)	NA
	d Oxygen (mg/l)	(0.0.)	mudetivity (µmmos/em)	
Is the sampling reach representative of the stream	m (Y/N) If not, please	explain:		
Additional comments/description of pollution imp	acts:			
Overall Stability of BOTH Stream Banks (che	ok ana): Stable	Moderately Stable	/ Unstab	le 🗌
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a	observations. Voucher collective appropriate field data sheets	ons optional. NOTE: al	I voucher samples must be	labeled with the
Performed? (Y/N): N (If Yes, Record a ID number. Inclu Fish Observed? (Y/N) Voucher? (Y/N)	observations. Voucher collective appropriate field data sheets Salamanders Observed	ons optional. NOTE: al	I voucher samples must be water Habitat Assessment Mer? (Y/N)	labeled with the
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Inclu Fish Observed? (Y/N) Voucher? (Y/N) Frogs or Tadpoles Observed? (Y/N) N Voucher	observations. Voucher collective appropriate field data sheets Salamanders Observed	ons optional. NOTE: al from the Primary Head ? (Y/N) N Vouch	I voucher samples must be water Habitat Assessment Mer? (Y/N)	labeled with the
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Inclu Fish Observed? (Y/N) Voucher? (Y/N) Frogs or Tadpoles Observed? (Y/N) N Voucher	observations. Voucher collective appropriate field data sheets Salamanders Observed	ons optional. NOTE: al from the Primary Head ? (Y/N) N Vouch	I voucher samples must be water Habitat Assessment Mer? (Y/N)	labeled with the
BIOTIC EVALUATION N (If Yes, Record a ID number. Inclu Fish Observed? (Y/N) N Voucher? (Y/N) Frogs or Tadpoles Observed? (Y/N) N Vouc	observations. Voucher collective appropriate field data sheets Salamanders Observed her? (Y/N) Aquatic Macro	ons optional. NOTE: al from the Primary Head ? (Y/N) Vouch Dinvertebrates Observ	I voucher samples must be water Habitat Assessment Mer? (Y/N) N Voucher?	labeled with the fanual)
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BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Inclu Fish Observed? (Y/N) N Voucher? (Y/N) Frogs or Tadpoles Observed? (Y/N) N Vouc Comments Regarding Biology: DRAWING AND NARRATIV Include important landmarks and other	observations. Voucher collections observations. Voucher collections appropriate field data sheets on the salamanders Observed the salamanders (Y/N) Aquatic Macro	ons optional. NOTE: al from the Primary Head ? (Y/N) Vouch binvertebrates Observ	I voucher samples must be water Habitat Assessment Ner? (Y/N) Noucher?	labeled with the fanual) (Y/N) eted):
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Include important landmarks and other in	observations. Voucher collections observations. Voucher collections observed appropriate field data sheets observed ner? (Y/N) N Aquatic Macro	ons optional. NOTE: al from the Primary Head ? (Y/N) Vouch binvertebrates Observ	I voucher samples must be water Habitat Assessment Ner? (Y/N) Noucher?	labeled with the fanual) (Y/N) eted):
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BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Include important landmarks and other sential Stream head artific	observations. Voucher collective appropriate field data sheets N Salamanders Observed her? (Y/N) N Aquatic Macro E DESCRIPTION OF ST eatures of interest for site events teep Wooded	ons optional. NOTE: al from the Primary Head ? (Y/N) Vouch binvertebrates Observ	I voucher samples must be water Habitat Assessment Ner? (Y/N) Noucher?	labeled with the fanual) (Y/N) eted):
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Include important landmarks and other include interest in the second and include important landmarks and other inc	observations. Voucher collective appropriate field data sheets N Salamanders Observed her? (Y/N) N Aquatic Macro E DESCRIPTION OF ST eatures of interest for site events teep Wooded	ons optional. NOTE: al from the Primary Heads ? (Y/N) Vouch binvertebrates Observ	I voucher samples must be water Habitat Assessment Mer? (Y/N) N Voucher? This must be complete the description of the street the water Habitat Assessment Mer?	labeled with the fanual) (Y/N) eted):
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Include important landmarks and other sential Stream head artific	observations. Voucher collective appropriate field data sheets N Salamanders Observed her? (Y/N) N Aquatic Macro E DESCRIPTION OF ST eatures of interest for site events teep Wooded	ons optional. NOTE: al from the Primary Head ? (Y/N) Vouch binvertebrates Observ	I voucher samples must be water Habitat Assessment Mer? (Y/N) N Voucher? This must be complete the description of the street the water Habitat Assessment Mer?	labeled with the fanual) (Y/N) eted):
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Include in portant landmarks and other sential Programments Stream head bedrock head	observations. Voucher collective appropriate field data sheets N Salamanders Observed her? (Y/N) N Aquatic Macro E DESCRIPTION OF ST eatures of interest for site events the extension of the e	ons optional. NOTE: al from the Primary Heads ? (Y/N) Vouch binvertebrates Observ	I voucher samples must be water Habitat Assessment Mer? (Y/N) N Voucher? This must be complete the description of the street the water Habitat Assessment Mer?	labeled with the fanual) (Y/N) eted):
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Include include important landmarks and other sential Stream head artific debris	observations. Voucher collective appropriate field data sheets N Salamanders Observed her? (Y/N) N Aquatic Macro E DESCRIPTION OF ST eatures of interest for site events the extension of the e	ons optional. NOTE: al from the Primary Heads ? (Y/N) Vouch binvertebrates Observ	I voucher samples must be water Habitat Assessment Mer? (Y/N) N Voucher? This must be complete the description of the street the water Habitat Assessment Mer?	labeled with the fanual) (Y/N) eted):
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record a ID number. Include in portant landmarks and other sential Programments Stream head bedrock head	observations. Voucher collective appropriate field data sheets N Salamanders Observed her? (Y/N) N Aquatic Macro E DESCRIPTION OF ST eatures of interest for site events allowed the steep	ons optional. NOTE: al from the Primary Heads ? (Y/N) Vouch binvertebrates Observ	I voucher samples must be water Habitat Assessment Mer? (Y/N) N Voucher? This must be complete the description of the street the water Habitat Assessment Mer?	labeled with the fanual) (Y/N) eted):



Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-jbl-20200106-02 SITE NUMBER 02 RIVER BASIN Mahoning River DRAINAGE AREA (mi²)	0.00
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09427 LONG80.61283 RIVER CODE NA RIVER MILE	NA
DATE 01/06/20 SCORER jbl,jtt COMMENTS intermittent	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Ins	tructions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO REMODIFICATIONS: extensive garbage dumping, old culvert	COVERY
 SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. 	HHEI
TYPE PERCENT TYPE PERCENT □ □ BLDR SLABS [16 pts] 0% □ SILT [3 pt] 5%	Metric
BOULDER (>256 mm) [16 pts] 5% LEAF PACK/WOODY DEBRIS [3 pts] 15%	Substrate
□ BEDROCK [16 pt] 0% □ FINE DETRITUS [3 pts] 0% ✓ □ CLAY or HARDPAN [0 pt] 0%	Max = 40
GRAVEL (2-64 mm) [9 pts] 15% MUCK [0 pts] 0%	22
SAND (<2 mm) [6 pts] 5% ARTIFICIAL [3 pts] 35%	22
Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock (A) Substrate Percentage (Check 100%)	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 TOTAL NUMBER OF SUBSTRATE TYPES: 7	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dep
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts]	25
	25
COMMENTS MAXIMUM POOL DEPTH (Inches): 4.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankfull
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	Bankfull Width Max=30
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.0 m (> 3' 3" - 4' 8") [15 pts] \(\text{ \left} \)	Width
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 7.00 This information must also be completed	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 7.00	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 7.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream ★ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 7.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ♣NOTE: River Left (L) and Right (R) as looking downstream ♣ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) V Wide >10m V Mature Forest, Wetland Conservation Tillage	Width Max=30
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (<= 3' 0") [5 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (< -0' 3") [5 pt	Width Max=30 20
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (<= 3' 0") [5 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Width Max=30 20
> 4.0 meters (> 13') [30 pts]	Width Max=30 20
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream And RIPARIAN WIDTH RI	Width Max=30 20 Crop
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH Riparian Ripar	Width Max=30 20 Crop
AVERAGE BANKFULL WIDTH This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY Wide >10m Wide >10m Wide >10m Residential, Park, New Field Narrow <5m None Residential, Park, New Field None COMMENTS AVERAGE BANKFULL WIDTH Fenced Pasture Mining or Construction COMMENTS Moist Channel, isolated pools, no flow (Intermitte Dry channel, no water (Ephemeral)) COMMENTS AVERAGE BANKFULL WIDTH FLOODPLAIN QUALITY AVERAGE BANKFULL WIDTH F	Width Max=30 20 Crop
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH	Width Max=30 20 Crop
> 4.0 meters (> 13') [30 pts]	Width Max=30 20 Crop
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH	Width Max=30 20 Crop Int)

DOWNSTREAM DESIGNATION	ED USE(S)				
WWH Name: Dry Run			- Constant estimates and estates	Evaluated Stream	270 Γι
CWH Name:				Evaluated Stream	
EWH Name:				Evaluated Stream _	
MAPPING: ATTACH COPIES	OF MAPS, INCLUDING THE E	NTIRE WATERSHED A	AREA. CLEARL	Y MARK THE SITE I	LOCATION
USGS Quadrangle Name: Campbell		NRCS Soil Map Page	ge:NR	RCS Soil Map Stream	m Order
County: Mahoning	Town	nship / City: Youngst	town		
MISCELLANEOUS					
Base Flow Conditions? (Y/N): N	Date of last precipitation:	01/05/20	Quantity:		
Photograph Information: 3 photos, up	1051 07 1000	bstrate	Quantity		
N	40				
Elevated Turbidity? (Y/N):	Carlopy (% open).	0%		_	
Were samples collected for water chem	sistry? (Y/N): Note la	ab sample no. or id. an	nd attach results) Lab Number:	
Field Measures: Temp (°C)	Dissolved Oxygen (mg/l)	pH (S.U.)	Conducti	vity (µmhos/cm)	
Is the sampling reach representative of	the stream (Y/N)	t, please explain:			
	a more triver reference consiste e tribina de la consiste e de la consiste e de la consiste e de la consiste e	**************************************			
A 1 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
Additional comments/description of poll Overall Stability of BOTH Stream Bar		Moderate	ly Stable	Unstab	
			ary Headwater H Voucher? (Y/	abitat Assessment M	lanual)
DRAWING AND NAR	RATIVE DESCRIPTION	OF STREAM RE	EACH (This <u>i</u>	must be compl	eted):
Include important landmarks an	d other features of interest fo	or site evaluation and	l a narrative des	cription of the stre	am's location
(steep	ed			
ential culvert					
	old pieces of c	extremely	y croded be	anks	
→ Ko-	vert in channel	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	~		
FLOW			y eroded b	anks	
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bl-20200106-02	woo	ded		_	٠ ٨

Reset Form

Save as pdf

Stream RLP-11 Modified Class 1



FPA Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-jbl-20200106-03 SITE NUMBER 03 RIVER BASIN Mahoning River DRAINAGE AREA (mi²)	.00
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09434 LONG80.61181 RIVER CODE NA RIVER MILE	
DATE 01/06/20 SCORER jbl,jtt COMMENTS ephemeral	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO REC	
MODIFICATIONS: garbage dumping	
 SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. 	HHEI
TYPE PERCENT TYPE PERCENT	Metric
BLDR SLABS [16 pts] 0% SILT [3 pt] 15%	Points
BOULDER (>256 mm) [16 pts]	Substrat
COBBLE (65-256 mm) [12 pts] 20% CLAY or HARDPAN [0 pt] 0%	Max = 40
☐ ☐ GRAVEL (2-64 mm) [9 pts] ☐ ☐ MUCK [0 pts] ☐ 0%	22
SAND (<2 mm) [6 pts]	
Total of Percentages of 22.00% (A) Substrate Percentage 100% (B)	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 TOTAL NUMBER OF SUBSTRATE TYPES: 7	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dep
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts]	
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	0
COMMENTS MAXIMUM POOL DEPTH (Inches): 0.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankful
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] \(\text{ \sigma} 1.0 m (<=3' 3") [5 pts]	Width
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 1.50	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 1.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream ☆	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 1.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream ★ RIPARIAN WIDTH FLOODPLAIN QUALITY	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 1.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream ☆	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) ANOTE: River Left	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream ★ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Wide >10m Wide >10m Mature Forest, Wetland I mmature Forest, Shrub or Old Field Conservation Tillage Immature Forest, Shrub or Old Field Conservation Flow Creen Pasture Row Creen Pastur	Width Max=30
> 4.0 meters (> 13') [30 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream ★ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Wide >10m Wide >10m Mature Forest, Wetland I mmature Forest, Shrub or Old Field Conservation Tillage Immature Forest, Shrub or Old Field Conservation Flow Creen Pasture Row Creen Pastur	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream A RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10 m Fenced Pasture Mining or Construction COMMENTS	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream And RIPARIAN WIDTH L R (Per Bank) Wide > 10m Wide > 10m Wide > 10m Wide > 10m Narrow < 5m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermittent)	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY Mature Forest, Wetland Wide >10 m Mature Forest, Wetland Moderate 5-10m Residential, Park, New Field Narrow <5m None Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	Width Max=30
AVERAGE BANKFULL WIDTH This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY AVERAGE BANKFULL WIDTH RIPARIAN WIDTH FLOODPLAIN QUALITY Wide > 10m	Width Max=30
A	Width Max=30
AVERAGE BANKFULL WIDTH This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH RIPARIA	Width Max=30
A	Width Max=30

	ED? - Yes ✓ No QHE	. 550.0	, , 30, Audoli	Completed QHE		
WWH Name: Dry Run	DESIGNATED USE(S)			Distance from Ev	valuated Stream	450 N
CWH Name:			Ī	Distance from Ev		
EWH Name:				Distance from Ev	aluated Stream _	
	CH COPIES OF MAPS, INCLU	DING THE ENTIRE V	VATERSHED A	REA. CLEARLY	MARK THE SITE L	OCATION
USGS Quadrangle Name:	ampbell	NRC:	Soil Map Page	NRC NRC	S Soil Map Strean	n Order
County: Mahoning		Township / C	ity: Youngsto	wn		
MISCELLANEOUS	s					
Base Flow Conditions? (Y/N)): N Date of last preci	ipitation: 01/0	5/20	Quantity: 0	.16 in	
Photograph Information: 3		A 100	122	1.00		
	N Canopy (% ope	400/				
	N	511).			NA NA	
Were samples collected for v	NA				.ab Number: NA	NA
Field Measures: Temp (°	C) Dissolved Oxyge		pH (S.U.) N /	Conductivit	y (µmhos/cm)	NA
Is the sampling reach repres	entative of the stream (Y/N)	If not, please	explain:			
Additional comments/descrip	ption of pollution impacts:					
Overall Stability of BOTH S	Stream Banks (check one):	Stable	Moderately	Stable /	Unstable	e
Fish Observed? (Y/N) N Frogs or Tadpoles Observed Comments Regarding Biolog	Voucner? (Y/N	alamanders Observe N) N Aquatic Mac	d? (Y/N) N roinvertebrates	Voucher? (Y/N) Observed? (Y/N		(Y/N) N
<u> 170</u>						
	AND NARRATIVE DES					
esidential	dmarks and other features of	of interest for site e	valuation and a	narrative descr	iption of the strea	am's locatio
awn	steep	wooded				
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Stream RLP 12



Primary Headwater Habitat Evaluation Form

27

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-jbl-20200106-04 SITE NUMBER 04 RIVER BASIN Mahoning River DRAINAGE AREA (mi²)	0.01
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09533 LONG80.61095 RIVER CODE NA RIVER MILE N	IA
DATE 01/06/20 SCORER jbl,jtt COMMENTS ephemeral; has a side channel at top	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instru	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING: tires, smell of sewage	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 TOTAL NUMBER OF SUBSTRATE TYPES: 7	HHEI Metric Points Substrate Max = 40 22
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	Pool Dept Max = 30
COMMENTS MAXIMUM POOL DEPTH (Inches): 0.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (Feet): 2.00	5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ♣NOTE: River Left (L) and Right (R) as looking downstream ♣ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant per Bank) L R Wide >10m Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row Cro None Fenced Pasture Mining or Construction COMMENTS	op -
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS recent rain SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/10	

ADDITIONAL STREAM INFORM	MATION (This Information Must Also be Completed):	
QHEI PERFORMED?	Yes No QHEI Score (If Yes, Attach Completed QHEI Form)	
DOWNSTREAM DES	IGNATED USE(S)	
WWH Name: Dry Run	Distance from Evaluated Stream	
CWH Name:	Distance from Evaluated Stream	
EWH Name:	Distance from Evaluated Stream _	
	COPIES OF MAPS, INCLUDING THE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION	N
USGS Quadrangle Name: Cam	NRCS Soil Map Page: NA NRCS Soil Map Stream Order	NA
County: Mahoning	Township / City: Youngstown	
MISCELLANEOUS		
Base Flow Conditions? (Y/N):_	Date of last precipitation: 01/05/20 Quantity: 0.16 in	
	otos, upstream, downsteam and substrate	
Elevated Turbidity? (Y/N):	Canopy (% open): 10%	
Were samples collected for water	142	
Field Measures: Temp (°C)	NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA	
Is the sampling reach representa	Y	
is the sampling reach represent	anve of the stream (1714) If not, please explain	
Additional comments/description	of pollution impacts:	
Overall Stability of BOTH Stre	eam Banks (check one): Stable Moderately Stable Unstable	
Total Control of the	D number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher?	
	NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed):	
Include important landma	arks and other features residential valuation and a narrative description of the stream's loc	ation
	hh-jbl-20200106-05	1/-
wooded side	1111-301-20200100-03	~
wooded side channe	el steep	
Gnann	tires wooded	
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october 24, 2 residential	PHWH Form Page - 2	
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Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-jbl-20200106-05 SITE NUMBER 05 RIVER BASIN Mahoning River DRAINAGE AREA (mi²)).52
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09592 LONG80.61050 RIVER CODE NA RIVER MILE	NA
DATE 01/06/20 SCORER jbl,jtt COMMENTS Perennial	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Inst	ructions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING: smell of treated water, trash and debris along hillside, culverted outside of survey corridor	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 100% Substrate Percentage Check C	HHEI Metric Points Substrate Max = 40 20 A+B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 TOTAL NUMBER OF SUBSTRATE TYPES: 5	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (Inches): 6.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	Bankfull Width Max=30
COMMENTSAVERAGE BANKFULL WIDTH (Feet): 7.00	20
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) L R Wide >10m Mature Forest, Wetland Conservation Tillage Moderate 5-10m Immature Forest, Shrub or Old Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row Conservation Tillage None Fenced Pasture Mining or Construction COMMENTS	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS recent rain The control of Evaluation (Check ONLY one box): Moist Channel, isolated pools, no flow (Intermitten Dry channel, no water (Ephemeral))	1
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/	100 ft)

	QHEI PERFORMED? - Yes V No QHEI Score (If Yes, Attach Completed QHEI Form)
	DOWNSTREAM DESIGNATED USE(S)
	WWH Name: Dry Run Distance from Evaluated Stream 980 ft
	CWH Name: Distance from Evaluated Stream
	EWH Name: Distance from Evaluated Stream
	MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
	USGS Quadrangle Name: Campbell NRCS Soil Map Page: NA NRCS Soil Map Stream Order NA
	County: Mahoning Township / City: Youngstown
	MISCELLANEOUS Base Flow Conditions? (Y/N): N Date of last precipitation: 01/05/20 Quantity: 0.16 in
	Photograph Information: 3 photos, upstream, downsteam and substrate
	Elevated Turbidity? (Y/N): N Canopy (% open): 10%
	Carlopy (70 open).
	Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA
	Field Measures: Temp (°C) NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA
	Is the sampling reach representative of the stream (Y/N) If not, please explain:
	Additional comments (description of pollution imposts)
	Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable
	ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
	Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (
	rogs of Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N)
rth /	Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):
rth	DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream cocation
/	DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream cocation w-jbl-20200106-01
rth	DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream cocation w-jbl-20200106-01

