

WATERS DELINEATION REPORT

**SHARON DATA CENTER
MERCER COUNTY, PENNSYLVANIA**

Prepared For:

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Prepared By:

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CEC Project 353-024

AUGUST 2025



Civil & Environmental Consultants, Inc.

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	METHODS	2
2.1	Preliminary Environmental Data Review	2
2.2	Wetland Delineation	3
2.3	Stream and Other Waters Delineation	4
3.0	RESULTS	6
3.1	Environmental Data Review	6
3.2	Field Study	9
3.2.1	Wetland Delineation	9
3.2.2	Streams and Other Waters Delineation	12
4.0	REGULATORY CONSIDERATIONS	15
5.0	CONCLUSIONS	17
6.0	LEVEL OF CARE	18
7.0	REFERENCES.....	19

TABLES

Table 1.	SSURGO Soil Mapping Units within the AOI
Table 2.	Wetlands Delineated within the AOI
Table 3.	Streams Delineated within the AOI

APPENDICES

Appendix A	Figures
	Figure 1. Site Location Map
	Figure 2. Desktop Environmental Data Map
	Figure 3. Water Delineation Map
Appendix B	Photographs
Appendix C	Wetland Determination Data Forms
Appendix D	Stream Data Forms
Appendix E	Antecedent Precipitation Tool

1.0 INTRODUCTION

Civil & Environmental Consultants, Inc. (CEC) conducted a waters delineation of the proposed Sharon Data Center project (Project) site located in the city of Sharon, Mercer County, Pennsylvania (Figure 1; all figures referenced in this report are in Appendix A). This report includes the findings of a desktop data review and field waters delineations of current site conditions. The purpose of these investigations was to identify, characterize, and delineate wetlands, streams, and other surface waters located within the Project's study area. This report presents the methodology and findings of the study.

2.0 METHODOLOGY

CEC conducted a review of background data and a field reconnaissance of the review area as described below.

2.1 PRELIMINARY ENVIRONMENTAL DATA REVIEW

Prior to the field study, the following data sources were consulted to aid in the identification of potential wetlands, streams, and other waters within the Project study area:

- U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps;
- Google Earth Pro aerial imagery;
- U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database;
- Federal Emergency Management Agency (FEMA) 100-year floodplain data;
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI); and
- 3D Hydrography Program (3DHP) stream and other waters data.

These publicly available data sources aided in overall habitat characterizations and facilitated identification of potential water resources within the study area of interest (AOI); areas of topographic depressions, mapped hydric soils, mapped NHD streams, NWI wetlands, and FEMA floodplains have higher potential to contain wetlands, streams, and other surface water features.

The data gathered were used to produce field mapping of the AOI established for the Project, and a field sampling plan was developed based on the desktop data review to adequately cover the Project AOI and to intersect all land cover types and areas of interest, including areas identified to have higher potential for supporting surface water features.

2.2 WETLAND DELINEATION

During the field study, CEC ecologists identified, characterized, and delineated wetlands in accordance with the routine, on-site determination methodology described in the U.S. Army Corps of Engineers' (USACE) *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987; referred to hereafter as Corps Manual), supplemented by the following technical guidance documents:

- *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0)* (USACE 2012); (referred to hereafter as Regional Supplement);
- *National Wetland Plant List* (USACE 2022); and
- *Field Indicators of Hydric Soils in the United States Version 8.2* (USDA-NRCS 2018).

CEC ecologists walked each transect and collected data at representative locations within each plant community cover type and areas of interest. Data collected at each sampling point were recorded on USACE Wetland Determination Data Forms. The sampling plan was modified as necessary if additional plant community cover types or areas of interest (e.g. localized depressions, converging slopes, evident hydrology, etc.) were encountered.

At each sampling point, the following parameters were assessed: vegetation, soils, and hydrology. First, visual estimates of percent absolute cover of plant species were recorded for each of the following strata, when present: tree, sapling/shrub, herb, and woody vine. A determination of whether the plant community was dominated by hydrophytic (wetland) plants was then made using the Rapid Test or Dominance Test indicators. Next, soils were sampled to a depth of 16 inches unless infeasible due to refusal, and the soil profile was evaluated to determine if it met hydric soil indicators. Lastly, indicators of wetland hydrology (e.g., surface water, high water table, saturation, etc.) were recorded, if present. If a parameter was determined to be significantly disturbed or naturally problematic, procedures described in the Corps Manual and Regional Supplement for atypical and problematic situations were applied.

The on-site sampling point data was used to determine whether that point was located in a wetland or non-wetland (i.e. upland). If a wetland was identified, further sampling was performed to delineate the wetland/non-wetland boundary. Each wetland was also classified according to the system developed by Cowardin et al. (1979). If more than one Cowardin classification type was identified within a wetland, the boundary between the types was delineated. Wetland boundaries were physically marked in the field with flagging tape and located using mapping-grade handheld Global Navigational Satellite System (GNSS) receivers rated with sub-meter accuracy under optimal conditions.

Upland habitats were also recorded on USACE Wetland Determination Forms. Upland sampling points were documented adjacent to wetland delineation boundaries, as well as at representative upland habitats throughout the study area.

2.3 STREAM AND OTHER WATERS DELINEATION

Concurrent with wetland delineations, CEC ecologists assessed the Project study area for streams and other waters such as ponds, ditches, seeps, springs, vernal pools, etc. These waters were identified by the presence of an ordinary high water mark (OHWM) in accordance with USACE Regulatory Guidance Letter No. 05-05: Ordinary High Water Mark Identification (USACE 2005). As described in RGL05-05, physical characteristics typically used to evaluate the presence of an OHWM include defined bed and banks, destruction of terrestrial vegetation, sediment sorting, a natural line impressed upon the bank, shelving, and leaf litter that is disturbed or washed away. In addition, all watercourses, which include streams, are defined in Pennsylvania as a channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow. (25 Pa. Code §105.1). The federal and state guidance were applied to determine the extents of streams.

