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| No                                                         | 8                                                                                                                                                                                   | ver             | = Total Cover | 0       |     |                                                     |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|---------|-----|-----------------------------------------------------|
| 5                                                          | n tic                                                                                                                                                                               |                 |               |         |     |                                                     |
| l hydrology mu<br>lematic.                                 | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.                                                                   | ver             | - Total Cover | 160     | 30' | 10                                                  |
| rovide supp<br>arate sheet)<br>Ition <sup>1</sup> (Explain | <ul> <li>4 - Morphological Adaptations (Provide supporting<br/>data in Remarks or on a separate sheet)</li> <li>Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</li> </ul> |                 |               |         |     |                                                     |
| i<br>:-                                                    | $\frac{X}{X}$ 2 - Dominance Test is >50%<br>$\frac{X}{X}$ 3 - Prevalence Index is $\leq 3.0^{1}$                                                                                    |                 | z             | 20      |     | Acorus americanus                                   |
| 'egetation                                                 | X 1 - Rapid Test for Hydrophytic Vegetation                                                                                                                                         | OBL             | z             | 30      |     | Carex lurida                                        |
|                                                            | Hydrophytic Vegetation Indicators:                                                                                                                                                  | OBL             | z             | л       |     | Lobelia siphilitica                                 |
| 1.32                                                       | Prevalence Index = B/A =                                                                                                                                                            | FACW            | ~             | 45      |     | Impatiens capensis                                  |
| 221                                                        | UPL species <u> </u>                                                                                                                                                                | Ver<br>OBL      | = Total Cover | 60 8    | Ļ   | Herb Stratum (Plot size: 5'<br>1. Leersia oryzoides |
| 0                                                          | 5                                                                                                                                                                                   | Ì               |               | İ       |     |                                                     |
| 106<br>0                                                   | FACW species $\frac{53}{0}$ x 2 = FAC species $\frac{0}{3}$ x 3 =                                                                                                                   |                 |               |         |     |                                                     |
| 115                                                        | OBL species 115 x 1 =                                                                                                                                                               |                 |               |         |     |                                                     |
| Multiply by:                                               | Prevalence Index worksheet:<br>Total % Cover of: M                                                                                                                                  | FACW            | = Iotal Cover | ∞   c   | 15  | Sapling/Shrub Stratum (Plot size:                   |
| 100.00 (A/B)                                               | Percent of Dominant Species<br>That Are OBL, FACW, or FAC:                                                                                                                          |                 |               |         |     |                                                     |
| 3<br>(B)                                                   | Total Number of Dominant<br>Species Across All Strata:                                                                                                                              |                 |               |         |     |                                                     |
| 3<br>(A)                                                   | Dominance Lest worksneet:<br>Number of Dominant Species<br>That Are OBL, FACW, or FAC:                                                                                              | Species? Status | Species?      | % Cover |     | Tree Stratum (Plot size:                            |

| An Voortotion                              | Are Vegetation                          | Are climatic / hydrol                                                                                                 | Soil Map Unit Name                                                        | Slope (%): 5              | Landform (hillslope, terrace, etc.):          | Investigator(s): MJA, SAH                                                               | Applicant/Owner: AEP                     | Project/Site: AEP Hillsboro to Millbrook Park |
|--------------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------|
| 0                                          | _, Soil                                 | ogic conditio                                                                                                         | Jonesbord                                                                 | Lat: 3                    | terrace, etc.                                 | JA, SAH                                                                                 | ΈP                                       | Hillsboro to I                                |
| or Lindrology                              | , or Hydrology                          | ns on the site typical                                                                                                | o-Rossmoyne silt loa                                                      | Lat: 39.17219             | ): Hillside                                   |                                                                                         |                                          | Millbrook Park                                |
| or Undrology of motionally problemation    | significantly disturbed?                | Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) | Soil Map Unit Name: Jonesboro-Rossmoyne silt loams, 2 to 6 percent slopes | Long:                     |                                               | Section, To                                                                             |                                          | City/County:                                  |
| /1f                                        |                                         | × No                                                                                                                  |                                                                           |                           | Local relief (concave, convex, none): Rolling | ownship, Rang                                                                           |                                          |                                               |
| If pooled evaluin any ensures in Democia V | Are "Normal Circumstances" present? Yes | (If no, e                                                                                                             | N                                                                         | -83.67515893833334 Datum: | oncave, conv                                  | je: Ohio Survey:                                                                        | State:                                   | Highland                                      |
|                                            | stances" pre                            | xplain in Rer                                                                                                         | NWI classification:                                                       | 833334                    | ex, none): _                                  | S VIRGINIA MILI                                                                         | PH                                       | 0                                             |
| in Domosto                                 | sent? Yes                               | narks.)                                                                                                               | ion:                                                                      | )atum:                    | Colling                                       | TARY DISTRICT                                                                           | ampling Poi                              | ampling Dat                                   |
|                                            | ×                                       |                                                                                                                       | N/A                                                                       | WGS 84                    |                                               | Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Highland Lot 9087 | State: OH Sampling Point: Wetland HM-001 | _ Sampling Date: 09/16/2019                   |

# SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

indicators confirm wetland status. ery dar orga 'la (ely nas Bui เร ery strong ,ege a nyc logy

### Are Vegetation SOIL , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

| PEM hillside seep wetland. Soils are very darkorganic material likely masking redox concentrations. Very strong vegetation and hydrology | Remarks: | Wetland Hydrology Present? |                     | on Present? |
|------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------|---------------------|-------------|
| v dark-                                                                                                                                  |          | Yes_                       | Yes_                | Yes         |
| -organ                                                                                                                                   |          | ×                          | < ×                 | <           |
| ic material likelv m                                                                                                                     |          | No                         | Yes X No            | No          |
| asking redox concentrations.                                                                                                             |          | within a Wetland?          | is the sampled Area |             |
| Verv str                                                                                                                                 |          | Yes                        |                     |             |
| ona vec                                                                                                                                  |          | ,                          | ~                   |             |
| letation and hydrology                                                                                                                   |          | Yes No                     |                     |             |

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SOIL

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|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------------------------|
|                                                                                                                    | tions), if available:                                                                                               | os, previous inspec                                                  | ig well, aerial photo                               | Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | orded Data (strea                                    | Describe Reco                                    |
| y Present? Yes X No                                                                                                | Wetland Hydrology Present?                                                                                          | 0.00                                                                 | Depth (inches):                                     | Yes X No                                                                                                   | sent?<br>lary fringo)                                | Saturation Present?<br>(includes capillary fri   |
|                                                                                                                    |                                                                                                                     |                                                                      | Depth (inches):                                     | ×                                                                                                          |                                                      | Water Table Present?                             |
|                                                                                                                    |                                                                                                                     |                                                                      | Uepth (inches):                                     | Yes No X                                                                                                   |                                                      | Surface Water Present?                           |
|                                                                                                                    |                                                                                                                     | in Remarks)                                                          | Other (Explain in Remarks)                          | ve Surface (B8)                                                                                            | Sparsely Vegetated Concave Surface (B8)              | Sparsely                                         |
|                                                                                                                    | I                                                                                                                   | Data (D9)                                                            | Gauge or Well Data (D9)                             | Imagery (B7)                                                                                               | Inundation Visible on Aerial Imagery (B7)            | Inundatio                                        |
| Geomorphic Position (UZ)<br>FAC-Neutral Test (D5)                                                                  | 5                                                                                                                   | Recent Iron Reduction in Tilled Solis (C6)<br>Thin Muck Surface (C7) | Hecent Iron Reduction II     Thin Muck Surface (C7) |                                                                                                            | Algal Mat or Crust (B4)<br>Iron Deposits (B5)        | Algal Mat or Crust                               |
| Stunted or Stressed Plants (D1)                                                                                    |                                                                                                                     | Presence of Reduced Iron (C4)                                        | Presence of Re                                      | -ī                                                                                                         | osits (B3)                                           | Drift Deposits (B3)                              |
| Saturation Visible on Aerial Imagery (C9)                                                                          |                                                                                                                     | Oxidized Rhizospheres on Living Roots (C3)                           | Oxidized Rhizospheres on L                          | 71                                                                                                         | Sediment Deposits (B2)                               | Sediment Deposit                                 |
| Dry-Season Water Table (C2)                                                                                        |                                                                                                                     | lants (B14)                                                          | True Aquatic Plants (B14)                           |                                                                                                            | n (A3)                                               | Saturation (A3)                                  |
| Surface Soil Cracks (B6)<br>Drainage Patterns (B10)                                                                | Drait                                                                                                               | Leaves (B9)<br>(B13)                                                 | Water-Stained Leaves (B9)<br>Aquatic Fauna (B13)    |                                                                                                            | Surface Water (A1)<br>High Water Table (A2)          | ✓ Surface Water (A1)                             |
| Secondary Indicators (minimum of two required)                                                                     | Seconda                                                                                                             |                                                                      | eck all that apply)                                 | Primary Indicators (minimum of one is required: check all that apply)                                      | Itors (minimum of                                    | Primary Indica                                   |
|                                                                                                                    |                                                                                                                     |                                                                      |                                                     | *                                                                                                          | Wetland Hydrology Indicators:                        | Wetland Hydrol                                   |
|                                                                                                                    | inches.                                                                                                             | ns in the upper 10                                                   | edox concentration                                  | Very dark soils. Organic material likely masking redox concentrations in the upper 10 inches.              | s. Organic materi                                    | Very dark soil                                   |
| Tes_                                                                                                               |                                                                                                                     |                                                                      |                                                     | 16                                                                                                         | 1es):                                                | Depth (inches):                                  |
| ×                                                                                                                  |                                                                                                                     |                                                                      |                                                     | a                                                                                                          | Gravel                                               | Type:                                            |
| uniess disturbed of problematic:                                                                                   | uniess                                                                                                              |                                                                      |                                                     | 13                                                                                                         | Scripting Laver (if observed):                       | Restrictive La                                   |
| Indicators of hydrophytic vegetation and<br>wetland hydrology must be present,<br>indexe disturbed or problemation | "Indicators<br>wetland                                                                                              | Depleted Dark Surface (F7)<br>Redox Depressions (F8)                 | Redox Depressions (F8)                              | 23                                                                                                         | Thick Dark Surface (A12)<br>Sandy Mucky Mineral (S1) | Sandy Mu                                         |
|                                                                                                                    | 3.                                                                                                                  | Surface (F6)                                                         | Redox Dark Surface (F6)                             | ce (A11)                                                                                                   | Depleted Below Dark Surface (A11)                    | Depleted                                         |
| Other (Explain in Remarks)                                                                                         | ✓ Other (                                                                                                           | Loamy Gleyed Matrix (F2)<br>Depleted Matrix (F3)                     | Loamy Gleyed Matrix<br>Depleted Matrix (F3)         |                                                                                                            | Stratified Layers (A5)<br>2 cm Murk (A10)            | Stratified Layers (<br>2 cm Mirck (A10)          |
| Very Shallow Dark Surface (TF12)                                                                                   | Very SI                                                                                                             | Loamy Mucky Mineral (F1)                                             | Loamy Muck                                          |                                                                                                            | Hydrogen Sulfide (A4)                                | Hydrogen                                         |
| Dark Surface (S7)<br>Iron-Manganese Masses (F12)                                                                   | Iron-Ma                                                                                                             | x (S5)<br>rix (S6)                                                   | Sandy Redox (S5)<br>Stripped Matrix (S6)            |                                                                                                            | Histic Epipedon (A2)<br>Black Histic (A3)            | Black Histic (A3)                                |
| Coast Prairie Redox (A16)                                                                                          | Coast F                                                                                                             | Sandy Gleyed Matrix (S4)                                             | Sandy Gleye                                         |                                                                                                            | A1)                                                  | Histosol (A1)                                    |
| *Location: PL=Pore Lining, M=Matrix:<br>Indicators for Problematic Hydric Soils <sup>3</sup> :                     |                                                                                                                     | sked Sand Grains                                                     | ced Matrix, MS=Ma                                   | "Type:: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains<br>Hydric Soil Indicators:  | idicators:                                           | Type: C=Concentration<br>Hydric Soil Indicators: |
|                                                                                                                    | s                                                                                                                   |                                                                      |                                                     |                                                                                                            |                                                      |                                                  |
| Restrictive gravel layer at 16 in.                                                                                 | M Silt                                                                                                              | 2<br>C                                                               | 10YR 4/6                                            | 98 1                                                                                                       | 2.5Y 4/1                                             | - 10 - 16                                        |
| Organic                                                                                                            | Silt                                                                                                                |                                                                      |                                                     | 100                                                                                                        | 10YR 2/1                                             | 2 - 10                                           |
| Organic                                                                                                            |                                                                                                                     |                                                                      | -                                                   | 0  <br>                                                                                                    | 10YR 2/2                                             | 0 - 2                                            |
| Remarks                                                                                                            | Loc <sup>2</sup> Texture                                                                                            | Type <sup>1</sup>                                                    | Redox Features                                      | % Co                                                                                                       | Color (moist)                                        | Depth<br>(inches)                                |
| of indicators.)                                                                                                    | Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | the indicator or c                                                   | ded to document                                     | e to the depth nee                                                                                         | iption: (Describ                                     | Profile Descr                                    |





South

East



| VEGETATION - Use scientific names of plants |                     |                      |                     |                                                                                                                   |
|---------------------------------------------|---------------------|----------------------|---------------------|-------------------------------------------------------------------------------------------------------------------|
| <u>Tree Stratum</u> (Plot size:30')<br>1    | Absolute<br>% Cover | Dominant<br>Species? | Indicator<br>Status | Dominance Test worksheet:<br>Number of Dominant Species<br>That Are OBL, FACW, or FAC: 2                          |
| 3.                                          |                     |                      |                     | Total Number of Dominant 2 Species Across All Strata: 2                                                           |
| 5                                           |                     |                      |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC: 100.00                                                 |
| Sapling/Shrub Stratum (Plot size: 15 )      |                     | = Total Cover        | rer                 | Prevalence Index worksheet:                                                                                       |
| 2                                           |                     |                      |                     | $\begin{array}{c c} \hline Total \% Cover of: \\ \hline OBL species \\ 90 \\ \hline x 1 = \\ 90 \\ \end{array}$   |
| 2                                           |                     |                      |                     | es <u>37</u> x 2 =                                                                                                |
| 4 .                                         |                     |                      |                     | FAC species $0 \times 3 = 0$<br>FACU species $0 \times 4 = 0$                                                     |
| ach Stration                                | 0                   | = Total Cover        | rer                 | 0 x5=                                                                                                             |
| 1. Impatiens capensis                       | 20                  | z                    | FACW                | Column Totals: 12/ (A) 104                                                                                        |
| 2. Dichanthelium clandestinum               | 5                   | z                    | FACW                | Prevalence Index = B/A =1.29                                                                                      |
| 3. Onoclea sensibilis                       |                     | z                    | FACW                | Hydrophytic Vegetation Indicators:                                                                                |
| 4. Carex lurida                             | 30                  | ~                    | OBL                 | X 1 - Rapid Test for Hydrophytic Vegetation                                                                       |
| 5. Pilea pumila                             | 00                  | z                    | FACW                |                                                                                                                   |
| Symphyotrichum novae-angliae                | ω                   | z                    | FACW                | X 3 - Prevalence Index is ≤3.0 <sup>1</sup>                                                                       |
| 7. Leersia oryzoides                        | 60                  | ~                    | OBL                 | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)            |
|                                             |                     |                      |                     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                                         |
|                                             | 127                 | = Total Cover        |                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
|                                             |                     |                      |                     | Hydrophytic                                                                                                       |
| 2.                                          | 0                   | = Total Cover        | ler                 | Vegetation Ves X No                                                                                               |

| Are Venetation                              | Are Vegetation                          | Are climatic / hydrol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Soil Map Unit Name                                                                           | Slope (%): 1              | Landform (hillslope, terrace, etc.): Toeslope | Investigator(s): MJA, SAH                                        | Applicant/Owner: AEP           | Project/Site: AEP               |
|---------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------------|------------------------------------------------------------------|--------------------------------|---------------------------------|
| Coil                                        | , Soil                                  | logic condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Hickory sil                                                                                  | Lat: 3                    | terrace, etc.                                 | JA, SAH                                                          | AEP                            | Hillsboro to M                  |
| or Hydrology                                | , or Hydrology                          | ns on the site typical fc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | lt Ioam, Illinoian Till Pl                                                                   | Lat: 39.16556             | ): Toeslope                                   |                                                                  |                                | AEP Hillsboro to Millbrook Park |
| naturally problematic?                      | significantly disturbed?                | Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Soil Map Unit Name: Hickory silt loam, Illinoian Till Plain, 12 to 18 percent slopes, eroded | Long:                     | <u>م</u>                                      | Section, Tow                                                     |                                | City/County:                    |
| (If needed avalain any answers in Demarks ) | Are "Normal Circumstances" present? Yes | No (If no, explain in Remarks.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | s, eroded NWI classification:                                                                | -83.65913537566666 Datum: | Local relief (concave, convex, none): Concave | Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRIC | State: OH                      | Highland                        |
| re in Domarke \                             | present? Yes_                           | lemarks.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ation:                                                                                       | Datum:                    | Concave                                       | IILITARY DISTRICT O                                              | Sampling Point                 | Sampling Date:                  |
|                                             | × No                                    | < compared with the second sec | N/A                                                                                          | WGS 84                    |                                               | ICT OH93Highland Lot 2511                                        | Sampling Point: Wetland HM-002 | 09/17/2019                      |

| Remarks: | Hydrophytic Vegetation Present?<br>Hydric Soil Present?<br>Wetland Hydrology Present? |   |
|----------|---------------------------------------------------------------------------------------|---|
|          | Yes_<br>Yes_                                                                          |   |
|          | ×××                                                                                   | < |
|          | Yes X No<br>Yes X No<br>Yes No                                                        |   |
|          | Is the Sampled Area within a Wetland?                                                 |   |
|          | Yes X No                                                                              |   |
|          |                                                                                       |   |

### SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. S . . (11) A ..... 1

| Pemarke. | Wetland Hydrology Present? | Hydric Soil Present? | ion Present? |
|----------|----------------------------|----------------------|--------------|
|          | Yes_                       | Yes_                 | Yes          |
|          | ×                          | ×                    | ×            |
|          | Yes X No                   | No                   | No           |
|          | within a Wetland?          | Is the Sampled Area  |              |
|          | Yes X No                   |                      |              |

| San            |  |
|----------------|--|
| ampling Point: |  |
| Wetland HM     |  |

SOIL

|                                                                                                                                                 |                |                     |                        |                                                                             |                          |             |                      |                                                                                 | Remarks                                               |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------|------------------------|-----------------------------------------------------------------------------|--------------------------|-------------|----------------------|---------------------------------------------------------------------------------|-------------------------------------------------------|---|
| Sie:                                                                                                                                            | ), if availabl | pections            | evious ins             | photos, pre                                                                 | well, aerial             | itoring     | gauge, mor           | (strea                                                                          | (includes capillary fringe)<br>Describe Recorded Data |   |
| Wetland Hydrology Present? Yes X No                                                                                                             | tland Hydr     | We                  |                        | iches):                                                                     | _ Depth (inches):        | ×           | No No                |                                                                                 | Saturation Present?                                   |   |
|                                                                                                                                                 |                | <u>1</u> 9          |                        | iches):                                                                     | _ Depth (inches):        |             |                      | resent? Yes                                                                     | Water Table Present?                                  |   |
|                                                                                                                                                 |                | l                   |                        | iches):                                                                     | _ Uepth (inches):        | 1           | No No                | Present? Yes                                                                    | Surface Water Present?                                |   |
|                                                                                                                                                 |                | -                   | marks)                 | Other (Explain in Remarks)                                                  | Other (Ex                |             | Surface (B           | Sparsely Vegetated Concave Surface (B8)                                         | Sparsely \                                            | - |
|                                                                                                                                                 |                |                     | (D9)                   | Gauge or Well Data (D9)                                                     | Gauge or                 |             | nagery (B7)          | Inundation Visible on Aerial Imagery (B7)                                       | Inundation                                            |   |
| FAC-Neutral Test (D5)                                                                                                                           | 2<br>          |                     | C7)                    | Thin Muck Surface (C7)                                                      | Thin Muck                |             |                      | Iron Deposits (B5)                                                              | Iron Deposits (B5)                                    |   |
| Stunted or Stressed Plants (D1)                                                                                                                 |                | 4)<br>4)            | d Iron (C              | Presence of Reduced Iron (C4)<br>Recent Iron Reduction in Tilled Soils (C6) | Presence<br>Recent In    |             |                      | sits (B3)<br>or Crust (B4)                                                      | Drift Deposits (B3)                                   |   |
| Saturation Visible on Aerial Imagery (C9)                                                                                                       | s (C3)         | ing Root            | res on Liv             | Oxidized Rhizospheres on Living Roots (C3)                                  | Oxidized F               |             |                      | Sediment Deposits (B2)                                                          | Sediment                                              |   |
| Dry-Season Water Table (C2)<br>Cravfish Burrows (C8)                                                                                            |                |                     | (B14)                  | True Aquatic Plants (B14)<br>Hydrogen Sulfide Odor (C1)                     | True Aqua<br>Hydrogen    |             |                      | (A3)                                                                            | Saturation (A3)<br>Water Marks (B1)                   |   |
| Drainage Patterns (B10)                                                                                                                         |                |                     | es (B9)                | Water-Stained Leaves (B9)<br>Aquatic Fauna (B13)                            | Water-Sta<br>Aquatic Fa  |             |                      | Surface Water (A1)<br>High Water Table (A2)                                     | High Water Table (A                                   |   |
| Secondary Indicators (minimum of two required)                                                                                                  | Sec            |                     | į                      | oply)                                                                       | k all that ap            | d: chec     | <u>ne is require</u> | Primary Indicators (minimum of one is required: check all that apply)           | Primary Indica                                        |   |
|                                                                                                                                                 |                |                     |                        |                                                                             |                          |             |                      | Wetland Hydrology Indicators:                                                   | Wetland Hydr                                          | _ |
|                                                                                                                                                 |                |                     |                        |                                                                             |                          |             |                      | ×                                                                               | HYDROLOGY                                             |   |
|                                                                                                                                                 |                |                     |                        |                                                                             |                          |             |                      |                                                                                 | Remarks:                                              |   |
| Hyaric soli Present? Yes No                                                                                                                     | Hydric         |                     |                        |                                                                             |                          |             |                      | es):                                                                            | Depth (inches):                                       |   |
| *<br>×                                                                                                                                          |                |                     |                        |                                                                             |                          | 3           | No                   | Type:                                                                           | Type:                                                 |   |
| uniess disturbed or problematic.                                                                                                                | -              |                     |                        |                                                                             |                          |             |                      | 5 cm Mucky Peat or Peat (S3)                                                    |                                                       | - |
| Indicators of hydrophytic vegetation and<br>wetland hydrology must be present,                                                                  | المان<br>س     |                     | rface (F7)<br>ns (F8)  | Depleted Dark Surface (F7)<br>Redox Depressions (F8)                        | Redox I                  |             | 5                    | Thick Dark Surface (A12)<br>Sandy Mucky Mineral (S1)                            | Sandy Mu                                              |   |
|                                                                                                                                                 | <u>ب</u>       |                     | ce (F6)                | Redox Dark Surface (F6)                                                     | Redox                    |             | (A11)                | Depleted Below Dark Surface (A11)                                               | Depleted                                              |   |
| Other (Explain in Remarks)                                                                                                                      |                |                     | -3)                    | Depleted Matrix (F3)                                                        | Loamy                    |             |                      | 2 cm Muck (A10)                                                                 | 2 cm Muck (A10)                                       |   |
| Very Shallow Dark Surface (TF12)                                                                                                                |                |                     | ieral (F1)             | Loamy Mucky Mineral (F1)                                                    | Loamy                    | 21 5        |                      | Hydrogen Sulfide (A4)                                                           | Hydrogen                                              |   |
| Iron-Manganese Masses (F12)                                                                                                                     |                |                     | 6)                     | Stripped Matrix (S6)                                                        | Strippe                  |             |                      | ic (A3)                                                                         | Black Histic (A3)                                     |   |
| Coast Prairie Redox (A16)<br>Dark Surface (S7)                                                                                                  |                |                     | trix (S4)              | Sandy Gleyed Matrix (S4)<br>Sandy Redox (S5)                                | Sandy (                  |             |                      | Histosol (A1)<br>Histic Epinedon (A2)                                           | Histosol (A1)                                         |   |
|                                                                                                                                                 | Indica         |                     |                        |                                                                             |                          | _           |                      | dicators:                                                                       | Hydric Soil Indicators:                               |   |
| 2 nostion PI = Pore Lining M=Matrix                                                                                                             | 21 00          | aine                | Sand Gr                | SEMasked                                                                    | d Matrix M               | Pedure      | ation RM=            | -<br>"Type: C=Concentration D=Depletion RM=Reduced Matrix MS=Masked Sand Grains | Type: C=Cor                                           |   |
|                                                                                                                                                 |                |                     |                        |                                                                             |                          |             |                      |                                                                                 | .   .                                                 |   |
| 13<br>13                                                                                                                                        |                |                     |                        |                                                                             |                          |             |                      |                                                                                 |                                                       |   |
|                                                                                                                                                 | 1              |                     |                        |                                                                             |                          |             |                      |                                                                                 | <br> <br>                                             |   |
| pam Prominent Redox Concentrations                                                                                                              | Clay loam      | 믿                   | 0                      | 25                                                                          | 5YR 4/6                  | 54          | 75                   | 2.5Y 5/2                                                                        | 10 - 18                                               |   |
| Dam Prominent Redox Concentrations                                                                                                              |                | PL Loc <sup>2</sup> | Type <sup>1</sup><br>C | t) %<br>15                                                                  | Color (moist)<br>5YR 4/6 | Color<br>5Y | 85                   | Color (moist)<br>10YR 4/2                                                       | <u>(inches)</u><br>0 - 10                             |   |
| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features | rm the abs     | or confi            | ndicator               | ment the i                                                                  | d to docu                | 1 neede     | o the depti          | ption: (Describe t<br>Matrix                                                    | Profile Descri                                        |   |





South

East

Soil Photos:

Wetland HM-002



Soil Profile

| <b>VEGETATION</b> – Use scientific names of plants  | its.                |                                       |                     |                                                                                                        |          |
|-----------------------------------------------------|---------------------|---------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------|----------|
| Tree Stratum (Plot size: 30')                       | Absolute<br>% Cover | Dominant Indicator<br>Species? Status | Indicator<br>Status | Dominance Test worksheet:                                                                              |          |
|                                                     |                     |                                       |                     | That Are OBL, FACW, or FAC: 2                                                                          | (A)      |
| , ci ci                                             |                     |                                       |                     | t                                                                                                      |          |
|                                                     |                     |                                       |                     | Species Across All Strata: 2                                                                           | –<br>(B) |
| <u>, 1</u>                                          |                     |                                       |                     | Percent of Dominant Species 100.00                                                                     | (A/R     |
|                                                     | 0                   | = Total Cover                         | Y.                  |                                                                                                        |          |
| 1 Salix sericea                                     | 45                  | ~                                     | OBL                 | Total % Cover of: Multiply by:                                                                         |          |
| 2                                                   |                     |                                       |                     | 43 x 1                                                                                                 |          |
| 3                                                   |                     |                                       |                     | FACW species $5 \times 2 = 10$                                                                         |          |
| 4                                                   |                     |                                       |                     | FAC species $0 \times 3 = 0$                                                                           |          |
| 5                                                   |                     |                                       |                     | FACU species $0 x 4 = 0$                                                                               |          |
|                                                     | 45                  | = Total Cover                         | er                  | UPL species $0 \times 5 = 0$                                                                           |          |
| <u>Herb Stratum</u> (Plot size:)<br>1. Carex Iurida | 65                  | ×                                     | OBL                 | Column Totals: <u>148</u> (A) <u>153</u>                                                               | (B)      |
| 2. Caltha palustris                                 | 20                  | z                                     | OBL                 | Prevalence Index = B/A =1.03                                                                           |          |
| 3. Eupatorium perfoliatum                           | 10                  | z                                     | OBL                 | Hydrophytic Vegetation Indicators:                                                                     |          |
| 4. Schoenoplectus tabernaemontani                   | ω                   | z                                     | OBL                 | X 1 - Rapid Test for Hydrophytic Vegetation                                                            |          |
| 5. Symphyotrichum novae-angliae                     | <br>л               | z                                     | FACW                | X 2 - Dominance Test is >50%                                                                           |          |
| ٥,<br>                                              |                     |                                       |                     | X 3 - Prevalence Index is ≤3.0 <sup>1</sup>                                                            |          |
| · , •                                               |                     |                                       |                     | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) | t)       |
|                                                     |                     |                                       |                     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                              | lain)    |
| 10.                                                 |                     |                                       |                     |                                                                                                        |          |
| Woody Vine Stratum (Plot size:30' )                 | 103                 | = Total Cover                         | ar.                 | be present, unless disturbed or problematic.                                                           | Y must   |
| · · ·                                               |                     |                                       |                     | Hydrophytic<br>Vegetation                                                                              |          |
|                                                     | 0                   | = Total Cover                         | Pr                  | Present? Yes A No                                                                                      |          |

| Are Vegetation, Soil, or Hydrology naturally problematic? | Are Vegetation, Soil, or Hydrology significantly disturbed? | Are climatic / hydrologic conditions on the site typical for this time of year? Yes $\_X$ No $\_$ | Soil Map Unit Name: Hickory silt loam, 18 to 25 percent slopes, moderately eroded | Slope (%): 10 Lat: 39.16048 | Landform (hillslope, terrace, etc.): Hillside | Investigator(s): MJA, SAH                                                               | Applicant/Owner: AEP                     | Project/Site: AEP Hillsboro to Millbrook Park |
|-----------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------|
|                                                           |                                                             | ne of year? Yes X                                                                                 | s, moderately eroded                                                              | Long:                       | Local r                                       | Section, Township                                                                       |                                          | City/County:                                  |
| (If needed, explain any answers in Remarks.)              | Are "Normal Circumstances" present? Yes X No                | No (If no, explain in Remarks.)                                                                   | NWI classification:                                                               | -83.64724102633333 Datum:   | Local relief (concave, convex, none): Rolling | Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Highland Lot 2511 | State: OH                                | Highland                                      |
| rs in Remarks.)                                           | present? Yes X No                                           | emarks.)                                                                                          | ation:                                                                            |                             | Rolling                                       | ILITARY DISTRICT OH93Highlar                                                            | State: OH Sampling Point: Wetland HM-003 | _ Sampling Date: 09/18/2019                   |
|                                                           | Ĩ                                                           |                                                                                                   | N/A                                                                               | WGS 84                      |                                               | d Lot 2511                                                                              | HM-003                                   | 019                                           |

SUMMARY OF FINDINGS -

Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?

Hydric Soil Present? Wetland Hydrology Present?

> Yes Yes

No

Is the Sampled Area within a Wetland?

Yes

 $\times$ 

No

 $|\times|\times|\times$ 

No No

Remarks:

| e                          |  |
|----------------------------|--|
| Descripti                  |  |
| <u>n</u>                   |  |
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| e absence                  |  |
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| SOIL                                                                                                                                                                                                                 | Sampling Point: Wetland HM-003                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Bedox Features                                                                      | sence of indicators.)                                 |
| (inches)         Color (moist)         %         Color (moist)         %         Type'         Loc'         Texture           0         -         6         10YR 2/1         100         /         Silt         Silt | t Remarks<br>Some grit                                |
| - 18 10YR 3/1 100 /                                                                                                                                                                                                  |                                                       |
|                                                                                                                                                                                                                      |                                                       |
|                                                                                                                                                                                                                      |                                                       |
|                                                                                                                                                                                                                      |                                                       |
|                                                                                                                                                                                                                      |                                                       |
|                                                                                                                                                                                                                      |                                                       |
| <ol> <li>D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.</li> </ol>                                                                                                                                           | <sup>2</sup> Location: PL=Pore Lining, M=Matrix.      |
| ators:                                                                                                                                                                                                               | Indicators for Problematic Hydric Soils':             |
| Histosol (A1) Sandy Gleyed Matrix (S4) Co                                                                                                                                                                            | Coast Prairie Redox (A16)<br>Dark Surface (S7)        |
| Stripped Matrix (S6)                                                                                                                                                                                                 | Iron-Manganese Masses (F12)                           |
| (A4) Loamy Mucky Mineral (F1)                                                                                                                                                                                        | Very Shallow Dark Surface (TF12)                      |
| (A5) Loamy Gleyed Matrix (F2)                                                                                                                                                                                        | Other (Explain in Remarks)                            |
| 2 cm Muck (A10) Depleted Matrix (F3)                                                                                                                                                                                 |                                                       |
| Depleted Dark Surface (F7)                                                                                                                                                                                           | <sup>3</sup> Indicators of hydrophytic vegetation and |
| Redox Depressions (F8)                                                                                                                                                                                               | wetland hydrology must be present,                    |
|                                                                                                                                                                                                                      |                                                       |
| Type:                                                                                                                                                                                                                | <                                                     |
| (inches):                                                                                                                                                                                                            | Hydric Soil Present? Yes <u>No</u> No                 |
| Remarks:                                                                                                                                                                                                             |                                                       |
| Very dark soils. Organic material likely masking redox concentrations.                                                                                                                                               |                                                       |
| HYDROLOGY                                                                                                                                                                                                            |                                                       |
|                                                                                                                                                                                                                      |                                                       |
| mum of one is required; check all that apply)                                                                                                                                                                        | Secondary Indicators (minimum of two required)        |
| Water-Stained Leaves (B9)                                                                                                                                                                                            | Surface Soil Cracks (B6)                              |
| B14)                                                                                                                                                                                                                 | Drv-Season Water Table (C2)                           |
| 1) V Hydrogen Sulfide Odor (C1)                                                                                                                                                                                      | Crayfish Burrows (C8)                                 |
| s (B2) Oxidized Rhizospheres on Living Roots (C3)                                                                                                                                                                    | Saturation Visible on Aerial Imagery (C9)             |
|                                                                                                                                                                                                                      | Stunted or Stressed Plants (D1)                       |
| (B4) Recent Iron Reduction in Tilled Soils (C6)                                                                                                                                                                      | Geomorphic Position (D2)                              |
| Thin Muck Surface (C7)                                                                                                                                                                                               | 」FAC-Neutral Test (U5)                                |
| Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)                                                                                                                                                   |                                                       |
| Field Observations:                                                                                                                                                                                                  |                                                       |
| Surface Water Present? Yes <u>No X</u> Depth (inches):                                                                                                                                                               |                                                       |
| Yes X No                                                                                                                                                                                                             |                                                       |
| Yes X No Depth (inches): 0.00                                                                                                                                                                                        | Wetland Hydrology Present? Yes X No                   |
| (includes capillary fringe) Describe Recorded Data (stream gauge monitoring well aerial photos previous inspections) if available                                                                                    |                                                       |
| Describe Recorded Data (sitearitigauge, monitorinig weit, aeriat priotos, previous inspections), it available                                                                                                        | Jie.                                                  |
| Remarks:<br>Hillside seep.                                                                                                                                                                                           |                                                       |
|                                                                                                                                                                                                                      |                                                       |
|                                                                                                                                                                                                                      |                                                       |