Stream RLP-14

Modified Class 2



Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-jbl-20200106-06 SITE NUMBER 06 RIVER BASIN Mahoning River DRAINAGE AREA (mi²)	0.01
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09648 LONG80.60866 RIVER CODE RIVER MILE	
DATE 01/06/20 SCORER jbl,jtt COMMENTS intermittent	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Ins	tructions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO REMODIFICATIONS: Channelized near road, trash	COVERY
 SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. 	HHEI
TYPE PERCENT TYPE PERCENT	Metric
BLDR SLABS [16 pts] 0% SILT [3 pt] 15% BOULDER (>256 mm) [16 pts] 0% LEAF PACK/WOODY DEBRIS [3 pts] 25%	Points
BOULDER (>256 mm) [16 pts]	Substrate
COBBLE (65-256 mm) [12 pts] 25% CLAY or HARDPAN [0 pt] 0%	Max = 40
☐ GRAVEL (2-64 mm) [9 pts]	21
Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 25.00% (A) Substrate Percentage 100% (B)	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 TOTAL NUMBER OF SUBSTRATE TYPES: 6	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dept
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts]	15
	15
COMMENTS MAXIMUM POOL DEPTH (Inches): 2.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	
≥ 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] ≤ 1.0 m (<-3' 0") [5 pts]	Width Max=30
> 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Max=30
COMMENTSAVERAGE BANKFULL WIDTH (Feet): 2.50 This information must also be completed	Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY AVERAGE BANKFULL WIDTH (Feet): 2.50 This information must also be completed RIPARIAN WIDTH FLOODPLAIN QUALITY FLOODPLAIN QUALITY	Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant per Bank) L R	Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY PROPERTY RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m AVERAGE BANKFULL WIDTH (Feet): 2.50 L R (Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m AVERAGE BANKFULL WIDTH (Feet): 2.50 L R (Most Predominant per Bank) L R (Most Predominant per Bank) I Mature Forest, Wetland Wide >10m Wi	5
AVERAGE BANKFULL WIDTH (Feet): 2.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field Open Pasture, Row Completed This information must also be completed RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) I R (Most Predominant per Bank) Field Open Pasture, Row Completed Narrow <5m Residential, Park, New Field Open Pasture, Row Completed RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) Field Open Pasture, Row Completed RIPARIAN WIDTH FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream And Right (R) as looki	5 5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m AVERAGE BANKFULL WIDTH (Feet): 2.50 L R (Most Predominant per Bank) L R (Most Predominant per Bank) I Mature Forest, Wetland Wide >10m Wi	5 5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None AVERAGE BANKFULL WIDTH (Feet): 2.50 L R (Most Predominant per Bank) L R Conservation Tillage Immature Forest, Shrub or Old Open Pasture, Row Conservation Open Pasture, Row Conservation None	5 5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing AVERAGE BANKFULL WIDTH (Feet): 2.50 AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WID	5 crop
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Residential, Park, New Field None COMMENTS AVERAGE BANKFULL WIDTH (Feet): 2.50 This information must also be completed RIPARIAN WIDTH FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream: (Per Bank) L R (Most Predominant per Bank) L R (Conservation Tillage) Immature Forest, Wetland Open Pasture, Row Conservation Open Pasture, Row Conservation None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	5 crop
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream: RIPARIAN WIDTH FLOODPLAIN QUALITY Wide >10m Mature Forest, Wetland Moderate 5-10m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) AVERAGE BANKFULL WIDTH (Feet): 2.50 AVERAGE B	5 crop
AVERAGE BANKFULL WIDTH (Feet): 2.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream Market (L) and Right (R) as looking down	5 crop
AVERAGE BANKFULL WIDTH (Feet): 2.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream ANOTE (Per Bank) Wide >10m	5 crop
AVERAGE BANKFULL WIDTH (Feet): 2.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream Market (L) and Right (R) as looking down	Max=30 5 Crop ntt)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Complete	ed):
QHEI PERFORMED? - Yes ✓ No QHEI Score (If Yes	s, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
WWH Name: Dry Run	Distance from Evaluated Stream 0.20
EWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATER	SHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Campbell NRCS Soil N	Map Page: NRCS Soil Map Stream Order
County: Mahoning Township / City: Y	oungstown
MISCELLANEOUS	
Base Flow Conditions? (Y/N): N Date of last precipitation: 01/05/20	Quantity:
	Quantity.
Photograph Information: 3 photos, upstream, downsteam and substrate	
Elevated Turbidity? (Y/N): N Canopy (% open): 20%	
Were samples collected for water chemistry? (Y/N): Note lab sample no. o	or id. and attach results) Lab Number:
	U.) Conductivity (µmhos/cm)
The state of the s	
s the sampling reach representative of the stream (Y/N) Y If not, please explain	n:
Additional comments/description of pollution impacts:	
Overall Stability of BOTH Stream Banks (check one): Stable Mo	oderately Stable Unstable
Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Aquatic Macroinver Comments Regarding Biology:	N Voucher? (Y/N) N
DRAWING AND NARRATIVE DESCRIPTION OF STREA	AM REACH (This <u>must</u> be completed):
Include important landmarks and other features of interest for site evaluati	ion and a narrative description of the stream's location
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	hh-jb/-20200106-05 wooded
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October 24, 2002 Revision	Save as pdf Reset Form

Stream RLP-15 Modified Class 2



Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION FE LINCOIN PARK-RIVERDEND 138KV Transmission Line	
hh-jbl-20200107-01 SITE NUMBER 01 RIVER BASIN Mahoning River DRAINAGE AREA (mi²)	0.07
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09770 LONG80.60457 RIVER CODE NA RIVER MILE	NA
DATE 01/06/20 SCORER jbl,jtt COMMENTS intermittent	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Inst	ructions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING CUIVERT	COVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.	ı HHEI
TYPE PERCENT TYPE PERCENT	Metric
BLDR SLABS [16 pts] 0% SILT [3 pt] 10%	Points
BOULDER (>256 mm) [16 pts]	Substrate
✓ ☐ COBBLE (65-256 mm) [12 pts] 25% ☐ CLAY or HARDPAN [0 pt] 0%	Max = 40
GRAVEL (2-64 mm) [9 pts] 25% MUCK [0 pts] 0%	27
SAND (<2 mm) [6 pts]	
Total of Percentages of 25.00% (A) Substrate Percentage 100% (B) Check	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 21 TOTAL NUMBER OF SUBSTRATE TYPES: 6	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dep
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts] < 5 cm [5 pts]	45
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	15
COMMENTS MAXIMUM POOL DEPTH (Inches): 3.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankful
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.0 m (<-3' 3" - 4' 8") [15 pts] > 1.0 m (<-3' 3") [5 pts]	Width Max=30
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	
COMMENTS AVERAGE BANKFULL WIDTH (Feet): 3.00	11
	5
	5
This information <u>must</u> also be completed	5
RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream	5
	5
RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) U Most Predominant per Bank) Wide >10m Mature Forest, Wetland Conservation Tillage	5
RIPARIAN ZONE AND FLOODPLAIN QUALITY **NOTE: River Left (L) and Right (R) as looking downstream ** RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Field Urban or Industrial	
RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland L R (Conservation Tillage Immature Forest, Shrub or Old Wide Transport Industrial	
RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m None RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R (Most Pr	rop
RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None COMMENTS RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R (Doservation Tillage) Conservation Tillage With a predominant per Bank) Residential, Park, New Field Mining or Construction Comments	rop
RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	rop
RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Marrow <5m None Fenced Pasture RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R (Most Predominant per Bank) L R (Conservation Tillage Immature Forest, Shrub or Old Field Open Pasture, Row Conservation Open Pasture, Row Conservation Mining or Construction COMMENTS	rop
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RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) Check ONLY one box): RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream A NOTE: River Left (L) and Right (R) as looking downstream A NOTE: River Left (L) and Right (R) as looking downstream A NOTE: River Left (L) and Right (R) as looking downstream A NOTE: River Left (L) and Right (R) as looking downstream A NOTE: River Left (L) and Right (R) as looking downstream A NOTE: River Left (L) and Right (R) as looking downstream A NOTE: River Left (L) and Right (R) as looking downstream A NOTE: River Left (L) and Right (R) as looking downstream A Note: A River Left (L) and Right (R) as looking downstream A Note: A River Left (L) and Right (R) as looking downstream A Note: A River Left (L) and Right (R) as looking downstream A Note: A River Left (L) and Right (R) as looking downstream A Note: A River Left (L) and Right (R) as looking downstream A Note: A River Left (L) and Right (R) as looking downstream A Note: A River Left (L) and River	rop

ADI	DITIONAL STREAM I	NFORMATION (This Info	mation Must Also	be Completed):			
	QHEI PERFOR	RMED? - Yes ✓ No	QHEI Score	(If Yes, Atta	ach Completed QH	El Form)	
	DOWNSTREA WWH Name: Dry Ru	M DESIGNATED USE(S)			Distance from F	Evaluated Stream	0.5 mi
	CWH Name:					valuated Stream	
	EWH Name:				Distance from E	valuated Stream	
	MAPPING: AT	TACH COPIES OF MAPS, I	NCLUDING THE E	NTIRE WATERSHED	AREA. CLEARLY	MARK THE SITE LO	CATION
HS	GS Quadrangle Name			NRCS Soil Map P	NA.	CS Soil Map Stream	***
	Mahanina	·. <u></u>				CO Soli Map Stream	Order _
COL	unity.		TOWN	ship / City: Young	0.		
	MISCELLANE	N		04/05/00		0.46 :	
	se Flow Conditions? (precipitation:	01/05/20	_ Quantity:	0.16 in	
Pho	otograph Information:	3 photos, upstream, do	vnsteam and sub	strate			
Ele	vated Turbidity? (Y/N)	: N Canopy (% open): 50°	/ 6			
We	ere samples collected	for water chemistry? (Y/N):	N (Note la	o sample no. or id. a	and attach results)	Lab Number: NA	
Fiel	ld Measures: Tem	o (°C) NA Dissolved C		NA pH (S.U.)		rity (µmhos/cm)	NA
			35.50		Conductiv	ну (ришоолони) <u>——</u>	
Is th	he sampling reach rep	presentative of the stream (Y/N) If not	, please explain:			
Add	ditional comments/des	scription of pollution impact	s:				
Ov	verall Stability of BO	TH Stream Banks (check	one): Stable	Modera	tely Stable	Unstable	√
Fro	h Observed? (Y/N) Nogs or Tadpoles Obser	17.5	Salamanders C (Y/N) N Aqua	Observed? (Y/N) N tic Macroinvertebrat	Voucher? (Y/lites Observed? (Y/li		(/N) <u>N</u>
10							
		G AND NARRATIVE I					
	include important	landmarks and other feat	ures of interest to	r site evaluation an	id a narrative desc	cription of the stream	n's location
	1 1	scrub					N
	\	shrub			wooded		
ed							
	_		garbage	hh-jbl-2020	0107-01		
FL	.ow scrub	1 De	V				
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		steep	, 6				
				/			
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res	sidential		Ī				
			PHWH	Form Page - 2			
Octo	ober 24, 2002 Revision	wooded			Cause on male	Reset	Form

Stream RLP-16 Modified Class 1



Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Lin	ne
	lahoning River DRAINAGE AREA (mi²) 0.04
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09795 LONG80	0.60351 RIVER CODE NA RIVER MILE NA
DATE 01/06/20 SCORER jbl,jtt COMMENTS intermit	ttent
NOTE: Complete All Items On This Form - Refer to "Field Evaluation	n Manual for Ohio's PHWH Streams" for Instructions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVE MODIFICATIONS: culvert, trash/debris dumped in channel	ERED PRECOVERING RECENT OR NO RECOVERY
SUBSTRATE (Estimate percent of every type of substrate present. Ch	
(Max of 32). Add total number of significant substrate types found (Max of TYPE PERCENT TYPE	PERCENT Metric
BLDR SLABS [16 pts] 0% SILT [[3 pt] 35% Points
	PACK/WOODY DEBRIS [3 pts] 25% DETRITUS [3 pts] 0% Substrat
☐ ☐ COBBLE (65-256 mm) [12 pts] ☐ ☐ CLAY	/ or HARDPAN [0 pt] 0%
	K [0 pts] 0% 00 10 10 10 10 10 10 10 10 10 10 10 10
	(7)
Bldr Slabs, Boulder, Cobble, Bedrock	tle Percentage 75% (B) A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6	TOTAL NUMBER OF SUBSTRATE TYPES: 4
2. Maximum Pool Depth (Measure the maximum pool depth within the	
evaluation. Avoid plunge pools from road culverts or storm water pipes) > 30 centimeters [20 pts] > 5 c	(Check ONLY one box): Max = 36 cm - 10 cm [15 pts]
	cm [5 pts] WATER OR MOIST CHANNEL [0 pts]
COMMENTS	MAXIMUM POOL DEPTH (Inches): 2.00
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements)	(Check ONLY one box): Bankful
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.0	(11.01.00):
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 1.0	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] Width Wax=30
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.0	(Check ONLY one box): D m - 1.5 m (> 3' 3" - 4' 8") [15 pts] Bankful Width
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS	(Check ONLY one box): 0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] 0 m (<=0' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): 2.00
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must	(Check ONLY one box): 0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
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3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant)	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (<=0' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): also be completed iver Left (L) and Right (R) as looking downstream \$\frac{1}{2}\$ per Bank) L R
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant Wide >10m Mature Forest, Wetl Moderate 5-10m Immature Forest, St	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (<=0' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): talso be completed iver Left (L) and Right (R) as looking downstream the per Bank) L R Conservation Tillage
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Riv	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (<-3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): talso be completed iver Left (L) and Right (R) as looking downstream ☆ per Bank) L R Conservation Tillage thrub or Old Urban or Industrial
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant Wide >10m Mature Forest, Wetl Moderate 5-10m Narrow <5m Residential, Park, N	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (<=0' 0") [5 pts] AVERAGE BANKFULL WIDTH (Feet): also be completed iver Left (L) and Right (R) as looking downstream to per Bank) and bland Conservation Tillage thrub or Old Urban or Industrial Open Pasture, Row Crop
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Riv	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (<-3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): talso be completed iver Left (L) and Right (R) as looking downstream ☆ per Bank) L R Conservation Tillage thrub or Old Urban or Industrial
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BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River and the average of 3-4 measurements) > 1.0	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (>-3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): also be completed iver Left (L) and Right (R) as looking downstream the chrub or Old Urban or Industrial Open Pasture, Row Crop Mining or Construction Moist Channel, isolated pools, no flow (Intermittent)
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: Ri RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Weth Moderate 5-10m Narrow <5m None COMMENTS Fenced Pasture COMMENTS Flow REGIME (At Time of Evaluation) (Check ONLY one box):	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (>-3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): also be completed iver Left (L) and Right (R) as looking downstream the chrub or Old Urban or Industrial Open Pasture, Row Crop Mining or Construction
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetl Wide >10m Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial)	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (<-3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): also be completed iver Left (L) and Right (R) as looking downstream ☆ per Bank) land Conservation Tillage thrub or Old Urban or Industrial Open Pasture, Row Crop Mining or Construction Moist Channel, isolated pools, no flow (Intermittent) Dry channel, no water (Ephemeral)
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts] > 0.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetl Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Evaluation) Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS recent rain SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Chennel)	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (>-9' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): also be completed iver Left (L) and Right (R) as looking downstream the conservation Tillage included
BANK FULL WIDTH (Measured as the average of 3-4 measurements) > 4.0 meters (> 13') [30 pts]	(Check ONLY one box): O m - 1.5 m (> 3' 3" - 4' 8") [15 pts] O m (>-3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): also be completed iver Left (L) and Right (R) as looking downstream ☆ per Bank) land Conservation Tillage thrub or Old Urban or Industrial Open Pasture, Row Crop Mining or Construction Moist Channel, isolated pools, no flow (Intermittent) Dry channel, no water (Ephemeral)
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QHEI PERFORMED? - Yes V No QHEI Score (If Yes, Attach Completed QHEI Form) DOWNSTREAM DESIGNATED USE(S) WWH Name: Distance from Evaluated Stream CWH Name: Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream NAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION USGS Quadrangle Name: Campbell NRCS Soil Map Page: NA NRCS Soil Map Stream Order NA	ADDITIONAL STREAM I	NFORMATION (This	Information Must Also	be Completed):			
DOWNSTREAM DESIGNATED USE(S) WOWH Name: Distance from Evaluated Stream O.0 mil WOWH Name: Distance from Evaluated Stream Distance from Evaluation Distance from Evaluation Distance from Evaluation Distance from Evaluated Stream Distance from Evaluation Di					ach Completed OHFLE	Form)	
WWH Name: Distance from Evaluated Stream O.9. ml Distance from Evaluated Stream Order Na Nacy Distance from Evaluated Stream Distance from Evaluated Distance from Evaluation Dis				(11 165, 740	adi completed di Li i	om)	
Distance from Evaluated Stream MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION SGS Quadrangle Name: Campbell NINCS Soil Map Page NA NRCS Soil Map Stream Order NA Source Miscellaneous Sase Flow Conditions? (V/N): N Date of last precipitation: 01/05/20 Quantity: 0.16 in Photograph Information: 3 photos, upstream, downsteam and substrate Selevated Turbidity? (V/N): N Canopy (% open): 50% Vere samples collected for water chemistry? (V/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Sield Measures: Temp (°C): NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA sites sampling reach representative of the stream (Y/N) if not, please explain: Distance from Evaluation Word attach results) Lab Number: NA Sibio Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA Sibio Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA Sibio Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA Sibio Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA Sibio Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA Sibio Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA Sibio Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA Sibio Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (umhos/cm) NA Dissolved (V/N) NA Conductivity (umhos/cm) NA Sibio Dissolved (V/N) NA Conductivity (umhos/cm) NA Performed? (V/N) NA Voucher? (V/N) NA Vouche			:(8)		Distance from Eval	uated Stream	0.0 mi
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION ISGS Quadrangle Name. Campbell NRCS Soil Map Page NA NRCS Soil Map Stream Order NA Southly. Mahoning Township / City. Voungstown MISCELLANEOUS Sase Flow Conditions? (Y/N): N Date of last precipitation: 01/05/20 Quantity: 0.16 in Photograph Information: 3 photos, upstream, downsteam and substrate Several Turbidity? (Y/N): N Canopy (% open): 50% Vere samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number. NA site sampling reach representative of the stream (Y/N) If not, please explain: Disolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA site sampling reach representative of the stream (Y/N) If not, please explain: Disolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA site sampling reach representative of the stream (Y/N) If not, please explain: Disolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA site sampling reach representative of the stream (Y/N) NA pH (S.U.) NA Conductivity (µmhos/cm) NA site oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA site oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA site oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA site oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA stream Hall Name (Mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA stream Hall Name (Mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA stream Hall Name (Mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA stream Hall Name (Mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA stream Hall Name (Mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA photographic NAME (Mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA photographic NAME (Mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA photographic NAME (Mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA photographic NAME (Mg/l) NAME (Mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA photographic NAME (Mg/l) NAME (Mg/l) NAME (Mg/l) NAME (M					Distance from Evalu	uated Stream _	
SGS Quadrangle Name. Campbell NRCS Soil Map Page. NA NRCS Soil Map Stream Order NA County: Mahoning Township / City: Vorungstown MISCELLANEOUS Sase Flow Conditions? (Y/N): N Date of last precipitation: 01/05/20 Quantity: 0.16 in Photograph Information: 3 photos, upstream, downstoam and substrate Elevated Turbidity? (Y/N): N Canopy (% open): 50% Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Field Measures: Temp (*C): NA Dissolved Oxygen (mg/l): NA pH (S.U.): NA Conductivity (µmhos/cm): NA s the sampling reach representative of the stream (Y/N): If not, please explain: Doverall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the sign observed? (Y/N): N (Voucher? (EWH Name:				Distance from Evalu	uated Stream _	
MISCELLANEOUS Sase Flow Conditions? (Y/N): N Date of last precipitation: 01/05/20 Quantity: 0.16 in Photograph Information: 3 photos, upstream, downsteam and substrate Elevated Turbidity? (Y/N): N Canopy (% open): 50% Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA Field Measures: Temp (*C) NA Dissolved Oxygen (mgn) NA pH (S.U.) NA Conductivity (µmhos/cm) NA s the sampling reach representative of the stream (Y/N) frot, please explain: **Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable **BIOTIC EVALUATION** BIOTIC EVALUATION (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the s in D number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Din umber: Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Sish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Solamanders Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N	MAPPING: AT	TACH COPIES OF MAI	PS, INCLUDING THE <u>E</u> I	NTIRE WATERSHE	DAREA. CLEARLY MA	ARK THE SITE LO	CATION
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Biotic Evaluation Biotic Evaluation Overlograph Information: Date of last precipitation: Date of la	Feed on the control of the control o		Towns	ship / City: Young	gstown	Ac Ac	
Debetors of the State of the St	MISCELLANE	ous					
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Signification of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the sign Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N	Were samples collected	for water chemistry? (Y/N): N (Note la	b sample no. or id.	and attach results) Lat	Number: NA	
s the sampling reach representative of the stream (Y/N) Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable	196	NA			212		NA
Additional comments/description of pollution impacts: Overall Stability of BOTH Stream Banks (check one): Stable					conductivity (p	
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Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location shrub scrub scrub scrub	Fish Observed? (Y/N): N Frogs or Tadpoles Obser	Voucher? (Y/N) Ved? (Y/N) Vou	N Salamanders C	a sheets from the Probserved? (Y/N)	imary Headwater Habita Voucher? (Y/N)	t Assessment Mar	nual)
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Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location shrub Scrub Scrub					_	7	- 11
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scrub shrub scrub		landmarks and other	features of interest to	r site evaluation a	nd a narrative descrip	tion of the stream	's location
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PHWH Form Page - 2

