WETLAND DELINEATION REPORT

Third Street Dam/Bridge Project
Borough of Media
Delaware County, Pennsylvania

Schnabel Reference 00151134
May 19, 2011

Schnabel ENGINEERING

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May 19, 2011

Mr. Jeffrey Smith
Borough of Media
301 North Jackson Street
Media, PA 19063

Subject: **Project 00151134, Wetland Delineation Report, Third Street Dam/Bridge Project, Borough of Media, Pennsylvania**

Dear Mr. Smith:

SCHNABEL ENGINEERING, LLC (Schnabel), is pleased to submit this wetland delineation report for the proposed impact area involved with the rehabilitation of the Third Street Dam/Bridge. These services were provided in accordance with our proposal dated April 9, 2008. Our services related to the wetland delineation included field reconnaissance, review/identification of dominant vegetation, soil investigation, observations of hydrologic conditions, and a request for a U.S. Army Corps of Engineers (Corps) preliminary Jurisdictional Determination (JD).

We previously delineated the site and summarized our results in our Wetland Delineation Report dated June 13, 2001. We received a JD dated November 29, 2001 (Attachment 2), that has since expired. We re-delineated the potential area of impact within the vicinity of the dam on August 31, 2010, and noted communities of dominant wetland vegetation, and the location of channels that could potentially be regulated by the Corps. We delineated the areas of potential jurisdiction, and had the surveyor locate the wetland boundary flags and the soil probe locations. We will send one copy of this report to the Corps for a verification of the wetland boundary and request a preliminary JD.

We provided protected species and cultural resource tasks, which included an online search of the Pennsylvania Natural Diversity Index, and a request for information from the Pennsylvania Historical and Museum Commission.

Services with respect to conducting a formal wetland functional assessment, soil class identification, hydrology and hydraulics, and habitat evaluation were not included. A Professional Wetland Scientist (PWS) certified by the Society of Wetland Scientists' Professional Certification Program (www.wetlandcert.org) performed these services.

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510 East Gay Street / West Chester, PA / 19380

INTRODUCTION

A wetland identification and delineation require the investigation of three components that characterize the majority of wetlands: (1) the presence of hydrophytic plants; (2) the presence of hydric or saturated soils that have become anaerobic due to long term saturation during the growing season; and (3) an indication of the presence of water flooding or saturating the site from ground or surface sources. The Corps defines a wetland as follows:

> *Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*[1]

DESCRIPTION OF SITE AND PROPOSED PROJECT

The Third Street Dam is located in the Borough of Media, Delaware County, Pennsylvania. Broomall's Lake and the upstream portion of the dam are owned by Broomall's Lake Country Club. The downstream portion of the dam and the identified wetlands are located within Glen Providence Park, a 25-acre park that was donated to Delaware County by a local family.

The proposed construction consists of replacing the existing spillway, resurfacing of the roadway, and flattening the existing downstream slope to a more stable 2.5H:1V slope. The proposed changes include placing fill material in the floodplain area, which will impact the delineated wetlands, and extending the spillway culvert to accommodate the slope.

According to the Soil Survey of Chester and Delaware Counties (1963), soils at the site are classified as Wehadkee silt loam. The soil survey information is included as Attachment 1.

METHODS

We visited the site on August 31, 2010, and performed a routine wetland field investigation. A routine wetland field investigation includes establishing points along the transition from known upland soils to mapped hydric soils, or in soils that may have hydric inclusions. In addition to soil data, we recorded vegetation and hydrologic indicators of wetlands. Accepted soil sampling procedure advises boring a 16-inch deep hole with a tile spade (Environmental Laboratory, 1987). Soils are observed, and their colors and consistency noted at a series of depths, within 10 inches below the soil surface (just below the A Horizon) being the most significant. For purposes of this study, soil is defined as "unconsolidated, natural material that supports, or is capable of supporting plant life" (Ibid., 1987).

The soil probe is the center of each data point used for vegetation investigation and data collection. We probed in five locations across the site as shown on the Wetland Boundary Plan (Attachment 8). We consulted the Soil Survey of Chester and Delaware Counties (1963) for descriptions of the mapped soil types on the project site in order to compare our findings.

[1] Environmental Laboratory (1987), Department of the Army, Waterways Experimental Station, January 1987 Final Report, p. A14, Appendix A.

We recorded the dominant vegetation within a five-foot diameter of the soil probe for the herbaceous, shrub or understory tree layer, and within a 30-ft diameter for trees. We then categorized each plant species by its status as shown in Table 1 according to Reed (1988).

Table 1: Wetland Plant Status

Category	Abbreviation	Definition
Not Listed	NL	Not listed in Reed, 1988
No Indicator	NI	Insufficient information available to determine indicator status
Obligate upland	UPL	Occurs <1% of the time in wetlands
Facultative upland	FACU	Occurs 1% to 33% of the time in wetlands
Facultative	FAC	Occurs 34% to 66% of the time in wetlands
Facultative wetland	FACW	Occurs 67% to 99% of the time in wetlands
Obligate wetland	OBL	Occurs >99% of the time in wetlands

If 50% or more of the sampling area is dominated by plants that are categorized as FAC, FACW, or OBL, the site's vegetative parameter is considered positive for hydrophytic or wetland vegetation.

Indicators of positive site hydrology (e.g., waterlogging, saturation, ponding/inundation, and physiological adaptations of plants to flooding) were noted. Potentially regulated “waters” were also noted and delineated from top of bank to top of bank for channels. Observations for each wetland datapoint are recorded on interim regional data forms approved by the Corps' Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual (Ibid., 1987): Eastern Mountains and Piedmont Region, and are included as Attachment 4.

RESULTS

Our field reconnaissance on August 31, 2010, resulted in the confirmation of the previously delineated wetland area on the downstream side of the dam. The delineated areas are shown in Attachment 8, Wetland Boundary Plan.

Photographs of the site taken during the field reconnaissance, including photographs of the delineated channel, the delineated wetland, soil probe locations, and general site features, are included in Attachment 3. Corps-approved data sheets for each of the five data points, noted as soil probes, are included in Attachment 4.

Soils

As described above, the Soil Survey of Chester and Delaware Counties (1963) classifies the soils on the site as Wehadkee silt loam. The soils on the surrounding slopes are classified as Manor soils (35-60% slopes) and Glenelg channery silt loam (8-15% slopes). A copy of the soil map is included in Attachment 1, and the locations of the soil probes are shown on the Wetland Boundary Plan, Attachment 8.

Wehadkee series soils are hydric soils and are described as deep, poorly drained soils on floodplains formed in recently deposited micaceous sediments washed from uplands (USDA-SCS, 1963). The surface layer of Wehadkee series soils is dark grayish-brown silt loam, with the subsurface being

yellowish-brown silty clay loam, mottled with various shades of gray. These soils are not recommended for many uses because of the wetness/high water table and fine texture.

The slopes surrounding the valley were Manor soils, 35 to 60% slopes; and Glenelg channery silt loam, 8 to 15% slopes; both are well-drained upland soils and are not considered hydric soils.