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South

East

Soil Photos:



Soil Profile

| Tree Stratum (Plot size:30')         | Absolute Dominant Indicator<br><u>% Cover Species?</u> Status | Dominance Test worksheet:<br>Number of Dominant Species                                                          |
|--------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <u>N</u>                             |                                                               |                                                                                                                  |
| 3.                                   |                                                               | Species Across All Strata: 2                                                                                     |
| 5 4                                  |                                                               | Percent of Dominant Species 100.00                                                                               |
| Continue/Charles Stratum (Dist size: | 0 = Total Cover                                               | Provalence Index worksheet:                                                                                      |
|                                      |                                                               | Total % Cover of: Multiply by:                                                                                   |
| S                                    |                                                               | 39 x 1                                                                                                           |
| ω<br>I                               |                                                               | es<br>0                                                                                                          |
|                                      | 9                                                             | 20                                                                                                               |
|                                      |                                                               | FACU species $0 \times 4 = 0$                                                                                    |
|                                      | 0 = Total Cover                                               | UPL species $0 \times 5 = 0$                                                                                     |
| Pedicularis lanceolata               | 15 N OBL                                                      | Column Totals: <u>159</u> (A) <u>199</u>                                                                         |
| Solidago patula                      | 5 N OBL                                                       | Prevalence Index = B/A =1.25                                                                                     |
| Eupatorium perfoliatum               | 20 N OBL                                                      | Hydrophytic Vegetation Indicators:                                                                               |
| Scirpus atrovirens                   | 40 Y OBL                                                      | X 1 - Rapid Test for Hydrophytic Vegetation                                                                      |
| Carex lurida                         | 55 Y OBL                                                      | X 2 - Dominance Test is >50%                                                                                     |
| Leersia oryzoides                    | 15 N OBL                                                      | $\frac{X}{1}$ 3 - Prevalence Index is $\leq 3.0^{1}$                                                             |
| Mimulus ringens                      | 3 N OBL                                                       | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting                                                   |
| Schoenoplectus tabernaemontani       | 1 N OBL                                                       | data in Remarks or on a separate sheet)                                                                          |
| Typha latifolia                      | 3 N OBL                                                       | Problematic Hydrophytic Vegetation' (Explain)                                                                    |
| 10. Juncus tenuis                    | 20 N FAC                                                      |                                                                                                                  |
| Woody Vine Stratum (Plot size: 30'   | 159 = Total Cover                                             | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic |
|                                      |                                                               | Hydrophytic                                                                                                      |
|                                      |                                                               |                                                                                                                  |
|                                      | 0 = Total Cover                                               | Present / Yes / No                                                                                               |

City/County:

Highland State:

|   |    | (If needed, explain any answers in Remarks.)                                                                                  | naturally problematic?      | Soil, or Hydrology      | _ Soil 🗸        | Are Vegetation         |
|---|----|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------|-----------------|------------------------|
| , | No | Are "Normal Circumstances" present? Yes                                                                                       | significantly disturbed?    | _, or Hydrology         | , Soil          | Are Vegetation, Soil   |
| < |    | Slimatic / hydrologic conditions on the site typical for this time of year? Yes $\frac{X}{N}$ No (If no, explain in Remarks.) | or this time of year? Yes X | s on the site typical f | ogic conditions | Are climatic / hydrole |

 $\times$ 

(If no, explain in Remarks.) NWI classification:

Soil Map Unit Name: Negley loam, 6 to 12 percent slopes

Landform (hillslope, terrace, etc.): Hillside

Slope (%):

ω

Lat: 39.15955

Long:

Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Highland Lot 2511

우

Sampling Point: Wetland HM-004 Sampling Date: 09/18/2019

Local relief (concave, convex, none): Rolling

-83.64549560350001

Datum:

WGS 84 N/A

Investigator(s): MJA, SAH Applicant/Owner: AEP

Project/Site: AEP Hillsboro to Millbrook Park

# SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

| Remarks: | Wetland Hydrology Present? | Hydric Soil Present? | Hydrophytic Vegetation Present? |
|----------|----------------------------|----------------------|---------------------------------|
|          | Yes X No                   | Yes X No             | Yes X No                        |
|          | within a Wetland?          | 0.00                 |                                 |
|          | Yes X No                   |                      |                                 |

Data point for W-MJA-091819-02. A PEM hillside seep wetland. The soils were very dark-organic material may be masking redox features.

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SOIL

|                                                                                                                                 |                                                                                                            | Remarks:<br>Hillside seep.                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| if available:                                                                                                                   | Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Describe Recorded Data                                                                                                                       |
| Wetland Hydrology Present? Yes X No                                                                                             | Yes X No Depth (inches): 0.00 Weti                                                                         | Saturation Present?<br>(includes capillary fringe)                                                                                           |
|                                                                                                                                 | ×<br>No                                                                                                    | Water Table Present?                                                                                                                         |
|                                                                                                                                 | Yes No X Depth (inches):                                                                                   | Surface Water Present?                                                                                                                       |
|                                                                                                                                 | Sparsely Vegetated Concave Surface (B8) U Other (Explain in Remarks)                                       | Sparsely Vegetated                                                                                                                           |
|                                                                                                                                 |                                                                                                            | Inundation Visible or                                                                                                                        |
| 5                                                                                                                               |                                                                                                            | Iron Deposits (B5)                                                                                                                           |
|                                                                                                                                 |                                                                                                            | Algal Mat or Crust (B4)                                                                                                                      |
|                                                                                                                                 | Presence of Reduced Iron (C4)                                                                              | Drift Deposits (B3)                                                                                                                          |
| C3) Crayfish Burrows (C8)<br>C3) Saturation Visible on Aerial Imageny (C9)                                                      |                                                                                                            | Water Marks (B1)                                                                                                                             |
| Dry-Season Water Table (C2)                                                                                                     |                                                                                                            | Saturation (A3)                                                                                                                              |
| Drainage Patterns (B10)                                                                                                         | Aquatic Fauna (B13)                                                                                        | High Water Table (A2)                                                                                                                        |
| Secondary Indicators (minimum of two required)                                                                                  | one is required: check                                                                                     | Primary Indicators (minin                                                                                                                    |
|                                                                                                                                 | licators:                                                                                                  | Wetland Hydrology Indicators:                                                                                                                |
|                                                                                                                                 |                                                                                                            | HYDROLOGY                                                                                                                                    |
| Hydric Soil Present? Yes X No                                                                                                   |                                                                                                            | Type:<br>Depth (inches):<br>Remarks:                                                                                                         |
|                                                                                                                                 | served): No                                                                                                | Restrictive Laver (if observed):                                                                                                             |
| <sup>3</sup> Indicators of hydrophytic vegetation and<br>wetland hydrology must be present,<br>unless disturbed or problematic. | A Surface (A11)<br>(A12)<br>al (S1)<br>Peat (S3)<br>Depleted Dark Surface (F6)<br>Redox Depressions (F8)   | 2 cm Muck (A10)<br>Depleted Below Dark Surface (A11)<br>Thick Dark Surface (A12)<br>Sandy Mucky Mineral (S1)<br>5 cm Mucky Peat or Peat (S3) |
| Very Shallow Dark Surface (TF12)<br>Other (Explain in Remarks)                                                                  |                                                                                                            | Stratified Layers (A5)                                                                                                                       |
| Iron-Manganese Masses (F12)                                                                                                     |                                                                                                            | Black Histic (A3)                                                                                                                            |
| <ul> <li>Coast Prairie Redox (A16)</li> <li>Dark Surface (S7)</li> </ul>                                                        | ) Sandy Gleyed Matrix (S4)                                                                                 | Histosol (A1)<br>Histic Epipedon (A2)                                                                                                        |
| Indicators for Problematic Hydric Soils <sup>3</sup> :                                                                          |                                                                                                            | Hydric Soil Indicators:                                                                                                                      |
| <sup>2</sup> Location: PL=Pore Lining, M=Matrix.                                                                                | -<br>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.                         | -<br><sup>1</sup> Type: C=Concentration                                                                                                      |
|                                                                                                                                 |                                                                                                            |                                                                                                                                              |
|                                                                                                                                 |                                                                                                            |                                                                                                                                              |
|                                                                                                                                 |                                                                                                            |                                                                                                                                              |
| Texture Remarks Silt Organic, some grit                                                                                         | <u>Matrix Color (moist) % Type<sup>1</sup> Loc<sup>2</sup></u>                                             | Uepth <u>Matrix</u><br>(inches) <u>Color (moist)</u><br>0 - 18 10YR 2/1                                                                      |
| the absence of indicators.)                                                                                                     | e to the depth needed to d                                                                                 | Profile Description: (De                                                                                                                     |





South

East



Soil Profile

| 2                                             |                     |                                       |                                                                                                                   |                                 |
|-----------------------------------------------|---------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Tree Stratum         (Plot size:)           1 | Absolute<br>% Cover | Dominant Indicator<br>Species? Status | Dominance Test worksheet:<br>Number of Dominant Species<br>That Are OBL, FACW, or FAC:                            | 3<br>(A)                        |
|                                               |                     |                                       | Total Number of Dominant<br>Species Across All Strata:                                                            | 3 (B)                           |
|                                               |                     |                                       | Percent of Dominant Species<br>That Are OBL, FACW, or FAC:                                                        | 100.00 (A/B)                    |
| Sapling/Shrub Stratum (Plot size:             | 0                   | Total Cover                           | Prevalence Index worksheet:                                                                                       |                                 |
| Salix sericea                                 | 8                   | Y OBL                                 | Total % Cover of:                                                                                                 | Multiply by:                    |
|                                               |                     |                                       | OBL species 118 x 1 =                                                                                             | = 118                           |
|                                               |                     |                                       | es 21                                                                                                             | 42                              |
|                                               |                     |                                       | FAC species 0 x 3 =                                                                                               | 0                               |
|                                               |                     |                                       | FACU species 0 x 4 =                                                                                              | 0                               |
| Herb Stratum (Plot size: 5')                  | ∝<br>∥              | Total Cover                           | Column Totale: 139 (A)                                                                                            | 160 (8)                         |
| Leersia oryzoides                             | 55                  | Y OBL                                 |                                                                                                                   |                                 |
| Carex Iurida                                  | 30                  | Y OBL                                 | Prevalence Index = B/A =                                                                                          | 1.15                            |
| Carex tribuloides                             | 10                  | N OBL                                 | Hydrophytic Vegetation Indicators:                                                                                | ors:                            |
| 4. Scirpus atrovirens                         | 20                  | N OBL                                 | X 1 - Rapid Test for Hydrophytic Vegetation                                                                       | c Vegetation                    |
| Impatiens capensis                            | 15                  | N FACW                                | X 2 - Dominance Test is >50%                                                                                      |                                 |
| Carex vulpinoidea                             | σ                   | N FACW                                | X 3 - Prevalence Index is ≤3.0 <sup>1</sup>                                                                       |                                 |
| Eupatorium perfoliatum                        | з                   | N OBL                                 | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting                                                    | s <sup>1</sup> (Provide suppor  |
| Onoclea sensibilis                            | 1                   | N FACW                                | data in Remarks or on a separate sheet)                                                                           | eparate sheet)                  |
|                                               |                     |                                       | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                                         | jetation <sup>1</sup> (Explain) |
|                                               |                     |                                       |                                                                                                                   |                                 |
| Woody Vine Stratum (Plot size: 30'            | 139                 | Total Cover                           | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. | and hydrology mus<br>roblematic |
|                                               |                     |                                       | Hydrophytic                                                                                                       |                                 |
|                                               | ļ                   |                                       | vegetation                                                                                                        |                                 |

| Are Vegetation                               | Are Vegetation                      | Are climatic / hydrolo                                                                   | Soil Map Unit Name:                                      | Slope (%): 2       | Landform (hillslope, terrace, etc.): Footslope | Investigator(s): MJA, SAH                                                               | Applicant/Owner: AEP           | Project/Site: AEP Hillsboro to Millbrook Park |
|----------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------|------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------|
| _ Soil                                       | , Soil                              | gic conditio                                                                             | Negley loa                                               | Lat 3              | errace, etc.                                   | A, SAH                                                                                  | P                              | illsboro to I                                 |
| , or Hydrology                               | , or Hydrology                      | ns on the site typical fo                                                                | Soil Map Unit Name: Negley loam, 18 to 25 percent slopes | Lat: 39.15649625   | ): Footslope                                   |                                                                                         |                                | Millbrook Park                                |
| naturally problematic?                       | significantly disturbed?            | Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No | lopes                                                    | Long:              | Loc                                            | Section, Town                                                                           |                                | City/County:                                  |
| (If needed, explain any answers in Remarks.) | Are "Normal Circumstances" present? | No (If no, explain in Remarks.)                                                          | NWI classification:                                      | -83.63843126083333 | Local relief (concave, convex, none): Concave  | Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Highland Lot 2512 | State: OH                      | Highland                                      |
| ers in Remarks )                             | present? Yes                        | Remarks.)                                                                                | cation:                                                  | Datum:             | Concave                                        | MILITARY DISTRICT O                                                                     | Sampling Point: Wetland HM-005 | _ Sampling Date:                              |
|                                              | No                                  | <                                                                                        | N/A                                                      | WGS 84             |                                                | H93Highland Lot 2512                                                                    | Wetland HM-005                 | ng Date: 09/19/2019                           |

# SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

| Remarks:<br>PEM with water coming from stream and hillside seep | <sup>o</sup> resent?       | Hydric Soil Present?   | Hydrophytic Vegetation Present? |
|-----------------------------------------------------------------|----------------------------|------------------------|---------------------------------|
| t hillside                                                      | Yes                        | Yes                    | Yes                             |
| e seep                                                          | ×                          | ×                      | ×                               |
|                                                                 | Yes X No within a Wetland? | No Is the Sampled Area |                                 |
|                                                                 |                            |                        |                                 |
|                                                                 | Yes X No                   |                        |                                 |

conning iron ٩ ē daas

| Sampling Point. | 000000000000000000000000000000000000000 |  |
|-----------------|-----------------------------------------|--|
|                 |                                         |  |
| 0.10            | Wetland HM-0                            |  |

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Hydric Soil Indicators:

ı ı. Т. ı. ı.