Save as pdf

Reset Form

Stream RLP-17 Mod Class 2



ChieFPA Primary Headwater Habitat Evaluation Form

Γ	46

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
s-bl-20200108 SITE NUMBER 01 RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²)	0.11
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09782 LONG80.59838 RIVER CODE RIVER MILE	0.53
DATE 01/08/20 SCORER BL, RM COMMENTS intermittent	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for In	structions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECENT OR N	ECOVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes	ei
(Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE PERCENT TYPE PERCENT	HHEI
□ □ BLDR SLABS [16 pts] 0% □ ✓ SILT [3 pt] 30%	Points
BOULDER (>256 mm) [16 pts]	Substrat
BEDROCK [16 pt]	Max = 4
☐ GRAVEL (2-64 mm) [9 pts] ☐ MUCK [0 pts] ☐ 0%	16
SAND (<2 mm) [6 pts] 20% ARTIFICIAL [3 pts] 0%	
Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock (A) Substrate Percentage (Check (B)	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 TOTAL NUMBER OF SUBSTRATE TYPES: 4	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dep
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 3
> 22.5 - 30 cm [30 pts]	4.5
A COMPANY A COLUMN A	15
COMMENTS 10 cm max pool depth; OWHM=1.3'w x 0.3'd MAXIMUM POOL DEPTH (Inches): 3.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankful
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.0 m (<-3' 3" - 4' 8") [15 pts] \(\left\) \(\left\) 1.0 m (<-3' 3") [5 pts]	Width Max=30
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	,
COMMENTS BF=4.1'w x 0.9'd AVERAGE BANKFULL WIDTH (Feet): 4.10	15
This information must also be completed	
RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY	
L R (Per Bank) L R (Most Predominant per Bank) L R	
Wide >10m Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Ulsban or Industrial	
Field Field	0
Narrow <5m Residential, Park, New Field Open Pasture, Row	Crop
None Fenced Pasture Mining or Constructi COMMENTS scrubby woods all around w/wetland along LDB	on
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermitted)	ent)
Subsurface flow with isolated pools (Interstitial) COMMENTS intermittent flow regime Dry channel, no water (Ephemeral)	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	
□ None □ 1.0 □ 2.0 □ 3.0	
0.5 2.5 >3	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10	ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):	
QHEI PERFORMED? - Yes V No QHEI Score (If Yes, Attach Completed QHEI Form)	
DOWNSTREAM DESIGNATED USE(S)	
WWH Name: Dry Run Distance from Evaluated Stream 0.9	+
CWH Name: Distance from Evaluated Stream	+
EWH Name: Distance from Evaluated Stream	7
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION	
USGS Quadrangle Name: Campbell NRCS Soil Map Page: NA NRCS Soil Map Stream Order N	Α
County: Mahoning Township / City: Youngstown	
MISCELLANEOUS	
Base Flow Conditions? (Y/N):_N Date of last precipitation:_ 01/05/20 Quantity:_ 0.16 in	
Photograph Information: 420-upstream, 421-downsteam 422-substrate	
Elevated Turbidity? (Y/N): N Canopy (% open): 30%	
Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: NA	\Box
Field Measures: Temp (°C) NA Dissolved Oxygen (mg/l) NA pH (S.U.) NA Conductivity (µmhos/cm) NA]
Is the sampling reach representative of the stream (Y/N) If not, please explain:	
Additional comments/description of pollution impacts:	
Overall Stability of BOTH Stream Banks (check one): Stable / Moderately Stable Unstable	
Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) Fish Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N N Voucher? (Y/N) N N N N N N N N N N N N	e sit
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)	
Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location)
FLOW POR Slope Was DCD	The same of the sa



Stream RLP-18 Modified Class 1



A Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-aeh-20200107-07 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²)	0.10
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09685 LONG80.60306 RIVER CODE NA RIVER MILE	NA
DATE 01/07/20 SCORER AEH/SKM COMMENTS Intermittent	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Inst	ructions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING CUIverted	COVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BOULDER (>256 mm) [16 pts] LEAF PACK/WOODY DEBRIS [3 pts]	HHEI Metric Points
□ □ BEDROCK [16 pt] 0% □ □ FINE DETRITUS [3 pts] 0% □ □ COBBLE (65-256 mm) [12 pts] 0% □ □ CLAY or HARDPAN [0 pt] 5%	Substrate Max = 40
GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] 0% ARTIFICIAL [3 pts] 0%	16
Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock O.00% (A) SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 Substrate Percentage 100% (B) TOTAL NUMBER OF SUBSTRATE TYPES: 4	A + B
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dept
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	5
COMMENTS MAXIMUM POOL DEPTH (Inches): 0.50	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Bankfull Width
> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Max=30
COMMENTSAVERAGE BANKFULL WIDTH (Feet): 2.00	5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH L R (Per Bank) Wide >10m Moderate 5-10m This information must also be completed ANOTE: River Left (L) and Right (R) as looking downstream NOTE: River Left (L) and Right (R) as looking downstream NOTE: River Left (L) and Right (R) as looking downstream NOTE: River Left (L) and Right (R) as looking downstream NOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Field	
Narrow <5m Residential, Park, New Field Open Pasture, Row C	гор
None Fenced Pasture Mining or Construction COMMENTS	1
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS The control of Evaluation (Check ONLY one box): Moist Channel, isolated pools, no flow (Intermitten Dry channel, no water (Ephemeral))	t)
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 0.5 1.0 2.0 3.0 >3.0 >3.0 >3.0	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/	100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be	Completed):
QHEI PERFORMED? - Yes ✓ No QHEI Score	(If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: Dry Run CWH Name: EWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIR	RE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Campbell	RCS Soil Map Page: NRCS Soil Map Stream Order
County: Mahoning Township	/ City:Youngstown
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Y Date of last precipitation: 0	1/06/20 Quantity: 0.01
Photograph Information: 3 photos, upstream, downsteam and substra	te
Elevated Turbidity? (Y/N): N Canopy (% open): 15%	
Were samples collected for water chemistry? (Y/N): N (Note lab sa	mple no. or id. and attach results) Lab Number:
	pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) Y If not, ple	ase explain:
Overall Stability of BOTH Stream Banks (check one): Stable	Moderately Stable Unstable
Performed? (Y/N): N (If Yes, Record all observations. Voucher co ID number. Include appropriate field data sh Voucher? (Y/N) N Salamanders Observed?	llections optional. NOTE: all voucher samples must be labeled with the site eets from the Primary Headwater Habitat Assessment Manual)
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher co ID number. Include appropriate field data sh Fish Observed? (Y/N) N Voucher? (Y/N) N Aquatic N Comments Regarding Biology:	Illections optional. NOTE: all voucher samples must be labeled with the site eets from the Primary Headwater Habitat Assessment Manual) erved? (Y/N) N Voucher? (Y/N) N Voucher
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher con ID number. Include appropriate field data she Fish Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic N Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF	llections optional. NOTE: all voucher samples must be labeled with the site eets from the Primary Headwater Habitat Assessment Manual) erved? (Y/N) N Voucher?
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher co ID number. Include appropriate field data sh Fish Observed? (Y/N) N Voucher? (Y/N) N Aquatic N Comments Regarding Biology:	llections optional. NOTE: all voucher samples must be labeled with the site eets from the Primary Headwater Habitat Assessment Manual) erved? (Y/N) N Voucher?
BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher cool in Include appropriate field data she will be seen to the cool in the cool	llections optional. NOTE: all voucher samples must be labeled with the site eets from the Primary Headwater Habitat Assessment Manual) erved? (Y/N) N Voucher?

Modified Class 1 Stream RLP-19



Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3): SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line

hh-aeh-20200107-08 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²) LENGTH OF STREAM REACH (ft) 200 LAT. 41.09613 LONG80.60301 RIVER CODE NA RIVER MILE	
DATE 01/07/20 SCORER AEH/SKM COMMENTS ephemeral	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Ins	tructions
STREAM CHANNEL	COVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock O.00% ARTIFICIAL [3 pts] Substrate Percentage Check (B)	HHEI Metric Points Substrate Max = 40 9
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES: 3	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (Inches): 0.50	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Bankfull Width Max=30
COMMENTSAVERAGE BANKFULL WIDTH (Feet): 0.50	5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) L R Wide >10m Mature Forest, Wetland Conservation Tillage Moderate 5-10m Field Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row (COMMENTS)	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS Woist Channel, isolated pools, no flow (Intermitte Dry channel, no water (Ephemeral)	nt)
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe	ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Als	o be Completed):
QHEI PERFORMED? - Yes ✓ No QHEI Score	(If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	Distance from Evaluated Stream 0.50
CWH Name: Dry Run	Distance from Evaluated Stream Distance from Evaluated Stream
EWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream
	NTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Campbell	NRCS Soil Map Page: NRCS Soil Map Stream Order
	ship / City: Youngstown
County Town	Stilp / City.
MISCELLANEOUS Y	01/06/20 Quantity: 0.01
Base Flow Conditions? (Y/N): Y Date of last precipitation:	Quantity.
Photograph Information: 3 photos, upstream, downsteam and sub	
Elevated Turbidity? (Y/N): N Canopy (% open): 30	%
Were samples collected for water chemistry? (Y/N): N (Note la	b sample no. or id. and attach results) Lab Number:
,	pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not	, please explain:
Overall Stability of BOTH Stream Banks (check one): Stable	Moderately Stable Unstable
ID number. Include appropriate field date Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders of	er collections optional. NOTE: all voucher samples must be labeled with the site a sheets from the Primary Headwater Habitat Assessment Manual) Observed? (Y/N) Voucher? (Y/N) N Voucher? (Y/N) Voucher? (Y/N) Voucher? (Y/N)
DRAWING AND NARRATIVE DESCRIPTION	OF STREAM REACH (This must be completed):
	on site evaluation and a narrative description of the stream's location
Upland	and a name description of the stream's location
drainage	forested
herb	
FLOW -	
) /	roadway
) (
	. \
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⚠ Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-aeh-20200107-09 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²)	.24
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09476 LONG80.60300 RIVER CODE NA RIVER MILE	NA
DATE 01/07/20 SCORER AEH/SKM COMMENTS perennial, NHD mapped tributary to Dry Run	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PhWH Streams of the Complete All Items On This Field Evaluation Manual for Ohio's PhWH Streams of the Complete Al	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERED Culverted	COVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock TOtal of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 10.00% ARTIFICIAL [3 pts] Substrate Percentage 100% (B)	HHEI Metric Points Substrate Max = 40
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 TOTAL NUMBER OF SUBSTRATE TYPES: 7	5000
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (Inches): 10.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Bankfull Width Max=30
COMMENTSAVERAGE BANKFULL WIDTH (Feet): 5.00	20
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS The control of Evaluation (Check ONLY one box): Moist Channel, isolated pools, no flow (Intermittent Dry channel, no water (Ephemeral))) L
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/100 ft)	00 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Als	so be Completed):
QHEI PERFORMED? - Yes V No QHEI Score	(If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: Dry Run CWH Name: EWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE	ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Campbell	NRCS Soil Map Page: NRCS Soil Map Stream Order
	nship / City: Youngstown
MISCELLANEOUS Base Flow Conditions? (Y/N): Y Date of last precipitation:	01/06/20 Quantity: 0.01
Photograph Information: 3 photos, upstream, downsteam and sul	bstrate
Field Measures: Temp (°C) Dissolved Oxygen (mg/l)	ab sample no. or id. and attach results) Lab Number: pH (S.U.) Conductivity (µmhos/cm) ot, please explain:
Overall Stability of BOTH Stream Banks (check one): Stable	Moderately Stable Unstable
ID number. Include appropriate field da Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders	ner collections optional. NOTE: all voucher samples must be labeled with the site sta sheets from the Primary Headwater Habitat Assessment Manual) Observed? (Y/N) Voucher? (Y/N) N Voucher? (Y/N) Voucher? (Y/N)
DRAWING AND NARRATIVE DESCRIPTION	N OF STREAM REACH (This must be completed):
Include important landmarks and other features of interest forest	or site evaluation and a narrative description of the stream's location
shrubby	gray film on water surface
forest	The state of the s

Stream RLP-21



Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-aeh-20200107-10 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²) 0	.10
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09327 LONG80.60296 RIVER CODE NA RIVER MILE N	IA
DATE 01/07/20 SCORER AEH/SKM COMMENTS intermittent	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instru	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERED Culverted	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of O.00% (A) Substrate Percentage 100% (B)	HHEI Metric Points Substrate Max = 40
Bldr Slabs, Boulder, Cobble, Bedrock	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (Inches): 0.50	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	Bankfull Width Max=30
COMMENTSAVERAGE BANKFULL WIDTH (Feet): 2.00	5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Residential, Park, New Field None Fenced Pasture This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R Conservation Tillage Urban or Industrial Open Pasture, Row Cre None Fenced Pasture Mining or Construction COMMENTS	ор
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):) L
None ✓ 1.0 □ 2.0 □ 3.0 0.5 □ 1.5 □ 2.5 □ >3	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/1	00 ft)

ADDITIONAL STREAM IN	IFORMATION (This Information Must A	Iso be Completed):		
QHEI PERFOR	MED? - Yes ✓ No QHEI Score	(If Yes, Attack	h Completed QHEI Form)	
DOWNSTREAM WWWH Name: Dry Rui CWH Name:			Distance from Evaluated S	
EWH Name:			Distance from Evaluated S	7
MAPPING: ATT	ACH COPIES OF MAPS, INCLUDING THE	ENTIRE WATERSHED	AREA. CLEARLY MARK TH	IE SITE LOCATIO
USGS Quadrangle Name:	Campbell	NRCS Soil Map Page	ge: NRCS Soil Ma	p Stream Order
County: Mahoning		wnship / City: Youngst		
MISCELLANEO	US	7.000 mm		
Base Flow Conditions? (Y		01/06/20	Quantity: 0.01	_
Photograph Information:	3 photos, upstream, downsteam and s	ubstrate		
Elevated Turbidity? (Y/N):	N Canopy (% open): 7	75%		
	N	lab sample no. or id. ar	nd attach results) Lab Numb	per:
Field Measures: Temp				
	resentative of the stream (Y/N)	2 - A - A - A - A - A - A - A - A - A -	Conductivity (printes	
is the sampling reach repr	esentative of the stream (Y/N) If n	ot, please explain:		
Performed? (Y/N): N Fish Observed? (Y/N) N Frogs or Tadpoles Observed	(If Yes, Record all observations. Vouc ID number. Include appropriate field of Voucher? (Y/N) N Salamanders red? (Y/N) N Voucher? (Y/N) N Aq	data sheets from the Primes Observed? (Y/N)	Voucher? (Y/N)	
Comments Regarding Biol	ogy:			
4.				
DRAWING	AND NARRATIVE DESCRIPTION	N OF STREAM RE	EACH (This must be	completed):
	andmarks and other features of interest	for site evaluation and	a narrative description of	the stream's loca
it				
1				
FLOW →				
PLOW 4			<u> </u>	
FLOW 4			lawn	
roadwa			lawn	

Save as pdf

Reset Form

Stream RLP-22 Modified Class 1



Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-aeh-20200107-01 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²)	0.01
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09023 LONG80.61077 RIVER CODE NA RIVER MILE	NA
DATE 01/07/20 SCORER AEH/SKM COMMENTS Ephemeral	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PhWH Streams of the Complete All Items On This Form - Refer to This Form - Refer	structions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RIMODIFICATIONS:	ECOVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes	HHEI
(Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE PERCENT TYPE PERCENT	Metric
□ □ BLDR SLABS [16 pts] 0% SILT [3 pt] 65%	Points
BOULDER (>256 mm) [16 pts]	Substrate
COBBLE (65-256 mm) [12 pts] 0% CLAY or HARDPAN [0 pt] 15%	Max = 40
GRAVEL (2-64 mm) [9 pts] 0% MUCK [0 pts] 0%	9
SAND (<2 mm) [6 pts]	
Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock (A) Substrate Percentage Check (B)	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES: 3	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dept
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts] < 5 cm [5 pts]	
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	5
COMMENTS MAXIMUM POOL DEPTH (Inches): 0.50	
	1
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Bankfull Width Max=30
	Width
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.0 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (<-3' 3") [5 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): This information must also be completed	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 0.50	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant per Bank) L R	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): O.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ♣NOTE: River Left (L) and Right (R) as looking downstream ♣ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10 Most Predominant per Bank) L R (Most Predominant per Bank) Mature Forest, Wetland Conservation Tillage	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): O.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream ☆ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant per Bank) L R Wide >10 m V Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Urban or Industrial Field Onen Pasture Power	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream And RIPARIAN WIDTH RIPARIAN WIDTH L R (Per Bank) Wide >10 m Wide >10 m Moderate 5-10m Residential, Park, New Field P1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (> 3' 3" - 4' 8") [15 pts] 2	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): O.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream ☆ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant per Bank) L R Wide >10 m V Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Urban or Industrial Field Onen Pasture Power	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS AVERAGE BANKFULL WIDTH (Feet): 0.50 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream ☆ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant per Bank) L R Wide >10m ✓ Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Urban or Industrial Field Open Pasture, Row None Residential, Park, New Field Open Pasture, Row None Fenced Pasture Mining or Construction	Width Max=30
> 4.0 meters (> 13') [30 pts] > 0.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY **NOTE: River Left (L) and Right (R) as looking downstream ** RIPARIAN WIDTH FLOODPLAIN QUALITY RIPARIAN WIDTH RIPARIAN WIDTH FLOODPLAIN QUALITY Moderate 5-10m Moderate 5-10m Residential, Park, New Field Narrow <5m Narrow <5m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermittee) Moist Channel, isolated pools, no flow (Intermittee)	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Wide >10m Narrow <5m Narrow <5m Narrow <5m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	Width Max=30
AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet):	Width Max=30
AVERAGE BANKFULL WIDTH (Feet): Sinuosity (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None	Width Max=30
> 4.0 meters (> 13') [30 pts]	Width Max=30
AVERAGE BANKFULL WIDTH (Feet): This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH	Width Max=30 5 Crop on