Although the Soil Survey of Chester and Delaware Counties (USDA-SCS, 1963) has the entire riparian valley around Broomall's Run mapped as hydric, Wehadkee soils, the field reconnaissance revealed that a natural levee has formed along the bank of Broomall's Run, with drier banks than the lower and wetter areas west of the bank. The soils of the banks of Broomall's Run more closely resembled the Manor and Glenelg channery soils of the slopes. The soil profile observations from each of the soil probes are recorded on the data sheets in Attachment 4.

Hydrology

The Third Street Dam/Bridge is located on Broomall's Run, which drains into Ridley Creek. Surface drainage upstream of the dam drains into Broomall's Lake. Surface drainage downstream of the dam generally follows the topography southwest towards Broomall's Run. Water enters Broomall's Run from the Third Street dam spillway and an approximately 24-inch stormwater pipe outlet.

There is a small drainage along the west edge of the low area, near the toe of the slope. This small drainage appears to be either seepage from the earthen dam, a spring, or a hillside seep. In between these two areas, there was standing water approximately 0.5 to 2-inches deep. Other areas were saturated to the soil surface.

Broomall's Run has continuous flow over a streambed of large rocks and areas of sediment within the constraints of steep, approximately 3.5 to 4-ft high banks. Debris piles along and in some cases above the banks show that during high flow, water floods the low area beyond the west bank.

Vegetation

The vegetation at the site consists of upland forest on the surrounding slopes and wetland emergent/ scrub-shrub in the low area near the toe of the dam. The overstory was dominated by Norway maple (*Acer platanoides*, UPL), tulip poplar (*Liriodendron tulipifera*, FACU), red maple (*Acer rubrum*, FAC), and sycamore (*Platanus occidentalis*, FACW-). The understory layer was dominated by spice bush (*Lindera benzoin*, FACU), and multiflora rose (*Rosa multiflora*, FACU). Herbaceous vegetation was dominated by clearweed (*Pilea pumila*, FACW), garlic mustard (*Alliaria petiolata*, FACU-), spotted jewelweed (*Impatiens capensis*, FACW) and in the wetland, skunk cabbage (*Symplocarpus foetidus*, OBL). A list of dominant plants observed at each of the data collection points is included on the Corps data forms (Attachment 4).

SUMMARY OF WETLAND FINDINGS

The area within the valley at the base of the Third Street Dam/Bridge possesses wetland characteristics. The delineation included the valley and the surrounding slopes of the proposed area of impact. Ponded water within the low area west of Broomall's Run and the hydric qualities of the soil demonstrate that this area is saturated for long periods of time. Hydrophytic vegetation was present in this area, but not always

the dominant vegetation. The area is relatively small and is in close proximity to forested upland, so the various upland plants that are present within the site are not surprising. See Attachment 8 for the wetland boundary and the location of the photographs.

This wetland may have formed because of dam seepage and may not exhibit wetland characteristics once the dam rehabilitation is complete.

Please note that the boundaries delineated on site, and the boundary noted on the Wetland Boundary Plan (Attachment 8) represents our opinion regarding the boundary of both the wetland/waters of the U.S., and the extent of Corps jurisdiction. Under the Clean Water Act, the Corps maintains regulatory authority over wetlands and waterways along with coordination with the PADEP. These agencies are responsible for identifying those areas that are within their regulatory jurisdiction. To this end, we will send a copy of this report and a request for a preliminary JD to the Corps to verify our delineation.

THREATENED AND ENDANGERED SPECIES

A Pennsylvania Natural Diversity Index (PNDI) search was conducted in 2001 (PNDI ID N85558). Agency correspondence concluded that no impact was anticipated. On March 23, 1011, a new PNDI search was conducted resulting in three potential impacts requiring further review. We have submitted the project information to the PADCNR, the PA Fish & Boat Commission, and the USFWS. The USFWS recommends a Phase I bog turtle habitat survey. In December of 2001, Mr. Larry Slavitter of the Corps performed a bog turtle screening at the site and concluded that the site was not considered bog turtle habitat. We will request that the Corps representative who will be verifying the wetland boundary do another habitat survey during the same visit. Please see copies of the PNDI search results and subsequent correspondence in Attachment 6. Additional correspondence received after this report is submitted will be forwarded upon receipt.

CULTURAL RESOURCE SEARCH

The Pennsylvania Historic and Museum Commission (PHMC), Bureau for Historic Preservation has reviewed the project and responded that the proposed project will have no adverse effect on the National Register eligible resource: Glen Providence Park, Media, Delaware County, and that no additional archaeological investigations are required. A copy of the letter from PHMC is included in Attachment 7.

GENERAL

The conclusions included in this report are based on the information revealed by this exploration, and are the opinions of the scientists involved in the project study. The delineation of wetlands or lack of wetland identification is for the days that field reconnaissance took place. Note that the presence or absence of a particular wetland parameter is dependent on a number of factors beyond our control. These include precipitation events, climatic factors, seasonal conditions, man-induced changes, natural conditions, time and budget limitations, and the like. We recommend that these findings be field verified by the Corps before deciding upon final design.

We recommend that this study be made available to prospective contractors for informational purposes.

We have endeavored to prepare this report in accordance with generally accepted scientific practices and make no warranties, either express or implied, as to the professional advice provided under the terms of our agreement and included in this report.

We appreciate the opportunity to be of service for this project. Please contact the undersigned at 610-696-6066 if you need clarification for any aspect of this report.

Sincerely,

SCHNABEL ENGINEERING, LLC

Sharon L. Krock, PWS
Project Scientist

SLK:JPH:jlm

Attachments:

(1) Maps
(2) Jurisdictional Determination
(3) Photographs
(4) Data Sheets
(5) References
(6) Protected Species Search
(7) Cultural Resource Search
(8) Wetland Boundary Plan

Distribution:

Borough of Media (1)
Attn: Mr. Jeffrey Smith

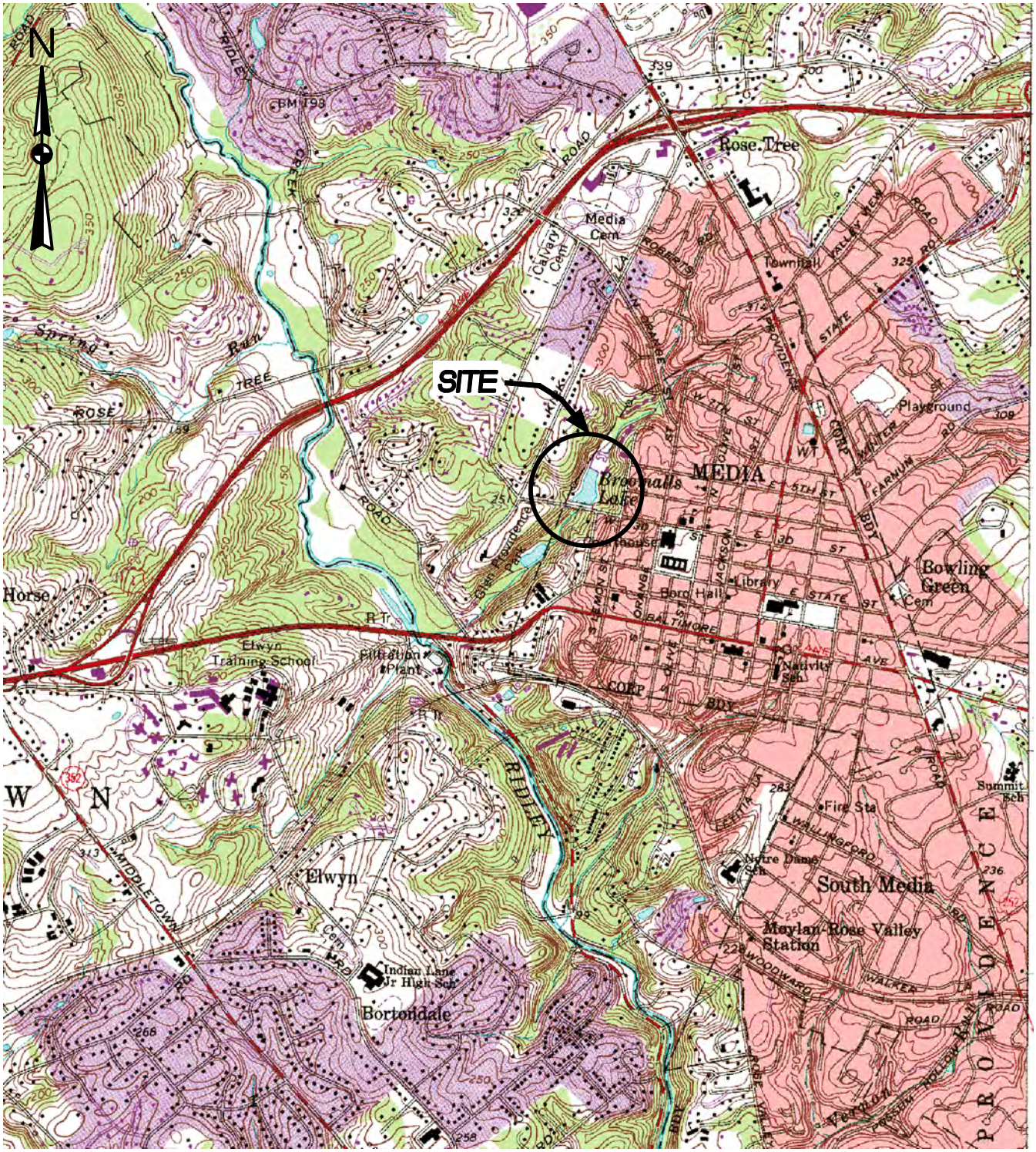
U.S. Army Corps of Engineers (1)
Attn: Mr. Bill Jenkins

Pennsylvania Department of Environmental Protection (1)
Attn: Ms. Zahra Nucci

ATTACHMENT 1

MAPS

Figure 1: Site Location Map
Figure 2: Soil Survey



SCALE: 1"=2000'

0 2000' 4000'

REFERENCE: USGS 7.5 MINUTE QUADRANGLE MEDIA, PA 1966, PHOTOREVISED 1994

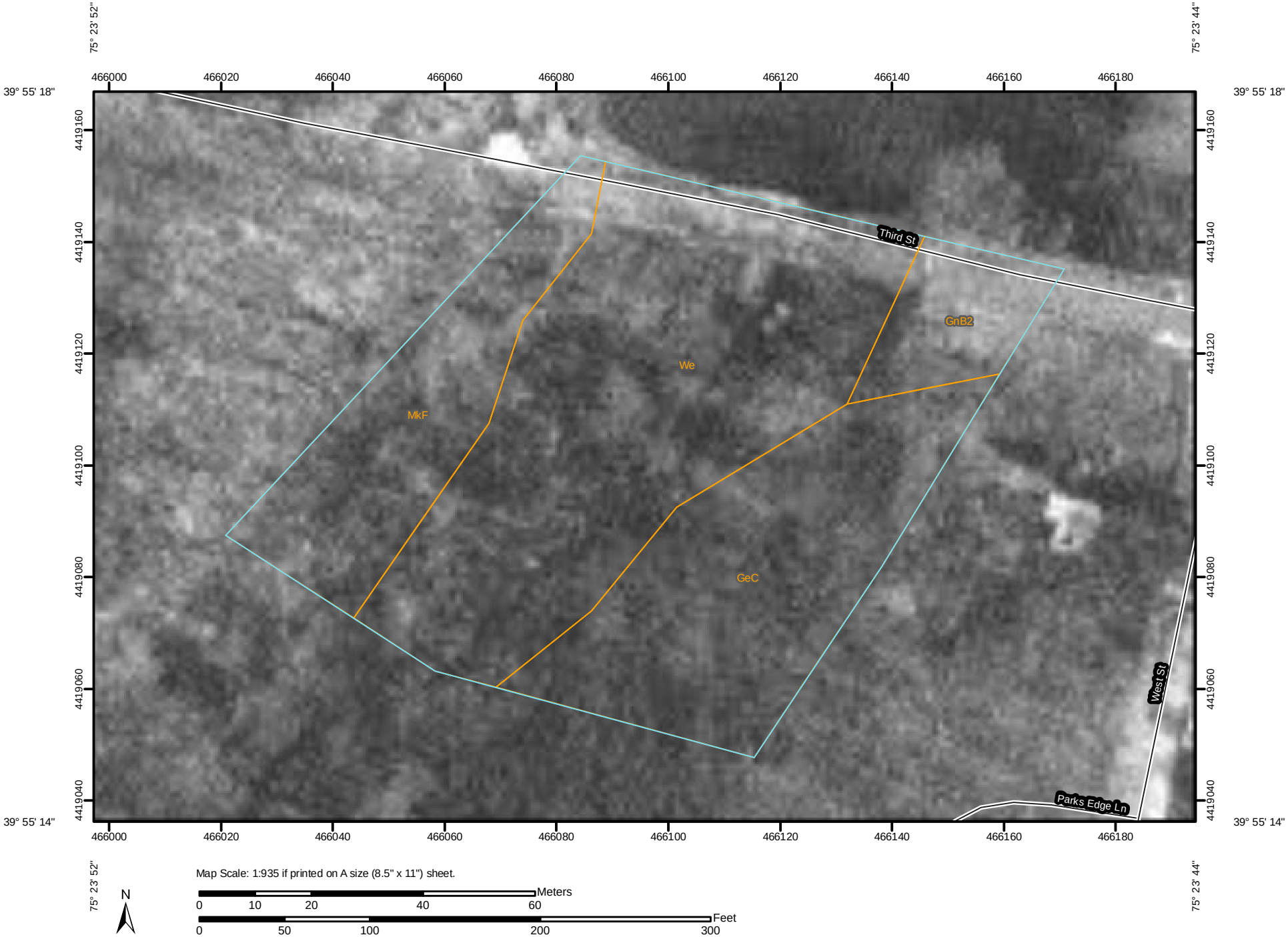
Schnabel ENGINEERING

THIRD STREET DAM/BRIDGE
MEDIA, PENNSYLVANIA
PROJECT NO. 00151134

SITE LOCATION MAP

FIGURE 1

Soil Map—Delaware County, Pennsylvania
(Third Street Dam)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:935 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Delaware County, Pennsylvania
Survey Area Data: Version 6, Feb 24, 2009