Histosol (A1) Histic Epipedon (A2) Black Histic (A3)

Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)

> Indicators for Problematic Hydric Soils<sup>3</sup>: <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Iron-Manganese Masses (F12) Coast Prairie Redox (A16) Dark Surface (S7)

No

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains

| Res                        | Ľ             |
|----------------------------|---------------|
| <b>Restrictive Layer</b> ( | C CHI MICKY   |
| ve                         | 1.1410        |
| Lay                        | ALC: Y        |
| er (i                      |               |
| (if ob                     | 10            |
| ser                        |               |
| observed)                  | Carol Loar (o |
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| Wetland Hydrology Indicators:                                                                              |                                                                |                                                |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------|
| Primary Indicators (minimum of one is required: check all that apply)                                      | ck all that apply)                                             | Secondary Indicators (minimum of two required) |
| Surface Water (A1)                                                                                         | Water-Stained Leaves (B9)                                      | Surface Soil Cracks (B6)                       |
| High Water Table (A2)                                                                                      | Aquatic Fauna (B13)                                            | Drainage Patterns (B10)                        |
| Saturation (A3)                                                                                            | True Aquatic Plants (B14)                                      | Dry-Season Water Table (C2)                    |
| Water Marks (B1)                                                                                           | Hydrogen Sulfide Odor (C1)                                     | Crayfish Burrows (C8)                          |
| Sediment Deposits (B2)                                                                                     | <ul> <li>Oxidized Rhizospheres on Living Roots (C3)</li> </ul> | 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)                     | <ul> <li>Geomorphic Position (D2)</li> </ul>   |
| Iron Deposits (B5)                                                                                         | Thin Muck Surface (C7)                                         | <ul> <li>FAC-Neutral Test (D5)</li> </ul>      |
| Inundation Visible on Aerial Imagery (B7)                                                                  | Gauge or Well Data (D9)                                        |                                                |
| Sparsely Vegetated Concave Surface (B8)                                                                    | Other (Explain in Remarks)                                     |                                                |
| Field Observations:                                                                                        |                                                                |                                                |
| Surface Water Present? Yes No _X                                                                           | Uepth (inches):                                                |                                                |
| Water Table Present? Yes X No                                                                              | Depth (inches):12.00                                           |                                                |
| Saturation Present? Yes X No (includes capillary fringe)                                                   | Depth (inches):0.00 Wetland I                                  | Wetland Hydrology Present? Yes X No            |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | y well, aerial photos, previous inspections), if av            | aílable:                                       |
| Remarks:                                                                                                   |                                                                |                                                |

| ed Matrix (F1)<br>Surface (F6)<br>ark Surface (F7)<br>essions (F8)                                                                                                                                                                                                                                                                                                                                        | Secondary Indicators (minimum of two<br>Surface Soil Cracks (B6) | d: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) | Imary Indicators (minimum of one is required: check all that apply)         Surface Water (A1)         High Water Table (A2)    Aquatic Fauna |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| (A11)<br>No Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Redox Depressions (F8) H                                                                                                                                                                                                                                                                       |                                                                  |                                                                        | DROLOGY<br>etland Hydrology Indicators:                                                                                                       |
| (A11)                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                  |                                                                        | emarks:                                                                                                                                       |
| Loamy Mucky Mineral (F1)<br>Loamy Gleyed Matrix (F2)<br>Depleted Matrix (F3)<br>✓ Redox Dark Surface (F6)<br>Depleted Dark Surface (F7)<br>Redox Depressions (F8)                                                                                                                                                                                                                                         | 8                                                                |                                                                        | Depth (inches):                                                                                                                               |
| (A11)                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                  |                                                                        | Type:                                                                                                                                         |
| (A11) Loamy Mucky Mineral (F1)<br>Depleted Matrix (F2)<br>Redox Dark Surface (F6)<br>Depleted Dark Surface (F7)<br>Redox Depressions (F8)                                                                                                                                                                                                                                                                 |                                                                  |                                                                        | estrictive Layer (if observed): No                                                                                                            |
| (A4)       Loamy Mucky Mineral (F1)         (A5)       Loamy Gleyed Matrix (F2)         Dark Surface (A11)       ✓         Depleted Matrix (F3)         Depleted Dark Surface (F6)         Depleted Dark Surface (F7)         Depleted Dark Surface (F8) | unless disturbed or problematic.                                 |                                                                        | 5 cm Mucky Peat or Peat (S3)                                                                                                                  |
| <ul> <li>(A4)</li> <li>(A5)</li> <li>Depleted Matrix (F2)</li> <li>Dark Surface (A11)</li> <li>✓ Redox Dark Surface (F6)</li> <li>Depleted Dark Surface (F7)</li> </ul>                                                                                                                                                                                                                                   | wetland hydrology must be present                                | Redox Depressions (F8)                                                 | Sandy Mucky Mineral (S1)                                                                                                                      |
| (A4) Loamy Mucky Mineral (F1)<br>(A5) Loamy Gleyed Matrix (F2)<br>Depleted Matrix (F3)<br>⊇ark Surface (A11)<br>✓ Redox Dark Surface (F6)                                                                                                                                                                                                                                                                 | <sup>3</sup> Indicators of hydrophytic vegetation a              | Depleted Dark Surface (F7)                                             | Thick Dark Surface (A12)                                                                                                                      |
| (A4) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F3)                                                                                                                                                                                                                                                                                                                               |                                                                  | ✓ Redox Dark Surface (F6)                                              | Depleted Below Dark Surface (A11)                                                                                                             |
| Loamy Mucky Mineral (F1)                                                                                                                                                                                                                                                                                                                                                                                  |                                                                  | Depleted Matrix (F3)                                                   | 2 cm Muck (A10)                                                                                                                               |
| Loamy Mucky Mineral (F1)                                                                                                                                                                                                                                                                                                                                                                                  | Other (Explain in Remarks)                                       | Loamy Gleyed Matrix (F2)                                               | Stratified Layers (A5)                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                           | Very Shallow Dark Surface (TF12)                                 | Loamy Mucky Mineral (F1)                                               | Hydrogen Sulfide (A4)                                                                                                                         |

Depth (inches)

0

Т

4

Matrix Color (moist) 10YR 3/2

Color (moist) 5YR 4/4

Redox Features

Type

Loc

Texture

Silty loam Clay loam

Prominent Redox Concentrations **Prominent Redox Concentrations** 

Remarks

4 - 18

10YR 5/2

60 95 %

10YR 5/6

40 ы

C 0

 $\leq$  $\leq$ 





South

West

East

Soil Photos:

Wetland HM-005



|                                      | 1                                                      | +                                                                                                                |
|--------------------------------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Tree Stratum (Plot size: 30')        | Absolute Dominant Indicator<br>% Cover Species? Status | 55 55                                                                                                            |
|                                      |                                                        | Number of Dominant Species     That Are OBL, FACW, or FAC:(A)                                                    |
|                                      |                                                        |                                                                                                                  |
|                                      |                                                        | Species Across All Strata:     1     B)                                                                          |
|                                      |                                                        |                                                                                                                  |
| <u>.</u>                             |                                                        | That Are OBL, FACW, or FAC: 100.00 (A/B)                                                                         |
| 35 Sapling/Shrub Stratum (Plot size: |                                                        | Prevalence Index worksheet:                                                                                      |
|                                      |                                                        | Total % Cover of: Multiply by:                                                                                   |
|                                      |                                                        | OBL species 101 x 1 = 101                                                                                        |
|                                      |                                                        | FACW species $25 \times 2 = 50$                                                                                  |
|                                      |                                                        | FAC species $0 \times 3 = 0$                                                                                     |
|                                      |                                                        | FACU species $0 \times 4 = 0$                                                                                    |
| Herb Stratum (Diot size: 5'          | 0 = Total Cover                                        | $\begin{array}{c} 0 \\ x5 = \\ 0 \\ 151 \\ \end{array}$                                                          |
| Leersia oryzoides                    | 90 Y OBL                                               | Column Totals: 120 (A) 131 (B)                                                                                   |
| Symphyotrichum novae-angliae         | 10 N FACW                                              | Prevalence Index = B/A =1.20                                                                                     |
| 3. Impatiens capensis                | 15 N FACW                                              | V Hydrophytic Vegetation Indicators:                                                                             |
| Eupatorium perfoliatum               | 3 N OBL                                                |                                                                                                                  |
| Persicaria sagittata                 | 8 N OBL                                                | X 2 - Dominance Test is >50%                                                                                     |
|                                      |                                                        | X 3 - Prevalence Index is ≤3.0 <sup>1</sup>                                                                      |
|                                      |                                                        | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)           |
|                                      |                                                        | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                                        |
| 90                                   |                                                        | и и и и и и и и и и и и и и и и и и и                                                                            |
| Woody Vine Stratum (Plot size: 30')  | 126 = Total Cover                                      | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic |
|                                      |                                                        | Hydrophytic                                                                                                      |
|                                      |                                                        | ×                                                                                                                |
|                                      | 0 = Total Cover                                        | Present? Yes // No                                                                                               |

| No                   | Are "Normal Circumstances" present? Yes                                                 | stances" p          | rmal Circum        | Are "No                                       | ly disturbed?   | significant        | Are Vegetation, Soil, or Hydrology significantly disturbed?                                                          | , Soil        | Vegetation                                    |
|----------------------|-----------------------------------------------------------------------------------------|---------------------|--------------------|-----------------------------------------------|-----------------|--------------------|----------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------|
| <                    | Ŭ                                                                                       | cplain in Re        | (If no, ex         | No                                            | /ear? Yes X     | for this time of y | Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks. | ogic conditio | climatic / hydrolc                            |
| N/A                  | ation:                                                                                  | NWI classification: | NN                 |                                               |                 | ent slopes         | Soil Map Unit Name: Otwell silt loam, 25 to 35 percent slopes                                                        | Otwell silt   | Map Unit Name:                                |
| WGS 84               | Datum:                                                                                  | 766666              | -83.62633588766666 | 8                                             | Long:           |                    | 9.1513492188                                                                                                         | Lat: 3        | Slope (%): 2 Lat: 39.1513492188               |
|                      | Concave                                                                                 | ex, none):          | ncave, conv        | Local relief (concave, convex, none): Concave | Lo              |                    | .): Ravine                                                                                                           | terrace, etc. | Landform (hillslope, terrace, etc.):          |
| 193Highland Lot 4217 | Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Highland Lot 4217 | ; VIRGINIA MI       | Ohio Surveys       | nship, Range                                  | _ Section, Towi |                    |                                                                                                                      | A, SAH        | nvestigator(s): MJA, SAH                      |
| Wetland HM-006       | State: OH Sampling Point: Wetland HM-006                                                | 위                   | State:             |                                               |                 |                    |                                                                                                                      | 9             | Applicant/Owner: AEP                          |
| 09/19/2019           | Sampling Date: 09/19/2019                                                               |                     | Highland           |                                               | _ City/County:  |                    | Millbrook Park                                                                                                       | fillsboro to  | Project/Site: AEP Hillsboro to Millbrook Park |

# SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Are Vegetation

Soil

or Hydrology

naturally problematic?

(If needed, explain any answers in Remarks.)

| Data point for WLM 1A-001010-02 A DEM wattand in boufield | ic Vegetation Present?<br>I Present?<br>ydrology Present? |
|-----------------------------------------------------------|-----------------------------------------------------------|
| n wotla                                                   | Yes<br>Yes<br>Yes                                         |
| n<br>n                                                    | $   \times   \times \times$                               |
| havfield                                                  | Yes X No<br>Yes X No<br>Yes X No                          |
|                                                           | Is the Sampled Area<br>within a Wetland?                  |
|                                                           | Yes X No                                                  |
|                                                           |                                                           |

| Sampling Point: |  |
|-----------------|--|
| Wetland HN      |  |

SOIL

| Depth Matrix                                                                              | n needed to document the indicator of contin<br>Redox Features                                             | n trie absence of indicators.)                                                      |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <u>(inches)</u> <u>Color (moist)</u> <u>%</u><br>0 - 6 10YR 3/2 90                        | Color (moist)         %         Type <sup>1</sup> Loc <sup>2</sup> 5YR 4/6         10         C         PL | Texture         Remarks           Silty loam         Prominent Redox Concentrations |
| 0 - 18 10YR 4/1 85                                                                        | 10YR 5/6 15 C PL                                                                                           | i n                                                                                 |
|                                                                                           |                                                                                                            |                                                                                     |
|                                                                                           |                                                                                                            |                                                                                     |
|                                                                                           |                                                                                                            |                                                                                     |
|                                                                                           |                                                                                                            |                                                                                     |
|                                                                                           |                                                                                                            |                                                                                     |
| <sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains | Reduced Matrix, MS=Masked Sand Grains.                                                                     | <sup>2</sup> Location: PL=Pore Lining, M=Matrix.                                    |
| Hydric Soil Indicators:                                                                   |                                                                                                            | Indicators for Problematic Hydric Soils <sup>3</sup> :                              |
| Histosol (A1)<br>Histic Epipedon (A2)                                                     | Sandy Gleyed Matrix (S4)                                                                                   | Dark Surface (S7)                                                                   |
| Black Histic (A3)                                                                         | Stripped Matrix (S6)                                                                                       | Iron-Manganese Masses (F12)                                                         |
| Hydrogen Sulfide (A4)                                                                     | Loamy Mucky Mineral (F1)                                                                                   | Very Shallow Dark Surface (TF12)                                                    |
| Stratified Layers (A5)                                                                    | Loamy Gleyed Matrix (F2)                                                                                   | Other (Explain in Remarks)                                                          |
| Depleted Below Dark Surface (A11)                                                         | Redox Dark Surface (F6)                                                                                    |                                                                                     |
| Thick Dark Surface (A12)                                                                  | Depleted Dark Surface (F7)                                                                                 | <sup>3</sup> Indicators of hydrophytic vegetation and                               |
| 5 cm Mucky Peat or Peat (S3)                                                              |                                                                                                            | unless disturbed or problematic.                                                    |
| Restrictive Layer (if observed): No                                                       |                                                                                                            |                                                                                     |
| Type:                                                                                     |                                                                                                            | Hydric Soil Present? Yes X No                                                       |
| Depth (inches):                                                                           |                                                                                                            |                                                                                     |
|                                                                                           |                                                                                                            |                                                                                     |
| HYDROLOGY                                                                                 |                                                                                                            |                                                                                     |
| Wetland Hydrology Indicators:                                                             |                                                                                                            |                                                                                     |
| Finitial y hindrators (11)                                                                |                                                                                                            |                                                                                     |
| High Water Table (A2)                                                                     | Aquatic Fauna (B13)                                                                                        | <ul> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> </ul>       |
| Saturation (A3)                                                                           | True Aquatic Plants (B14)                                                                                  | Dry-Season Water Table (C2)                                                         |
| Water Marks (B1)                                                                          | Hydrogen Sulfide Odor (C1)                                                                                 | Crayfish Burrows (C8)                                                               |
| Sediment Deposits (B2)                                                                    | Oxidized Rhizospheres on Living Roots (C3)                                                                 |                                                                                     |
| Algal Mat or Crust (B4)                                                                   | Presence of Reduced Iron (U4)     Becent Iron Beduction in Tilled Soils (C                                 | 30                                                                                  |
| Iron Deposits (B5)                                                                        | Thin Muck Surface (C7)                                                                                     | Geofficiplic Fosition (DZ)     FAC-Neutral Test (D5)                                |
| Inundation Visible on Aerial Imagery (B7)                                                 |                                                                                                            |                                                                                     |
| Sparsely Vegetated Concave Surface (B8)                                                   |                                                                                                            |                                                                                     |
| Í                                                                                         | ×                                                                                                          |                                                                                     |
|                                                                                           | × :                                                                                                        |                                                                                     |
|                                                                                           | _ Deptri (incries):                                                                                        |                                                                                     |
| ×                                                                                         | No Depth (inches):6.00 Wet                                                                                 | Wetland Hydrology Present? Yes X No                                                 |
| Describe Recorded Data (stream gauge, mo                                                  | Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available  | if available:                                                                       |
| Remarks                                                                                   |                                                                                                            |                                                                                     |
|                                                                                           |                                                                                                            |                                                                                     |