AD	DDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
	QHEI PERFORMED? - Yes V No QHEI Score (If Yes, Attach Completed QHEI Form)
✓ 	DOWNSTREAM DESIGNATED USE(S) WWH Name: Dry Run CWH Name: Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream
	MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
US	SGS Quadrangle Name: Campbell NRCS Soil Map Page: NRCS Soil Map Stream Order
Co	ounty: Mahoning Township / City: Youngstown
Ba	MISCELLANEOUS use Flow Conditions? (Y/N): Y Date of last precipitation: 01/06/20 Quantity: 0.01
Ph	otograph Information: 3 photos, upstream, downsteam and substrate
We	evated Turbidity? (Y/N): N Canopy (% open): 90% ere samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: PH (S.U.) PH (S.U.) Conductivity (µmhos/cm) the sampling reach representative of the stream (Y/N) If not, please explain:
	BIOTIC EVALUATION In the formed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fro	sh Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/
	DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed): Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
	wetland
ap FL	LOW -

Class 1 Stream RLP-23



Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-aeh-20200107-02 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²) 0.	01
LENGTH OF STREAM REACH (ft) 200 LAT. 41.08972 LONG80.61098 RIVER CODE NA RIVER MILE N	A
DATE 01/07/20 SCORER AEH/SKM COMMENTS Ephemeral	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instru	
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOMMODIFICATIONS:	VERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.	HHEI
TYPE PERCENT TYPE PERCENT	Metric
BLDR SLABS [16 pts]	
BEDROCK [16 pt] 0% FINE DETRITUS [3 pts]	Substrate Max = 40
☐ COBBLE (65-256 mm) [12 pts] 5% ☐ CLAY or HARDPAN [0 pt] 0% ☐ GRAVEL (2-64 mm) [9 pts] 0% ☐ MUCK [0 pts] 0%	
SAND (<2 mm) [6 pts] 0% ARTIFICIAL [3 pts] 0%	9
Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock Substrate Percentage (A) Substrate Percentage (Check 100%)	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES: 3	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):	Pool Dept
> 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	IVIAX - 30
> 22.5 - 30 cm [30 pts]	5
COMMENTS MAXIMUM POOL DEPTH (Inches): 0.50	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] ≤ 1.0 m (<-3' 3") [5 pts]	Width Max=30
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	
COMMENTS AVERAGE BANKFULL WIDTH (Feet): 1.00	5
This information must also be completed	
RIPARIAN ZONE AND FLOODPLAIN QUALITY \$\times NOTE: River Left (L) and Right (R) as looking downstream \$\times\$	
RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant per Bank) L R	
Wide >10m Mature Forest, Wetland Conservation Tillage	
Moderate 5-10m Immature Forest, Shrub or Old	n
Narrow <5m Residential, Park, New Field	,
None Fenced Pasture Mining or Construction COMMENTS	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	
Stream Flowing Subsurface flow with isolated pools (Interstitial) Moist Channel, isolated pools, no flow (Intermittent) Dry channel, no water (Ephemeral)	
COMMENTS	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0	
✓ 0.5	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/10	0 ft)

DDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
QHEI PERFORMED? - Yes V No QHEI Score (If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: Dry Run CWH Name: Distance from Evaluated Stream Distance from Evaluated Stream EWH Name: Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
Company (
V
July.
MISCELLANEOUS ase Flow Conditions? (Y/N): Y Date of last precipitation: 01/06/20 Quantity: 0.01
notograph Information: 3 photos, upstream, downsteam and substrate
levated Turbidity? (Y/N): N Canopy (% open): 10% Vere samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)
the sampling reach representative of the stream (Y/N) If not, please explain:
overall Stability of BOTH Stream Banks (check one): Stable Moderately Stable Unstable
erformed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) ish Observed? (Y/N) N Voucher? (Y/N)
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed):
Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
forest
forest

Stream RLP-24

Class 1



Primary Headwater Habitat Evaluation Form

13	Ī	13	Ī
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AND COMMENTS A	
	NA
DATE 01/07/20 SCORER AEH/SKM COMMENTS Ephemeral	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Inst	ructions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING.	COVERY
	. UUEI
	Metric
□ BLDR SLABS [16 pts] 0% SILT [3 pt] 75%	Points
	Substrate
	Max = 40
Sit Water (2 of minin) (5 pto)	8
Shirto (42 mini) [e pio]	
Name Post Process	
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES: 2	DOTO TO A SITE NUMBER NA POVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi*) 0.01 STREAM REACH (ft) 200 LAT, 41.08945 LONG, 30.61078 RIVER CODE NA RIVER MILE NA PATEON OF SCORER ALL STATE (TYPE DATE OF STREAM REACH (ft) 200 LAT, 41.08945 LONG, 30.61078 RIVER CODE NA RIVER MILE NA PATEON OF SCORER ALL STATE (TYPE DATE OF STREAM REACH (ft) 200 LAT, 41.08945 LONG, 30.61078 RIVER CODE NA RIVER MILE NA PATEON OF SCORER ALL STATE (TYPE DATE OF STREAM REACH (ft) 200 RIVER MILE NA RI
	A PIVER BASIN Dry Run-Mahoning DRAINAGE ABEA (mit) 0.01
	Dry Run-Mahoning 3 -80.61078 RIVER CODE NA RIVER MILE NA 1 NA RIVER MILE NA 25% Substrate Precentage Na 25% Substrate Precentage Na 25% Substrate Types Na 3 Na River Mile Na 4 River Mile Na 4 River Mile Na 5 Check ONLY one box): Na Na 1 Na River Mile Na 1 Na River Mile Na 25% Substrate Types Na 3 Na River Mile Na 4 Na Na Na 1 Na Na Na 1 Na Na Na
Length of Stream Rech (if) 200 LAT 41.08945 LONG 80.61078 RIVER CODE NA RIVER MILE NA	
COMMENTS MAXIMUM POOL DEPTH (Inches): 0.00	RITE NUMBER AH (ft) 200 LAT. 41.08945 LONG. 90.61078 RIVER CODE NA RIVER MILE NA RER AEH/SKM COMMENTS Ephemeral IS ON This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions TONDE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERY ate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. PERCENT TYPE IS ILT [3 pt] PERCENT IMP [5 pts] 0% PERCENT Substrate present. Check ONLY two predominant substrate TYPE boxes number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. PERCENT TYPE IND DETRITUS [3 pts] 0% PERCENT Substrate present. Check ONLY two predominant substrate TYPE boxes number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. PERCENT TYPE IND DETRITUS [3 pts] 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%
	SITE NIJABER NA
	Max=30
	Max=30
COMMENTSAVERAGE BANKFULL WIDTH (Feet): 0.50	Max=30
COMMENTSAVERAGE BANKFULL WIDTH (Feet): 0.50	Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY	Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) AVERAGE BANKFULL WIDTH (Feet): 0.50 This information must also be completed RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R	SCORER AEH/SKM COMMENTS Ephemeral
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream: RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Lirban or Industrial	Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY **NOTE: River Left (L) and Right (R) as looking downstream ** RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Wide >10m Moderate 5-10m AVERAGE BANKFULL WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R (Most Predominant per Bank) Immature Forest, Wetland Urban or Industrial Field	5 S
SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS (16 pts) BUDR SL	
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH	5 Top
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY Moderate 5-10m Mature Forest, Wetland Residential, Park, New Field Narrow <5m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	5 Top
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream Mature Forest, Wetland Conservation Tillage RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R (Per Bank) L R (Most Predominant per Bank) L R (Most Predom	5 Top
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH LR (Per Bank) Wide >10m Mature Forest, Wetland Wide >10m Moderate 5-10m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) Stream Flowing Subsurface flow with isolated pools (Interstitial) AVERAGE BANKFULL WIDTH (Feet): 0.50 Conservation L R Conservation Tillage Urban or Industrial Open Pasture, Row Conservation Mining or Construction Comments Moist Channel, isolated pools, no flow (Intermitten Dry channel, no water (Ephemeral)	5 Top
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY Wide >10m Mature Forest, Wetland Moderate 5-10m Residential, Park, New Field Narrow <5m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	5 Top
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH FLOODPLAIN QUALITY R (Per Bank) Wide >10m Mature Forest, Wetland Wide >10m Mature Forest, Shrub or Old Urban or Industrial Field Narrow <5m Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 COMMENTS AVERAGE BANKFULL WIDTH (Feet): 0.50 This information must also be completed NOTE: River Left (L) and Right (R) as looking downstream Conservation Tillage I mmature Forest, Shrub or Old Urban or Industrial Open Pasture, Row Completed None Mining or Construction Comments Moist Channel, isolated pools, no flow (Intermitten Dry channel, no water (Ephemeral) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 3.0	5 Top
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY *NOTE: River Left (L) and Right (R) as looking downstream *NOTE: River Left (L) and Right (R) as looking downstream *NOTE: River Left (L) and Right (R) as looking downstream *NOTE: River Left (L) and Right (R) as looking downstream *NOTE: River Left (L) and Right (R) as looking downstream *NOTE: River Left (L) and Right (R) as looking downstream *NOTE: River Left (L) and Right (R) as looking downstream *NOTE: RIVER Left (L) and River Left (5 Top
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	EAM INFORMATION (This Information Must Also be Completed):	
QHEI PER	RFORMED? - Yes ✓ No QHEI Score(If Yes, Attach Completed QHEI Form)	
DOWNST WWH Name: D	TREAM DESIGNATED USE(S) Distance from Evaluated Stream	0.50
CWH Name:	Distance from Evaluated Stream	
EWH Name:	Distance from Evaluated Stream	
MAPPING	G: ATTACH COPIES OF MAPS, INCLUDING THE <u>entire</u> watershed area. Clearly mark the site	LOCATION
USGS Quadrangle N		
County: Mahoning		ani Order
County.	Township / Gity	
MISCELL		
Base Flow Condition	ns: (1/14)	
Photograph Informat	ation: 3 photos, upstream, downsteam and substrate	
Elevated Turbidity?		
Were samples colle	ected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number:	
	Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)	
	ch representative of the stream (Y/N) If not, please explain:	
is the sampling reac	in not, please explain.	
BIOTIC E	EVALUATION	
Performed? (Y/N): _ Fish Observed? (Y/N) Frogs or Tadpoles C Comments Regarding	(If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher?	Manual)
Performed? (Y/N): _ Fish Observed? (Y/N) Frogs or Tadpoles C Comments Regardin	(If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher?	Manual) ? (Y/N) N leted):
Performed? (Y/N): _ Fish Observed? (Y/N) Frogs or Tadpoles C Comments Regardin	(If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Note:	Manual) ? (Y/N) N leted):
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Performed? (Y/N): _ Fish Observed? (Y/N) Frogs or Tadpoles C Comments Regardin DRAV Include importantial	(If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment IN NOTE: All voucher? (Y/N) NOTE: All voucher samples must be ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment IV NOTE: All voucher? (Y/N) NOTE: All voucher samples must be composite of the Primary Headwater Habitat Assessment IV NOTE: All voucher? (Y/N) NOTE: All voucher samples must be composite of the Primary Headwater Habitat Assessment IV NOTE: All voucher? (Y/N) NOTE: All voucher samples must be identified to the Primary Headwater Habitat Assessment IV NOTE: All voucher? (Y/N) NOTE: All voucher?	Manual) ? (Y/N) N leted): eam's location
Performed? (Y/N): _ Fish Observed? (Y/N) Frogs or Tadpoles C Comments Regardin DRAV Include importantial	(If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment of Note of No	Manual) ? (Y/N) N leted): eam's location
Performed? (Y/N): _ Fish Observed? (Y/N) Frogs or Tadpoles C Comments Regardin DRAV Include importantial	(If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment of Note of No	Manual) ? (Y/N) N leted): eam's location
Performed? (Y/N): _ Fish Observed? (Y/N) Frogs or Tadpoles C Comments Regardin DRAV Include importantial	(If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment IN NOTE: All voucher? (Y/N) NOTE: All voucher samples must be ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment IV NOTE: All voucher? (Y/N) NOTE: All voucher samples must be composite of the Primary Headwater Habitat Assessment IV NOTE: All voucher? (Y/N) NOTE: All voucher samples must be composite of the Primary Headwater Habitat Assessment IV NOTE: All voucher? (Y/N) NOTE: All voucher samples must be identified to the Primary Headwater Habitat Assessment IV NOTE: All voucher? (Y/N) NOTE: All voucher?	Manual) ? (Y/N) N leted): eam's location

Save as pdf

Reset Form

Class 1 Stream RLP-25



ChieFPA Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-aeh-20200107-03 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²) LENGTH OF STREAM REACH (ft) 200 LAT. 41.08953 LONG80.61110 RIVER CODE NA RIVER MILE DATE 01/07/20 SCORER AEH/SKM COMMENTS Ephemeral	NA
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Ins STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RE MODIFICATIONS:	
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 1. SUBSTRATE Present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of substrate TYPE boxes (Max of 32). Add total number of significant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. PERCENT TYPE SILT [3 pt] SILT [3 pt] FINE DETRITUS [3 pts] O% MUCK [0 pts] ARTIFICIAL [3 pts] O% Check TOTAL NUMBER OF SUBSTRATE TYPES: 2	HHEI Metric Points Substrate Max = 40
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts]	Pool Dep Max = 30
MAXIMUM POOL DEPTH (Inches): 0.50	Bankfull Width Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: RIPARIAN WIDTH (R)	
Stream Flowing Subsurface flow with isolated pools (Interstitial) Moist Channel, isolated pools, no flow (Intermitter Dry channel, no water (Ephemeral)	nt)
COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0 ✓ 0.5 1.5 2.5 >3	1

ADDITIONAL STREAM INFORMATION (This Information Must Als	o be Completed):
QHEI PERFORMED? - Yes ✓ No QHEI Score	(If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	
WWH Name: Dry Run	Distance from Evaluated Stream
CWH Name:	
EWH Name:	Distance from Evaluated Stream
	NTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Campbell	NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Mahoning Town	ship / City: Youngstown
MISCELLANEOUS	
Base Flow Conditions? (Y/N):Y Date of last precipitation:	01/06/20 Quantity: 0.01
Photograph Information: 3 photos, upstream, downsteam and sul	ostrate
Elevated Turbidity? (Y/N): N Canopy (% open): 10	%
Were samples collected for water chemistry? (Y/N): N (Note la	ab sample no. or id. and attach results) Lab Number:
	pH (S.U.) Conductivity (μmhos/cm)
Is the sampling reach representative of the stream (Y/N) Y If no	t, please explain:
Overall Stability of BOTH Stream Banks (check one): Stable	Moderately Stable Unstable
Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders	er collections optional. NOTE: all voucher samples must be labeled with the site ta sheets from the Primary Headwater Habitat Assessment Manual) Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) Voucher? (Y/N)
DRAWING AND NARRATIVE DESCRIPTION	OF STREAM REACH (This must be completed):
	or site evaluation and a narrative description of the stream's location
forest	
A	
FLOW	9
stream 02 forest	large trash pile
DUMU	Form Page - 2

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Reset Form

Stream RLP- 26 Modified Class 1



ChieFPA Primary Headwater Habitat Evaluation Form

Г	26	
ı	20	

NOTE: Complete All Items On This Form - Re	COMMENTS efer to "Field L CHANNEL ned parking lo	Dry Run-Maha LONG80.61068 RIV intermittent Evaluation Manual for PRECOVERED REC	VER CODE NA Ohio's PHWH S	RIVER MILE	NA
NOTE: Complete All Items On This Form - Round Modifications: Culverted through abandor 1. SUBSTRATE (Estimate percent of every type (Max of 32). Add total number of significant su	41.08246 COMMENTS efer to "Field L CHANNEL ned parking lo	LONG80.61068 RIV	VER CODE NA Ohio's PHWH S	RIVER MILE	NA
NOTE: Complete All Items On This Form - Restriction of the STREAM CHANNEL NONE / NATURA MODIFICATIONS: Culverted through abandor (Max of 32). Add total number of significant successions.	COMMENTS efer to "Field L CHANNEL ned parking lo	intermittent Evaluation Manual for RECOVERED REC	Ohio's PHWH S		
NOTE: Complete All Items On This Form - Restriction - Rest	efer to "Field L CHANNEL ned parking lo	Evaluation Manual for			T-marking.
NOTE: Complete All Items On This Form - Restriction - Rest	efer to "Field L CHANNEL ned parking lo	Evaluation Manual for		treams" for Instr	notice:
STREAM CHANNEL NONE / NATURA MODIFICATIONS: culverted through abandor 1. SUBSTRATE (Estimate percent of every type (Max of 32). Add total number of significant su	L CHANNEL ned parking lo	RECOVERED REC			uction!
MODIFICATIONS: culverted through abandon 1. SUBSTRATE (Estimate percent of every type (Max of 32). Add total number of significant su	ned parking l		OVERING RE		
SUBSTRATE (Estimate percent of every type (Max of 32). Add total number of significant su				CENT OR NO REC	OVERY
(Max of 32). Add total number of significant su					
		HT - HT 1000 H	Acres and a second formal and a second second fill the		. нн
		en e	Soore is sum of be	PERCENT	Met
BLDR SLABS [16 pts] 0%		SILT [3 pt]		30%	Poi
BOULDER (>256 mm) [16 pts] 0%	_ 닏!	LEAF PACK/WOODY		20%	Subs
BEDROCK [16 pt] 0% COBBLE (65-256 mm) [12 pts] 10%	- 남	FINE DETRITUS [3]		0%	Max
COBBLE (65-256 mm) [12 pts] 10% GRAVEL (2-64 mm) [9 pts] 40%		CLAY or HARDPAN MUCK [0 pts]	[0 pt]	0%	
SAND (<2 mm) [6 pts] 0%		ARTIFICIAL [3 pts]		0%	16
T. 1. (D				(D)	
Bldr Slabs, Boulder, Cobble, Bedrock)% (A)	Substrate Percentage 10	00%	(B)	A +
CORE OF TWO MOST PREDOMINATE SUBSTRAT	TE TYPES: 1	2 TOTAL NUMBER	R OF SUBSTRATE	E TYPES: 4	
. Maximum Pool Depth (Measure the maximum	um pool depth	within the 61 meter (200 f	t) evaluation reach	at the time of	Pool
evaluation. Avoid plunge pools from road culv				at the time of	Max
> 30 centimeters [20 pts]		> 5 cm - 10 cm [15 p	ots]		
> 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts]		< 5 cm [5 pts] NO WATER OR MC	DIST CHANNEL [0	ptsl	5
		vacanaces vacanes area			
COMMENTS		MAXIMUM PO	JOL DEP IH	(Inches): 1.00	
BANK FULL WIDTH (Measured as the avera	age of 3-4 mea		k ONLY one box):		Banl
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]		> 1.0 m - 1.5 m (> 3' ≤ 1.0 m (<=3' 3") [5 s			Wid
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]					_
COMMENTS		AVEDAGE BA	ANKFULL WIDTH	(Feet) 3.00	5
COMMENTS		AVERAGE BA	WINT OLL WIDTH	(Feet): 3.00	. 3
	T1: : : .				
RIPARIAN ZONE AND FLOODPLAIN		nation <u>must</u> also be compl		ng downstream 🏠	
RIPARIAN WIDTH FL	OODPLAIN QU		3 , ,		
		redominant per Bank)	LR		
Wide >10m		Forest, Wetland re Forest, Shrub or Old		nservation Tillage	
✓ ✓ Moderate 5-10m	Field	TO FORGS, Office of Old	LLL Urb	oan or Industrial	
Narrow <5m	Reside	ntial, Park, New Field	Opt	en Pasture, Row Cr	op
None		Pasture	□□ Mir	ning or Construction	6
COMMENTS				3	L
FLOW REGIME (At Time of Evaluatio	n) (Check ON	Yone box):			
Stream Flowing	ny (enear en		el, isolated pools,	no flow (Intermittent	t)
Subsurface flow with isolated pools (Int	terstitial)	Dry channel,	no water (Ephem	eral)	1
COMMENTS					L
SINUOSITY (Number of bends per 61	m (200 ft) of ch	nannel) (Check ONLY one I	oox):		
None 1.	0	2.0	☐ 3	3.0	
	0		☐ 3	3.0 >3	