Date(s) aerial images were photographed: 4/13/1999

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Delaware County, Pennsylvania (PA045)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
GeC	Glenelg channery silt loam, 8 to 15 percent slopes	0.6	27.6%
GnB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	0.2	6.9%
MkF	Manor soils, 35 to 60 percent slopes	0.4	18.0%
We	Wehadkee silt loam	1.1	47.5%
Totals for Area of Interest		**2.3**	**100.0%**

ATTACHMENT 2

JURISDICTIONAL DETERMINATION

JR

DEPARTMENT OF THE ARMY
PHILADELPHIA DISTRICT, CORPS OF ENGINEERS
WANAMAKER BUILDING, 100 PENN SQUARE EAST
PHILADELPHIA, PENNSYLVANIA 19107-3390

NOV 30 2001

REPLY TO
ATTENTION OF

NOV 29 2001

Regulatory Branch
Application Section II

SUBJECT: CENAP-OP-R-200002284-39 (JD)
PADEP #: D23-009

Mrs. Jane O. Rowan
Schnabel Engineering Associates
510 East Gay Street
West Chester, Pennsylvania 19380

Dear Mrs. Rowan:

The plans identified below depict the extent of Federal jurisdiction on the subject property. The basis of our determination of jurisdiction is also provided (Enclosure 1).

Pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, a Department of the Army permit is required for work or structures in navigable waters of the United States and the discharge of dredged or fill material into waters of the United States including adjacent and isolated wetlands. Any proposal to perform the above activities within the area of Federal jurisdiction requires the prior approval of this office.

This letter is valid for a period of five (5) years. However, this wetland determination is issued in accordance with current Federal regulations and is based upon the existing site conditions and information provided by you in your application. This office reserves the right to reevaluate and modify the jurisdictional determination at any time should the existing site conditions or Federal regulations change, or should the information provided by you prove to be false, incomplete or inaccurate.

In accordance with the U.S. Army Corps of Engineers Administrative Appeal Process, you may accept or appeal the approved jurisdiction determination. For further information in this regard, please refer to the Notification of Administrative Appeal Options and Process and Request for Appeal form (Enclosure 2).

If you should have any questions regarding this matter, please contact Lawrence M. Slavitter at (215) 656-6734 or write to the above address.

Sincerely,

Edward E. Bonner
Biologist

****
SUBJECT PROPERTY: Pennsylvania Department of Transportation; 1 acre; Latitude 39-55-17 North, 75-23-50 West; adjacent to the 3rd Street Dam, in the Borough of Media, Delaware County, Delaware.
****
SURVEY DESCRIPTION: Plan prepared by Schnabel Engineering; dated November 12, 2001, unrevised; entitled "Third Street Dam...", scale 1" = 20'; sheet 1 of 1.
****
COMMENTS: Site inspect performed by personnel of this office August 2, 2001.

Enclosures

PHILADELPHIA DISTRICT
BASIS OF JURISDICTIONAL DETERMINATION

Project Name: Pennsylvania Department of Transportation File No: CENAP-OP-R- 200002284

Date: November 27, 2001

1. The jurisdictional determination outlined in the attached letter was based on the following:

   ☐ A. There are no Waters of the United States present at the site.

   ☐ B. The Waters of the United States present at the site are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce. This includes waters which are subject to the ebb and flow of the tide.

   ☐ C. The Waters of the United States at the site are interstate waters, including interstate wetlands.

   ☐ D. The Waters of the United States at the site are other waters such as intrastate lakes, rivers, streams (including intermittent streams, mudflats, sand flats, wetlands sloughs, prairie potholes, wet meadows, playa lakes or natural ponds containing a nexus to interstate commerce).

   The nexus to Interstate commerce consists of:
   --- recreational or other purposes
   --- fish or shellfish
   --- industrial or commercial purposes
   --- habitat for migratory birds or game birds or wildlife
   --- commercially saleable timber products
   --- sand, gravel, oil, gas or other commodities of commerce
   --- other _____

   ☐ E. The Waters of the United States present at the site contain impoundments of waters otherwise defined as Waters of the United States.

   ☒ F. The Waters of the United States present at the site are part of a tributary system to waters identified in B-E above.

   ☐ G. The Waters of the United States present at the site are part of the territorial seas.

   ☐ H. There are wetlands present at the site which are adjacent to waters identified in B-G above.

2. The lateral extent of the Waters of the United States, including wetlands at the site as identified on the accompanying map was based on one or more of the following:

   ☒ The presence of wetlands has been determined by the U.S. Army Corps of Engineers 1987 Wetlands Delineation Manual and Guidance supporting the Manual.

   ☒ Wetland parameters including hydrology, hydric soils and hydrophytic vegetation.

   ☒ Ordinary high water mark, mean high water mark, high tide line, mean high tide line.

Lawrence M. Slavitter
Biologist

Enclosure 1

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Pennsylvania Department of Transportation	File Number: 200002284	Date: NOV 29 2001

Attached is:		See Section Below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the Philadelphia District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the Philadelphia District Engineer. Your objections must be received by the Philadelphia District Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the Philadelphia District Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the Philadelphia District Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the Philadelphia District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-ET-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Philadelphia District Engineer.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-ET-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Philadelphia District Engineer.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-ET-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Philadelphia District Engineer.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Lawrence M. Slavitter
U.S. Army Corps of Engineers, Philadelphia District
ATTN: CENAP-OP-R
Wanamaker Building, 100 Penn Square East
Philadelphia, PA 19107-3390
(215) 656-6734

If you only have questions regarding the appeal process you may also contact:
James W. Haggerty
Review Officer
U.S. Army Engineer Division-North Atlantic
ATTN: CENAD-ET-O
Fort Hamilton Military Community
Building 301, General Lee Avenue
Brooklyn, NY 11252-6700
(718) 765-7150

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

ATTACHMENT 3

PHOTOGRAPHS

PHOTOGRAPH 1

LOCATION:

SP-1, outside of wetland boundary.

COMMENTS:

Soils at SP-1.

PHOTOGRAPH 2

LOCATION:

SP-2 within wetland.

COMMENTS:

Soil profile at SP-2.

PHOTOGRAPH 3

LOCATION:

SP-3

COMMENTS:

Soil profile at SP-3 within wetlands.

PHOTOGRAPH 4

LOCATION:

SP-4

COMMENTS:

Soils at SP-4 outside of wetland boundary.