South

West

East

Wetland HM-006



| VEGETATION - Use scientific names of plants         | S.                         |                                       |          |                                                                                                                   |                            |
|-----------------------------------------------------|----------------------------|---------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------|----------------------------|
| Tree Stratum (Plot size:30')<br>1                   | Absolute<br><u>% Cover</u> | Dominant Indicator<br>Species? Status | Status   | Dominance Test worksheet:<br>Number of Dominant Species<br>That Are OBL, FACW, or FAC;                            | ⊥<br>(À)                   |
| 3.                                                  |                            |                                       |          | Total Number of Dominant<br>Species Across All Strata:                                                            | (B)                        |
| 2, 4, 6, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,     | 0                          |                                       |          | Percent of Dominant Species 1<br>That Are OBL, FACW, or FAC: 1                                                    | 100.00 (A/B)               |
| Sapling/Shrub Stratum (Plot size:) 1) 2             |                            |                                       |          | Prevalence Index worksheet:<br>Total % Cover of: Mult<br>OBI species 105 x 1 =                                    | Multiply by:<br>= 105      |
| 4 3                                                 |                            |                                       |          | 0 10                                                                                                              | 0 20                       |
| 5                                                   |                            |                                       |          | s 0 x 4                                                                                                           |                            |
| Herb Stratum (Plot size: 5')<br>4 Leersia oryzoides | 95                         | Y Y                                   | OBL      | Column Totals: 115 (A)                                                                                            | 125                        |
| 2. Persicaria sagittata                             | 10                         | z                                     | OBL      | Prevalence Index = B/A =                                                                                          | 1.09                       |
| 3. Impatiens capensis                               | 10                         | z                                     | FACW     | Hydrophytic Vegetation Indicators:                                                                                |                            |
| 4.                                                  |                            |                                       |          | X 1 - Rapid Test for Hydrophytic Vegetation                                                                       | getation                   |
| 5.                                                  |                            |                                       |          |                                                                                                                   |                            |
| 6<br>                                               |                            |                                       |          |                                                                                                                   |                            |
| 7.                                                  |                            |                                       |          | <ul> <li>4 - Morphological Adaptations (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> | ate sheet)                 |
| 2, 2, 3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,     |                            |                                       |          | — Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                                       | ion <sup>1</sup> (Explain) |
| 10.                                                 |                            |                                       |          | <sup>1</sup> Indicators of hydric soil and wetland h                                                              | wdrology mi                |
| Woody Vine Stratum (Plot size:30')                  | 115                        | Total Cover                           | ų        | Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.              | matic.                     |
| 1.                                                  |                            |                                       | in<br>Te | Hydrophytic<br>Vegetation                                                                                         |                            |
|                                                     | 0                          | Total Cover                           | Å        | Present? Yes A No                                                                                                 | ľ                          |

| Are Vegetation Soil                          | Are Vegetation                          | Are climatic / hydrold                                                                   | Soil Map Unit Name                                            | Slope (%): 2              | Landform (hillslope, terrace, etc.): Toeslope | Investigator(s): MJA, SAH                                        | Applicant/Owner: AEP           | Project/Site: AEP Hillsboro to Millbrook Park |
|----------------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------|-----------------------------------------------|------------------------------------------------------------------|--------------------------------|-----------------------------------------------|
| _ Soil                                       | , Soil                                  | ogic conditic                                                                            | Otwell silt                                                   | Lat:                      | terrace, etc                                  | A, SAH                                                           | ĒP                             | fillsboro to                                  |
| , or Hydrology                               | , or Hydrology                          | ins on the site typical fo                                                               | Soil Map Unit Name: Otwell silt loam, 25 to 35 percent slopes | Lat: 39.1506720312        | ): Toeslope                                   |                                                                  |                                | Millbrook Park                                |
| naturally problematic?                       | significantly disturbed?                | Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No | it slopes                                                     | Long:                     |                                               | Section, Tov                                                     |                                | City/County:                                  |
| (If needed, explain any answers in Remarks.) | Are "Normal Circumstances" present? Yes | X No (If no, explain in Remarks.)                                                        | NWI classification:                                           | -83.62460673666668 Datum: | Local relief (concave, convex, none): Concave | Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRIC | State: OH                      | Highland                                      |
| rs in Remarks.)                              | present? Yes                            | lemarks.)                                                                                | ation:                                                        | Datum:                    | Concave                                       | IILITARY DISTRICT OHS                                            | Sampling Point: Wetland HM-007 | Sampling Date: 09/19/2019                     |
|                                              | No ×                                    | <                                                                                        | N/A                                                           | WGS 84                    |                                               | ICT OH93Highland Lot 4217                                        | Vetland HM-007                 | 19/19/2019                                    |

#### SUMMARY OF FINDINGS -Attach site map showing sampling point locations, transects, important features, etc.

|          |                     |          | Remarks:                        |
|----------|---------------------|----------|---------------------------------|
| Yes X No | within a Wetland?   | Yes X No | resent?                         |
|          | Is the Sampled Area | Yes X No |                                 |
|          |                     | Yes X No | Hydrophytic Vegetation Present? |

#### Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

|                                | and and and another |                     |
|--------------------------------|---------------------|---------------------|
| vdrophytic Vegetation Present? | Yes X No            |                     |
| ydric Soil Present?            | Yes X No            | Is the Sampled Area |

| etation Present? Yes X No Is the Sampled Area |                   | ALIACH SILE IIIA | p showing sai | <ul> <li>Involve - Analysis and showing sampling point reasons, unipersative and substanties</li> </ul> |
|-----------------------------------------------|-------------------|------------------|---------------|---------------------------------------------------------------------------------------------------------|
| Yes X No                                      | tetation Present? | Yes X            | No            |                                                                                                         |
|                                               | ent?              | Yes X            | No            |                                                                                                         |

| Sampling P            |
|-----------------------|
| Point: Wetland HM-007 |
| Г. <sup>с</sup>       |

 Profile Description:
 (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

 Depth (inches)
 Matrix Color (moist)
 Redox Features Color (moist)
 Type<sup>1</sup>
 Loc<sup>2</sup>
 Texture
 Feature

 0 - 4
 10YR 4/2
 85
 5YR 4/6
 15
 C
 PL
 Loam
 Prominent R

Type<sup>1</sup> C

Texture Loam

Remarks Prominent Redox Concentrations

Matrix Color (moist) 10YR 4/2

% 85

SOIL

| STIAILOW DAIN SUITACE (TETZ)                           |                      |       |            | INITCKA INIT             | LOdiny                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |                                                                                                           |                         |
|--------------------------------------------------------|----------------------|-------|------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------|-------------------------|
| very shallow Dark surface (1F12)                       | L very               |       | ieral (F1) | Loamy Mucky Mineral (F1) | Loamy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             | Hydrogen Sulfide (A4)                                                                                     | Hydroger                |
| Challow Dark Curface (TE19)                            | Von                  |       | oral (E1)  | Muchov Mir               | Loomy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             | Cultide (AA)                                                                                              | Ludronor                |
| Iron-Manganese Masses (F12)                            | I Iron-              |       | 6)         | Stripped Matrix (S6)     | Strippe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             | tic (A3)                                                                                                  | Black Histic (A3)       |
| Dark Surface (S/)                                      | Dark                 |       |            | Sandy Redox (S5)         | Sandy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             | Histic Epipedon (A2)                                                                                      | Histic Ep               |
|                                                        |                      |       | 100/00/    | Cicy ou init             | Laura de la carre |             |                                                                                                           | 1                       |
| Coast Prairie Redox (A16)                              | Coas                 |       | trix (S4)  | Sandv Gleved Matrix (S4) | Sandv                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             | A1)                                                                                                       | Histosol (A1)           |
| Indicators for Problematic Hydric Soils <sup>3</sup> : | Indicator            |       |            |                          | ]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             | idicators:                                                                                                | Hydric Soil Indicators: |
| <sup>2</sup> Location: PL=Pore Lining, M=Matrix.       | <sup>2</sup> Locatic | ains. | Sand Gr    | IS=Masked                | educed Matrix, M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | etion, RM=R | <sup>-</sup><br><sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains | -<br>Type: C=Co         |
|                                                        | ÌÌ                   |       |            |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |                                                                                                           | ľ                       |
|                                                        |                      |       |            |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |                                                                                                           | ·   ·                   |
| Prominent Redox Concentrations                         | Clay loam            | PP    | 0          | 30                       | 5YR 4/6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 70          | 10YR 4/1                                                                                                  | 10 - 18                 |
| Prominent Redox Concentrations                         | Loam                 | P     | 0          | 30                       | 5YR 4/6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 6           | 10YK 4/2                                                                                                  | 4 - 10                  |

#### HYDROLOGY

| one is required; check all that apply)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| Utace Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Saturation Visible on Aerial Imagery (C9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| Drift Deposits (B3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| ☐ Iron Deposits (B5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Surface Water Present? Yes <u>No X</u> Depth (inches):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Water Table Present? Yes <u>No X</u> Depth (inches):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| Yes No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Incators:       Secondary Indicators (minimum of M         num of one is required: check all that apply)       Secondary Indicators (minimum of M         (2)       Hydrogen Sulfide Claves (B9)       Surface Soil Cracks (B6)         (B2)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         (B2)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         (B2)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         (B2)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Stunted or Stressed Plants (D1)       Saturation Visible on Aerial Image or Well Data (D9)       Stunted or Stressed Plants (D1)         Concave Surface (B8)       Other (Explain in Remarks)       FAC-Neutral Test (D5)         Yes       No       X       Depth (inches):         Yes       No       X       Depth (inches): inspections), if available: |  |
| Remarks:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |





South

East

West

Wetland HM-007



|        |                                                                                                                   |                                    |        |               | heet.)  | or on a separate s | Remarks: (Include photo numbers here or on a separate sheet.) |
|--------|-------------------------------------------------------------------------------------------------------------------|------------------------------------|--------|---------------|---------|--------------------|---------------------------------------------------------------|
| I      | Ves No                                                                                                            | Present?                           | ver    | = Total Cover | 0       |                    |                                                               |
|        | <                                                                                                                 | Vegetation                         |        |               |         |                    |                                                               |
|        |                                                                                                                   | Hydronhytic                        |        |               |         |                    | ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )                       |
| ogy mu | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. | "Indicators of I<br>be present, un | ver    | = Total Cover | 107     | 30'                | Woody Vine Stratum (Plot size:                                |
|        |                                                                                                                   |                                    |        | 11 1          |         |                    | fil.                                                          |
| xplain | Problematic Hydrophytic Vegetation' (Explain)                                                                     | Problema                           |        |               |         |                    |                                                               |
| eet)   | data in Remarks or on a separate sheet                                                                            | data in                            |        |               |         |                    |                                                               |
| supp   | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting                                                    | 4 - Morph                          |        |               |         |                    |                                                               |
|        | 3 - Prevalence Index is ≤3.0 <sup>1</sup>                                                                         | X 3 - Preval                       | FACW   | z             | -       |                    | Agrimonia parviflora                                          |
|        | 2 - Dominance Test is >50%                                                                                        |                                    | FACW   | z             | თ       |                    | Impatiens capensis                                            |
| ň      | 1 - Rapid Test for Hydrophytic Vegetation                                                                         |                                    | FACW   | z             | 8       |                    | Symphyotrichum novae-angliae                                  |
|        | Hydrophytic Vegetation Indicators:                                                                                | Hydrophytic V                      | OBL    | z             | 10      |                    | Eupatorium perfoliatum                                        |
|        | Prevalence Index = B/A =1.10                                                                                      | Prevaler                           | OBL    | ×             | 60      |                    | Leersia oryzoides                                             |
|        |                                                                                                                   |                                    | OBL    | z             | 20      | 1400               | Typha latifolia                                               |
| 3      | 112 (A) 1                                                                                                         | Column Totals:                     | Ver    | - Total Cover | 6       | ļ                  | Herb Stratum (Plot size: 5'                                   |
|        | 0 x 5= 0                                                                                                          | UPI species                        | VIDI   |               | თ       |                    |                                                               |
|        | $x = 0 \\ x = 0$                                                                                                  | FACU species                       |        |               |         |                    |                                                               |
|        | $0 x_3 = 0$                                                                                                       | FAC species                        |        |               |         |                    |                                                               |
|        | s <u>14</u> x 2 = <u>28</u>                                                                                       | FACW species                       |        |               |         |                    |                                                               |
|        | $95 \times 1 = 95$                                                                                                | <b>OBL</b> species                 |        |               |         |                    |                                                               |
| ×      | Cover of: Multiply by:                                                                                            | Total % Cover of:                  | OBL    | ~             | 5       |                    | 1. Salix nigra                                                |
|        | Prevalence Index worksheet:                                                                                       | Prevalence In                      | ver    | = Total Cover | c       | 15'                | Sapling/Shrub Stratum (Plot size:                             |
| (A/B)  | Percent of Dominant Species<br>That Are OBL, FACW, or FAC: 100.00                                                 | Percent of Dou<br>That Are OBL     |        |               |         |                    |                                                               |
| (B)    | ss All Strata: 2                                                                                                  | Species Across All Strata:         |        |               |         |                    |                                                               |
|        |                                                                                                                   | Total Number of Dominant           |        |               |         |                    |                                                               |
| <br>(À | Number of Dominant Species 2<br>That Are OBL, FACW, or FAC: 2                                                     | Number of Do<br>That Are OBL       | Status | Species?      | % Cover |                    | 1                                                             |
|        | Dolling lost workshoet                                                                                            |                                    |        |               |         |                    |                                                               |

|                                                                                         | (If needed, explain any answers in Remarks.) | any answer            | ded, explain a                        | (If need      | problematic?     | naturally         | Are Vegetation, Soil, or Hydrology naturally problematic?                                                               | Soil           | Are Vegetation                       |
|-----------------------------------------------------------------------------------------|----------------------------------------------|-----------------------|---------------------------------------|---------------|------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------|
| No No                                                                                   | Are "Normal Circumstances" present? Yes No   | stances" pr           | ormal Circum                          | Are "No       | ntly disturbed?  | significa         | Are Vegetation, Soil, or Hydrology significantly disturbed?                                                             | , Soil         | Are Vegetation                       |
| <                                                                                       | emarks.)                                     | xplain in Re          | (If no, e)                            | No            | f year? Yes X    | I for this time o | Are climatic / hydrologic conditions on the site typical for this time of year? Yes $X$ No (If no, explain in Remarks.) | logic conditio | Are climatic / hydrc                 |
| N/A                                                                                     | ation:                                       | NWI classification:   | NN                                    |               | oderately eroded | cent slopes, m    | Soil Map Unit Name: Otwell silt loam, 12 to 18 percent slopes, moderately eroded                                        | e: Otwell silt | Soil Map Unit Nam                    |
| WGS 84                                                                                  | Datum:                                       | -83.6234244879 Datum: | -83.6234                              |               | Long:            |                   | Lat: 39.1501270432                                                                                                      | Lat            | Slope (%): 1                         |
|                                                                                         | e): Concave                                  | ex, none):            | Local relief (concave, convex, none): | al relief (co | Loc              |                   | .): Terrace                                                                                                             | , terrace, etc | Landform (hillslope, terrace, etc.): |
| Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Highland Lot 4217 | LITARY DISTRICT O                            | S VIRGINIA MIL        | le: Ohio Surveys                      | ship, Rang    | Section, Towns   |                   |                                                                                                                         | JA, SAH        | Investigator(s): MJA, SAH            |
| State: OH Sampling Point: Wetland HM-008                                                | Sampling Point:                              | 오                     | State:                                |               |                  |                   |                                                                                                                         | AEP            | Applicant/Owner: AEP                 |
| 09/20/2019                                                                              | Sampling Date:                               |                       | Highland                              |               | City/County:     |                   | AEP Hillsboro to Millbrook Park                                                                                         | Hillsboro to   | Project/Site: AEP                    |

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Roadside PEM under T-line. Ephemeral stream flows into wetland from east, loses definition (i.e., "sheds"), and regains definition at outflow (to the west).

Wetland Hydrology Present? Hydric Soil Present?

Yes\_ Yes

No

within a Wetland? Is the Sampled Area

Yes

 $|\times|$ 

No

Hydrophytic Vegetation Present?