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):	
QHEI PERFORMED? - Yes ✓ No QHEI Score (If Yes, Attac	ch Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: Dry Run and Mahoning River CWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream
EWH Name: _	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED	AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Campbell NRCS Soil Map Pa	nge: NRCS Soil Map Stream Order
County: Mahoning Township / City: Youngs	town
MISCELLANEOUS	
Base Flow Conditions? (Y/N):_Y Date of last precipitation:_ 01/06/20	Quantity: 0.01
Photograph Information: 3 photos, upstream, downsteam and substrate	
Elevated Turbidity? (Y/N): N Canopy (% open): 20%	
Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. ar	nd attach results) Lab Number:
	Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:	
	1
Overall Stability of BOTH Stream Banks (check one): Stable Moderate	ely Stable Unstable
Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. ID number. Include appropriate field data sheets from the Prim Fish Observed? (Y/N) Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrate Comments Regarding Biology:	nary Headwater Habitat Assessment Manual) Voucher? (Y/N)
DRAWING AND NARRATIVE DESCRIPTION OF STREAM RE- Include important landmarks and other features of interest for site evaluation and	
tires	a manative description of the stream's location
FLOW wetlands	
forested	
	old concrete/parking lot
PHWH Form Page - 2	

Class 1 Stream RLP-27



EPA Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-aeh-20200107-06 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²)	.25
LENGTH OF STREAM REACH (fft) 200 LAT. 41.08327 LONG80.61038 RIVER CODE NA RIVER MILE I	
DATE 01/07/20 SCORER AEH/SKM COMMENTS ephemeral, tributary of hh-aeh-20200107-05	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING.	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes	
(Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE PERCENT TYPE PERCENT	HHEI Metric
□ BLDR SLABS [16 pts] 0% □ ✓ SILT [3 pt] 25%	Points
BOULDER (>256 mm) [16 pts]	Substrate
□ □ BEDROCK [16 pt] □ □ FINE DETRITUS [3 pts] □ 0% □ □ CLAY or HARDPAN [0 pt] 5%	Max = 40
GRAVEL (2-64 mm) [9 pts] 20% MUCK [0 pts] 0%	40
SAND (<2 mm) [6 pts] 20% ARTIFICIAL [3 pts] 0%	18
Total of Percentages of 20.00% (A) Substrate Percentage 100% (B)	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 TOTAL NUMBER OF SUBSTRATE TYPES: 6	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dept
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts]	
□ > 10 - 22.5 cm [25 pts] □ NO WATER OR MOIST CHANNEL [0 pts]	5
COMMENTS MAXIMUM POOL DEPTH (Inches): 0.50	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width
> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Max=30
COMMENTS AVERAGE BANKFULL WIDTH (Feet): 3.00	5
, vi a de 2 vi a vi	
This information must also be completed	
RIPARIAN ZONE AND FLOODPLAIN QUALITY \$\times\$NOTE: River Left (L) and Right (R) as looking downstream \$\times\$ RIPARIAN WIDTH FLOODPLAIN QUALITY	
L R (Per Bank) L R (Most Predominant per Bank) L R	
Wide >10m	
Moderate 5-10m Immature Forest, Shrub or Old Urban or Industrial	
Narrow <5m Residential, Park, New Field Open Pasture, Row Cr	ор
None Fenced Pasture Mining or Construction	
COMMENTS	-
FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	
Stream Flowing Moist Channel, isolated pools, no flow (Intermittent Dry channel, no water (Ephemeral))
COMMENTS_	L
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	
☐ None ☐ 1.0 ☐ 2.0 ☐ 3.0	
✓ 0.5	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/	00.60
Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/-	00 ft)

	AM INFORMATION (This Information Must Also be Completed):
QHEI PER	FORMED? - Yes No QHEI Score (If Yes, Attach Completed QHEI Form)
	REAM DESIGNATED USE(S) y Run and Mahoning River Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream
MAPPING: USGS Quadrangle N	: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Mahoning	Township / City:Youngstown
MISCELLA Base Flow Conditions	
Photograph Informati	ion: 3 photos, upstream, downsteam and substrate
Field Measures: T	Canopy (% open):
BIOTIC E	BOTH Stream Banks (check one): Stable Moderately Stable Unstable VALUATION N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N Frogs or Tadpoles Of Comments Regarding	N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher?
-	
	VING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed):



Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
hh-aeh-20200106-02 SITE NUMBER NA RIVER BASIN Dry Run-Mahoning DRAINAGE AREA (mi²) 0	.01
LENGTH OF STREAM REACH (ft) 200 LAT. 41.09224 LONG80.64336 RIVER CODE NA RIVER MILE 1	8
DATE 01/06/20 SCORER AEH/SKM COMMENTS Ephemeral	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr	uctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO REC MODIFICATIONS: recent construction west of stream, silt/dirt falling into stream	OVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pt] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock BLDR SLABS [16 pts] O% SILT [3 pt] SUBSTRATE (Estimate percent substrate TYPE boxes (Max of 8). Final metric score is sum of boxes A & B. PERCENT O% SILT [3 pt] SILT [3 pt] SUBSTRATE (Estimate percentage of the substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 8). Final metric score is sum of boxes A & B. PERCENT O% SILT [3 pt] SILT [3 pt] SUBSTRATE (Estimate percentage of the substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 8). Final metric score is sum of boxes A & B. PERCENT O% SILT [3 pt] SUBSTRATE (Estimate percentage of the substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 8). Final metric score is sum of boxes A & B. PERCENT O% SILT [3 pt] SUBSTRATE (Estimate TYPE boxes (Max of 8). Final metric score is sum of boxes A & B. PERCENT O% SILT [3 pt] SUBSTRATE (PERCENT) O% SILT [3 pt] SUBSTRATE (PERCENT) O% SUBSTRATE (PERCENT)	HHEI Metric Points Substrate Max = 40 16
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 TOTAL NUMBER OF SUBSTRATE TYPES: 4	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts] > 22.5 - 30 cm [30 pts]	Pool Dept Max = 30
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts]	Bankfull Width Max=30
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	
COMMENTS AVERAGE BANKFULL WIDTH (Feet): 2.00	5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: River Left (L) and Right (R) as looking downstream ANOTE: RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mide > 10m Mature Forest, Wetland Moderate 5-10m Moderate 5-10m Moderate 5-10m Residential, Park, New Field None Fenced Pasture Mining or Construction COMMENTS	р
Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Moist Channel, isolated pools, no flow (Intermittent) Dry channel, no water (Ephemeral)	-
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/100 ft)	00 ft)

ADDITIONAL STREAM INFORMATION (This Information Must A	ulso be Completed):
QHEI PERFORMED? - Yes V No QHEI Score	(If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S)	Distance from Evaluated Stream 0.15
WWH Name: Mahoning River CWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream
EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE	ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
JSGS Quadrangle Name: Youngstown	NRCS Soil Map Page: NRCS Soil Map Stream Order
	wnship / City:Youngstown
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Y Date of last precipitation:	01/06/20 Quantity: 0.01
Photograph Information: 3 photos, upstream, downsteam and s	
	10%
Lievated Fulbidity: (1714) Carlopy (% open)	
	e lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l)	pH (S.U.) Conductivity (μmhos/cm)
s the sampling reach representative of the stream (Y/N) Y	not, please explain:
Overall Stability of BOTH Stream Banks (check one): Stable	Moderately Stable Unstable
BIOTIC EVALUATION	-
ID number. Include appropriate field of Voucher? (Y/N) N Salamander	cher collections optional. NOTE: all voucher samples must be labeled with the site data sheets from the Primary Headwater Habitat Assessment Manual) s Observed? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Voucher? (Y/N) N
DRAWING AND NARRATIVE DESCRIPTION	ON OF STREAM REACH (This must be completed):
Include important landmarks and other features of interest	t for site evaluation and a narrative description of the stream's loc
interstate	
interstate	
→	
FLOW	herb
all recently impacte	ed construction - piles
of dirt	a concuration photo
PHW October 24, 2002 Revision	/H Form Page - 2
	- T

Reset Form

Save as pdf



Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 56

Stream & Location: FE Lincoln Parl	k-Riverbend 138kV Transmission Line	_RM: Date: 10/6/2020
QHEI-2020-10-06-BJM-001	Scorers Full Name & Affiliation	: Brian Miller AECOM
River Code:	STORET #:	2, -80.611802 Office verified location
□ BOULDER [9]	strate TYPE BOXES;	ONE (Or 2 & average) QUALITY HEAVY [-2] SILT
quality; 3-Highest quality in moderate or gr	ence 0 to 3: 0 -Absent; 1-Very small amounts or if more commoderate amounts, but not of highest quality or in small amounts reater amounts (e.g., very large boulders in deep or fast water rootwad in deep / fast water, or deep, well-defined, functional POOLS > 70cm [2] OXBOWS, BACKWATI OROTWADS [1] AQUATIC MACROPHY BOULDERS [1] LOGS OR WOODY DE	Check ONE (<i>Or 2 & average</i>) al pools. EXTENSIVE >75% [11] WODERATE 25-75% [7] YTES [1] SPARSE 5-<25% [3]
3] CHANNEL MORPHOLOGY Check SINUOSITY DEVELOPMENT HIGH [4]	CHANNELIZATION STABILITY NONE [6] HIGH [3] RECOVERED [4] MODERATE [2] RECOVERING [3] LOW [1] RECENT OR NO RECOVERY [1]	Channel Maximum 20
River right looking downstream RIPAF EROSION NONE / LITTLE [3] MODERATE [2] NARRO	RATE 10-50m [3]	ITY CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] Indicate predominant land use(s)
Check ONE (<i>ONLY!</i>) Check ON ☐ > 1m [6] ☑ POOL WIDT ! ☐ 0.7-<1m [4] ☐ POOL WIDT !	CURRENT VELOCITY NNEL WIDTH NE (Or 2 & average) H > RIFFLE WIDTH [2] H = RIFFLE WIDTH [1] H > RIFFLE WIDTH [0] MODERATE [1] Indicate for reach - pools and r	Primary Contact Secondary Contact (circle one and comment on back) Primary Contact Secondary Contact (circle one and comment on back) Pool / Current Maximum 6
Indicate for functional riffles; of riffle-obligate species: RIFFLE DEPTH RUN D □ BEST AREAS > 10cm [2] □ MAXIMUN	Best areas must be large enough to support Check ONE (Or 2 & average). DEPTH RIFFLE / RUN SUBSTRATE RIF M > 50cm [2] ☑ STABLE (e.g., Cobble, Boulder) [2] M < 50cm [1] ☐ MOD. STABLE (e.g., Large Gravel) [1] ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]	Ta population NO RIFFLE [metric=0] FFLE / RUN EMBEDDEDNESS NONE [2] LOW [1] MODERATE [0] Riffle / Run EXTENSIVE [-1] Maximum 8
DRAINAGE AREA	RY LOW - LOW [2-4])%GLIDE: Gradient 4

	ALL that apply	Comment RE: Reach consistency/	Is reach typical of steam?, Recreation	n/ Observed - Inferred, Other	/ Sampling observations, Concerns, Acc	ess directions, etc.
METHOD BOAT WADE L. LINE OTHER DISTANCE	D LOW D		nearly most of the cobble and minnow darter, and cray fish v		areas had garbage and/foam dr tream.	raining
☐ 0.12 Km	CLARITY 1stsample pass 2nd ✓ < 20 cm ☐ 20-<40 cm ☐ 40-70 cm ☐ > 70 cm/ CTB ☐ SECCHI DEPTH ☐	☐ INVASIVE MACROPHYTES ☐ EXCESS TURBIDITY ☐ DISCOLORATION ☐ FOAM / SCUM	D] MAINTENANCE FUBLIC / PRIVATE / BOTH / NA ACTIVE / HISTORIC / BOTH / NA FOUNG-SUCCESSION-OLD SPRAY / SNAG / REMOVED MODIFIED DIPPED OUT / NA LEVEED / ONE SIDED	Circle some & COMMENT	FJ ISSUES WWTD/CSO / NPDES / INDUSTRY HARDENED / CRBAD/DIRT&GRIME CONTAMINATED / LANDFILL BMPs_CONSTRUCTION-SEDIMENT OGGING / IRRIGATION / COOLING BANK / EROSION / SURFACE	FI MEASUREMENTS X width 30 feet X depth 18 inch. max. depth 20 inch X bankfull width 30 feet bankfull X depth 18 inch
CANOP > 85%- OPE 55%-<85% 30%-<55% 10%-<30% <10%- CLO	EN se cm	TO TRACH / LITTER	RELOCATED / CUTOFFS MOVING-BEDLOAD-STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED FLOOD CONTROL (TRAINACE)		FALSE BANK / MANURE / LAGOON WASH H ₂ 0 / TILE / H ₂ 0 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME ATMOSPHERE / DATA PAUGITY	W/D ratio 20 bankfull max. depth Not Cal floodprone x ² width Not Cal entrench. ratio Not Cal. Le Tree:

Stream Drawing:



Stream RLP-30 Mod. Class 1

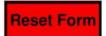


Primary Headwater Habitat Evaluation Form

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SITE NAME/LOCATION FE LINCOIN PARK-RIVERBEND 138KV Transmission Line SITE NUMBER N/A RIVER BASIN Dry Run - Mahoni Drainage area (mi²)	
STE NUMBER 1-3-1 RIVER BASIN 217 TWO DRAINAGE AREA (MI)	0.01
LENGTH OF STREAM REACH (ft) 162 LAT. 41.09417 LONG80.61400 RIVER CODE N/A RIVER MILE	N/A
DATE 10/06/20 SCORER BJM COMMENTS HHEI-2020-10-06-BJM-001 EPHEMERAL	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Institute of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams of the Complete All Items of the	structions
STREAM CHANNEL	ECOVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes	
(Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE PERCENT TYPE PERCENT	HHE
□ BLDR SLABS [16 pts] 0 SILT [3 pt] 35	Point
□ BOULDER (>256 mm) [16 pts] □ LEAF PACK/WOODY DEBRIS [3 pts] 10 □ BEDROCK [16 pt] □ □ FINE DETRITUS [3 pts] 10	Substrat
☐ COBBLE (65-256 mm) [12 pts] ☐ ☐ ☐ CLAY or HARDPAN [0 pt] 25	Max = 4
GHAVEL (2-64 mm) [9 pts] 10 MUCK [0 pts] 0	9
SAND (AZ IIIII) [0 pts]	
Bldr Slabs, Boulder, Cobble, Bedrock Check	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 TOTAL NUMBER OF SUBSTRATE TYPES: 6	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dep
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 3
	0
Owhm at 2inches - no flowing water	
COMMENTS Ownim at 2inches - no flowing water MAXIMUM POOL DEPTH (Inches): 0.00	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Bankful
> 4.0 meters (> 13) [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] \(\text{\left} \) 1.0 m (<=0' 3") [5 pts]	Width
	Width Max=30
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Max=30
	Max=30
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Average bank at 3ft AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed	Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY AVERAGE BANKFULL WIDTH (Feet): 3.00 This information formation must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream A	Max=30
COMMENTS Average bank at 3ft AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) L R	Max=30
COMMENTS Average bank at 3ft This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) Wide >10m Mature Forest, Wetland Conservation Tillage	Max=30
COMMENTS Average bank at 3ft This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY PLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Field	5
COMMENTS Average bank at 3ft This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY PLOODPLAIN QUALITY RIPARIAN WIDTH (Per Bank) Wide >10m Mature Forest, Wetland Narrow <5m Narrow <5m AVERAGE BANKFULL WIDTH FLOODPLAIN QUALITY AVERAGE BANKFULL WIDTH (Feet): 3.00 AVERAGE BANKFULL WIDTH (Feet): 5	
COMMENTS Average bank at 3ft This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY PLOODPLAIN QUALITY RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m AVERAGE BANKFULL WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Wide >10m Urban or Industrial Field Conservation Tillage	Max=30
COMMENTS Average bank at 3ft This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH (Per Bank) Wide >10m Wide >10m Mature Forest, Wetland Moderate 5-10m Residential, Park, New Field None Riparian X (Per Bank) Mining or Construction Residential, Park, New Field Mining or Construction Mining or Construction	Max=30
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH L R (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Narrow <5m Narrow <5m None Residential, Park, New Field None COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moderate 5-10m AVERAGE BANKFULL WIDTH (Feet): 3.00 Mining or Construction Conservation Tillage Immature Forest, Shrub or Old Immature Forest, Shrub or	Max=30
COMMENTS Average bank at 3ft This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY RIPARIAN WIDTH (Per Bank) Wide >10m Mature Forest, Wetland Moderate 5-10m Residential, Park, New Field None COMMENTS FLOOW REGIME (At Time of Evaluation) (Check ONLY one box):	Max=30
COMMENTS Average bank at 3ft AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY \$\times NOTE: River Left (L) and Right (R) as looking downstream \$\times RiPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) L R (Onservation Tillage Immature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Urban or Industrial Open Pasture, Row (Intersection Comments) Narrow <5m Residential, Park, New Field Open Pasture, Row (Intersection Comments) FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) Z Dry channel, no water (Ephemeral) SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):	Max=30
COMMENTS Average bank at 3ft This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream Mature Forest, Wetland Conservation Tillage Wide >10m Mature Forest, Wetland Urban or Industrial Moderate 5-10m Residential, Park, New Field Open Pasture, Row one Fenced Pasture COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 (Check ONLY one box): SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 (Check ONLY one box): SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 (Check ONLY one box): None 1.0 (Check ONLY one box): None 1.0 (Check ONLY one box): OCHIEVED TO THE AVERAGE BANKFULL WIDTH (Feet): 3.00 AVERAGE BANKFULL WIDTH (Feet): 4.00 AVERAGE BANKFULL WIDTH (Feet): 4.0	Max=30
COMMENTS Average bank at 3ft AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream (Per Bank) L R (Most Predominant per Bank) L R (Per Bank) Wide >10m Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Urban or Industrial Field Open Pasture, Row (Most Predominant per Bank) L R Conservation Tillage Immature Forest, Shrub or Old Urban or Industrial Open Pasture, Row (Most Channel, isolated pools, no flow (Intermitted Subsurface flow with isolated pools (Interstitial) SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Max=30
COMMENTS Average bank at 3ft This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream Mature Forest, Wetland Conservation Tillage Wide >10m Mature Forest, Wetland Urban or Industrial Moderate 5-10m Residential, Park, New Field Open Pasture, Row one Fenced Pasture COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (Interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 (Check ONLY one box): SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 (Check ONLY one box): SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 (Check ONLY one box): None 1.0 (Check ONLY one box): None 1.0 (Check ONLY one box): OCHIEVED TO THE AVERAGE BANKFULL WIDTH (Feet): 3.00 AVERAGE BANKFULL WIDTH (Feet): 4.00 AVERAGE BANKFULL WIDTH (Feet): 4.0	Max=30

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):
QHEI PERFORMED? - Yes No QHEI Score (If Yes, Attach Completed QHEI Form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: Dry Run CWH Name: Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
USGS Quadrangle Name: Campbell NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Mahoning Township / City: T2N R1W
MISCELLANEOUS
Base Flow Conditions? (Y/N): Y Date of last precipitation: 10/06/20 Quantity: 0.59
Photograph Information: See Appendix D
Elevated Turbidity? (Y/N): N Canopy (% open): 30
Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:
Additional and the state of the
Additional comments/description of pollution impacts:
BIOTIC EVALUATION
Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site
ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual) N November 2 (V(N) N N November 2 (V(N) N N November 2 (V(N) N N N November 2 (V(N) N N N N N N N N N N N N N N N N N N
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N) Vouc
Comments Regarding Biology:
None observed
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):
Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location
Stream RLP-30
FLOW