PHOTOGRAPH 5

LOCATION:

View is north, upstream.

COMMENTS:

Third Street Dam spillway

PHOTOGRAPH 6

LOCATION:

View is northeast.

COMMENTS:

Stormwater outlet pipe.

PHOTOGRAPH 7

LOCATION:

View is east towards Broomall's Run.

COMMENTS:

Within wetland boundary

PHOTOGRAPH 8

LOCATION:

View is north-northwest, looking upgradient at drainage.

ATTACHMENT 4

DATA SHEETS

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: 3rd St. Dam/Bridge City/County: Media/Delaware Sampling Date: 8/31/10

Applicant/Owner: Borough of Media State: PA Sampling Point: SP-1

Investigator(s): S. Krock Section, Township, Range: Media Borough

Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): S Lat: 39.92148061 Long: 75.39682481 Datum: _____

Soil Map Unit Name: Wehadkee 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 _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ 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 Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

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 _____ No X	Depth (inches): _____
Water Table Present?	Yes _____ No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____ No X	Depth (inches): _____

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-1

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Liriodendron tulipifera	30%	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	30	= Total Cover	

Sapling/Shrub Stratum (Plot size: 5')			
1. Rosa multiflora	30%	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Maianthemum canadense	10%	Y	FAC
2. Hosta sp.	5%	N	?
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
		= 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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	1	x 3 =	3
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	3 (A)		15 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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 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-1

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[1]	Loc[2]	Texture	Remarks
0-1	10YR 2/2		—					Organic / leaf litter
2-14	10YR 2/2		—				silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rocks / bricks

Depth (inches): 14"

Hydric Soil Present? Yes ____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: 3rd Street Dam/Bridge City/County: Media/Delaware Sampling Date: 8/31/10

Applicant/Owner: Borough of Media State: PA Sampling Point: SP-2

Investigator(s): S. Krock Section, Township, Range: Media Borough

Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or (MLRA)): S Lat: 39.9214806 Long: 75.3968248 Datum: _____

Soil Map Unit Name: Wehadkee 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 _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (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 X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

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 _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

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

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30')			
1. Platanus occidentalis	45	Y	FACW
2. Liriodendron tulipifera	30	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	75	= Total Cover	
Sapling/Shrub Stratum (Plot size: 5')			
1. Lindera benzoin	20	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	= Total Cover	
Herb Stratum (Plot size: 5')			
1. Symplocarpus foetidus	10	Y	OBL
2. Pilea pumila	15	Y	FACW
3. Impatiens capensis	10		FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	35	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (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:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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 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.)

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 Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR2.5/1	95%	—				silt	fine roots
2-4	7.5YR 2.5/1	75	2.5YR 3/6	30	C	M	silt with sand	
4-12	2.5Y 3/1	70	2.5 YR 4/8	30	C	M	sandy loam	
12-16	2.5Y 3/1	90	5YR 5/8	10	C	M	sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: 3rd Street Dam/Bridge City/County: Media/Delaware Sampling Date: 8/31/10

Applicant/Owner: Borough of Media State: PA Sampling Point: SP-3

Investigator(s): S. Krock Section, Township, Range: Media Borough

Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): _____ Slope (%): _____

Subregion (LRR or MLRA): S Lat: 39.9213772 Long: 75.3970696 Datum: _____

Soil Map Unit Name: Wehadkee 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 _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (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 X No _____	**Is the Sampled Area within a Wetland?**	**Yes X No _____**
Hydric Soil Present?	Yes X No _____		
Wetland Hydrology Present?	Yes _____ No X		

Remarks:

Along transition between wetland/upland.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ 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 Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

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 _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

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: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	45	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	45 = Total Cover		
Sapling/Shrub Stratum (Plot size: 5')			
1. Rosa multiflora	12	Y	FACU
2. Lindera benzoin	10	N	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	22 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Toxicodendron radicans	15	Y	FAC
2. Alliaria petiolata	10	N	FACU
3. Pilea pumila	5	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
	= 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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (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:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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 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.)

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 Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	90	—				silt loam	
4-16	5Y 4/2	80	7.5YR 4/6	20	C	M	silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: 3rd Street Dam/Bridge City/County: Media/Delaware Sampling Date: 8/31/10

Applicant/Owner: Borough of Media State: PA Sampling Point: SP-4

Investigator(s): S. Krock Section, Township, Range: Media Borough

Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): _____ Slope (%): _____

Subregion (LRR or MLRA)? S Lat: 39.9213772 Long: 75.3969584 Datum: _____

Soil Map Unit Name: Wehadkee 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 _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (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 X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ 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 Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

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 _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

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')	Absolute % Cover	Dominant Species?	Indicator Status
1. Liriodendron tulipifera	50	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50 = Total Cover		
Sapling/Shrub Stratum (Plot size: 5')			
1. Rosa multiflora	30	Y	FACU
2. Lonicera japonica	15	N	FAC
3. Lindera benzoin	10	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	55 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Alliaria petiolata	20	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
	= 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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	1	x 3 =	3
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Column Totals:	5 (A)		15 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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 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.)

shaded, moist riparian area, so some hydrophytic plants present.

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 Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	90					sandy loam	
6-16	2.5Y 3/2	85	7.5YR 4/4	15	C	M	silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

ATTACHMENT 5

REFERENCES

REFERENCES

Environmental Laboratory. (1987). "Corps of Engineers Wetlands Delineation Manual": *Technical Report Y-87-1*, US Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.

Gleason, Henry A. (1968). The New Britton and Brown Illustrated Flora of the Northeastern U.S. and Adjacent Canada. Hafner Publishing Company, Inc. New York. Volumes I, II, III.

Hitchcock, A.S. (1971). Manual of the Grasses of the United States. Dover Publications, Inc., New York. Volumes I and II.

Munsell Soil Color Charts. 2000 Edition Revised. MacBeth Division of Kollmorgen Corporation. Baltimore, Maryland.

Newcomb, L. (1977). Newcomb's Wildflower Guide. Little, Brown and Company. Boston, Massachusetts. 488 pp.

Petrides, George A. (1972). Trees and Shrubs. Houghton Mifflin Company. Boston, Massachusetts. 428 pp.

Reed, P.B., Jr. (1988). National List of Plant Species that Occur in Wetlands: *1988 Northeast (Region 6)*. U.S. Fish and Wildlife Service, U.S. Department of the Interior. 111 pp.

U.S. Department of Agriculture – Soil Conservation Service. (1963). *Soil Survey of Chester and Delaware Counties*.