All streams were further assessed into three classifications of flow: ephemeral, intermittent, or perennial. These classifications are defined (following state and federal guidance) as follows:

- **Ephemeral** –surface water flows or pools only in direct response to precipitation (e.g., rain or snow fall);
- **Intermittent** –surface water flows continuously during certain times of the year and more than in direct response to precipitation (e.g., seasonally when the groundwater table is elevated or when snowpack melts); and
- **Perennial** – surface water flows continuously year-round during normal rainfall. Ground water provides the primary hydrology.

The uppermost limit of an ephemeral stream was established where the stream loses its defined bed and bank or OHWM. Stream boundaries were marked in the field with flagging tape and located using GNSS receivers rated with sub-meter accuracy. The physical characteristics of the streams and field observations were summarized on field data forms.

3.0 RESULTS

3.1 ENVIRONMENTAL DATA REVIEW

A review of the USGS 7.5-minute topographic quadrangles, NHD stream layer, and NWI layer did not identify any resources within the AOI, and no FEMA 100-year floodplains occur within the AOI (Figure 2).

A review of the SSURGO data identified one soil mapping unit as not hydric (Ur), and one soil mapping unit as predominantly not hydric (UaC) (Table 1 and Figure 2).

Table 1. SSURGO Soil Mapping Units within the AOI

Soil Map Unit Symbol	Soil Map Unit Name	Drainage Class	Hydric Rating
UaC	Udorthents, loamy, 0 to 15 percent slopes	Moderately well drained	Predominantly not hydric
Ur	Urban land	Moderately poorly drained	Not hydric

3.2 FIELD STUDY

CEC staff conducted a field reconnaissance on July 11, 2025 to determine the presence of wetlands, streams and other waters within the approximate 17-acre AOI. According to USACE Antecedent Precipitation Tool (APT), the AOI received a score of 16-Wetter than Normal for the July field investigation. The 30-day rolling average was above the 30-year normal range. The Palmer Drought Severity Index (PDSI) was calculated as a “mild wetness” according to the APT tool.

Locations of sampling points, wetlands, and streams are provided in Figure 3. Photographs are included in Appendix B, and Wetland Determination Data Forms and Stream Data Forms are provided in Appendices C and D, respectively; the data forms provide details of the delineated wetlands and streams. The following sections provide general descriptions of the field investigation findings.

3.2.1 Wetland Delineation

Three (3) wetlands were identified within the AOI, two of which were classified as Palustrine Emergent (PEM), and one as Palustrine Unconsolidated Bottom (PUB). Refer to Table 2 for a summary of the wetlands identified within the Project study area.

In addition, two (2) sampling points documented upland habitats within the Project study area. These uplands included previously disturbed urban areas.

Table 2. Wetlands Delineated within the AOI

Wetland Identifier	Area (acres)	Cowardin Classification ¹	Sampling Point
W001A	0.015	PEM	SP-1
W001B	0.009	PEM	
W002	0.029	PUB	SP-2

¹ As interpreted from *USFWS Classification of Wetlands and Deepwater Habitats of the United States*. (1979). Palustrine emergent (PEM). Palustrine scrub shrub (PSS). Palustrine unconsolidated bottom (PUB).

3.2.2 Streams and Other Waters Delineation

One (1) stream was identified within AOI, which was classified as intermittent. Table 3 presents the CEC identifier, stream name, approximate length of the streams within the AOI, and CEC's assignments of the stream classifications.

Table 3. Streams Delineated within the AOI

Stream Identifier	Stream Name	Study Area Length (feet) ¹	Stream Classification ²
S001	UNT to Shenango River	73	Intermittent

¹ Includes the portion of the stream within AOI only.

² Stream classification based on channel condition and observations at time of field delineation.

4.0 REGULATORY CONSIDERATIONS

The USACE has authority to permit the discharge of dredged or fill material into “waters of the U.S.” under Section 404 of the federal Clean Water Act, and to permit work and the placement of structures in navigable waters under Sections 9 and 10 of the Rivers and Harbors Act of 1899. Wetlands, streams, and other waters that meet the guidelines contained in the Corps Manual, Regional Supplement, and Regulatory Guidance Letter No. 05-05 are subject to regulation by USACE as waters of the U.S. as defined by 33 CFR 328.3(a) and in conformance with the 2023 U.S. Supreme Court ruling in *Sackett v. EPA*. Additionally, Section 401 of the Clean Water Act requires state agencies to evaluate whether discharges to these waters comply with state water quality standards. A Section 401 Water Quality Certification is required for activities that require federal permits or authorizations but is typically integrated into the USACE Section 404 permitting process.

The Pennsylvania Department of Environmental Protection (PADEP) has coinciding jurisdiction over “waters of the Commonwealth” as established by the Dam Safety and Encroachments Act (P.L. 1375, No. 325) and the Clean Streams Law (P.L. 1987, No. 3941). The PA Code of State Regulations, in Title 25, Chapter 105 Dam Safety and Waterway Management, defines “waters of the Commonwealth” as any watercourse, stream, waterbody, or wetland, including their floodways. The PADEP generally considers channels to be potentially jurisdictional if they exhibit defined bed and banks, whether natural or artificial, with perennial or intermittent flow. The PADEP regulates encroachments, defined as “*any structure or activity which changes, expands or diminishes the course, current or cross section of a watercourse, floodway, or body of water*” through the Chapter 105 permit process. The floodway is defined as extending 50 feet from the top of bank of watercourses if not delineated by a Federal Emergency Management Agency (FEMA) study.