Stream RLP-31 Mod. Class 1



ChieFPA Primary Headwater Habitat Evaluation Form

SITE NAME/LOCAT							
OIL INVINITY LOCAL	ION FE Lincoln Park-Riv	verbend 138kV	Transmissi	on Line			
	SITE NUMBER_	N/A	RIVERBA	SIN Dry Run - Mah	ONI DRAIN	IAGE AREA (mi²)	
LENGTH OF STRE	AM REACH (ft) 80	LAT. 41.096		G80.61123 RIVE		RIVER MILE	N/A
DATE 10/06/20	SCORER BJM	COMM	IENTS HE	IEI-2020-10-06-BJ	M-002 EPHE	MERAL	
NOTE: Complet	e All Items On This For	m - Refer to "I	Field Eval	uation Manual for O	hio's PHWH S	Streams" for Instr	ructions
STREAM CHANN	NEL DINONE/NA	ATURAL CHANN	EL П RE	COVERED RECO	VERING RE	ECENT OR NO REC	OVERY
	S: Fed from roadside di	rainage stormy	vater				
	TE (Estimate percent of ev	97 VIX. 151	920. KA	ent Check ONLY two n	redominant subs	trate TVPF hoves	
	. Add total number of signifi						HHE
TYPE		PERCENT	TYPE	CII T [2 at]		PERCENT 40	Metr Poin
	SLABS [16 pts] DER (>256 mm) [16 pts]	0		SILT [3 pt] LEAF PACK/WOODY I	DEBRIS [3 pts]	20	. •
	OCK [16 pt]	0		FINE DETRITUS [3 pt		10	Substra Max =
COBBL	.E (65-256 mm) [12 pts]	0		CLAY or HARDPAN [0	pt]	30	wax =
	L (2-64 mm) [9 pts]	0		MUCK [0 pts]		0	7
SAND	(<2 mm) [6 pts]	0		ARTIFICIAL [3 pts]		0	ـــــا
	of Percentages of Boulder, Cobble, Bedrock	O (A	()	Substrate Percentage Check		(B)	A + B
	IOST PREDOMINATE SUB	STRATE TYPES	: 3	TOTAL NUMBER	OF SUBSTRATI	E TYPES: 4	
2. Maximum	Pool Depth (Measure the I	maximum nool o	denth withi	n the 61 meter (200 ft)	evaluation reach	at the time of	Pool De
evaluation.	Avoid plunge pools from roa			pes) (Check ONLY or	ne box):	at the time of	Max =
> 30 centime > 22.5 - 30	eters [20 pts]		H	> 5 cm - 10 cm [15 pts < 5 cm [5 pts]	5]		l
> 10 - 22.5			7	NO WATER OR MOIS	ST CHANNEL [0	pts]	o
COMMENT	Owhm depth 1inch	- no flowing w	ater				•
			alti	BAAVIBALISA DO	N DEDTH		
COMMEN	5	no noming n	atei	MAXIMUM POO	OL DEPTH	(Inches): 0.00	
3. BANK FUL	L WIDTH (Measured as th			nents) (Check	ONLY one box)	(Arragio (Control of Control of Co
3. BANK FUL > 4.0 meters	3				ONLY one box): " - 4' 8") [15 pts]	(Width
3. BANK FUL > 4.0 meters > 3.0 m - 4.0	L WIDTH (Measured as th			nents) (Check > 1.0 m - 1.5 m (> 3' 3	ONLY one box): " - 4' 8") [15 pts]	(Bankft Width Max=3
3. BANK FUL > 4.0 meters > 3.0 m - 4.0 > 1.5 m - 3.0	L WIDTH (Measured as th (> 13') [30 pts] 0 m (> 9' 7" - 10') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts]			nents) (Check > 1.0 m - 1.5 m (> 3' 3 ≤ 1.0 m (<-3' 3") [5 pts	ONLY one box): " - 4' 8") [15 pts]	(Width Max=3
3. BANK FUL > 4.0 meters > 3.0 m - 4.0 > 1.5 m - 3.0	L WIDTH (Measured as th (> 13') [30 pts] 0 m (> 9' 7" - 13') [25 pts]			nents) (Check > 1.0 m - 1.5 m (> 3' 3 ≤ 1.0 m (<-3' 3") [5 pts	ONLY one box): " - 4' 8") [15 pts]		Width
3. BANK FUL > 4.0 meters > 3.0 m - 4.0 > 1.5 m - 3.0	L WIDTH (Measured as th (> 13') [30 pts] 0 m (> 9' 7" - 10') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts]	e average of 3-4	measuren	(Check > 1.0 m - 1.5 m (> 3' 3 \le 1.0 m (<=3' 3") [5 pts	ONLY one box): " - 4' 8") [15 pts] s]	(Widtl Max=3
3. BANK FUL > 4.0 meters > 3.0 m - 4.0 > 1.5 m - 3.0	L WIDTH (Measured as the (> 13') [30 pts] 0 m (> 9' 7" - 10') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] TS 3ft bank width	e average of 3-4 This in	measuren	nents) (Check > 1.0 m - 1.5 m (> 3' 3 ≤ 1.0 m (<=3' 3") [5 pts AVERAGE BAN must also be complet TE: River Left (L) and R	ONLY one box): " - 4' 8") [15 pts] s] NKFULL WIDTH	(Feet): 3.00	Width Max=3
3. BANK FUL > 4.0 meters > 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT	L WIDTH (Measured as the (> 13') [30 pts] 0 m (> 9' 7" - 13') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] TS 3ft bank width PARIAN ZONE AND FLOOD PARIAN WIDTH	This in FLAIN QUALITY	measuren	(Check > 1.0 m - 1.5 m (> 3' 3 ≤ 1.0 m (<=3' 3") [5 pts	ONLY one box): " - 4' 8") [15 pts] NKFULL WIDTH ed ight (R) as looking	(Feet): 3.00	Width Max=3
3. BANK FUL > 4.0 meters > 3.0 m - 4.6 > 1.5 m - 3.6 COMMENT	L WIDTH (Measured as the (> 13') [30 pts] 0 m (> 9' 7" - 10') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] TS 3ft bank width	This in PLAIN QUALITY FLOODPLA	measuren	(Check > 1.0 m - 1.5 m (> 3' 3 ≤ 1.0 m (<-3' 3") [5 pts	ONLY one box): " - 4' 8") [15 pts] NKFULL WIDTH ed ight (R) as looking	(Feet): 3.00	Width Max=3
3. BANK FUL > 4.0 meters > 3.0 m - 4.4 > 1.5 m - 3.6 COMMENT	L WIDTH (Measured as the (> 13') [30 pts] 0 m (> 9' 7" - 10') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] S 3ft bank width PARIAN ZONE AND FLOOD PARIAN WIDTH Per Bank)	This in PLAIN QUALITY FLOODPLA	nformation NOUALITY Most Predom ature Forest	(Check > 1.0 m - 1.5 m (> 3' 3 ≤ 1.0 m (<-3' 3") [5 pts	ONLY one box): " - 4' 8") [15 pts] NKFULL WIDTH ed ight (R) as lookii	(Feet): 3.00	Width Max=3
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3. BANK FUL > 4.0 meters > 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT RIP RIP CO FLO Street Substitute Street Substitute Street Substitute	LL WIDTH (Measured as the (> 13') [30 pts] 0 m (> 9' 7" - 10') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] TS 3ft bank width ARIAN ZONE AND FLOOD PARIAN WIDTH Per Bank) Wide >10m Moderate 5-10m Narrow <5m None MMENTS OW REGIME (At Time of Evant Flowing surface flow with isolated po	This is PLAIN QUALITY FLOODPLA L R (M L R (M Fig Fig Re Caluation) (Check	nformation NO QUALITY Most Predom ature Forest mature Foreld esidential, Fenced Pastu	AVERAGE BAN Must also be complet TE: River Left (L) and R Y hinant per Bank) t, Wetland est, Shrub or Old Park, New Field Te box): Moist Channel	ONLY one box): " - 4' 8") [15 pts] NKFULL WIDTH ed ight (R) as looking LR Co Urt Op Mir	(Feet): 3.00 Ing downstream Inservation Tillage oan or Industrial en Pasture, Row Craning or Construction on flow (Intermittent)	Width Max=3
3. BANK FUL > 4.0 meters > 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT RIP RIP CO FLO Street Substitute Street Substitute A 1.0 A 1.0 A 1.0 COMMENT COMMENT RIP RIP A 1.0 CO FLO Street Substitute Substitute Substitute Substitute A 2.0 A 3.0 COMMENT CO FLO Street Substitute Substitute A 3.0 CO FLO Street Substitute Substitu	LL WIDTH (Measured as the (> 13') [30 pts] 0 m (> 9' 7" - 10') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] TS 3ft bank width ARIAN ZONE AND FLOOD PARIAN WIDTH Per Bank) Wide >10m Moderate 5-10m Narrow <5m None MMENTS OW REGIME (At Time of Evant Flowing)	This is PLAIN QUALITY FLOODPLA L R (M L R (M Fig Fig Re Caluation) (Check	nformation NO QUALITY Most Predom ature Forest mature Foreld esidential, Fenced Pastu	AVERAGE BAN Must also be complet TE: River Left (L) and R Y hinant per Bank) t, Wetland est, Shrub or Old Park, New Field Te box): Moist Channel	ONLY one box): " - 4' 8") [15 pts] NKFULL WIDTH ed ight (R) as looking LR Co Urt Op Mir	(Feet): 3.00 Ing downstream Inservation Tillage oan or Industrial en Pasture, Row Craning or Construction on flow (Intermittent)	Width Max=3
3. BANK FUL > 4.0 meters > 3.0 m - 4.0 > 1.5 m - 3.0 COMMENT RIP RI L R CO Stree Subs CO	LL WIDTH (Measured as the (> 13') [30 pts] 0 m (> 9' 7" - 10') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] TS 3ft bank width ARIAN ZONE AND FLOOD PARIAN WIDTH Per Bank) Wide >10m Moderate 5-10m Narrow <5m None MMENTS OW REGIME (At Time of Evant Flowing surface flow with isolated po	This in PLAIN QUALITY FLOODPLA L R (M L R (M Richard Recorder Reco	nformation ANO IN QUALITY Most Predom ature Fores mature Fores mature Foreld esidential, Fenced Pastu	ments) (Check > 1.0 m - 1.5 m (> 3' 3' 3 ≤ 1.0 m (<-3' 3") [5 pts] AVERAGE BAN Must also be complet TE: River Left (L) and R Y ninant per Bank) t, Wetland est, Shrub or Old Park, New Field are Boox): Moist Channel Dry channel, n	ONLY one box): " - 4' 8") [15 pts] NKFULL WIDTH ed ight (R) as looking the composition of the composition	(Feet): 3.00 Ing downstream Inservation Tillage oan or Industrial en Pasture, Row Craning or Construction on flow (Intermittent)	Width Max=3
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3. BANK FUL > 4.0 meters > 3.0 m - 4.4 > 1.5 m - 3.6 COMMENT RIP RIP CO FLC Stree CO SIN None 0.5 STREAM CO	LL WIDTH (Measured as the (> 13') [30 pts] 0 m (> 9' 7" - 10') [25 pts] 0 m (> 9' 7" - 4' 8") [20 pts] TS 3ft bank width ARIAN ZONE AND FLOOD PARIAN WIDTH Per Bank) Wide >10m Moderate 5-10m Narrow <5m None MMENTS OW REGIME (At Time of Evant Flowing surface flow with isolated pomments) WIDSITY (Number of bends to the comment of	This in PLAIN QUALITY FLOODPLA L R (M Imperial Records of Section (Check tools (Interstitial) per 61 m (200 ft) 1.0 1.5	nformation Nost Predom ature Fores mature Fores esidential, Fenced Pastu	ments) (Check > 1.0 m - 1.5 m (> 3' 3' 3 ≤ 1.0 m (<-3' 3") [5 pts] AVERAGE BAN Must also be completed to the second se	ONLY one box): " - 4' 8") [15 pts] NKFULL WIDTH ed ight (R) as looking the composition of the composition	(Feet): 3.00 Ing downstream Annexistream Inservation Tillage pan or Industrial en Pasture, Row Craining or Construction or Info (Intermittent neral) 3.0 3.0	Width Max=5
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	MED? - Yes No QHEIS	Score (If Yes, Atta	ch Completed QHEI Form)	
DOWNSTREAM	M DESIGNATED USE(S)			
WWH Name: Dry Ru			_ Distance from Evaluated Stream	0.01
CWH Name:			Distance from Evaluated Stream _	
EWH Name:			Distance from Evaluated Stream _	
MAPPING: ATT	FACH COPIES OF MAPS, INCLUDE	ING THE <u>ENTIRE</u> WATERSHED	AREA. CLEARLY MARK THE SITE	LOCATION
USGS Quadrangle Name	Campbell	NRCS Soil Map Pa	age: NRCS Soil Map Streat	m Order
County: Mahoning	*	Township / City: T2N R1	w	500
MISCELLANEC	ous			
	v	10/06/20	Quantity: 0.59	
Base Flow Conditions? (Y		tation:	Quantity: 0.59	
Photograph Information: _	Lane			
Elevated Turbidity? (Y/N):	: N Canopy (% open):30		
Were samples collected for	for water chemistry? (Y/N):	(Note lab sample no. or id. a	nd attach results) Lab Number:	
			Conductivity (µmhos/cm)	
			Conductivity (µmnos/cm)	-
Is the sampling reach rep	presentative of the stream (Y/N)	If not, please explain:		
Performed? (Y/N): N	(If Yes, Record all observatio ID number. Include appropria Voucher? (Y/N)	ate field data sheets from the Prinamanders Observed? (Y/N)	NOTE: all voucher samples must be mary Headwater Habitat Assessment M Voucher? (Y/N) So Observed? (Y/N) Voucher?	lanual)
Fish Observed? (Y/N) N Frogs or Tadpoles Observed Comments Regarding Bio	ved? (Y/N) N voucher? (Y/N)			(1/11)
Frogs or Tadpoles Observ	ved? (Y/N) N voucher? (Y/N)	N .		(1/N)
Comments Regarding Bio	ved? (Y/N) N voucher? (Y/N)	N ,		(1/10)
Comments Regarding Bio	ved? (Y/N) N voucher? (Y/N)			(17/10)
Comments Regarding Bio	ology:		EACH (This <u>must</u> be compl	
Comments Regarding Bio None Observed DRAWING	ology: Voucher? (Y/N)	RIPTION OF STREAM R	EACH (This <u>must</u> be completed a narrative description of the stre	eted):
Comments Regarding Bio None Observed DRAWING Include important I	ology: Voucher? (Y/N)	RIPTION OF STREAM R	-	eted):
Comments Regarding Bio None Observed DRAWING Include important I	ology: Voucher? (Y/N)	RIPTION OF STREAM R	-	eted):
Comments Regarding Bio None Observed DRAWING Include important I	ology: Voucher? (Y/N)	RIPTION OF STREAM R	-	eted): am's locatio
Comments Regarding Bio None Observed DRAWING	ology: Voucher? (Y/N)	RIPTION OF STREAM R	d a narrative description of the stre	eted): am's locatio



Stream RLP-32 Mod. Class 1



Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION FE LINCOIN PARK-RIVE	erbend 138kV Transmission Line	
SITE NUMBER_N		.01
LENGTH OF STREAM REACH (ft)95	LAT. 41.09727 LONG80.60970 RIVER CODE N/A RIVER MILE N	I/A
DATE 10/06/20 SCORER BJM	COMMENTS HHEI-2020-10-06-BJM-003 EPHEMERAL	
NOTE: Complete All Items On This Form	m - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr	uctions
STREAM CHANNEL NONE / NAT MODIFICATIONS: Fed from roadside dra	TURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECainage/ stormwater	OVERY
	ery type of substrate present. Check ONLY two predominant substrate TYPE boxes	
,	cant substrate types found (Max of 8). Final metric score is sum of boxes A & B. PERCENT TYPE PERCENT	HHEI Metric
BLDR SLABS [16 pts]	0 SILT [3 pt] 40	Points
BOULDER (>256 mm) [16 pts]	0 LEAF PACK/WOODY DEBRIS [3 pts] 20 0	Substrate
□ □ BEDROCK [16 pt] □ □ □ COBBLE (65-256 mm) [12 pts] □	0 FINE DETRITUS [3 pts] 0 10 CLAY or HARDPAN [0 pt]	Max = 40
GHAVEL (2-64 mm) [9 pts]	O MUCK [0 pts]	10
SAND (<2 mm) [6 pts]	0 ARTIFICIAL [3 pts] 30	
Total of Percentages of	O (A) Substrate Percentage (B) Check	A + B
Bldr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBS		500.00
	naximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dept
evaluation. Avoid plunge pools from road > 30 centimeters [20 pts]	d culverts or storm water pipes) (Check ONLY one box): > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts]	< 5 cm [5 pts]	
> 10 - 22.5 cm [25 pts]	NO WATER OR MOIST CHANNEL [0 pts]	0
COMMENTS Owhm depth 1inch n	no flowing water MAXIMUM POOL DEPTH (Inches): 0.00	
3. BANK FULL WIDTH (Measured as the	e average of 3-4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] ≤ 1.0 m (<-3' 3") [5 pts]	Width Max=30
> 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]		
COMMENTS 3ft bank width	AVERAGE BANKFULL WIDTH (Feet): 3.00	5
	(1 661).	
	This information must also be completed	
RIPARIAN ZONE AND FLOODE RIPARIAN WIDTH	PLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆ FLOODPLAIN QUALITY	
	The state of the s	
L R (Per Bank)	L R (Most Predominant per Bank) L R	
L R (Per Bank) Wide >10m	Mature Forest, Wetland Conservation Tillage	
L R (Per Bank)	Mature Forest, Wetland Immature Forest, Shrub or Old Field Conservation Tillage Urban or Industrial	
L R (Per Bank) Wide >10m	Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old	op
L R (Per Bank) Wide >10m Moderate 5-10m	Mature Forest, Wetland Immature Forest, Shrub or Old Field Conservation Tillage Urban or Industrial Open Pasture Row Creen	op
L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m None COMMENTS	Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Conservation Tillage Urban or Industrial Open Pasture, Row Cro	op -
L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Eval	Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Fenced Pasture Mining or Conservation Tillage Urban or Industrial Open Pasture, Row Cro Mining or Construction Aduation) (Check ONLY one box): Moist Channel, isolated pools, no flow (Intermittent)	-
L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Evaluation of Evaluat	Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Fenced Pasture Mining or Conservation Tillage Urban or Industrial Open Pasture, Row Cro Mining or Construction Aduation) (Check ONLY one box): Moist Channel, isolated pools, no flow (Intermittent)	-
L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Eval) Stream Flowing Subsurface flow with isolated pool COMMENTS SINUOSITY (Number of bends pool	Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Fenced Pasture Mining or Construction Moist Channel, isolated pools, no flow (Intermittent) Dry channel, no water (Ephemeral) Per 61 m (200 ft) of channel) (Check ONLY one box):	-
L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Eval) Stream Flowing Subsurface flow with isolated pool COMMENTS	Mature Forest, Wetland Immature Forest, Shrub or Old Immature Forest, Shrub or Old Field Open Pasture, Row Cro Residential, Park, New Field Fenced Pasture Mining or Construction Moist Channel, isolated pools, no flow (Intermittent) Ols (Interstitial) Open Pasture, Row Cro Mining or Construction Moist Channel, isolated pools, no flow (Intermittent) Ory channel, no water (Ephemeral)	-
L R (Per Bank) Wide >10m Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Eval Stream Flowing Subsurface flow with isolated pool COMMENTS SINUOSITY (Number of bends pool	Mature Forest, Wetland Immature Forest, Shrub or Old Immature Forest, Wetland Immature Forest, Shrub or Old Immature	-
R	Mature Forest, Wetland Immature Forest, Shrub or Old Immature Forest, Wetland Immature Forest, Shrub or Old Immature	