ATTACHMENT 6

PROTECTED SPECIES SEARCH

1. PROJECT INFORMATION

Project Name: **Third Street Dam**
Date of review: **3/23/2011 2:13:09 PM**
Project Category: **In-stream / Riverine Activities and Projects,Dam or Lock,Maintenance or modification**
Project Area: **1.1** acres
County: **Delaware** Township/Municipality: **Media**
Quadrangle Name: **MEDIA** ~ ZIP Code: **19063**
Decimal Degrees: **39.920170 N, -75.396852 W**
Degrees Minutes Seconds: **39° 55' 12.6" N, -75° 23' 48.7" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	**Potential Impact**	**FURTHER REVIEW IS REQUIRED, See Agency Response**
PA Fish and Boat Commission	**Potential Impact**	**FURTHER REVIEW IS REQUIRED, See Agency Response**
U.S. Fish and Wildlife Service	**Potential Impact**	**MORE INFORMATION REQURIED, See Agency Response**

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

Note that regardless of PNDI search results, projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 or 11 in certain counties (Adams, Berks, Bucks, Carbon, Chester, Cumberland, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York) must comply with the bog turtle habitat screening requirements of the PASPGP.

RESPONSE TO QUESTION(S) ASKED

Q1: Accurately describe what is known about wetland presence in the project area or on the land parcel by selecting ONE of the following. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.
Your answer is: **4. Someone qualified to identify and delineate wetlands has investigated the site, and determined that wetlands ARE located in or within 300 feet of the project area. (A written report from the wetland specialist, and detailed project maps should document this.)**

Q2: "Will any and all on-land (non-aquatic) disturbance occur in or on an existing building, parking lot, driveway, road, road shoulder, street, runway, paved area, railroad bed, maintained (periodically mown) lawn, crop agriculture field or maintained orchard?"
Your answer is: **2. No**

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for one year** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jursidictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE: No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE: Further review of this project is necessary to resolve the potential impacts(s). Please send project information to this agency for review (see WHAT TO SEND).

DCNR Species: (Note: The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below. After desktop review, if a botanical survey is required by DCNR, we recommend the DCNR Botanical Survey Protocols, available here: http://www.gis.dcnr.state.pa.us/hgis-er/PNDI_DCNR.aspx.)
Scientific Name: Ageratina aromatica
Common Name: Small White-snakeroot
Current Status: Special Concern Species*
Proposed Status: Special Concern Species*

Scientific Name: Alopecurus aequalis
Common Name: Short-awn Foxtail
Current Status: Special Concern Species*
Proposed Status: Threatened

Scientific Name: Scleria pauciflora
Common Name: Few Flowered Nutrush
Current Status: Threatened
Proposed Status: Threatened

PA Fish and Boat Commission

RESPONSE: Further review of this project is necessary to resolve the potential impacts(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)
Scientific Name: Sensitive Species**
Common Name:
Current Status: Threatened
Proposed Status: Special Concern Species*

U.S. Fish and Wildlife Service

RESPONSE: Information Request: Conduct a "Bog Turtle Habitat Survey" (Phase 1 survey) in accordance with the U.S. Fish and Wildlife Service's (USFWS) Guidelines for Bog Turtle Surveys (April 2006 revision). The Phase 1 survey should evaluate all wetlands on the land parcel or within the project area (whichever is greater). The project area includes all areas that will be impacted by earth disturbance or project-associated features, including but not limited to, roads, water and sewer lines, utility lines, stormwater and sedimentation basins, buildings and other structures, driveways, parking lots, staging areas, yards, lawns, trails, wells, and ponds PLUS at least a 300-foot buffer around these features. Due to the skill required to correctly identify potential bog turtle habitat, the Phase 1 survey should be done by a qualified bog turtle surveyor (list available from the USFWS upon request). Send Phase 1 survey results to the USFWS for review and concurrence, and if potential bog turtle habitat is found, also send a detailed project description and detailed project plans documenting how

direct and indirect impacts to the wetlands will be avoided. If adverse effects to these wetlands cannot be avoided, further coordination/consultation with the USFWS will be necessary.

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.
** Sensitive Species - Species identified by the jurisdictinal agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, send the following information to the agency(s) seeking this information (see AGENCY CONTACT INFORMATION).

Check-list of *Minimum* Materials to be submitted:

____**SIGNED** copy of this Project Environmental Review Receipt
____Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.
____Project location information (name of USGS Quadrangle, Township/Municipality, and County)
____USGS 7.5-minute Quadrangle with project boundary clearly indicated, and quad name on the map

The inclusion of the following information may expedite the review process.
____A basic site plan(particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)
____Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)
____Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams
____The DEP permit(s) required for this project

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. For cases where a "Potential Impact" to threatened and endangered species has been identified before the application has been submitted to DEP, the application should not be submitted until the impact has been resolved. For cases where "Potential Impact" to special concern species and resources has been identified before the application has been submitted, the application should be submitted to DEP along with the PNDI receipt, a completed PNDI form and a USGS 7.5 minute quadrangle map with the project boundaries delineated on the map. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. DEP and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at http://www.naturalheritage.state.pa.us.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a **preliminary** screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI *Environmental* Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources
Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552, Harrisburg, PA. 17105-8552
Fax:(717) 772-0271

U.S. Fish and Wildlife Service
Endangered Species Section
315 South Allen Street, Suite 322, State College, PA. 16801-4851
NO Faxes Please.

PA Fish and Boat Commission
Division of Environmental Services
450 Robinson Lane, Bellefonte, PA. 16823-7437
NO Faxes Please

PA Game Commission
Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA. 17110-9797
Fax:(717) 787-6957

7. PROJECT CONTACT INFORMATION

Name: Sharon Krock
Company/Business Name: Schnabel Engineering
Address: 510 East Gay St.
City, State, Zip: West Chester, PA 19380
Phone:(610) 696-6066 Fax:(610) 696-7771
Email: skrock@schnabel-eng.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

Sharon L. Krock — applicant/project proponent signature
3/24/11 — date

3200-PM-DWW0016 6.94

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
BUREAU OF DAMS, WATERWAYS AND WETLANDS

For Department Use Only
PNDI Search #
Date

SUPPLEMENT NO. 1
PENNSYLVANIA NATURAL DIVERSITY INVENTORY SEARCH FORM

A. This Supplement No. 1 provides the site information necessary to perform a computer search for species of special concern listed under the Endangered Species Act of 1973, the Wild Resources Conservation Act, the Pennsylvania Fish and Boat Code or the Wildlife Code. Records regarding species of special concern are maintained in a computer data base called the "Pennsylvania Natural Diversity Inventory" (PNDI).

B. Complete the information below and mail to the appropriate regional office (SEE REVERSE SIDE FOR LIST OF OFFICES AND ADDRESSES).

C. **This Supplement No. 1 will be returned to you with information relevant to your project concerning species of special concern. Include it and any correspondence from appropriate agency indicating resolution with your submission of a Chapter 105 Permit Application for a Water Obstruction and Encroachment Permit and/or a Dam Permit and/or a General Permit Registration.**

D. **The absence of recorded information in the PNDI files does not necessarily imply actual conditions on the site Future field investigations could alter this determination. The information in PNDI is routinely updated. Results of this PNDI search are valid for one year.**

PROJECT LOCATION:

Delaware
County

Media Borough
Township and/or Municipality

NAME: Jane O Rowan

ADDRESS: 510 E. Gay St.
West Chester, PA 19380

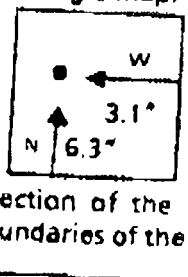
PHONE (8:00 AM TO 4:00 PM): 610-696-6066

1) Name of the United States Geological Survey (U.S.G.S.) 7½ Minute Quadrangle Map where project is located: Media

2) Project size (in acres) 0.2

3) Indicate location of approximate project center on the U.S.G.S. Quad map by measuring in inches (to nearest one-tenth) from the lower right corner of the full U.S.G.S. Quadrangle map.