In Pennsylvania, the USACE has delegated authority to the PADEP to authorize minor qualifying activities through the state-wide Section 404 permit titled PA State Programmatic General Permit 6 (PASPGP-6), with concurrent review by USACE for certain categories of impacts. A Joint Permit Application to PADEP and USACE is typically required for activities with more significant

impacts that exceed the thresholds of PA Chapter 105 General Permits and PASPGP-6. In addition to encroachments, permits for discharges to waters, including from construction stormwater runoff or erosion, may be required by National Pollutant Discharge Elimination System (NPDES) and PA Chapter 102 regulations.

All waters within the Project study area were delineated using guidelines set forth by the PADEP and USACE, which have final regulatory authority on the jurisdiction and extents of wetlands, streams, and other waters.

5.0 CONCLUSIONS

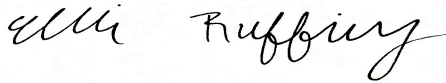
CEC conducted a waters delineation within the AOI on July 11, 2025. CEC identified the following with the Site:

- 3 wetlands, totaling approximately 0.053 acres;
- 1 stream, totaling approximately 73 linear feet

6.0 LEVEL OF CARE

This waters delineation has been prepared based on the best available information, interpreted in the light of the investigator's training, experience, and professional judgement in conformance with the USACE Manual, the applicable regional supplement, other applicable agency guidelines, and with the level of care and skill ordinarily exercised by members of the environmental consulting profession practicing contemporaneously under similar conditions in the locality of the Site. The wetland boundaries described in this report may change subsequent to CEC's delineation based on changes in the regulatory criteria, seasonal variations in hydrology, alterations to drainage patterns, and other human activities and/or land disturbances.

Report Prepared By:



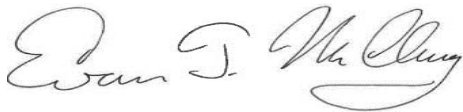
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08/22/25

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Civil & Environmental Consultants, Inc.

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Evan McClung

08/22/25

Senior Project Manager

Civil & Environmental Consultants, Inc.

7.0 REFERENCES

- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. Publication No. FWS/OBS-79/31, Washington, D.C.: U.S. Department of the Interior, Fish and Wildlife Service.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, Vicksburg, Mississippi: Department of the Army, U.S. Army Engineer Waterways Experiment Station.
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- U.S. Congress. 1986. *Definition of "Waters of the United States"*. Codified at 33 CFR 328.3 (et seq.), Washington, DC: U.S. Government Printing Office.
- U.S. Congress. 1899. *Rivers and Harbors Appropriation Act of 1899*. Codified at 33 U.S.C. 403 (et seq.), Washington, DC: U.S. Government Printing Office.
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- . 2005. "Ordinary High Water Mark Identification." *Regulatory Guidance Letter No. 05-05*. Washington, DC: U.S. Army Corps of Engineers.
- . 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0*. Edited by J. F. Berkowitz, J. S. Wakeley, R. W. Lichvar and C. V. Noble. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center.
- USDA-NRCS. 2018. *Field Indicators of Hydric Soils in the United States, Version 8.2*. Edited by L. M. Vasilas, G. W. Hurt and J. F. Berkowitz. Washington, D.C.: USDA-NRCS, in cooperation with the National Technical Committee for Hydric Soils.

APPENDIX A

FIGURES



REFERENCE(S):

1. USGS TOPOGRAPHIC MAP / ARCGIS MAP SERVICE:
ACCESSED 8/21/2025.
SHARON WEST, OHIO QUADRANGLE
PUBLISHED 1980.

AREA OF INTEREST (AOI)
(41.2437, -80.5061)

LEGEND

 AREA OF INTEREST (AOI)

SCALE IN FEET

0 2,000 4,000

APPROXIMATE SITE LOCATION



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BACKBONE SHARON LLC
SHARON DATA CENTER
MERCER COUNTY, PENNSYLVANIA

SITE LOCATION MAP

DRAWN BY:	SRS	CHECKED BY:	AFC	APPROVED BY:	ETM*	FIGURE NO:
DATE:	8/19/2025	SCALE:	1"=2,000'	PROJECT NO:	353-024	1

*Hand Signature on file



- REFERENCES**
1. ESRI WORLD IMAGERY / ARCGIS MAP SERVICE:
[HTTP://GOTO.ARCGISONLINE.COM/MAPS/WORLD_IMAGERY](http://GOTO.ARCGISONLINE.COM/MAPS/WORLD_IMAGERY),
ACCESSED 8/21/2025
 2. USFWS NATIONAL WETLANDS INVENTORY (NWI)
DATA BY STATE, ACCESSED 8/21/2025.
 3. USGS NATIONAL HYDROGRAPHY DATASET (NHD)
FRAMEWORK WEB SERVICE:
[HTTP://FRAMEWORKWFS.USGS.GOV/FRAMEWORK/WMS/WMS.CGI](http://FRAMEWORKWFS.USGS.GOV/FRAMEWORK/WMS/WMS.CGI),
ACCESSED 8/21/2025.
 4. FEMA D-FIRM NATIONAL FLOOD HAZARD LAYER
ACCESSED 8/21/2025.
 5. USDA, NRCS SOIL SURVEY GEOGRAPHIC (SSURGO)
DATABASE, ACCESSED 8/21/2025