Yes

No No

 $|\times|\times\times$ 

Remarks:

| Sam           |
|---------------|
| pling Point   |
| nt: Wetland I |

| U | 0 |  |
|---|---|--|
| 2 | 2 |  |
| Г |   |  |
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|   |   |  |
|   |   |  |
|   |   |  |

|                                                                                                                                                                                                                                                                                                                               | s), if available:                                                                                                                                                                                                                                                                                                                                                                                                                                                         | nspection                       | revious ir                                                                                                           | al photos, p                                                                                                                                                                                                                                                                                                                                     | g well, aeri                                                                              | monitorin             | am gauge,                                             | Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:<br>Remarks:                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Remarks:                                                                                                                                                                                                                                             |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Present? Yes X No                                                                                                                                                                                                                                                                                                             | Wetland Hydrology Present?                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u> </u>                        | 3.00                                                                                                                 | Depth (Inches):<br>Depth (inches):<br>Depth (inches):                                                                                                                                                                                                                                                                                            | Depth (<br>Depth (                                                                        | N N N                 | Yes<br>Yes<br>Yes                                     | rations:<br>ar Present?<br>Present?<br>'esent?<br>'illary fringo)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Field Observations:<br>Surface Water Present?<br>Water Table Present?<br>Saturation Present?<br>(includee cepillary fringe                                                                                                                           |                      |
| Secondary Indicators (minimum of two required)<br>Surface Soil Cracks (B6)<br>Drainage Patterns (B10)<br>Dry-Season Water Table (C2)<br>Crayfish Burrows (C8)<br>Saturation Visible on Aerial Imagery (C9)<br>Stunted or Stressed Plants (D1)<br>Geomorphic Position (D2)<br>FAC-Neutral Test (D5)                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | iving Roo<br>C4)<br>led Soils ( | ves (B9)<br>))<br>(B14)<br>ves on L<br>ares on L<br>ares on L<br>ion in Till<br>(C7)<br>(C7)<br>(C7)<br>(C7)<br>(C7) | x all that apply)<br>Water-Stained Leaves (B9)<br>Aquatic Fauna (B13)<br>True Aquatic Plants (B14)<br>Hydrogen Sulfide Odor (C1)<br>Oxidized Rhizospheres on Living Roots (C3)<br>Presence of Reduced Iron (C4)<br>Presence of Reduction in Tilled Soils (C6)<br>Thin Muck Surface (C7)<br>Gauge or Well Data (D9)<br>Other (Explain in Remarks) | eck all that<br>Water-S<br>Aquatic<br>True Aq<br>Hydroge<br>Presenc<br>Thin Mu<br>Gauge c | (B7)<br>(B8)          | of one is rec<br>ial Imagery<br>ave Surface           | Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)         Surface Water (A1)       Water-Stained         High Water Table (A2)       Aquatic Fauna         Saturation (A3)       True Aquatic Fauna         Water Marks (B1)       Hydrogen Sulf         Drift Deposits (B2)       Hydrogen Sulf         Drift Deposits (B3)       Presence of R         Algal Mat or Crust (B4)       Presence of R         Iron Deposits (B5)       Thin Muck Sulf         Sparsely Vegetated Concave Surface (B8)       Other (Explain) | Vetland Hydrology       Primary Indicators (r       Surface Water (       High Water Tab       Vaturation (A3)       Water Marks (B       Drift Deposits (F       Algal Mat or Cn       Iron Deposits (F       Inundation Visit       Sparsely Veget |                      |
| Present? Yes X No                                                                                                                                                                                                                                                                                                             | Hydric Soil Present?                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                 |                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                  |                                                                                           |                       |                                                       | GY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Type:<br>Depth (inches):<br>Remarks:                                                                                                                                                                                                                 | T                    |
| <ul> <li>Coast Prairie Redox (A16)</li> <li>Dark Surface (S7)</li> <li>Iron-Manganese Masses (F12)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> <li><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</li> </ul> | <sup>a</sup> Indicators -<br>wetland<br>unless c                                                                                                                                                                                                                                                                                                                                                                                                                          | 3                               | atrix (S4)<br>5)<br>S6)<br>neral (F1<br>atrix (F2<br>atrix (F2)<br>(F3)<br>ace (F6)<br>arface (F6)<br>unface (F8)    | Sandy Gleyed Matrix (S4)<br>Sandy Redox (S5)<br>Stripped Matrix (S6)<br>Loamy Mucky Mineral (F1)<br>Loamy Gleyed Matrix (F2)<br>Depleted Matrix (F3)<br>Redox Dark Surface (F6)<br>Depleted Dark Surface (F7)<br>Redox Depressions (F8)                                                                                                          | Sand<br>Coam<br>Coam<br>Coam<br>Coam<br>Redo                                              |                       | face (A11)<br>)<br>)<br>((S3)<br>ad): No              | Histosol (A1)<br>Histosol (A1)<br>Black Histic (A3)<br>Hydrogen Sulfide (A4)<br>Stratified Layers (A5)<br>2 cm Muck (A10)<br>Depleted Below Dark Surface (A11)<br>Thick Dark Surface (A12)<br>Sandy Mucky Mineral (S1)<br>5 cm Mucky Peat or Peat (S3)<br>Restrictive Layer (if observed): No                                                                                                                                                                                                                                                                                        | Histosol (A1)<br>Histosol (A1)<br>Black Histic Epipedon (A2<br>Black Histic (A3)<br>Hydrogen Sulfide (A<br>Stratified Layers (A:<br>2 cm Muck (A10)<br>Depleted Below Dai<br>Thick Dark Surface<br>Sandy Mucky Miner<br>Sandy Mucky Peat or          |                      |
| Location: PL=Pore Lining, M=Matrix:                                                                                                                                                                                                                                                                                           | <sup>2</sup> Location:                                                                                                                                                                                                                                                                                                                                                                                                                                                    | brains.                         | Sand Q                                                                                                               | MS=Maske                                                                                                                                                                                                                                                                                                                                         | zed Matrix,                                                                               | M=Reduc               | D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                      | 1.00 M 100 100 M 100 |
| Prominent redox concentrations                                                                                                                                                                                                                                                                                                | Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)         Depth<br>(inches)       Matrix       Redox Features       Loc <sup>2</sup> Texture       Features         0       8       10YR 4/2       85       2.5YR 3/6       15       C       PL       Sit loam       Prominent r         8       18       2.5Y 3/1       80       2.5YR 3/6       20       C       PL       Clay loam       Prominent r | PL                              | indicato                                                                                                             | locument the ir<br>Redox Features<br>t)                                                                                                                                                                                                                                                                                                          | Color (moist)<br>2.5YR 3/6<br>2.5YR 3/6                                                   | epth nee<br>Col<br>2. | x %<br>85<br>80                                       | ription: (Describ<br>Matrix<br>Color (moist)<br>10YR 4/2<br>2.5Y 3/1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Profile Desc<br>Depth<br>(inches)<br>0 - 8<br>8 - 18                                                                                                                                                                                                 | N N N ===            |





South

East

West

Wetland HM-008



Soil Profile

| VEGETATION – Use scientific names of plants   | plants.                                                |                                                                                                                |
|-----------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Tree Stratum         (Plot size:              | Absolute Dominant Indicator<br>% Cover Species? Status | Dominance Test worksheet:           Number of Dominant Species           That Are OBL, FACW, or FAC:         2 |
| 2.                                            |                                                        |                                                                                                                |
| 3.                                            |                                                        | Species Across All Strata: (B)                                                                                 |
| 5 .4                                          |                                                        | Percent of Dominant Species 100.00 (A/B)                                                                       |
| 15'<br>Sapling/Shrub Stratum (Plot size:      | 0 = Total Cover                                        |                                                                                                                |
|                                               |                                                        | Total % Cover of: Multiply by:                                                                                 |
| N                                             |                                                        | OBL species $\frac{141}{2} \times 1 = \frac{141}{2}$                                                           |
| . <u>ω</u>                                    |                                                        | n 20                                                                                                           |
| ישיים איז |                                                        | FACU species $0 \times 4 = 0$                                                                                  |
| Herb Stratum (Plot size: 5')                  | 0 = Total Cover                                        | $161 \times 5 = 0$                                                                                             |
| 0                                             | 30 N OBL                                               | 2                                                                                                              |
|                                               | 50 Y OBL                                               | Prevalence Index = B/A =1.12                                                                                   |
| 3. Juncus effusus                             | 40 Y OBL                                               | Hydrophytic Vegetation Indicators:                                                                             |
| 4. Scirpus atrovirens                         | 15 N OBL                                               | X 1 - Rapid Test for Hydrophytic Vegetation                                                                    |
| Eupatorium perfoliatum                        | 3 N OBL                                                | X 2 - Dominance Test is >50%                                                                                   |
| Impatiens capensis                            | 20 N FACW                                              | X 3 - Prevalence Index is ≤3.0 <sup>1</sup>                                                                    |
| 7. Mimulus ringens                            | 3 N OBL                                                | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting                                                 |
| <u>,</u>                                      |                                                        | data in Remarks or on a separate sheet)                                                                        |
| 9.                                            |                                                        | Problematic Hydrophytic Vegetation (Explain)                                                                   |
| 10.                                           |                                                        | Indicators of hydric soil and wetland hydrology mus                                                            |
| Woody Vine Stratum (Plot size: 30'            | $\frac{161}{2}$ = Total Cover                          | Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic            |
|                                               |                                                        | Hydrophytic                                                                                                    |
| 2.                                            |                                                        |                                                                                                                |
|                                               | 0 = Total Cover                                        |                                                                                                                |

| Are Vegetation Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) | Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes N | Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) | Soil Map Unit Name: Otwell silt loam, 18 to 25 percent slopes, moderately eroded NWI classification: | Slope (%):         3         Lat:         39.1478033334         Long:         -83.61759306716668         Datum: | etc.): Hillside | Investigator(s): MJA, SAH Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Higha | Applicant/Owner: AEP State: Sampling Point: Wetland HM-009 | Project/Site: AEP Hillsboro to Millbrook Park City/County: Highland Sampling Date: U//20/2 |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| (\$)                                                                                                  | No No                                                                                                 | <                                                                                                                     | N/A                                                                                                  | WGS 84                                                                                                          |                 | ICT OH93Highland Lot 4217                                                                             | oint: Wetland HM-009                                       | ate: U9/20/2019                                                                            |

# SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

|            |                     |          | Remarks:                        |
|------------|---------------------|----------|---------------------------------|
|            |                     |          |                                 |
| Yes / No / | within a Wetland?   | Yes X No | Wetland Hydrology Present?      |
| 400 ×      | Is the Sampled Area | Yes X No | Hydric Soil Present?            |
|            |                     | Yes X No | Hydrophytic Vegetation Present? |
|            |                     |          |                                 |

Stratified Layers (A5) Hydrogen Sulfide (A4)

Histic Epipedon (A2) Black Histic (A3) Histosol (A1)

2 cm Muck (A10)

Hydric Soil Indicators:

ı ı Т. 1

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains

Sandy Gleyed Matrix (S4) Sandy Redox (S5)

Indicators for Problematic Hydric Soils<sup>3</sup>: <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Dark Surface (S7)

Coast Prairie Redox (A16)

Sandy Mucky Mineral (S1) Thick Dark Surface (A12)

Redox Depressions (F8) Depleted Dark Surface (F7) Redox Dark Surface (F6) Depleted Matrix (F3) Loamy Gleyed Matrix (F2) Loamy Mucky Mineral (F1) Stripped Matrix (S6)

<sup>3</sup>Indicators of hydrophytic vegetation and

Other (Explain in Remarks) Very Shallow Dark Surface (TF12) Iron-Manganese Masses (F12)

wetland hydrology must be present,

unless disturbed or problematic.

5 cm Mucky Peat or Peat (S3)

Restrictive Layer (if observed):

No

Hydric Soil Present?

Yes

×

No

Depth (inches): Type:

Remarks:

HYDROLOGY

|                                                      |                                                                                                            |                       | Remarks:                                                              |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------|
| ions), if available:                                 | Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | tream gauge, monito   | Describe Recorded Data (st                                            |
|                                                      |                                                                                                            |                       | (includes capillary fringe)                                           |
| Wetland Hydrology Present? Yes X No                  | X Depth (inches):                                                                                          | Yes No                | Saturation Present?                                                   |
|                                                      | X Depth (inches):                                                                                          | Yes No                | Water Table Present?                                                  |
|                                                      | No X Depth (inches):                                                                                       | Yes No _              | Surface Water Present?                                                |
|                                                      |                                                                                                            |                       | Field Observations:                                                   |
|                                                      | Other (Explain in Remarks)                                                                                 | ncave Surface (B8)    | Sparsely Vegetated Concave Surface (B8)                               |
|                                                      | Gauge or Well Data (D9)                                                                                    | erial Imagery (B7)    | Inundation Visible on Aerial Imagery (B7)                             |
| ✓ FAC-Neutral Test (D5)                              | Thin Muck Surface (C7)                                                                                     |                       | Iron Deposits (B5)                                                    |
| ils (C6) 🗹 Geomorphic Position (D2)                  | Recent Iron Reduction in Tilled Soils (C6)                                                                 |                       | Algal Mat or Crust (B4)                                               |
| Stunted or Stressed Plants (D1)                      | Presence of Reduced Iron (C4)                                                                              |                       | Drift Deposits (B3)                                                   |
| Roots (C3) Saturation Visible on Aerial Imagery (C9) | Oxidized Rhizospheres on Living Roots (C3)                                                                 | )                     | Sediment Deposits (B2)                                                |
| Crayfish Burrows (C8)                                | Hydrogen Sulfide Odor (C1)                                                                                 |                       | Water Marks (B1)                                                      |
| Dry-Season Water Table (C2)                          | True Aquatic Plants (B14)                                                                                  |                       | Saturation (A3)                                                       |
| Drainage Patterns (B10)                              | Aquatic Fauna (B13)                                                                                        |                       | High Water Table (A2)                                                 |
| Surface Soil Cracks (B6)                             | Water-Stained Leaves (B9)                                                                                  |                       | Surface Water (A1)                                                    |
| Secondary Indicators (minimum of two required)       | check all that apply)                                                                                      | n of one is required: | Primary Indicators (minimum of one is required: check all that apply) |
|                                                      |                                                                                                            | tors:                 | Wetland Hydrology Indicators:                                         |

SOIL

Depth

Color (moist) 10YR 4/2

%

Color (moist) 10YR 4/6

() %

Type

Loc

Texture

Remarks

Silt

ı. 16 8

ω

16 ω 1 0 (inches)

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2.5Y 4/3 2.5Y 3/1

90

10YR 4/6 5YR 4/6

10 20 10

C C 0

Ρ Ч  $\leq$ 

Sandy Loam Clay Loam

Prominent Redox Concentrations **Prominent Redox Concentrations** Prominent Redox Concentrations

80 90





South

East

West

Wetland HM-009



Soil Profile

| VEGETATION - Use scientific names of plants | ints.                      |                                       |                     |                                                                                                                   |                                          |                          |                     |        |
|---------------------------------------------|----------------------------|---------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------|---------------------|--------|
| <u>Tree Stratum</u> (Plot size:30')<br>1    | Absolute<br><u>% Cover</u> | Dominant Indicator<br>Species? Status | Indicator<br>Status | Dominance Test worksheet:<br>Number of Dominant Species<br>That Are OBL, FACW, or FAC                             | t worksheet<br>ant Species<br>CW, or FAC |                          | N                   | Â      |
| 3. 12                                       |                            |                                       |                     | Total Number of Dominant<br>Species Across All Strata:                                                            | Dominant<br>Il Strata:                   | Ĩ                        | N                   | (B)    |
| 5 4                                         |                            |                                       |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC                                                         | ant Species<br>(CW, or FAC               | Ì                        | 100.00              | (A/B)  |
| Sapling/Shrub Stratum (Plot size: 15)       |                            | = Total Cover                         | er                  | Prevalence Index worksheet:                                                                                       | x workshee                               | Π                        |                     |        |
|                                             |                            |                                       |                     | Total % Cover of:                                                                                                 | er of:                                   | Multi                    | Multiply by:        | L:     |
| 2.                                          |                            |                                       |                     | OBL species                                                                                                       |                                          | ×1=                      |                     | 1      |
| 3                                           |                            |                                       |                     | FACW species                                                                                                      | 36                                       | x 2 =                    | 72                  |        |
| A A                                         |                            |                                       |                     | FAC species                                                                                                       | 0                                        | × 4 =                    | 0                   |        |
|                                             | 0                          | Total Cover                           | er                  | UPL species                                                                                                       | 0                                        | x 5 =                    | 0                   | 8      |
| Herb Stratum (Plot size:)                   | 55                         | ~                                     | OBL                 | Column Totals:                                                                                                    | 149                                      | (A)                      | 185                 | - (B)  |
| 2. Impatiens capensis                       | 18                         | z                                     | FACW                | Prevalence                                                                                                        | Prevalence Index = B/A =                 |                          | 1.24                | 1      |
| 3. Carex lurida                             | 25                         | ×                                     | OBL                 | Hydrophytic Vegetation Indicators:                                                                                | jetation Ind                             | icators:                 |                     | 1      |
| 4. Leersia oryzoides                        | 15                         | z                                     | OBL                 | X 1 - Rapid Test for Hydrophytic Vegetation                                                                       | st for Hydrop                            | hytic Veg                | etation             |        |
| 5. Mimulus ringens                          | თ                          | z                                     | OBL                 | X 2 - Dominance Test is >50%                                                                                      | ce Test is >5                            | 0%                       |                     |        |
| 6. Typha latifolia                          | 10                         | z                                     | OBL                 | X 3 - Prevalence Index is ≤3.0                                                                                    | xe Index is ≤                            | 3.01                     |                     |        |
| 7. Onoclea sensibilis                       | 10                         | z                                     | FACW                | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting                                                    | gical Adapta                             | tions <sup>1</sup> (Pro  | ovide supp          | portin |
| 8. Bidens frondosa                          | ω                          | z                                     | FACW                | data in Re                                                                                                        | data in Remarks or on a separate sheet   | a separa                 | te sheet)           |        |
| 9. Eupatorium perfoliatum                   | ω                          | z                                     | OBL                 | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                                         | Hydrophytic                              | Vegetatio                | n' (Explai          | n)     |
| 10. Dichanthelium clandestinum              | 5                          | z                                     | FACW                |                                                                                                                   |                                          |                          |                     |        |
| Woody Vine Stratum (Plot size: 30')         | 149 =                      | Total Cover                           | er                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. | ric soil and v<br>s disturbed of         | vetland hy<br>or problem | /drology n<br>natic | nust   |
| 1                                           |                            |                                       |                     | Hydrophytic                                                                                                       |                                          |                          |                     |        |
| 2.                                          |                            |                                       |                     | Vegetation                                                                                                        | :<br>×                                   | :                        |                     |        |
|                                             | 0                          | Total Cover                           | P                   | Present?                                                                                                          | Yes                                      | No.                      |                     |        |

| ×<br>  No                                                                               | present? Yes          | istances" p         | Are "Normal Circumstances" present?           |                 | , or Hydrology significantly disturbed?                                                                               | , or Hydrology         | , Soil                    | Are Vegetation, Soil _                        |
|-----------------------------------------------------------------------------------------|-----------------------|---------------------|-----------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|-----------------------------------------------|
| (                                                                                       | emarks.)              | xplain in R         | (If no, e                                     | es X No         | Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) | ons on the site typica | ologic conditi            | Are climatic / hydr                           |
| N/A                                                                                     | ation:                | NWI classification: | N                                             | eroded          | Soil Map Unit Name: Hickory clay loam, 12 to 18 percent slopes, severely eroded                                       | clay loam, 12 to 18 p  | he: Hickory o             | Soil Map Unit Nan                             |
| WGS 84                                                                                  | Datum:                | 649999              | -83.61654113649999                            |                 | Long:                                                                                                                 | Lat: 39.14725          | Lat                       | Slope (%): 3                                  |
|                                                                                         | Concave               | ex, none):          | Local relief (concave, convex, none): Concave | Local relief    |                                                                                                                       | c.): Terrace           | e, terrace, etc           | Landform (hillslope, terrace, etc.): Terrace  |
| Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Highland Lot 4217 | ILITARY DISTRIC       | S VIRGINIA M        | Inge: Ohio Survey:                            | n, Township, Ra | Sectio                                                                                                                |                        | ΛJA, SAH                  | Investigator(s): MJA, SAH                     |
| g Point: Wetland HM-010                                                                 | State: OH Sampling Po | 우                   | State:                                        |                 |                                                                                                                       |                        | AEP                       | Applicant/Owner: AEP                          |
| ing Date: 09/20/2019                                                                    | Sampling Da           |                     | Highland                                      | City/County:    | City/C                                                                                                                | Millbrook Park         | <sup>9</sup> Hillsboro to | Project/Site: AEP Hillsboro to Millbrook Park |

# SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Are Vegetation

Soil

, or Hydrology

naturally problematic?