- North (Up) 8.5 inches
- West (to the left) 3 inches



N: 6.3" W: 3.1"

Broomall's Lake Dam

(example, not to scale)

4) Attach an 8½" x 11" photocopy (DO NOT REDUCE) of the section of the U.S.G.S. Quadrangle Map which identifies the project location and outlines the approximate boundaries of the project.

FOR DEPARTMENT USE ONLY

☐ No known record of habitats for species of special concern has been identified in the area designated above

☐ No impact to species of special concern. (PNDI staff person _____ (initials) on _____ (date)).

☐ Potential impact to species of special concern. Written recommendations on measures necessary to resolve this matter will be provided by:

☐ Dept. of Environmental Resources
Bureau of Forestry/FAS
P.O. Box 8552
Harrisburg, PA 17105-8552
717-787-3444

☐ Mr. Andrew L. Shiels
PA Fish & Boat Commission
450 Robinson Lane
Bellefonte, PA 16823
814-359-5113

☐ Mr. Denver A. McDowell
PA Game Commission
2001 Elmerton Ave.
Harrisburg, PA 17110-9797
717-783-8743

PNDI Internet Database Search Results

PNDI Search Number: N85558
Search Results For Delaware.County@dep.state.pa.us
Search Performed By: Ed Magargee On 9/13/01 12:42:51 PM
Agency/Organization: Delaware
Phone Number: (610)892-9484
Search Parameters: Quad - 397584; North Offset - 8.5; West Offset - 3.0; Acres - 100
Project location center (Latitude): 39.92167
Project location center (Longitude): 75.39639
Project Type: DEP Permits/Obstructions/Encroachments

Print this page using your Internet browser's print function and keep it as a record of your search.

Instructions for DCNR Bureau of Forestry personnel only:
When instructed below to contact the PA Fish and Boat Commission, the US Fish and Wildlife Service or the PA Game Commission, BOF personnel should instead contact Merlin Benner (570) 724-8140, who will coordinate resolution with those agencies.
When instructed to contact Jeanne Harris, they should do so.

DEP and Conservation Districts should follow the instructions below when potential conflicts are indicated.

When details are displayed as part of the search result, the element's Scientific Name, Common Name, State Status, Proposed State Status and Number of Occurrences within the Search Area are listed.

Due to the sensitive nature of certain endangered species, species names are not displayed for species under the jurisdiction of the Pennsylvania Fish & Boat Commission and the U.S. Fish & Wildlife Service.

PNDI records indicate the following potential conflicts with ecological resources of special concern within the specified search area:

1 potential conflicts

The Applicant should FAX a cover letter including a project narrative, acreage to be impacted, how construction/maintenance activity is to be accomplished, township/municipality where project resides, USGS 7.5 minute quadrangle with project boundary marked, and quad name on the map to:

Non-Game and Endangered Species Unit Leader
Pennsylvania Fish and Boat Commission
Bureau of Fisheries and Engineering
450 Robinson Lane
Bellefonte, PA 16823
FAX number: (814) 359-5153

1 potential Land Invertebrate conflicts:

PHYCIODES BATESII - TAWNY CRESCENT - - (1)

Please Contact the following office regarding these potential conflicts:

Charles Bier
Director of Heritage Programs
Western Pennsylvania Conservancy
209 Fourth Avenue
Pittsburg, PA 15222
(412) 281-1487

Your search yielded potential conflicts with the following **Federally Listed** Species of Special Concern:

1 potential conflicts

The Applicant should FAX a cover letter including a project narrative, acreage to be impacted, how construction/maintenance activity is to be accomplished, township/municipality where project resides, USGS 7.5 minute quadrangle with project boundary marked, and quad name on the map to:

Endangered Species Biologist
U.S. Fish and Wildlife Service
315 South Allen Street, Suite 322
State College, PA 16801
FAX Number: (814) 234-0748

PNDI is a site specific information system, which describes significant natural resources of Pennsylvania. This system includes data descriptive of plant and animal species of special concern, exemplary natural communities and unique geological features. PNDI is a cooperative project of the Department of Conservation and Natural Resources, The Nature Conservancy and the Western Pennsylvania Conservancy. This response represents the most up-to-date summary of the PNDI data files and is valid for 1 year. An absence of recorded information does not necessarily imply actual conditions on-site. A field site survey may reveal previously unreported populations.

Legal authority for Pennsylvania's biological resources resides with three administrative agencies. The handout entitled Pennsylvania Biological Resource Management Agencies, outlines which species groups are managed by these agencies. Feel free to contact our office if you have questions concerning this response or the PNDI system, and please refer to the PNDI Search Number at the top of this page in future correspondence concerning this project.

New Search using inches on a Quad
New Search using Latitude and Longitude
PNDI Search Home
PNDI Search Welcome

**** THIS FORM APPLIES TO PLANTS, NATURAL COMMUNITIES, AND INSECTS ONLY ****

PA NATURAL DIVERSITY INVENTORY "POTENTIAL CONFLICT" RESPONSE FORM

PNDI SEARCH INFO

PNDI Search #	n70003
Search performed by	Monica Starr
Agency	Delaware CCD
County	Delaware
Township	Media Borough
Applicant info.	Schnabel Engineering Associates, Inc.
Project name	Broomall Lake Dam Project

BUREAU OF FORESTRY/PNDI COMMENT (s):

__X__ *NO EFFECT ANTICIPATED*
The PNDI computer screening revealed hits on species of special concern. Based on the information submitted to us concerning the site we determined that there would be no impact on the species of special concern identified during the screening.

_____ *POTENTIAL SPECIES OCCURRENCE IN PROJECT AREA*
Based on our PNDI map review we determined a potential impact to species of special concern that may or may not have been identified during the screening. The following listed species may occur within the project are:

therefore, further coordination with this office is necessary to avoid potential impacts to the above species.

_____ A survey for the species listed above should be conducted at the appropriate time of year by a qualified botanist. Survey results should be submitted to our office for review and comment. A list of qualified surveyors can be obtained by calling our office.

_____ A habitat survey should be conducted and survey results should be submitted to our office for review and comment.

_____ *SPECIES KNOWN TO OCCUR WITHIN THE PROJECT AREA*
The following listed species may occur within the project area:

therefore, further coordination with our office is necessary to avoid impacts to the above species.