LEGEND AREA OF INTEREST (AOI) SOIL MAP UNIT 1% ANNUAL CHANCE FLOOD HAZARD 3DHP STREAM NWI RIVERINE	Civil & Environmental Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108 Ph: 412.429.2324 · 800.365.2324 www.cecinc.com		BACKBONE SHARON LLC SHARON DATA CENTER MERCER COUNTY, PENNSYLVANIA	
	ENVIRONMENTAL DATA REVIEW MAP			
	DRAWN BY: SRS DATE: 8/21/2025	CHECKED BY: AFC SCALE: 1"=300'	APPROVED BY: ETM* PROJECT NO: 353-024	FIGURE NO: 2



REFERENCES
1. ESRI WORLD IMAGERY / ARCGIS MAP SERVICE:
[HTTP://GTO.ARCGISONLINE.COM/MAPS/WORLD_IMAGERY](http://gto.arcgis.com/maps/world_imagery),
ACCESSED 8/21/2025
2. PAMAP PROGRAM LIDAR DATA, 2' INTERVAL, 2020.

LEGEND	
	AREA OF INTEREST (AOI)
	SAMPLING POINT
	INTERMITTENT STREAM
	WETLAND - PEM
	WETLAND - PUB
	INDEX CONTOUR - 10 FT. INTERVAL
	INTERMEDIATE CONTOUR - 2 FT. INTERVAL

 Civil & Environmental Consultants, Inc.		700 Cherrington Parkway Moon Township, PA 15108 Ph: 412.429.2324 · 800.365.2324 www.cecinc.com	
DRAWN BY:	SRS	CHECKED BY:	AFC
DATE:	8/21/2025	SCALE:	1"=200'

BACKBONE SHARON LLC SHARON DATA CENTER MERCER COUNTY, PENNSYLVANIA			
WATERS DELINEATION MAP			
APPROVED BY:	ETM*	FIGURE NO:	3
PROJECT NO:	353-024		

*Hand signature on file

APPENDIX B

PHOTOGRAPHS



Photo Number: 1
Description: W001A (PEM) Sample Point SP-1, Northeast
Date Taken: 7/11/2025



Photo Number: 2
Description: W001A (PEM) Overview, South
Date Taken: 7/11/2025



Photo Number: 3
Description: W001B Overview, East
Date Taken: 7/11/2025



Photo Number: 4
Description: W002 (PUB) Sample Point SP-2, Northeast
Date Taken: 7/11/2025



Photo Number: 5
Description: W002 Overview, North
Date Taken: 7/11/2025



Photo Number: 6
Description: Upland Sample Point SP-3, Southwest
Date Taken: 7/11/2025



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Photo Number: 7
Description: Upland Sample Point SP-4, South
Date Taken: 7/11/2025



Photo Number: 8
Description: Intermittent Stream S001, US
Date Taken: 7/11/2025



Photo Number: 9
Description: Intermittent Stream S001, DS
Date Taken: 7/11/2025



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Sharon Data Center
Backbone Sharon, LLC
Project Number: 353-024.0060

APPENDIX C

WETLAND DETERMINATION DATA FORMS

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

Project/Site: Sharon Data Center City/County: Mercer County Sampling Date: 07/10/2025
Applicant/Owner: Backbone Sharon, LLC State: PA Sampling Point: SP-1
Investigator(s): FDD/LKK Section, Township, Range: _____
Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2%
Subregion (LRR or MLRA): LRR N Lat: 41.246589 Long: -80.505433 Datum: NAD83 (2011)
Soil Map Unit Name: Udorthents, loamy, 0 to 15 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation No, Soil Yes, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____		

Remarks:

PEM portion of wetland complex W002 is located in a depression on the edge of the disturbed portion of the study area. Soil is disturbed due to previous land use and development.

Wetland ID: W001; Cowardin Class: PEM

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

☒ Surface Water (A1)	☐ True Aquatic Plants (B14)
☐ High Water Table (A2)	☐ Hydrogen Sulfide Odor (C1)
☐ Saturation (A3)	☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Water Marks (B1)	☐ Presence of Reduced Iron (C4)
☐ Sediment Deposits (B2)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Drift Deposits (B3)	☐ Thin Muck Surface (C7)
☐ Algal Mat or Crust (B4)	☐ Other (Explain in Remarks)
☐ Iron Deposits (B5)	
☐ Inundation Visible on Aerial Imagery (B7)	
☐ Water-Stained Leaves (B9)	
☐ Aquatic Fauna (B13)	

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Drainage Patterns (B10)
☐ Moss Trim Lines (B16)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ Microtopographic Relief (D4)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <u>X</u> No _____	Depth (inches): <u>1</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology indicators are present.

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: _____ SP-1

Tree Stratum	Plot size: 30 ft radius	Absolute % Cover	Dominant Species?	Indicator Status	
1. None					
2.					
3.					
4.					
5.					
6.					
7.					
		_____ = Total Cover			
		50% of total cover: _____ 20% of total cover: _____			
Sapling/Shrub Stratum	Plot size: 15 ft radius				
1. None					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
		_____ = Total Cover			
		50% of total cover: _____ 20% of total cover: _____			
Herb Stratum	Plot size: 5 ft radius				
1. <i>Phragmites australis</i>		50	Y	FACW	
2. <i>Juncus tenuis</i>		20	Y	FAC	
3. <i>Carex crinita</i>		15	N	OBL	
4. <i>Eupatorium perfoliatum</i>		7	N	FACW	
5. <i>Solidago rugosa</i>		5	N	FAC	
6. <i>Galium aparine</i>		3	N	FACU	
7.					
8.					
9.					
10.					
11.					
		_____ 100 = Total Cover			
		50% of total cover: 50 20% of total cover: 20			
Woody Vine Stratum	Plot size: 30 ft radius				
1. None					
2.					
3.					
4.					
5.					
		_____ = Total Cover			
		50% of total cover: _____ 20% of total cover: _____			

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
No 1 - Rapid Test for Hydrophytic Vegetation
Yes 2 - Dominance Test is >50%
 _____ 3 - Prevalence Index is ≤3.0¹
No 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
No Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:
Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (Include photo numbers here or on a separate sheet.)
 Vegetation meets hydric indicators.