(If needed, explain any answers in Remarks.)

|          |                            | _                    | _                               |
|----------|----------------------------|----------------------|---------------------------------|
| Remarks: | Wetland Hydrology Present? | Hydric Soil Present? | Hydrophytic Vegetation Present? |
|          | Yes X No                   | Yes_                 | Yes                             |
|          | ×                          | ×                    | ×                               |
|          | No                         | No                   | No                              |
|          | within a Wetland? Yes X No | Is the Sampled Area  | _                               |
|          |                            |                      |                                 |

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| SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | o the depth i  | needed to docu       | ment the ind                               | icator or co                       | nfirm t  | he absence of              | Sampling Point: Wetland HM-010                                  |
|--------------------------------------------------------------------------------------------------------------------------|----------------|----------------------|--------------------------------------------|------------------------------------|----------|----------------------------|-----------------------------------------------------------------|
| Depth Matrix<br>(inches) Color (moist)                                                                                   | %              | Red<br>Color (moist) | Redox Features                             | Type <sup>1</sup> Loc <sup>2</sup> |          | Texture                    | Remarks                                                         |
| ω<br>                                                                                                                    | 00             | 10YR 4/6             | 1 1                                        |                                    |          | Silt Loam                  | Prominent Redox Concentrations                                  |
| 3 - 10 10YR 4/1                                                                                                          | 85             | 5YR 4/6              | 15                                         | C<br>PL                            |          | Silt Loam                  | Prominent Redox Concentrations                                  |
| 10 - 18 2.5Y 4/3                                                                                                         | 80             | 10YR 4/6             | 20                                         | с<br>м                             |          | Sandy Loam                 | Prominent Redox Concentrations                                  |
|                                                                                                                          |                |                      |                                            |                                    |          |                            |                                                                 |
| -                                                                                                                        |                |                      |                                            |                                    |          |                            |                                                                 |
| -                                                                                                                        |                |                      |                                            |                                    |          |                            | i.                                                              |
|                                                                                                                          |                |                      |                                            |                                    | 6        |                            |                                                                 |
| Hydric Soil Indicators:                                                                                                  |                |                      |                                            |                                    |          | Indicators 1               | Indicators for Problematic Hydric Soils <sup>3</sup> :          |
| Histosol (A1)                                                                                                            |                | Sandy                | Sandy Gleyed Matrix (S4)                   | : (S4)                             |          | Coast F                    | Coast Prairie Redox (A16)                                       |
| Histic Epipedon (A2)                                                                                                     |                | Sandy                | Sandy Redox (S5)                           |                                    |          | Dark Su                    | Dark Surface (S7)                                               |
| Black Histic (A3)                                                                                                        |                | Strippe              | Stripped Matrix (S6)                       | -17041                             |          | Iron-Ma                    | Iron-Manganese Masses (F12)<br>Verv Shallow Dark Surface (TE12) |
| Stratified Layers (A5)                                                                                                   |                | Loamy                | Loamy Gleyed Matrix (F2)                   | 4 (F2)                             |          | Other (I                   | Other (Explain in Remarks)                                      |
| 2 cm Muck (A10)                                                                                                          |                | ✓ Deplet             | Depleted Matrix (F3)                       |                                    |          |                            |                                                                 |
| Depleted Below Dark Surface (A11)                                                                                        | (A11)          | Redox                | Redox Dark Surface (F6)                    | (F6)                               |          | 3                          |                                                                 |
| Sandy Mucky Mineral (S1)                                                                                                 |                | Redox                | Redox Depressions (F8)                     | (F8)                               |          | wetland                    | wetland hydrology must be present                               |
| 5 cm Mucky Peat or Peat (S3)                                                                                             | Ĵ              | ]                    | -                                          |                                    |          | unless (                   | unless disturbed or problematic.                                |
| Restrictive Layer (if observed):                                                                                         | No             |                      |                                            |                                    |          |                            |                                                                 |
| Depth (inches):                                                                                                          |                | b                    |                                            |                                    |          | Hydric Soil Present?       | Present? Yes X No                                               |
|                                                                                                                          |                |                      |                                            |                                    |          |                            |                                                                 |
|                                                                                                                          |                |                      |                                            |                                    |          |                            |                                                                 |
| HYDROLOGY                                                                                                                |                |                      |                                            |                                    |          |                            |                                                                 |
| Wetland Hydrology Indicators:                                                                                            |                |                      |                                            |                                    |          |                            |                                                                 |
| Primary Indicators (minimum of one is required: check all that apply)                                                    | ne is required | check all that a     | (Vldd                                      |                                    |          | Secondar                   | Secondary Indicators (minimum of two required)                  |
| High Water Table (A1)                                                                                                    |                | Aquatic F            | Water-Stained Leaves (B9)                  | (6A)                               |          | Drain                      | Sufface Soil Cracks (B6)                                        |
| Saturation (A3)                                                                                                          |                | True Aqu             | True Aquatic Plants (B14)                  | 14)                                |          | Dry-S                      | Dry-Season Water Table (C2)                                     |
| Water Marks (B1)                                                                                                         |                | Hydroger             | Hydrogen Sulfide Odor (C1)                 | (C1)                               |          | Cray                       | Crayfish Burrows (C8)                                           |
| Sediment Deposits (B2)                                                                                                   |                | Oxidized             | Oxidized Rhizospheres on Living Roots (C3) | on Living R                        | oots (C  |                            | Saturation Visible on Aerial Imagery (C9)                       |
|                                                                                                                          |                | Presence             | Presence of Reduced Iron (U4)              | ron (U4)                           | 6 100    |                            | Stunted of Stressed Plants (D1)                                 |
| Iron Denosite (B5)                                                                                                       |                | Thin Muc             | Recent Iron Reduction In Tilled Solls (U6) | In Tilled Sol                      | IS (UD)  |                            | Geomorphic Position (UZ)                                        |
| Inundation Visible on Aerial Imagery (B7)                                                                                | nagery (B7)    | Gauge of             | Gauge or Well Data (D9)                    | )<br>,                             |          | [                          |                                                                 |
| Sparsely Vegetated Concave Surface (B8)                                                                                  | Surface (B8)   | Other (E)            | Other (Explain in Remarks)                 | ırks)                              |          |                            |                                                                 |
| 2<br>x                                                                                                                   |                |                      |                                            |                                    |          |                            |                                                                 |
| 17                                                                                                                       |                | I.                   | ncnes):                                    |                                    |          |                            |                                                                 |
| Water Table Present? Yes                                                                                                 | oN se          | X Depth (inches):    | nches):                                    | 10                                 |          |                            |                                                                 |
|                                                                                                                          | ×              | Depth (inches):      |                                            | 10                                 | Wetlar   | Wetland Hydrology Present? | Present? Yes X No                                               |
| (includes capillary fringe)                                                                                              |                |                      | 101001                                     |                                    |          |                            |                                                                 |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:               | gauge, monit   | oring well, aerial   | photos, previ                              | ous inspecti                       | ons), if | available:                 |                                                                 |
| Remarks:                                                                                                                 | tor in wotland |                      |                                            |                                    |          |                            |                                                                 |
|                                                                                                                          |                | 1                    |                                            |                                    |          |                            |                                                                 |
|                                                                                                                          |                |                      |                                            |                                    |          |                            |                                                                 |

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South



East

West

Wetland HM-010



Soil Profile

| VEGETATION - Use scientific names of plants         | S.                  |                                       |                     |                                                                                                      |                                         |                         |           |
|-----------------------------------------------------|---------------------|---------------------------------------|---------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------|-----------|
| <u>Tree Stratum</u> (Plot size:30')<br>1            | Absolute<br>% Cover | Dominant Indicator<br>Species? Status | Indicator<br>Status | Dominance Test worksheet:<br>Number of Dominant Species<br>That Are OBL, FACW, or FAC                | worksheet:<br>ant Species<br>CW, or FAC | ω                       | ۵<br>ک    |
| 23                                                  |                     |                                       |                     | Total Number of Dominant                                                                             | Dominant                                | ω                       |           |
|                                                     |                     |                                       |                     | opecies Across Air origia.                                                                           | ii Ulala.                               |                         | (u)       |
|                                                     | -<br>-              |                                       |                     | Percent of Dominant Species<br>That Are OBL, FACW, or FAC:                                           | ant Species<br>CW, or FAC               | 100.00                  | .00 (A/B) |
| Sapling/Shrub Stratum (Plot size:)                  |                     | = Iotal Cover                         | er                  | Prevalence Index worksheet:                                                                          | <b>worksheet</b>                        | Π.                      |           |
|                                                     |                     |                                       |                     | Total % Cover of                                                                                     | r of:                                   | Multiply by:            | y by:     |
| 2                                                   | ĺ                   |                                       |                     | OBL species                                                                                          |                                         | x1=                     | 12/       |
| 3                                                   |                     |                                       |                     | FACW species                                                                                         | 10                                      | x 2 =                   | 20        |
| 4                                                   |                     |                                       |                     | FAC species                                                                                          | 0                                       | x 3 =                   | 0         |
| ,<br>я                                              |                     |                                       |                     | FACU species                                                                                         | 0                                       | x 4 =                   | 0         |
|                                                     | 0                   | = Total Cover                         | er                  | UPL species                                                                                          | 0                                       | x 5 =                   | 0         |
| <u>Herb Stratum</u> (Piot size:)<br>1. Carex Iurida | 20                  | ×                                     | OBL                 | Column Totals:                                                                                       | 137                                     | (A)                     | 147       |
| 2 Typha latifolia                                   | 15                  | z                                     | OBL                 | Prevalence Index = B/A =                                                                             | Index = B/A                             | = 1.07                  | 07        |
| <ol> <li>Eupatorium perfoliatum</li> </ol>          | 18                  | z                                     | OBL                 | Hydrophytic Vegetation Indicators:                                                                   | etation Indi                            | cators:                 |           |
| <ol> <li>Impatiens capensis</li> </ol>              | 10                  | z                                     | FACW                | X 1 - Rapid Test for Hydrophytic Vegetation                                                          | t for Hydrop                            | hytic Veget             | ation     |
| 5. Acorus americanus                                | 25                  | ×                                     | OBL                 | X 2 - Dominance Test is >50%                                                                         | e Test is >50                           | %С                      |           |
| 6. Scirpus atrovirens                               | 35                  | ×                                     | OBL                 | X 3 - Prevalence Index is ≤3.0 <sup>1</sup>                                                          | e Index is ≤3                           | 3.01                    |           |
| 7. Mimulus ringens                                  | 8                   | z                                     | OBL                 | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting                                       | jical Adaptat                           | ions <sup>1</sup> (Prov | ide suppo |
| 8. Persicaria sagittata                             | 5                   | z                                     | OBL                 | data in Re                                                                                           | data in Remarks or on a separate sheet) | a separate              | sheet)    |
| 9. Schoenoplectus tabernaemontani                   |                     | z                                     | OBL                 | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                            | Hydrophytic \                           | Vegetation              | (Explain) |
| 10                                                  |                     |                                       |                     |                                                                                                      |                                         |                         | -         |
| Woody Vine Stratum (Plot size: 30')                 | 137                 | = Total Cover                         | er                  | Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. | s disturbed c                           | r problema              | rology mu |
|                                                     |                     |                                       |                     | Hydrophytic                                                                                          |                                         |                         |           |
| 2                                                   |                     |                                       |                     | Vegetation                                                                                           | :<br>×                                  | :                       |           |
|                                                     | 0                   | = Total Cover                         | er                  | Present?                                                                                             | Yes                                     | <br>                    |           |

| Are Vegetation                               | Are Vegetation                      | Are climatic / hydrolog                                                                  | Soil Map Unit Name:                                                             | Slope (%): 3              | Landform (hillslope, terrace, etc.):      | Investigator(s): MJA, SAH                                                               | Applicant/Owner: AEP         | Project/Site: AEP Hillsboro to Millbrook Park |
|----------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------|-----------------------------------------------|
| _ Soil                                       | , Soil                              | gic conditio                                                                             | Hickory cl                                                                      | Lat: 3                    | srrace, etc.                              | , SAH                                                                                   | P                            | llsboro to l                                  |
| , or Hydrology                               | _, or Hydrology                     | ns on the site typical fo                                                                | ay loam, 12 to 18 per                                                           | Lat: 39.14675             | ): Terrace                                |                                                                                         |                              | Millbrook Park                                |
| naturally problematic?                       | significantly disturbed?            | Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No | Soil Map Unit Name: Hickory clay loam, 12 to 18 percent slopes, severely eroded | Long:                     | Loca                                      | Section, Towns                                                                          |                              | City/County:                                  |
| (If needed, explain any answers in Remarks.) | Are "Normal Circumstances" present? | _ No (If no, explain in Remarks.)                                                        | NWI classification:                                                             | -83.61508030499999 Datum: | Local relief (concave, convex, none): Con | Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Highland Lot 4217 | State: OH Sampling           | Highland Sam                                  |
| Remarks.)                                    | nt? Yes X No                        | ·ks.)                                                                                    | N/A                                                                             | um: WGS 84                | Concave                                   | RY DISTRICT OH93Highland Lot 4217                                                       | npling Point: Wetland HM-011 | Sampling Date: 09/20/2019                     |

# SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

| _ |          |                                                                                       |
|---|----------|---------------------------------------------------------------------------------------|
|   | Remarks: | Hydrophytic Vegetation Present?<br>Hydric Soil Present?<br>Wetland Hydrology Present? |
|   |          | Yes_<br>Yes_<br>Yes_                                                                  |
| - |          | Yes X No<br>Yes X No<br>Yes No                                                        |
|   |          | Yes X No<br>Yes X No<br>Yes X No                                                      |
|   |          | Is the Sampled Area within a Wetland?                                                 |
|   |          | Yes X No                                                                              |
|   |          | No                                                                                    |
|   |          |                                                                                       |

| Sampli      |  |
|-------------|--|
| ng Point    |  |
| Wetland HM- |  |

SOIL

|                                                                                                                     |            |                                 |                                                                                  |                           |               |                                                                                                                      | Remarks                                                       |
|---------------------------------------------------------------------------------------------------------------------|------------|---------------------------------|----------------------------------------------------------------------------------|---------------------------|---------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| if available:                                                                                                       | pections), | evious ins                      | al photos, pr                                                                    | toring well, aeria        | gauge, moni   | Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:           | Describe Rec                                                  |
| Wetland Hydrology Present? Yes X No                                                                                 | Wetl       | თ                               | Depth (inches):                                                                  | Depth (                   | Yes X No      | esent? Y<br>illary fringo)                                                                                           | Saturation Present?<br>(includes capillary fringe)            |
|                                                                                                                     |            |                                 | Depth (inches):                                                                  | $ \times $                | Yes No        | 5                                                                                                                    | Water Table Present?                                          |
|                                                                                                                     |            |                                 | Inchest                                                                          | ×                         | Yee Nr        |                                                                                                                      | Field Observations:                                           |
|                                                                                                                     |            | marks)                          | Other (Explain in Remarks)                                                       |                           | Surface (B8   | Sparsely Vegetated Concave Surface (B8)                                                                              | Sparsely                                                      |
| FAC-Neutral Test (D5)                                                                                               |            | C7)<br>(D9)                     | Thin Muck Surface (C7)<br>Gauge or Well Data (D9)                                | Thin Mu<br>Gauge o        | magery (B7)   | Inundation Visible on Aerial Imagery (B7)                                                                            | Iron Dep                                                      |
|                                                                                                                     | ing Roots  | d Iron (C4                      | Oxidized Rhizospheres on Living Roots (C3)<br>Presence of Reduced Iron (C4)      | Presenc                   |               | Sediment Deposits (B2)<br>Drift Deposits (B3)                                                                        | Drift Dep                                                     |
|                                                                                                                     |            | dor (C1)                        | Hydrogen Sulfide Odor (C1)                                                       | Hydroge                   |               | Water Marks (B1)                                                                                                     | Water M                                                       |
| ✓ Drainage Patterns (B10)<br>✓ Drainage Patterns (B10)<br>Drv-Season Water Table (C2)                               |            | (B14)                           | Vyater-Statilied Leaves (D9)<br>Aquatic Fauna (B13)<br>True Aquatic Plants (B14) | Aquatic I<br>True Aqu     |               | Saturation (A3)                                                                                                      | High Water Tab                                                |
| Secondary Indicators (minimum of two required)                                                                      |            |                                 | apply)                                                                           | d: check all that :       | ne is require | Primary Indicators (minimum of one is required: check all that apply)                                                | Primary Indic                                                 |
|                                                                                                                     |            |                                 |                                                                                  |                           |               | GY                                                                                                                   | HYDROLOGY<br>Wetland Hydrol                                   |
|                                                                                                                     |            |                                 |                                                                                  |                           |               |                                                                                                                      | Remarks:                                                      |
| Hydric Soil Present? Yes X No                                                                                       |            |                                 |                                                                                  | b                         | No            | Restrictive Layer (if observed):<br>Type:<br>Depth (inches):                                                         | Restrictive Layer<br>Type:<br>Depth (inches):                 |
| wetland hydrology must be present,<br>unless disturbed or problematic.                                              |            | ns (F8)                         | Redox Depressions (F8)                                                           | Redo                      | 3)            | Sandy Mucky Mineral (S1)<br>5 cm Mucky Peat or Peat (S3)                                                             | 5 cm Mu                                                       |
| <sup>3</sup> Indicators of hydrophytic vegetation and                                                               | 080.8      | =3)<br>ice (F6)<br>rface (F7)   | Depleted Matrix (F3)<br>Redox Dark Surface (F6)<br>Depleted Dark Surface (F7)    | ✓ Deple<br>Deple          | e (A11)       | 2 cm Muck (A10)<br>Depleted Below Dark Surface (A11)<br>Thick Dark Surface (A12)                                     | 2 cm Muck (A10)<br>Depleted Below [<br>Thick Dark Surfac      |
| Very Shallow Dark Surface (TF12)                                                                                    |            | io)<br>ieral (F1)<br>atrix (F2) | Loamy Mucky Mineral (F1)                                                         | Loam                      |               | Stratified Layers (A5)                                                                                               | Hydrogen Sulfide<br>Stratified Layers                         |
| Dark Surface (S7)                                                                                                   |            | trix (S4)<br>)                  | Sandy Gleyed Matrix (S4)<br>Sandy Redox (S5)                                     | Sandy<br>Sandy            |               | Histosol (A1)<br>Histic Epipedon (A2)<br>Black Histic (A2)                                                           | Histosol (A1)<br>Histic Epiped                                |
| <sup>2</sup> Location: PL=Pore Lining, M=Matrix.<br>Indicators for Problematic Hydric Soils <sup>3</sup> :          | ains.      | Sand Gra                        | MS=Masked                                                                        | educed Matrix, I          | letion, RM=R  | <sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains<br>Hydric Soil Indicators: | <sup>1</sup> Type: C=Concentration<br>Hydric Soil Indicators: |
|                                                                                                                     |            |                                 |                                                                                  |                           |               |                                                                                                                      |                                                               |
|                                                                                                                     |            |                                 |                                                                                  |                           |               |                                                                                                                      | · .                                                           |
| =  <br>                                                                                                             | ₽          | 0                               | 15                                                                               | 10YR 4/6                  | 85            | 10YR 4/2                                                                                                             |                                                               |
| Texture         Remarks           Silt Loam         Prominent Redox Concentrations                                  |            | Type <sup>1</sup>               | t) 10                                                                            | Color (moist)<br>10YR 4/6 | 90            | Color (moist)<br>10YR 4/2                                                                                            | (inches)<br>0 - 6                                             |
| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | or confirm | ndicator                        | ument the i                                                                      | needed to doc             | to the depth  | ription: (Describe                                                                                                   | Profile Desc                                                  |



South



East

West

Wetland HM-011



Soil Profile

| Woody Vine Stratum (Plot size:                                                                                                                        |                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
|                                                                                                                                                       | Hadrophytic                                         |
| 2.                                                                                                                                                    |                                                     |
| 0 = Total Cover                                                                                                                                       | Present? Yes <u>^</u> No                            |
| Remarks: (Include photo numbers here or on a separate sheet.)                                                                                         |                                                     |
| Carex sp. given OBL indicator, as plant exhibits characteristics of common wetland plant but could not identify species as inflorescence was missing. | but could not identify species as inflorescence was |
|                                                                                                                                                       |                                                     |

|                                                                                                                    |                 |                       | Remarks: (Include photo numbers here or on a separate sheet.) |
|--------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------|---------------------------------------------------------------|
| Present? Yes <u>^ No</u>                                                                                           | Total Cover     | 0                     |                                                               |
| ×                                                                                                                  |                 |                       | i                                                             |
| Hydrophytic                                                                                                        |                 |                       |                                                               |
| Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                  | Total Cover     | 100 =                 | Woody Vine Stratum (Plot size:30')                            |
|                                                                                                                    |                 |                       | 10.                                                           |
| Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                                          |                 |                       | 0                                                             |
| <ul> <li>4 - Morphological Adaptations' (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |                 | Ì                     | 7.                                                            |
| X 3 - Prevalence Index is ≤3.0 <sup>1</sup>                                                                        |                 |                       | o.                                                            |
| X 2 - Dominance Test is >50%                                                                                       |                 |                       | <u>л</u>                                                      |
| X 1 - Rapid Test for Hydrophytic Vegetation                                                                        |                 |                       | 4.                                                            |
| Hydrophytic Vegetation Indicators:                                                                                 | N OBL           | 10                    | 3. Carex sp.                                                  |
| Prevalence Index = B/A =1                                                                                          | Y OBL           | 85                    | 2. Juncus effusus                                             |
|                                                                                                                    | N OBL           | თ<br>                 | 1. Persicaria hydropiper                                      |
| ls: 100                                                                                                            |                 |                       | Herb Stratum (Plot size:)                                     |
| UPL species 0 x 5 = 0                                                                                              | Total Cover     | 0                     | ū                                                             |
| FACU species 0 x 4 = 0                                                                                             |                 |                       | Ģ                                                             |
| FAC species $0 x 3 = 0$                                                                                            |                 |                       | 4.                                                            |
| FACW species 0 x 2 = 0                                                                                             |                 |                       |                                                               |
| OBL species 100 x 1 = 100                                                                                          |                 |                       | 3                                                             |
| Total % Cover of: Multiply by:                                                                                     |                 |                       |                                                               |
| Prevalence Index worksheet:                                                                                        |                 | 4                     | Sapling/Shrub Stratum (Plot size:)                            |
| Percent of Dominant Species 100.00 (A/B) That Are OBL, FACW, or FAC:                                               | Tatal Casar     |                       | 5                                                             |
| Species Across All Strata:(B)                                                                                      |                 |                       | ۵, <u>۴</u>                                                   |
| Total Number of Dominant                                                                                           |                 |                       | 2.                                                            |
| That Are OBL, FACW, or FAC:1 (A)                                                                                   |                 |                       | 1.                                                            |
| Dominance Test worksheet:<br>Number of Dominant Species                                                            | Species? Status | Absolute I<br>% Cover | Tree Stratum (Plot size:30' )                                 |
|                                                                                                                    |                 |                       | VEGETATION – Use scientific names of plants.                  |

| Are climatic / hydrologic conditions on the site typical for this time of year? Yes $X$ No                                                                                         | Soil Map Unit Name: Opequon stony silt loam, 18 to 35 percent slopes, moderately eroded | Slope (%): 2 Lat: 39.12807 Long: | etc.): Ravine                                   | ×                                                                                       | Applicant/Owner: AEP                     | Project/Site: _AEP Hillsboro to Millbrook Park City/County: _ |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------|---------------------------------------------------------------|
| X       No (If no, explain in Remarks.)         ?       Are "Normal Circumstances" present? Yes X         No       No         ?       (If needed, explain any answers in Remarks.) | rately eroded NWI classification: R4SBC                                                 | -83.57032 Datum: WGS 84          | _ Local relief (concave, convex, none): Concave | Section, Township, Range: Ohio Surveys VIRGINIA MILITARY DISTRICT OH93Highland Lot 2769 | State: OH Sampling Point: Wetland HM-012 | ty: Highland Sampling Date: 09/23/2019                        |

SUMMARY OF FINDINGS -

Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?

Wetland Hydrology Present? Hydric Soil Present?

Yes\_ Yes

No No No

within a Wetland? Is the Sampled Area

Yes

 $\times$ 

No

 $|\times|\times|\times$ 

Remarks:

Palustrine emergent wetland, located in active cow pasture. Soils compacted and rutted.

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| y Present? Yes X No                                                                                                                                                                                                                                                                                                                          | Wetland Hydrology Present?<br>ons), if available:                                     | - Wett:                 | avious insp                                                                                                   | nches):<br>nches):<br>nches):                                                                                                                                                                                                                                                                                                                    | <ul> <li>C Depth (inches);</li> <li>C Depth (inches);</li> <li>C Depth (inches);</li> <li>g well, aerial photos</li> </ul>               | , monitoring | Field Observations:       Yes       No       X       Depth (inches):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Field Observations:<br>Surface Water Present?<br>Water Table Present?<br>Saturation Present?<br>(includes capillary fringe<br>(includes capillary fringe<br>Describe Recorded Date                                                                                                                                                                                            | Field Observations:<br>Surface Water Presen<br>Water Table Present?<br>Saturation Present?<br>(includes capillary fring<br>Describe Recorded Da                                                            |
| Secondary Indicators (minimum of two required)<br>Surface Soil Cracks (B6)<br>Drainage Patterns (B10)<br>Dry-Season Water Table (C2)<br>Crayfish Burrows (C8)<br>Saturation Visible on Aerial Imagery (C9)<br>Stunted or Stressed Plants (D1)<br>Geomorphic Position (D2)<br>FAC-Neutral Test (D5)                                           |                                                                                       | ng Roots (<br>Soils (C6 | es (B9)<br>(B14)<br>lor (C1)<br>lor (C1)<br>d Iron (C4)<br>d Iron (C4)<br>on in Tilled<br>C7)<br>(D9)<br>(D9) | ( all that apply)<br>Water-Stained Leaves (B9)<br>Aquatic Fauna (B13)<br>True Aquatic Plants (B14)<br>Hydrogen Sulfide Odor (C1)<br>Oxidized Rhizospheres on Living Roots (C3)<br>Presence of Reduced Iron (C4)<br>Recent Iron Reduction in Tilled Soils (C6)<br>Thin Muck Surface (C7)<br>Gauge or Well Data (D9)<br>Other (Explain in Remarks) | eck all that a<br>Water-St<br>Aquatic F<br>True Aqu<br>Hydroger<br>Oxidized<br>Presence<br>Recent Ir<br>Thin Muc<br>Gauge or<br>Gauge or | ce (B7)      | Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)         Surface Water (A1)       Water-Stained         High Water Table (A2)       Aquatic Fauna         Saturation (A3)       True Aquatic Fauna         Water Marks (B1)       Hydrogen Sulf         Sediment Deposits (B2)       Hydrogen Sulf         Drift Deposits (B3)       Presence of R         Algal Mat or Crust (B4)       Presence of R         Inundation Visible on Aerial Imagery (B7)       Gauge or Well         Sparsely Vegetated Concave Surface (B8)       Other (Explain | Wetland Hydrology Indicators:         Primary Indicators (minimum of c         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial         Sparsely Vegetated Concav | Wetland H<br>Primary Ind<br>Surface<br>High W<br>Satura<br>Satura<br>Vater<br>Difft Do<br>Algal N<br>Iron Do<br>Inunda                                                                                     |
|                                                                                                                                                                                                                                                                                                                                              |                                                                                       |                         |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                          |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | nches):                                                                                                                                                                                                                                                                                                                                                                       | Remarks:                                                                                                                                                                                                   |
| Present? Yes X No                                                                                                                                                                                                                                                                                                                            | Hydric Soil Present?                                                                  |                         |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                          |              | bserved): No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Restrictive Layer (if observed):<br>Type:                                                                                                                                                                                                                                                                                                                                     | Restrictive                                                                                                                                                                                                |
| Indicators for Problematic Hydric Soils <sup>3</sup> :<br>Coast Prairie Redox (A16)<br>Dark Surface (S7)<br>Iron-Manganese Masses (F12)<br>Very Shallow Dark Surface (TF12)<br>Other (Explain in Remarks)<br><sup>3</sup> Indicators of hydrophytic vegetation and<br>wetland hydrology must be present,<br>unless disturbed or problematic. | Indicators<br>Coast I<br>Dark S<br>Iron-Ma<br>Very Sl<br>Very Sl<br>Other (<br>unless |                         | trix (S4)<br>)<br>6)<br>6)<br>eeral (F1)<br>ttrix (F2)<br>-3)<br>ce (F6)<br>rface (F7)<br>ns (F8)             | Sandy Gleyed Matrix (S4)<br>Sandy Redox (S5)<br>Stripped Matrix (S6)<br>Loamy Mucky Mineral (F1)<br>Loamy Gleyed Matrix (F2)<br>Depleted Matrix (F3)<br>Redox Dark Surface (F6)<br>Depleted Dark Surface (F7)                                                                                                                                    | Sandy<br>Strippe<br>Loamy<br>Deplet<br>Redox                                                                                             | Ū.           | ric Soil Indicators:<br>Histosol (A1)<br>Histic Epipedon (A2)<br>Black Histic (A3)<br>Hydrogen Sulfide (A4)<br>Stratified Layers (A5)<br>2 cm Muck (A10)<br>Depleted Below Dark Surface (A11)<br>Thick Dark Surface (A12)<br>Sandy Mucky Mineral (S1)<br>5 cm Mucky Peat or Peat (S3)                                                                                                                                                                                                                                                                                                                        | Hydric Soil Indicators:<br>Histosol (A1)<br>Histic Epipedon (A2)<br>Black Histic (A3)<br>Hydrogen Sulfide (A4)<br>Stratified Layers (A5)<br>2 cm Muck (A10)<br>Depleted Below Dark Surface<br>Thick Dark Surface (A12)<br>Sandy Mucky Mineral (S1)<br>5 cm Mucky Peat or Peat (S3)                                                                                            | Hydric Soil Indic<br>Histosol (A1)<br>Histic Epiped<br>Black Histic (<br>Hydrogen Su<br>Stratified Lay<br>Stratified Lay<br>2 cm Muck (A<br>Depleted Bel<br>Depleted Bel<br>Thick Dark Si<br>Sandy Mucky F |
| <sup>2</sup> Location: PL=Pore Lining, M=Matrix.                                                                                                                                                                                                                                                                                             | <sup>2</sup> Loccation:                                                               |                         | Sand Gra                                                                                                      | IS=Masked                                                                                                                                                                                                                                                                                                                                        | ced Matrix, N                                                                                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Concentratio                                                                                                                                                                                                                                                                                                                                                                  | -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-                                                                                                                |
| of indicators.)<br>Remarks                                                                                                                                                                                                                                                                                                                   | Texture<br>Silty day loam                                                             | C, PL                   | ndicator o                                                                                                    | locument the ir<br>Redox Features<br>t) %<br>10<br>10<br>10                                                                                                                                                                                                                                                                                      | Color (moist)<br>10YR 3/6                                                                                                                | depth nee    | Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)         Depth<br>(inches)       Matrix       Redox Features       Type <sup>1</sup> Loc <sup>2</sup> Texture       Feature         0       -       4       10YR 3/2       90       10YR 3/6       10       C       M       sity day loam         4       -       12       10YR 4/2       90       10YR 3/6       10       C       C, PL       Sity day loam                                                                                                                              | scription: (Descri<br>Matri<br>Color (moist)<br>10YR 3/2<br>10YR 4/2                                                                                                                                                                                                                                                                                                          | Profile Des<br>Depth<br>(inches)<br>0 - 4<br>4 - 12                                                                                                                                                        |

Midwest Region – Version 2.0

West Photo taken 01-15-2020

East Photo taken 01-15-2020



South Photo taken 01-15-2020

North Photo taken 01-15-2020



Soil Photos: Wetland HM-012



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Summary: Notice Notice Hillsboro-Millbrook 138 kV Line Rebuild Project Part 4 electronically filed by Tanner Wolffram on behalf of AEP Ohio Transmission Company, Inc.