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be complete Include important landmarks and other features of interest for site evaluation and a narrative description of the stream	ADDITIONAL STREAM	INFORMATION (This Information	Must Also be Completed):		
WWH Name: Distance from Evaluated Stream MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LO USGS Quadrangle Name: Campbell NRCS Soil Map Page: NRCS Soil Map Stream County: Mahoning Township / City: T2N R1W MISCELLANEOUS Base Flow Conditions? (Y/N): V Date of last precipitation: 10/06/20 Quantity: 0.56 Photograph Information: See Appendix D Elevated Turbidity? (Y/N): N Canopy (% open): 20 Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: Field Measures: Temp ("C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) If not, please explain: BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be lab ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Voucher	QHEI PERFO	RMED? - Yes No QHEIS	core(If Yes, Attac	ch Completed QHEI Forn	m)
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LO USGS Quadrangle Name: Campbell NRCS Soil Map Page NRCS Soil Map Stream County: Mahoning Township / City: T2N R1W MISCELLANEOUS Base Flow Conditions? (Y/N): Date of last precipitation: 10/06/20 Quantity: 0.56 Photograph Information: See Appendix D Elevated Turbidity? (Y/N): N Canopy (% open): 20 Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) If not, please explain: BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be lab 10 number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N): N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be complete Include important landmarks and other features of interest for site evaluation and a narrative description of the stream Ammandam RLP-32	WWH Name: Dry R CWH Name:			Distance from Evaluate	ed Stream _
USGS Quadrangle Name: Campbell			ļ.		t-14 200 (0.000 (0.00). 5 (0.00
MISCELLANEOUS Base Flow Conditions? (Y/N): V Date of last precipitation: 10/06/20 Quantity: 0.56 Photograph Information: See Appendix D Elevated Turbidity? (Y/N): N Canopy (% open): 20 Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: Field Measures: Temp ("C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) If not, please explain: BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be lab in number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Overher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Overher? (Y/N) N Voucher? (Y/N) N Voucher					
MISCELLANEOUS Base Flow Conditions? (Y/N): Y Date of last precipitation: 10/06/20 Quantity: 0.56 Photograph Information: See Appendix D Elevated Turbidity? (Y/N): N Canopy (% open): 20 Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) If not, please explain: BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be lab 1D number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N) N Voucher? (Y	Le .	e: Campbell	Tou D	155 E	Map Stream Order _
Base Flow Conditions? (Y/N): V Date of last precipitation: 10/06/20 Quantity: 0.56 Photograph Information: See Appendix D Elevated Turbidity? (Y/N): N Canopy (% open): 20 Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: Field Measures: Temp (°C): Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) If not, please explain: BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be lab 10 number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be complete Include important landmarks and other features of interest for site evaluation and a narrative description of the stream RLP-32	ounty: Mahoning		Township / City:	w	
Elevated Turbidity? (Y/N): N Canopy (% open): 20 Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: Field Measures: Temp (°C) Dissolved Oxygen (mo/l) pH (S.U.) Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) If not, please explain: Additional comments/description of pollution impacts: BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be lab ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Vouc			ation: 10/06/20	Quantity: 0.56	
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Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) If not, please explain: Additional comments/description of pollution impacts: BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be lab 1D number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be complete Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream	Elevated Turbidity? (Y/N	l): N Canopy (% open	20		
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) If not, please explain: Additional comments/description of pollution impacts: BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be lab 1D number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be complete Include Important landmarks and other features of interest for site evaluation and a narrative description of the stream	Vere samples collected	for water chemistry? (Y/N):	_ (Note lab sample no. or id. a	nd attach results) Lab Nu	umber:
Additional comments/description of pollution impacts: BIOTIC EVALUATION Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be lab ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N N Voucher? (Y/N) N Voucher?			mg/l) pH (S.U.)	Conductivity (µm	hos/cm)
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Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled to number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Man Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be complete Include important landmarks and other features of interest for site evaluation and a narrative description of the stream REP-32	additional comments/de	scription of pollution impacts:			
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be complete Include important landmarks and other features of interest for site evaluation and a narrative description of the stream RLP-32	Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Obse	(If Yes, Record all observation ID number. Include appropriate Voucher? (Y/N) N Sala erved? (Y/N) N Voucher? (Y/N)	te field data sheets from the Prin	Voucher? (Y/N)	
Include important landmarks and other features of interest for site evaluation and a narrative description of the stream	comments Regarding B	iology:			
Include important landmarks and other features of interest for site evaluation and a narrative description of the stream					
Include important landmarks and other features of interest for site evaluation and a narrative description of the stream					
em RLP-32	DRAWIN	G AND NARRATIVE DESC	RIPTION OF STREAM R	EACH (This <u>must</u> b	pe completed):
mixed to some	Include important	t landmarks and other features of	nterest for site evaluation and	d a narrative description	of the stream's locat
mixed to some	-			¥6	
for 3 Come	RLP-32	1	Staur atalle	Project / Client	
The Miles mital Scraps forest	FLOW →	ahillele mital/sur	mix 1		
Flor	4		lor		



Mod. Class 1 Stream RLP-33



Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3):

14

SITE WANTE EGGATION _	erbend 138kV Transmission Line	
SITE NUMBER N		
LENGTH OF STREAM REACH (ft) 67	LAT. 41.09741 LONG80.60937 RIVER CODE N/A RIVER MILE N	N/A
DATE 10/06/20 SCORER BJM	COMMENTS HHEI-2020-10-06-BJM-004 EPHEMERAL	
NOTE: Complete All Items On This Form	n - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instr	ructions
STREAM CHANNEL NONE / NAT MODIFICATIONS: Fed from roadside dra	TURAL CHANNEL RECOVERED RECOVERING RECENT OR NO REC	COVERY
	ry type of substrate present. Check ONLY two predominant substrate TYPE boxes	
1 NOT THE REPORT OF THE PARTY O	ant substrate types found (Max of 8). Final metric score is sum of boxes A & B.	HHEI Metric
TYPE BLDR SLABS [16 pts]	ERCENT TYPE PERCENT 0 □ ✓ SILT [3 pt] 40	Points
BOULDER (>256 mm) [16 pts]	0 LEAF PACK/WOODY DEBRIS [3 pts] 50	
BEDROCK [16 pt]	0 FINE DETRITUS [3 pts]	Substrate Max = 40
COBBLE (65-256 mm) [12 pts]	0 CLAY or HARDPAN [0 pt] 10	
GHAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts]	0 MUCK [0 pts] 0 ARTIFICIAL [3 pts] 0	9
000 NASS NASS 000 NO	Artificial [opio]	
Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock	Check	A + B
SCORE OF TWO MOST PREDOMINATE SUBS	TRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES: 3	
	aximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Depth
evaluation. Avoid plunge pools from road > 30 centimeters [20 pts]	d culverts or storm water pipes) (Check ONLY one box): > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts]	< 5 cm [5 pts]	
> 10 - 22.5 cm [25 pts]	NO WATER OR MOIST CHANNEL [0 pts]	0
COMMENTS Owhm depth 1inch n	o flowing water observed MAXIMUM POOL DEPTH (Inches): 0.00	
3 RANK FILL WIDTH (Measured as the	average of 3-4 measurements) (Check ONLY one hox):	Bankfull
3. BANK FULL WIDTH (Measured as the > 4.0 meters (> 13') [30 pts]	average of 3-4 measurements) (Check ONLY one box): > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Bankfull Width
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]		
> 4.0 meters (> 13') [30 pts]	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] ≤ 1.0 m (<-3' 3") [5 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (<-3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] ≤ 1.0 m (<-3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed LAIN QUALITY 公NOTE: River Left (L) and Right (R) as looking downstream 公	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Strain St	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] ≤ 1.0 m (<=3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed LAIN QUALITY ♣NOTE: River Left (L) and Right (R) as looking downstream ♣ FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Strain St	This information must also be completed LAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Wetland Conservation Tillage	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Strain St	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] ≤ 1.0 m (<=3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed LAIN QUALITY ♣NOTE: River Left (L) and Right (R) as looking downstream ♣ FLOODPLAIN QUALITY L R (Most Predominant per Bank) L R	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Strain St	This information must also be completed LAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Immature Forest, Shrub or Old Salo Sal	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width	This information must also be completed LAIN QUALITY LAI	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width RIPARIAN ZONE AND FLOODP RIPARIAN WIDTH (Per Bank) Wide > 10m Moderate 5-10m Narrow < 5m	This information must also be completed LAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream A FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Open Pasture, Row Creen.	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width RIPARIAN ZONE AND FLOODP RIPARIAN WIDTH (Per Bank) Wide > 10m Moderate 5-10m Narrow < 5m None	AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed LAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream A FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Fenced Pasture NAVERAGE BANKFULL WIDTH (Feet): 3.00 L R Conservation Tillage Urban or Industrial Open Pasture, Row Cro Mining or Construction	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Stream Flowing	This information must also be completed LAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream FLOODPLAIN QUALITY Residential, Park, New Field Residential, Park, New Field Fenced Pasture Noist Channel, isolated pools, no flow (Intermittent)	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width	This information must also be completed LAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream FLOODPLAIN QUALITY Residential, Park, New Field Residential, Park, New Field Fenced Pasture Noist Channel, isolated pools, no flow (Intermittent)	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Stream Flowing Subsurface flow with isolated pool COMMENTS Stream Flowing Subsurface flow with isolated pool COMMENTS Stream Flowing Subsurface flow with isolated pool COMMENTS Stream Flowing Subsurface flow with isolated pool COMMENTS Stream Flowing Subsurface flow with isolated pool COMMENTS Stream Flowing Subsurface flow with isolated pool COMMENTS Stream Flowing Subsurface flow with isolated pool COMMENTS Stream Flowing Subsurface flow with isolated pool COMMENTS Stream Flowing Subsurface flow with isolated pool COMMENTS Stream Flowing Stream Fl	This information must also be completed LAIN QUALITY ♣ NOTE: River Left (L) and Right (R) as looking downstream ♣ FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Shrub or Old Immature Forest, Shrub or Old Residential, Park, New Field Residential, Park, New Field Fenced Pasture Moist Channel, isolated pools, no flow (Intermittent) Is (Interstitial) NAVERAGE BANKFULL WIDTH (Feet): 3.00 L R Conservation Tillage Urban or Industrial Open Pasture, Row Cro Mining or Construction	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width RIPARIAN ZONE AND FLOODP RIPARIAN WIDTH (Per Bank) Wide >10m V Moderate 5-10m Narrow <5m None COMMENTS FLOW REGIME (At Time of Eval Stream Flowing Subsurface flow with isolated pool COMMENTS SINUOSITY (Number of bends p	This information must also be completed LAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream FLOODPLAIN QUALITY Residential, Park, New Field Residential, Park, New Field Fenced Pasture Noist Channel, isolated pools, no flow (Intermittent)	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Sinuosity (Number of bends p	This information must also be completed LAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Residential, Park, New Field Fenced Pasture Moist Channel, isolated pools, no flow (Intermittent) Is (Interstitial) Order Moist Channel, no water (Ephemeral) Check ONLY one box):	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Site Sinuosity (Number of bends pooned)	This information must also be completed LAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream FLOODPLAIN QUALITY Nature Forest, Wetland Mature Forest, Shrub or Old Immature Forest, Shrub or Old Residential, Park, New Field Residential, Park, New Field Moist Channel, isolated pools, no flow (Intermittent) Is (Interstitial) Park (Not Predominant per Bank) Moist Channel, isolated pools, no flow (Intermittent) Is (Interstitial) Check ONLY one box): 1.0 Check ONLY one box): 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	Width Max=30

	ED? - Yes V No QHEI Score	(If Voc Atte	ach Completed QHEI Form)	
QHEI PERFORM		(II Tes, Alla	acti Completed QHEI Form)	
WWH Name: Dry Run	DESIGNATED USE(S)		Distance from Evaluated Stream	0.01
CWH Name:			Distance from Evaluated Stream	1
EWH Name:			Distance from Evaluated Stream	
MAPPING: ATTA	CH COPIES OF MAPS, INCLUDING THE	ENTIRE WATERSHEI	DAREA. CLEARLY MARK THE SIT	E LOCATION
USGS Quadrangle Name:		NRCS Soil Map F		
				eam Order _
County: Manoning	Tov	wnship / City: T2N R		
MISCELLANEOL	S			
Base Flow Conditions? (Y/N	I): Y Date of last precipitation:	10/06/20	Quantity: 0.56	
Photograph Information:	ee Appendix D			
Elevated Turbidity? (Y/N):		30		
	N	lab cample no orid	and attach results) Lab Number:	
were samples collected for				
Field Measures: Temp (pH (S.U.)	Conductivity (µmhos/cm)	
Is the sampling reach repre	sentative of the stream (Y/N) Y If n	ot, please explain:		
Additional comments/descr	ntion of pollution imposts:			
Additional comments/descr				
BIOTIC EVALUA				
N	TION	cher collections optiona	NOTE: all voucher samples must b	ne laheled wit
BIOTIC EVALUA Performed? (Y/N): N				
Performed? (Y/N):	(If Yes, Record all observations. Voud ID number. Include appropriate field of	data sheets from the Pr	imary Headwater Habitat Assessmen	
N	(If Yes, Record all observations. Vouc ID number. Include appropriate field of Voucher? (Y/N)	data sheets from the Pr s Observed? (Y/N)		t Manual)
Performed? (Y/N): N Fish Observed? (Y/N) N	(If Yes, Record all observations. Vouc ID number. Include appropriate field of Voucher? (Y/N) Salamanders d? (Y/N) Voucher? (Y/N) Aq	data sheets from the Pr s Observed? (Y/N)	imary Headwater Habitat Assessmen Voucher? (Y/N)	t Manual)
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe	(If Yes, Record all observations. Vouc ID number. Include appropriate field of Voucher? (Y/N) Salamanders d? (Y/N) Voucher? (Y/N) Aq	data sheets from the Pr s Observed? (Y/N)	imary Headwater Habitat Assessmen Voucher? (Y/N)	t Manual)
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe	(If Yes, Record all observations. Vouc ID number. Include appropriate field of Voucher? (Y/N) Salamanders d? (Y/N) Voucher? (Y/N) Aq	data sheets from the Pr s Observed? (Y/N)	imary Headwater Habitat Assessmen Voucher? (Y/N)	t Manual)
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe Comments Regarding Biolo	(If Yes, Record all observations. Vouc ID number. Include appropriate field of Voucher? (Y/N) Salamanders d? (Y/N) Voucher? (Y/N) Aq gy:	data sheets from the Pr s Observed? (Y/N) N uatic Macroinvertebra	Voucher? (Y/N) N tes Observed? (Y/N) N Vouche	t Manual) er? (Y/N) N
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe Comments Regarding Biolo DRAWING	(If Yes, Record all observations. Voucler Include appropriate field of Voucher? (Y/N) Salamanders (Y/N) Voucher? (Y/N) Aquity AND NARRATIVE DESCRIPTION	data sheets from the President of Sobserved? (Y/N) Nuatic Macroinvertebra	Voucher? (Y/N) N Vouches REACH (This must be comp	t Manual) er? (Y/N) N pleted):
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Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe Comments Regarding Biolo DRAWING Include important late	(If Yes, Record all observations. Voucler Include appropriate field of Voucher? (Y/N) Salamanders (Y/N) Voucher? (Y/N) Aquity AND NARRATIVE DESCRIPTION	data sheets from the President of Sobserved? (Y/N) Nuatic Macroinvertebra	Voucher? (Y/N) N Vouches REACH (This must be comp	t Manual) er? (Y/N) N pleted):
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe Comments Regarding Biolo DRAWING Include important late	(If Yes, Record all observations. Voucler Include appropriate field of Voucher? (Y/N) Salamanders (Y/N) Voucher? (Y/N) Aquity AND NARRATIVE DESCRIPTION	data sheets from the President of Sobserved? (Y/N) Nuatic Macroinvertebra	Voucher? (Y/N) N Vouches REACH (This must be comp	t Manual) er? (Y/N) N pleted):
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe Comments Regarding Biolo DRAWING Include important late	(If Yes, Record all observations. Voucler Include appropriate field of Voucher? (Y/N) Salamanders (Y/N) Voucher? (Y/N) Aquity AND NARRATIVE DESCRIPTION	data sheets from the Property of the Property	Voucher? (Y/N) N tes Observed? (Y/N) N REACH (This must be compared a narrative description of the st	t Manual) er? (Y/N) N pleted):
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe Comments Regarding Biolo DRAWING Include important late	(If Yes, Record all observations. Voucler Include appropriate field of Voucher? (Y/N) Salamanders (Y/N) Voucher? (Y/N) Aquity AND NARRATIVE DESCRIPTION	data sheets from the Property of the Property	Voucher? (Y/N) N tes Observed? (Y/N) N REACH (This must be compared a narrative description of the st	t Manual) er? (Y/N) N pleted):
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe Comments Regarding Biolo DRAWING Include important late	(If Yes, Record all observations. Voucler Include appropriate field of Voucher? (Y/N) Salamanders (Y/N) Voucher? (Y/N) Aquity AND NARRATIVE DESCRIPTION	data sheets from the President of Sobserved? (Y/N) Nuatic Macroinvertebra	Voucher? (Y/N) N tes Observed? (Y/N) N REACH (This must be compared a narrative description of the st	t Manual) er? (Y/N) N pleted):
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe Comments Regarding Biolo DRAWING Include important late eam RLP-33	(If Yes, Record all observations. Voucler Include appropriate field of Voucher? (Y/N) Salamanders (Y/N) Voucher? (Y/N) Aquity AND NARRATIVE DESCRIPTION	data sheets from the Property of the Property	Voucher? (Y/N) N tes Observed? (Y/N) N REACH (This must be compared a narrative description of the st	t Manual) er? (Y/N) N pleted):
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observe Comments Regarding Biolo DRAWING Include important late eam RLP-33	(If Yes, Record all observations. Voucler Include appropriate field of Voucher? (Y/N) Salamanders (Y/N) Voucher? (Y/N) Aquity AND NARRATIVE DESCRIPTION	data sheets from the Property of the Property	Voucher? (Y/N) N tes Observed? (Y/N) N REACH (This must be compared a narrative description of the st	t Manual) er? (Y/N) N pleted):