SOIL

Sampling Point: SP-1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (Moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-2	10YR 2/1	100					Loam/Clayey	
2-10	2.5Y 5/2	100					Loam/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (MLRA 147, 148)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (MLRA 136)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5)	☒ Depleted Matrix (F3)
☐ 2 cm Muck (A10) (LRR N)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Iron Monosulfide (A18)	☐ Iron-Manganese Masses (F12) (LRR N ,
☐ Sandy Mucky Mineral (S1)	MLRA 136)
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 122, 136)
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147, 148)
☐ Dark Surface (S7)	

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (MLRA 147)
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Red Parent Material (F21)
(outside MLRA 127, 147, 148)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____ Rock _____

Depth (inches): _____ 10 _____

Hydric Soil Present? Yes ☒ No ☐**Remarks:**

Hydric soil is present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

Project/Site: Sharon Data Center City/County: Mercer County Sampling Date: 07/10/2025
 Applicant/Owner: Backbone Sharon, LLC State: PA Sampling Point: SP-2
 Investigator(s): FDD, LKK Section, Township, Range: N/A
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2%
 Subregion (LRR or MLRA): LRR N Lat: 41.246987 Long: -80.505362 Datum: NAD83 (2011)
 Soil Map Unit Name: Udorthents, loamy, 0 to 15 percent slopes; UaC NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil Yes, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		

Remarks:
 PUB wetland located along toe of slope and the edge of industrial site. Soil is disturbed

Wetland ID: W002; Cowardin Class: PUB

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

<u>X</u> Surface Water (A1)	<u> </u> True Aquatic Plants (B14)
<u>X</u> High Water Table (A2)	<u> </u> Hydrogen Sulfide Odor (C1)
<u>X</u> Saturation (A3)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)
<u> </u> Water Marks (B1)	<u> </u> Presence of Reduced Iron (C4)
<u> </u> Sediment Deposits (B2)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)
<u> </u> Drift Deposits (B3)	<u> </u> Thin Muck Surface (C7)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Other (Explain in Remarks)
<u> </u> Iron Deposits (B5)	
<u> </u> Inundation Visible on Aerial Imagery (B7)	
<u>X</u> Water-Stained Leaves (B9)	
<u> </u> Aquatic Fauna (B13)	

Secondary Indicators (minimum of two required)

<u> </u> Surface Soil Cracks (B6)
<u> </u> Sparsely Vegetated Concave Surface (B8)
<u> </u> Drainage Patterns (B10)
<u> </u> Moss Trim Lines (B16)
<u> </u> Dry-Season Water Table (C2)
<u> </u> Crayfish Burrows (C8)
<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Geomorphic Position (D2)
<u>X</u> Shallow Aquitard (D3)
<u> </u> Microtopographic Relief (D4)
<u>X</u> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>8</u>
Water Table Present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>0</u>
Saturation Present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>0</u>

(includes capillary fringe)

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: SP-2

Tree Stratum	Plot size: <u>30 ft radius</u>	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
		_____ = Total Cover			Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
50% of total cover: _____		20% of total cover: _____			
Sapling/Shrub Stratum Plot size: <u>15 ft radius</u>					
1. <u>None</u>					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
		_____ = Total Cover			Hydrophytic Vegetation Indicators: <u>No</u> 1 - Rapid Test for Hydrophytic Vegetation <u>No</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u>Yes</u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>No</u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: _____		20% of total cover: _____			
Herb Stratum Plot size: <u>5 ft radius</u>					
1. <u>None</u>					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
		_____ = Total Cover			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
50% of total cover: _____		20% of total cover: _____			
Woody Vine Stratum Plot size: <u>30 ft radius</u>					
1. <u>None</u>					
2. _____					
3. _____					
4. _____					
5. _____					
		_____ = Total Cover			Hydrophytic Vegetation Present? Yes <u>X</u> No _____
50% of total cover: _____		20% of total cover: _____			
Remarks: (Include photo numbers here or on a separate sheet.) No vegetation due to constant inindation					

SOIL

Sampling Point: SP-2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (Moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100					Muck	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (MLRA 147, 148)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (MLRA 136)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)
☒ 2 cm Muck (A10) (LRR N)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Iron Monosulfide (A18)	☐ Iron-Manganese Masses (F12) (LRR N,
☐ Sandy Mucky Mineral (S1)	MLRA 136)
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 122, 136)
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147, 148)
☐ Dark Surface (S7)	

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (MLRA 147)
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Red Parent Material (F21)
(outside MLRA 127, 147, 148)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____ Rock _____

Depth (inches): _____ 4 _____

Hydric Soil Present? Yes ☒ No ☐**Remarks:**

Soil is ver gravely and disturbed from industrial usage

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

Project/Site: Sharon Data Center City/County: Mercer County Sampling Date: 07/10/2025
Applicant/Owner: Backbone Sharon, LLC State: PA Sampling Point: SP-3
Investigator(s): FDD, LKK Section, Township, Range: N/A
Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): Concave Slope (%): 0-2%
Subregion (LRR or MLRA): LRR N Lat: 41.246821 Long: -80.505668 Datum: NAD83 (2011)
Soil Map Unit Name: Udorthents, loamy, 0 to 15 percent slopes; UaC NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No, Soil Yes, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		

Remarks:
Upland sample point located in industrial area

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

<u> </u> Surface Water (A1)	<u> </u> True Aquatic Plants (B14)
<u> </u> High Water Table (A2)	<u> </u> Hydrogen Sulfide Odor (C1)
<u> </u> Saturation (A3)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)
<u> </u> Water Marks (B1)	<u> </u> Presence of Reduced Iron (C4)
<u> </u> Sediment Deposits (B2)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)
<u> </u> Drift Deposits (B3)	<u> </u> Thin Muck Surface (C7)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Other (Explain in Remarks)
<u> </u> Iron Deposits (B5)	
<u> </u> Inundation Visible on Aerial Imagery (B7)	
<u> </u> Water-Stained Leaves (B9)	
<u> </u> Aquatic Fauna (B13)	

Secondary Indicators (minimum of two required)

<u> </u> Surface Soil Cracks (B6)
<u> </u> Sparsely Vegetated Concave Surface (B8)
<u> </u> Drainage Patterns (B10)
<u> </u> Moss Trim Lines (B16)
<u> </u> Dry-Season Water Table (C2)
<u> </u> Crayfish Burrows (C8)
<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Geomorphic Position (D2)
<u> </u> Shallow Aquitard (D3)
<u> </u> Microtopographic Relief (D4)
<u> </u> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u>1</u>
Water Table Present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>
Saturation Present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>

(includes capillary fringe)

Wetland Hydrology Present? Yes No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: SP-3

Tree Stratum	Plot size: <u>30 ft radius</u>	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
		_____ = Total Cover			Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
		50% of total cover: _____ 20% of total cover: _____			
Sapling/Shrub Stratum	Plot size: <u>15 ft radius</u>				
1. <u>None</u>					Hydrophytic Vegetation Indicators: <u>No</u> 1 - Rapid Test for Hydrophytic Vegetation <u>No</u> 2 - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>No</u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>No</u> Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
		_____ = Total Cover			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		50% of total cover: _____ 20% of total cover: _____			
Herb Stratum	Plot size: <u>5 ft radius</u>				
1. <u>Galium aparine</u>		<u>40</u>	<u>Y</u>	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
2. <u>Solidago canadensis</u>		<u>25</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Andropogon virginicus</u>		<u>20</u>	<u>Y</u>	<u>FACU</u>	
4. <u>Cirsium arvense</u>		<u>10</u>	<u>N</u>	<u>FACU</u>	
5. <u>Poa pratensis</u>		<u>5</u>	<u>N</u>	<u>FACU</u>	
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
		_____ 100 = Total Cover			Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
		50% of total cover: <u>50</u> 20% of total cover: <u>20</u>			
Woody Vine Stratum	Plot size: <u>30 ft radius</u>				
1. <u>None</u>					
2. _____					
3. _____					
4. _____					
5. _____					
		_____ = Total Cover			
		50% of total cover: _____ 20% of total cover: _____			

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

SOIL

Sampling Point: SP-3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (Moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-2	10YR 3/1	100					Loam/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (MLRA 147, 148)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (MLRA 136)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)
☐ 2 cm Muck (A10) (LRR N)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Iron Monosulfide (A18)	☐ Iron-Manganese Masses (F12) (LRR N,
☐ Sandy Mucky Mineral (S1)	MLRA 136)
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 122, 136)
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147, 148)
☐ Dark Surface (S7)	

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (MLRA 147)
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Red Parent Material (F21)
(outside MLRA 127, 147, 148)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**
Type: _____ Rock _____
Depth (inches): _____ 2 _____
Hydric Soil Present? Yes _____ No **X****Remarks:**

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

Project/Site: Sharon Data Center City/County: Mercer County Sampling Date: 07/10/2025
Applicant/Owner: Backbone Sharon, LLC State: PA Sampling Point: SP-4
Investigator(s): FDD, LKK Section, Township, Range: N/A
Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2%
Subregion (LRR or MLRA): LRR N Lat: 41.243188 Long: -80.506279 Datum: NAD83 (2011)
Soil Map Unit Name: Urban land; Ur NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation No, Soil Yes, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		

Remarks:
Upland sample point located in industrial area

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

<u> </u> Surface Water (A1)	<u> </u> True Aquatic Plants (B14)
<u> </u> High Water Table (A2)	<u> </u> Hydrogen Sulfide Odor (C1)
<u> </u> Saturation (A3)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)
<u> </u> Water Marks (B1)	<u> </u> Presence of Reduced Iron (C4)
<u> </u> Sediment Deposits (B2)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)
<u> </u> Drift Deposits (B3)	<u> </u> Thin Muck Surface (C7)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Other (Explain in Remarks)
<u> </u> Iron Deposits (B5)	
<u> </u> Inundation Visible on Aerial Imagery (B7)	
<u> </u> Water-Stained Leaves (B9)	
<u> </u> Aquatic Fauna (B13)	

Secondary Indicators (minimum of two required)

<u> </u> Surface Soil Cracks (B6)
<u> </u> Sparsely Vegetated Concave Surface (B8)
<u> </u> Drainage Patterns (B10)
<u> </u> Moss Trim Lines (B16)
<u> </u> Dry-Season Water Table (C2)
<u> </u> Crayfish Burrows (C8)
<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Geomorphic Position (D2)
<u> </u> Shallow Aquitard (D3)
<u> </u> Microtopographic Relief (D4)
<u> </u> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>
Water Table Present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>
Saturation Present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>