Stream RLP-34



Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION FE LINCOIN Park-RIVE	erbend 138kV Transmission Line	
SITE NUMBER_N		(mi²) 0.01
LENGTH OF STREAM REACH (ft) 33		MILE N/A
DATE 10/06/20 SCORER BJM	COMMENTS HHEI-2020-10-06-BJM-005 EPHEMERAL	
NOTE: Complete All Items On This Form	n - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" fo	or Instructions
STREAM CHANNEL NONE / NAT MODIFICATIONS: Fed from roadside dra	TURAL CHANNEL RECOVERED RECOVERING RECENT OR Nainage / stormwater	NO RECOVERY
	ery type of substrate present. Check ONLY two predominant substrate TYPE b	ooxes
	eant substrate types found (Max of 8). Final metric score is sum of boxes A & B. ERCENT TYPE PERCENT	HHEI Metric
BLDR SLABS [16 pts]	0 SILT [3 pt] 40	Points
BOULDER (>256 mm) [16 pts] BEDROCK [16 pt]	0 LEAF PACK/WOODY DEBRIS [3 pts] 45 0 FINE DETRITUS [3 pts] 0	Substrat
COBBLE (65-256 mm) [12 pts]	0 CLAY or HARDPAN [0 pt] 10	Max = 40
GRAVEL (2-64 mm) [9 pts]	0 MUCK [0 pts] 0	10
SAND (<2 mm) [6 pts]	0 ARTIFICIAL [3 pts] 5	
Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock	Substrate Percentage (B)	A + B
SCORE OF TWO MOST PREDOMINATE SUBS	STRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES: 4	1
	naximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	
evaluation. Avoid plunge pools from road > 30 centimeters [20 pts]	d culverts or storm water pipes) (Check ONLY one box): > 5 cm - 10 cm [15 pts]	Max = 3
> 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts]	< 5 cm [5 pts] NO WATER OR MOIST CHANNEL [0 pts]	0
0		=-111
COMMENTS Ownm depth finch is	MAXIMUM POOL DEPTH (Inches):	0.00
3. BANK FULL WIDTH (Measured as the		
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	e average of 3-4 measurements) (Check <i>ONLY</i> one box): > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] = 1.0 m (<-0' 3") [5 pts]	Width
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] = 1.0 m (<=0' 0") [5 pts]	Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (<-9' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet):	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width RIPARIAN ZONE AND FLOODE	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] ≤ 1.0 m (<=3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstrea	3.00 Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] ≤ 1.0 m (<-3' 3") [5 pts] AVERAGE BANKFULL WIDTH (Feet): This information must also be completed	3.00 Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Sft bank width RIPARIAN ZONE AND FLOODE RIPARIAN WIDTH	AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstread FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Conservation Tiles	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Strain	This information must also be completed PLAIN QUALITY L R (Most Predominant per Bank) > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): L R (Feet): AVERAGE BANKFULL WIDTH (Feet): L R (Feet):	Width Max=30 5 am &
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width RIPARIAN ZONE AND FLOODE RIPARIAN WIDTH L R (Per Bank) Wide >10m	AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Conservation Till Immature Forest, Shrub or Old Lirban or Indust	Width Max=30 3.00 5 am☆
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width RIPARIAN ZONE AND FLOODE RIPARIAN WIDTH (Per Bank) Wide > 10m Wide > 10m Narrow < 5m None	AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstread FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Immature Forest, Wetland Urban or Indust Field Onen Pasture I	Width Max=30 3.00 5 am☆ illage trial Row Crop
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width RIPARIAN ZONE AND FLOODE RIPARIAN WIDTH (Per Bank) Wide > 10m Wide > 10m Narrow < 5m	AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstread FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Wetland Immature Forest, Shrub or Old Residential, Park, New Field Open Pasture, I	Width Max=30 3.00 5 am☆ illage trial Row Crop
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width RIPARIAN ZONE AND FLOODE RIPARIAN WIDTH (Per Bank) Wide > 10m Wide > 10m Narrow < 5m None COMMENTS FLOW REGIME (At Time of Eval	AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstread FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Fenced Pasture Mining or Const	Width Max=30 3.00 5 am ☆ illage trial Row Crop truction
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Stream Flowing Subsurface flow with isolated poor	AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstread FLOODPLAIN QUALITY R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Wetland Mature Forest, Shrub or Old Field Residential, Park, New Field Fenced Pasture Mining or Const	Width Max=30 3.00 5 am ☆ illage trial Row Crop truction
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Stream Flowing Stream Stream Flowing	AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstread FLOODPLAIN QUALITY R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Wetland Mature Forest, Shrub or Old Field Residential, Park, New Field Fenced Pasture Mining or Const	Width Max=30 3.00 5 am illage trial Row Crop truction
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Site bank width	AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstread FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Residential, Park, New Field Fenced Pasture Mining or Const Moist Channel, isolated pools, no flow (Interpretation) Open Pasture, Interpretation Moist Channel, isolated pools, no flow (Interpretation) Open 61 m (200 ft) of channel) (Check ONLY one box):	Width Max=30 3.00 5 am ☆ illage trial Row Crop
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Subsurface flow with isolated poor COMMENTS Stream Flowing Stream Flowi	AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstread FLOODPLAIN QUALITY L R (Most Predominant per Bank) Mature Forest, Wetland Mature Forest, Wetland Immature Forest, Shrub or Old Field Residential, Park, New Field Residential, Park, New Field Fenced Pasture Mining or Const Moist Channel, isolated pools, no flow (Interplated only const Moist Channel, no water (Ephemeral)	Width Max=30 3.00 5 am ☆ illage trial Row Crop
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Step	AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet):	Width Max=30 3.00 5 am illage trial Row Crop truction
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Site bank width	AVERAGE BANKFULL WIDTH (Feet): AVERAGE BANKFULL WIDTH (Feet): This information must also be completed PLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstreat FLOODPLAIN QUALITY Residential Park, Wetland Mature Forest, Wetland Mesidential, Park, New Field Residential, Park, New Field Residential, Park, New Field Mining or Constant of the Conservation of the C	Width Max=30 3.00 5 am illage trial Row Crop truction

QHEI PERFORMED? -	Yes No QHEI Score	(If Yes Atta	ch Completed QHEI Form)	
		(11 165, Aua	an completed QTTETT offin)	
DOWNSTREAM DESIGNATION OF THE PROPERTY OF THE	ATED USE(S)		Distance from Evaluated Stream	0.01
CWH Name:			Distance from Evaluated Stream	1
EWH Name:			Distance from Evaluated Stream	
MAPPING: ATTACH CODI	ES OF MAPS, INCLUDING THE F	NTIRE WATERSHER	AREA. CLEARLY MARK THE SIT	E I OCATION
		1		Г
USGS Quadrangle Name: Campbel		NRCS Soil Map P	age: NRCS Soil Map Stro	eam Order _
County: Mahoning	Town	nship / City: T2N R1	W	
MISCELLANEOUS				
Base Flow Conditions? (Y/N):	Date of last precipitation:	10/06/20	Quantity: 0.56	
			Quantity.	
Photograph Information: See Appe	naix D			
Elevated Turbidity? (Y/N): N	Canopy (% open):			
Were samples collected for water ch	emistry? (Y/N): N (Note In	ab sample no. or id. a	and attach results) Lab Number:	
Field Measures: Temp (°C)		pH (S.U.)	Conductivity (µmhos/cm)	
Is the sampling reach representative	of the stream (Y/N)	t, please explain:		
Additional comments/description of p	collution impacts:			
Additional comments/description of p	olidion impacts			
ID nu	mber. Include appropriate field da	observed? (Y/N)	NOTE: all voucher samples must be mary Headwater Habitat Assessmen Voucher? (Y/N) es Observed? (Y/N) Vouche	
	ADDATIVE DECODIDATION	LOCOTOCAMO	EACH (This must be com	pleted):
DRAWING AND NA	ARRATIVE DESCRIPTION	NOFSIREAM H		
			d a narrative description of the s	tream's loca
Include important landmarks			d a narrative description of the s	tream's loca
				tream's loca

Mod. Class 1 Stream RLP-35



Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3):

ſ	17	٦
L	17	4

SITE NAME/LOCATION FE Lincoln Park-Riverbend 138kV Transmission Line	
SITE NUMBER N/A RIVER BASIN Dry Run - Mahoni DRAINAGE AREA (mi²)	0.01
LENGTH OF STREAM REACH (ft) 69 LAT. 41.09670 LONG80.61056 RIVER CODE N/A RIVER MILE	N/A
DATE 10/06/20 SCORER BJM COMMENTS HHEI-2020-10-06-BJM-006 EPHEMERAL	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Ins	tructions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO REMODIFICATIONS: Fed from roadside drainage / stormwater	COVERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes	ı HHEI
(Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B. TYPE PERCENT TYPE PERCENT	Metric
□ □ BLDR SLABS [16 pts] 0 □ ✓ SILT [3 pt] 35	Points
□ BOULDER (>256 mm) [16 pts] 0 □ LEAF PACK/WOODY DEBRIS [3 pts] 40 □ BEDROCK [16 pt] 0 □ FINE DETRITUS [3 pts] 0	Substrat
☐ ☐ COBBLE (65-256 mm) [12 pts] 5 ☐ ☐ CLAY or HARDPAN [0 pt] 10	Max = 40
GHAVEL (2-64 mm) [9 pts] 5	12
SAND (<2 IIIII) [6 pts]	
Total of Percentages of 5 (A) Substrate Percentage (B) Bldr Slabs, Boulder, Cobble, Bedrock	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES: 6	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Dep
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30
> 22.5 - 30 cm [30 pts] < 5 cm [5 pts]	
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts] COMMENTS Owhm depth 1inch no flowing water observed MAXIMUM POOL DEPTH (Inches): 0.00	0
COMMENTS Owning depth 1 inch no flowing water observed MAXIMUM POOL DEPTH (Inches): 0.00	
	100
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankful
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONL Y one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	Bankful Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Width
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] ≤ 1.0 m (<-3' 3") [5 pts]	Width
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ♣NOTE: River Left (L) and Right (R) as looking downstream ♣ RIPARIAN WIDTH FLOODPLAIN QUALITY	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY & NOTE: River Left (L) and Right (R) as looking downstream & RIPARIAN WIDTH L R (Per Bank) L R (Most Predominant per Bank) L R	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream And RIPARIAN WIDTH RIPARIAN WIDTH L R (Per Bank) Wide > 10m Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old L Page 13' 3" - 4' 8") [15 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (<=3' 3") [5 pts] > 1.0 m (<=3' 3") [5 pts] > 1.0 m (<=3' 3") [5 pts] S S S S S S S S S	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream And RIPARIAN WIDTH L R (Per Bank) Wide > 10m Mature Forest, Wetland Wide > 10m Moderate 5-10m AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) I Mature Forest, Wetland I Conservation Tillage I Immature Forest, Shrub or Old I Urban or Industrial Field	Width Max=30
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (< -0' 3") [5 pt	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ANOTE: River Left (L) and Right (R) as looking downstream And RIPARIAN WIDTH L R (Per Bank) Wide > 10m Mature Forest, Wetland Wide > 10m Moderate 5-10m AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Most Predominant per Bank) I Mature Forest, Wetland I Conservation Tillage I Immature Forest, Shrub or Old I Urban or Industrial Field	Width Max=30
34.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (< -3' 3") [5 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ★NOTE: River Left (L) and Right (R) as looking downstream ★ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R (Most Predominant per Bank) L R Wide >10 m Mature Forest, Wetland Conservation Tillage Immature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Urban or Industrial Narrow <5 m Residential, Park, New Field Open Pasture, Row Conservation None Fenced Pasture Mining or Construction COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermitter)	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 3ft bank width AVERAGE BANKFULL WIDTH (Feet): 3.00 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY NOTE: River Left (L) and Right (R) as looking downstream not left (L) and Right (R) as looking downstream not left (L) and Right (R) as looking downstream not left (L) and Right (R) as looking downstream not left (L) and Right (R) as looking downstream not left (L) and Right (R) as looking downstream not left (L) and Right (R) as looking downstream not left (R) as looking downstream not	Width Max=30
A.0 meters (> 13') [30 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m · 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m · 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Stream Flowing None COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS	Width Max=30
> 4.0 meters (> 13') [30 pts] > 1.0 m (> 3' 3" - 4' 8") [15 pts] > 1.0 m (> 3' 3" - 4' 8") [15 pts] > 1.5 m - 3.0 m (> 9' 7" - 10') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	Width Max=30
> 4.0 meters (> 13') [30 pts] > 3.0 m · 4.0 m (> 9' 7" - 10') [25 pts] > 1.5 m · 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS Stream Flowing None COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) COMMENTS	Width Max=30 5

OHELDE	ERFORMED? - Yes V No	OHEL Score	(If Vec. As	tach Completed QHEI Fo	rm)
		WHEI SCOILE	(II res, Al	tadii Completed QHELFO	(IIII)
WWH Name:	TREAM DESIGNATED USE(S) Dry Run			Distance from Evalua	ated Stream 0.01
CWH Name:				Distance from Evalua	ited Stream
EWH Name:				Distance from Evalua	ted Stream
MAPPIN	IG: ATTACH COPIES OF MAPS, IN	NCLUDING THE EI	NTIRE WATERSHI	D AREA. CLEARLY MAR	RK THE SITE LOCATION
USGS Quadrangle	Name: Campbell		NRCS Soil Map	Page: NRCS S	oil Map Stream Order
County: Mahonin	g	Towns	ship / City:T2N	R1W	
MISCEL	LANEOUS				
Base Flow Condition	ons? (Y/N): Y Date of last	precipitation:	10/06/20	Quantity: 0.5	6
	ation: See Appendix D				
Elevated Turbidity?	N	/ open): 20)		
_		open).			
Were samples coll	ected for water chemistry? (Y/N):	(Note la	b sample no. or id	and attach results) Lab	Number:
Field Measures:	Temp (°C) Dissolved O	xygen (mg/l)	pH (S.U.)	Conductivity (μ	mhos/cm)
Is the sampling rea	ach representative of the stream (Y/NI) Y	, please explain:_		
is the sampling rea	correpresentative of the stream (1710) 11 1101	, piease expiairi		
BIOTIC	EVALUATION				
Performed? (Y/N): Fish Observed? (Y Frogs or Tadpoles	N (If Yes, Record all obsorber Include a Voucher? (Y/N) N Voucher? (Y/N) N Voucher?	ppropriate field data	a sheets from the F	al. NOTE: all voucher sam rimary Headwater Habitat Voucher? (Y/N) ates Observed? (Y/N)	
Performed? (Y/N): Fish Observed? (Y	N (If Yes, Record all obsorber Include a Voucher? (Y/N) N Voucher? (Y/N) N Voucher?	ppropriate field data	a sheets from the F	rimary Headwater Habitat Voucher? (Y/N)	Assessment Manual)
Performed? (Y/N): Fish Observed? (Y Frogs or Tadpoles	N (If Yes, Record all obsorber Include a Voucher? (Y/N) N Voucher? (Y/N) N Voucher?	ppropriate field data	a sheets from the F	rimary Headwater Habitat Voucher? (Y/N)	Assessment Manual)
Performed? (Y/N): Fish Observed? (Y Frogs or Tadpoles	N (If Yes, Record all obsorber Include a Voucher? (Y/N) N Voucher? (Y/N) N Voucher?	ppropriate field data	a sheets from the F	rimary Headwater Habitat Voucher? (Y/N)	Assessment Manual)
Performed? (Y/N): Fish Observed? (Y Frogs or Tadpoles Comments Regard	N (If Yes, Record all obsorber Include a ID number. Include a V/N) N Voucher? (Y/N) N Voucher? Include a V/N) N Voucher? Include a V/N Voucher? I	Salamanders CP (Y/N) N Aqua	a sheets from the F Observed? (Y/N) Itic Macroinvertebr	Voucher? (Y/N) Nates Observed? (Y/N) N	Assessment Manual) Voucher? (Y/N) be completed):
Performed? (Y/N): Fish Observed? (Y Frogs or Tadpoles Comments Regard	N (If Yes, Record all obs ID number. Include a ID number? (Y/N) N Voucher? (Y/N) N Voucher? (Y/N) N Voucher? (Ing Biology:	Salamanders CP (Y/N) N Aqua	a sheets from the F Observed? (Y/N) Itic Macroinvertebr	Voucher? (Y/N) Nates Observed? (Y/N) N	Assessment Manual) Voucher? (Y/N) be completed):
Performed? (Y/N): Fish Observed? (YFrogs or Tadpoles Comments Regard DRA Include impe	N (If Yes, Record all obsorber Include a ID number. Include a V/N) N Voucher? (Y/N) N Voucher? Include a V/N) N Voucher? Include a V/N Voucher? I	Salamanders CP (Y/N) N Aqua	a sheets from the F Observed? (Y/N) Itic Macroinvertebr	Voucher? (Y/N) Nates Observed? (Y/N) N	Voucher? (Y/N) N be completed): on of the stream's loca
Performed? (Y/N): Fish Observed? (Y Frogs or Tadpoles Comments Regard DRA Include impe	N (If Yes, Record all obsorber Include a ID number. Include a V/N) N Voucher? (Y/N) N Voucher? Include a V/N) N Voucher? Include a V/N Voucher? I	Salamanders CP (Y/N) N Aqua	a sheets from the F Observed? (Y/N) Itic Macroinvertebr	Voucher? (Y/N) Nates Observed? (Y/N) Nates O	Assessment Manual) Voucher? (Y/N) be completed):
Performed? (Y/N): Fish Observed? (YFrogs or Tadpoles Comments Regard	N (If Yes, Record all obs ID number. Include a V/N) N Voucher? (Y/N) N Voucher?	Salamanders CP (Y/N) N Aqua	a sheets from the F Observed? (Y/N) Itic Macroinvertebr	Voucher? (Y/N) Nates Observed? (Y/N) N	Voucher? (Y/N) N be completed): on of the stream's loca



APPENDIX D

REPRESENTATIVE STREAMS AND WETLANDS PHOTOGRAPHS





Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 8, 2020

Description:

Wetland RLP-01

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 6, 2020

Description:

Wetland RLP-02

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-03

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-04

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-05

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-06

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-07

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-08a

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-08b

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 8, 2020

Description:

Wetland RLP-09a

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 8, 2020

Description:

Wetland RLP-09b

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 8, 2020

Description:

Wetland RLP-10

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-11

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No.

60595883

Date:

January 7, 2020

Description:

Wetland RLP-12

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 6, 2020

Description:

Wetland RLP-13

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-14

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-15a

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-15b

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 6, 2020

Description:

Wetland RLP-16a

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 6, 2020

Description:

Wetland RLP-16b

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 6, 2020

Description:

Wetland RLP-16c

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-17a

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-17b

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-17c

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-18a

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-18b

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-19a

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-19b

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-20

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-21a

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No.

60595883

Date:

January 7, 2020

Description:

Wetland RLP-21b

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-22

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-23

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-24

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-25

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-26

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Wetland RLP-27

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

August 20, 2020

Description:

Wetland RLP-28

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Wetland RLP-29a

PSS wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Wetland RLP-29b

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Wetland RLP-30

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Wetland RLP-31

PEM wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Wetland RLP-32

PFO wetland



Facing North



Facing East



Facing South



Facing West



Soil Pit



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 6, 2020

Description:

Stream RLP-01

Perennial

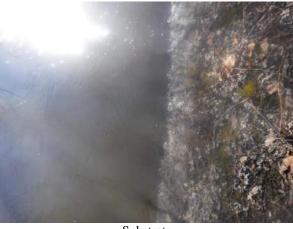
Warmwater Habitat



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 8, 2020

Description:

Stream RLP-02

Perennial

Warmwater Habitat



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line

Project No. 60595883

Date:

January 8, 2020

Description:

Stream RLP-03

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 8, 2020

Description:

Stream RLP-04

Perennial

Coldwater Habitat



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 8, 2020

Description:

Stream RLP-05

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 8, 2020

Description:

Stream RLP-06

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line

Project No.

60595883

Date:

January 8, 2020

Description:

Stream RLP-07

Ephemeral

Class 1



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line

Project No. 60595883

Date:

January 8, 2020

Description:

Stream RLP-08

Ephemeral

Class 1



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 8, 2020

Description:

Stream RLP-09

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No.

60595883

Date:

January 6, 2020

Description:

Stream RLP-10

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 6, 2020

Description:

Stream RLP-11

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No.

60595883

Date:

January 6, 2020

Description:

Stream RLP-12

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 6, 2020

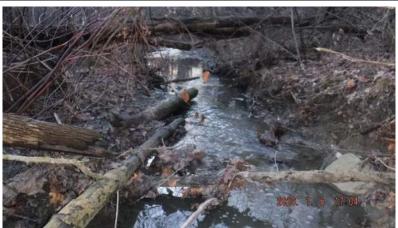
Description:

Stream RLP-13

Perennial



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line

Project No. 60595883

Date:

January 6, 2020

Description:

Stream RLP-14

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No.

60595883

Date:

January 7, 2020

Description:

Stream RLP-15

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Stream RLP-16

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No.

60595883

Date:

January 8, 2020

Description:

Stream RLP-17

Intermittent



Facing Upstream



Facing Downstream



Substrate



PHOTOGRAPHIC RECORD

STREAMS

Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Stream RLP-18

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No.

60595883

Date:

January 7, 2020

Description:

Stream RLP-19

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Stream RLP-20

Perennial



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Stream RLP-21

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Stream RLP-22

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line

Project No. 60595883

Date:

January 7, 2020

Description:

Stream RLP-23

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Stream RLP-24

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 7, 2020

Description:

Stream RLP-25

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line

Project No. 60595883

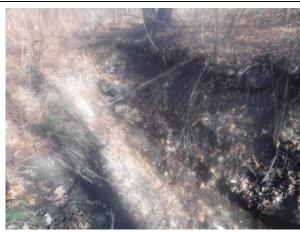
Date:

January 7, 2020

Description:

Stream RLP-26

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No.

60595883

Date:

January 7, 2020

Description:

Stream RLP-27

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

January 6, 2020

Description:

Stream RLP-28

Intermittent



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line

Project No. 60595883

Date:

October 6, 2020

Description:

Stream RLP-29

Perennial

Good Warmwater



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Stream RLP-30

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Stream RLP-31

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Stream RLP-32

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Stream RLP-33

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No. 60595883

Date:

October 6, 2020

Description:

Stream RLP-34

Ephemeral



Facing Upstream



Facing Downstream



Substrate



Client Name:

American Transmission Systems, Incorporated

Site Location:

Lincoln Park-Riverbend 138 kV Transmission Line Project

Project No.

60595883

Date:

October 6, 2020

Description:

Stream RLP-35

Ephemeral



Facing Upstream



Facing Downstream



Substrate