(includes capillary fringe)

Wetland Hydrology Present? Yes No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: _____ SP-4

Tree Stratum	Plot size: 30 ft radius	Absolute % Cover	Dominant Species?	Indicator Status
1. None				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
		_____ = Total Cover		
		50% of total cover: _____ 20% of total cover: _____		
Sapling/Shrub Stratum	Plot size: 15 ft radius			
1. <i>Populus deltoides</i>		20	Y	FAC
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
		_____ 20 = Total Cover		
		50% of total cover: 10 20% of total cover: 4		
Herb Stratum	Plot size: 5 ft radius			
1. <i>Galium aparine</i>		30	Y	FACU
2. <i>Solidago canadensis</i>		25	Y	FACU
3. <i>Cirsium arvense</i>		20	Y	FACU
4. <i>Apocynum androsaemifolium</i>		5	N	FACU
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
		_____ 80 = Total Cover		
		50% of total cover: 40 20% of total cover: 16		
Woody Vine Stratum	Plot size: 30 ft radius			
1. None				
2. _____				
3. _____				
4. _____				
5. _____				
		_____ = Total Cover		
		50% of total cover: _____ 20% of total cover: _____		

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by: _____
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
No 1 - Rapid Test for Hydrophytic Vegetation
No 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
No 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
No Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:
Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

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

SOIL

Sampling Point: SP-4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (Moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-2	7.5YR 3/1	100					Loam/Clayey	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (MLRA 147, 148)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (MLRA 136)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)
☐ 2 cm Muck (A10) (LRR N)	☐ Redox Dark Surface (F6)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)
☐ Iron Monosulfide (A18)	☐ Iron-Manganese Masses (F12) (LRR N,
☐ Sandy Mucky Mineral (S1)	MLRA 136)
☐ Sandy Gleyed Matrix (S4)	☐ Umbric Surface (F13) (MLRA 122, 136)
☐ Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA 148)
☐ Stripped Matrix (S6)	☐ Red Parent Material (F21) (MLRA 127, 147, 148)
☐ Dark Surface (S7)	

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (MLRA 147)
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Red Parent Material (F21)
(outside MLRA 127, 147, 148)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**
Type: Rock/cement
Depth (inches): 2
Hydric Soil Present? Yes ☐ No ☒**Remarks:**

APPENDIX D

STREAM DATA FORMS

Pennsylvania Stream Data Form

PROJECT #: 353-024 PROJECT NAME: Sharon Data Center DATE: 07/10/25 INVESTIGATORS: FDD/LKK
COUNTY: Mercer STATE: PA LOCATION: Sharon
STREAM NAME: UNT to Shenango STREAM ID: S001 FLOW CLASSIFICATION: Intermittent
WEATHER CONDITIONS: ☒ Sunny ☐ Partly Cloudy ☐ Cloudy ☐ Rain ☐ Other (See Remarks)
Has there been precipitation at the site within the past 5 days? ☒ Yes ☐ No ☐ Unknown

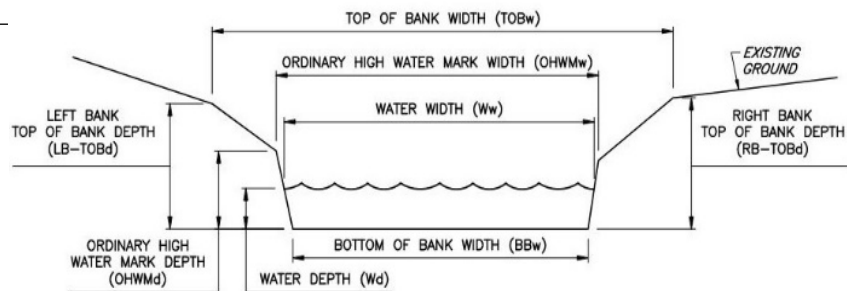
Remarks:

Intermittent stream S001 is located in a forested portion of the study area. S001 gains flow from the North, outside the boundary, and continues to flow through the boundary into the wetland W002.

AVERAGE STREAM CHANNEL DIMENSIONS (ft)

TOBw: 7 RB-TOBd: 2 LB-TOBd: 2
OHWMw: 4 OHWMd: 1
Ww: 3 Wd: 0.5
BBw: 2

TYPICAL STREAM CROSS SECTION FACING DOWNSTREAM



OHWM INDICATORS:

Geomorphic: ☒ Break in slope / defined bed & banks ☐ Shelving ☐ Bedforms (bar deposition / scour lines)
Sediment: ☐ Changes in soil (alluvial / hydric vs. colluvial / residual) ☐ Sorting ☐ Mudcracks
Vegetation: ☐ Absence of terrestrial vegetation ☐ Vegetation matted down or bent ☐ Exposed roots
☒ Hydrophytic emergent cover ☐ Periphyton / algae cover >10% ☐ Moss/lichen trim lines
☐ Change in type or density (Explain: _____)
Ancillary: ☐ Wrack / organic debris lines ☒ Leaf litter disturbed or washed away ☐ Water staining

PRIMARY SUBSTRATE (Check all >20%):

☐ Clay ☒ Silt ☒ Sand ☒ Gravel (0.25-2.0in) ☒ Cobble (2-10in)
☐ Boulder (>10in) ☐ Muck ☐ Vegetation ☐ Artificial ☐ Bedrock

FLOW CHARACTERISTICS:

☐ No water; streambed is dry ☐ Streambed is moist ☐ Standing water present ☒ Flowing water present

BANK EROSION:

Right Bank Facing Downstream: ☐ None ☒ Slight ☐ Moderate ☐ Severe
Left Bank Facing Downstream: ☐ None ☒ Slight ☐ Moderate ☐ Severe
Describe: Some undercutting

CANOPY COVER: ☐ 0-25% ☐ 26-50% ☐ 51-75% ☒ 76-100%

BIOLOGICAL CHARACTERISTICS:

Macroinvertebrates Observed? (If Yes, check below) ☐ Yes ☒ No

☐ Plecoptera (Stonefly) ☐ Ephemeroptera (Mayfly) ☐ Trichoptera (Caddisfly) ☐ Coleoptera (Aquatic Beetles)
☐ Diptera (True Fly) ☐ Decapoda (Crawfish) ☐ Gastropoda (Snails) ☐ Isopoda (Sowbugs)
☐ Megaloptera (Alderfly) ☐ Odonata (Dragonfly) ☐ Platyhelminthes (Flatworms)
☐ Other Taxa: _____

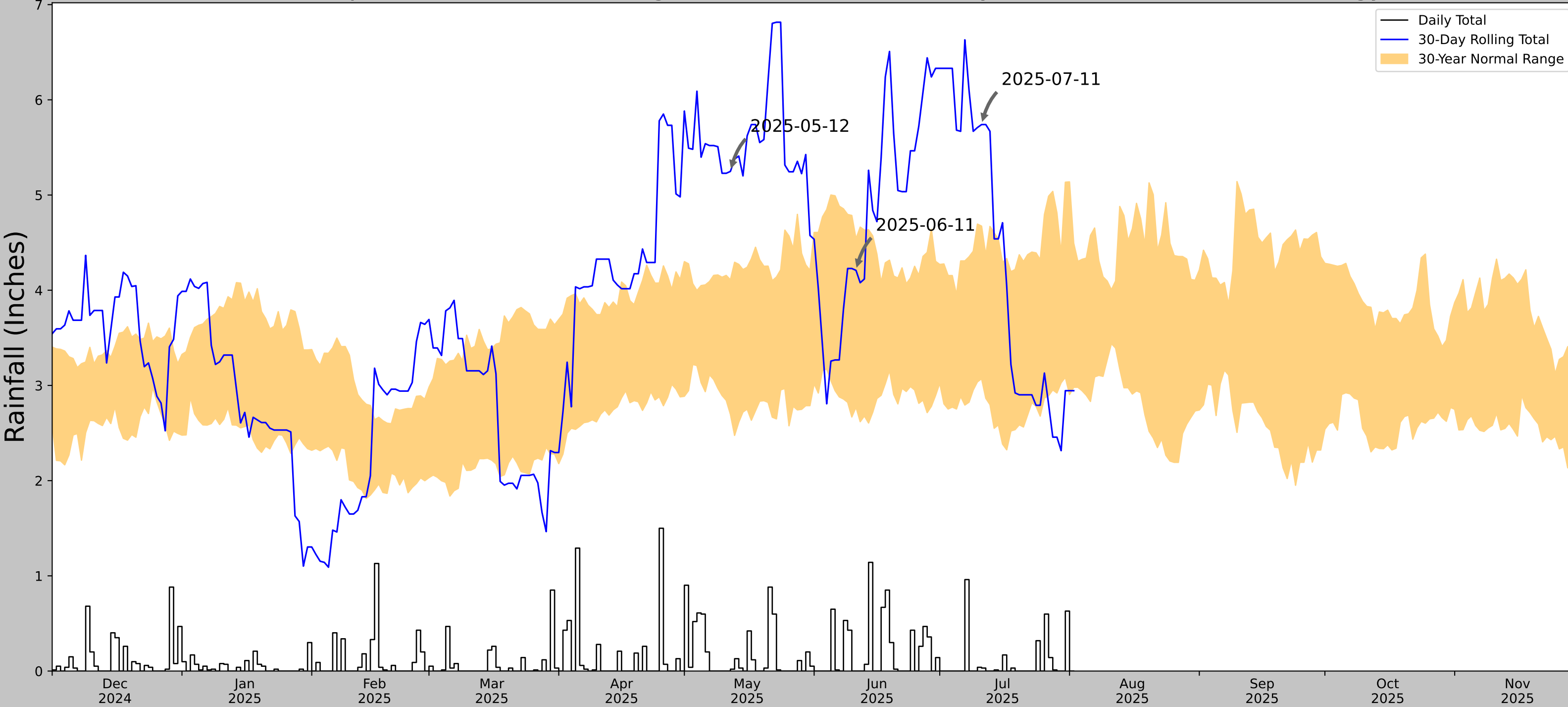
Fish or Herptiles observed? (If Yes, check below) ☐ Yes ☒ No

Describe: _____

APPENDIX E

ANTECEDENT PRECIPITATION TOOL

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.24375, -80.50614
Observation Date	2025-07-11
Elevation (ft)	866.484
Drought Index (PDSI)	Mild wetness (2025-06)
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-07-11	3.070473	4.673622	5.740158	Wet	3	3	9
2025-06-11	2.771654	4.540945	4.208662	Normal	2	2	4
2025-05-12	2.69685	4.109843	5.248032	Wet	3	1	3
Result							Wetter than Normal - 16



US Army Corps
of Engineers.



Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
YOUNGSTOWN-WARREN RGNL AP	41.2547, -80.6736	1166.995	8.732	300.511	6.553	11353	90