Comments:

for Jeanne Brennan, DCNR/BOF/PNDI, PO Box 8552, Harrisburg, PA 17105
fax 717-772-0271 phone 717-772-0258 jbrennan@dcnr.state.pa.us

Signature: [signature] Date: 11/1

U.S. FISH AND WILDLIFE SERVICE
"POTENTIAL CONFLICT" RESPONSE FORM

This responds to your inquiry about a PNDI Internet Database search that resulted in a potential conflict with a federally listed, proposed or candidate species.

PNDI SEARCH INFORMATION

PNDI Search Number: N85558
Date of PNDI search: 9/13/01
Search performed by: ED Magargee
Agency: Delaware CCD
Fax or email: 610-696-7771

PROJECT LOCATION INFORMATION

County: Delaware
Quad: Media
Lat/Long: 39.92167 / 75.39639

PROJECT NAME/DESCRIPTION: Rehab of Broomall's Lake Dam | Road

FISH AND WILDLIFE SERVICE COMMENT(S):

✓ ***NO EFFECT***

Except for occasional transient species, no federally listed, proposed or candidate species under our jurisdiction are known to exist in the project area. Therefore, no biological assessment or further Section 7 consultation under the Endangered Species Act is required with the Service. Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered.

____ ***KNOWN OR POTENTIAL SPECIES OCCURRENCE IN PROJECT AREA***

The following federally listed, proposed or candidate species occur/may occur in the project area:

- ☐ bald eagle
- ☐ Indiana bat
- ☐ bog turtle
- ☐ e. massasauga rattlesnake
- ☐ clubshell / northern riffleshell
- ☐ dwarf wedgemussel
- ☐ small-whorled pogonia
- ☐ northeastern bulrush

therefore, further consultation or coordination with the Service is necessary prior to permit issuance or project approval (see below).

____ A *survey* for the species listed above should be conducted at the appropriate time of year by a qualified biologist. The survey protocol and a list of qualified surveyors are attached. Survey results should be submitted to the Service for review and concurrence.

____ A *survey* for the species listed above should be conducted at the appropriate time of year by a qualified biologist. A proposed survey protocol should be submitted to the Service for review and approval. Survey results should then be submitted to the Service for review and concurrence.

____ A bog turtle habitat survey (Phase 1 survey) should be conducted in accordance with the Service's *Guidelines for Bog Turtle Surveys*. Survey results should be submitted to the Service for review and concurrence.

____ Based on a review of the project information, including the size of the project area and the anticipated minor effects on forested habitat, the Service has determined that the proposed project is not likely to adversely affect the Indiana bat if the following recommendations are implemented. Removal of trees and forested areas within the project area could result in the direct take of roosting Indiana bats, which could be injured or killed when trees are cut; therefore, tree-cutting activities should be carried out from November 16 to March 31, during which time bats are hibernating. If any tree-cutting is necessary from April 1 to November 15, trees greater than or equal to 5 inches diameter breast height (d.b.h.) should not be cut or physically disturbed (e.g., while harvesting any adjacent trees) in order to avoid killing or injuring roosting Indiana bats. If these recommendations cannot be implemented, further consultation with the Service will be necessary.

____ ***ADDITIONAL PROJECT INFORMATION OR EVALUATION NEEDED***

____ Please send additional information about the *project*, including a detailed project description, site plans, and location map (7.5-minute topographic map showing the project location). Please include the PNDI Search number indicated above.

____ Please provide *photographs* of the project site showing the *habitat(s)* that may be directly or indirectly affected by the project.

____ Please provide this office with additional information about: 1) the type and quantity of *habitat(s)* that will be affected (e.g., wetland, stream, forest, old field, agricultural); and 2) the extent of *direct and indirect effects* the proposed project may have on these habitat types. Please include the PNDI Search number indicated above.

____ Please contact this office to arrange for a meeting or site visit.

This determination is valid for two years from the date of this letter. In addition, this response relates only to federally listed, proposed, and candidate species under our jurisdiction, based on an office review of the proposed project's location and anticipated impacts. No field inspection of the project area has been conducted by this office. Consequently, comments on this form are not to be construed as addressing other Service concerns under the Fish and Wildlife Coordination Act or other authorities.

If you have any questions regarding this matter, please contact the biologist indicated below at 814-234-4090, or mail the requested information to their attention (U.S. Fish and Wildlife Service, 315 South Allen Street, Suite 322, State College, PA 16801):

____ Michael Schmaus (x 238)
__✓__ Bonnie Crosby (x 234)

SIGNATURE: _____ DATE: 9/25/01

Chief, Branch of Endangered Species
Pennsylvania Field Office

FACSIMILE COVER SHEET

US Army Corps of Engineers®

Philadelphia District
Attn: CENAP-OP-R
100 Penn Square East
Philadelphia, Pennsylvania 19107-3390

FROM: Lawrence M. Slavitter

TELEPHONE #: (215) 656-6734

FAX #: (215) 656-6724

DATE: December 3, 2001

Total Number of Pages: 5 (including cover sheet)

TO: Bonnie Crosby/Jared Brandwein/Dominic Rocco/ Sharon Krock

USFWS/USFWS/PADEP/Schnabel Engineering Associates

FAX: 814-234-0748/570-894-1281/610-832-6259/610-696-7771

SUBJECT: CENAP-OP-R-200102327-39; PADOT, Broomalls Lake Dam

The undersigned performed a bog turtle screening for a site located at the base of the Third Street Dam, in the City of Media, Delaware County. The dam has formed leaks, forcing the road over the dam to be closed. The PADOT plan to rehabilitate the dam in the near future. The wetlands on the site are formed by springs on the adjacent hill, but primarily from the breaches in the adjacent dam structure. While the PNDI did show a "hit" for a species, consultation by the undersigned with the USFWS Northeastern Field Office indicates that the site is at least 3 miles from the dam structure. Based on the site inspection, the site would not be considered habitat and as such, no further action is required by this office, with regard to the turtle issue. Attached you will find a copy of a site map; the Evaluation Form, the PNDI search results and the cover letter sent by the applicant outlining the conditions of the pipeline at the site.

Should you have any additional question regarding this matter, please field free to contact me at the phone number indicated above or by e-mail at Lawrence.M.Slavitter@nap02.usace.army.mil

Larry Slavitter
Biologist
Application Section II

PNDI Internet Database Search Results

PNDI Search Number: N89504
Search Results For Lawrence.M.Slavitter@nap02.usace.army.mil
Search Performed By: Lawrence Slavitter On 12/3/01 10:23:22 AM
Agency/Organization: US Army Corps of Engineers
Phone Number: 215-656-6734
Search Parameters: Quad - 397584 - MEDIA; Acres - 640
Project location center (Latitude): 39deg. 55min. 17sec.
Project location center (Longitude): 75deg. 23min. 49sec.
Project Type: Other\COE/SPGP-2

Print this page using your Internet browser's print function and keep it as a record of your search.

Instructions for DCNR Bureau of Forestry personnel only:
When instructed below to contact the PA Fish and Boat Commission, the US Fish and Wildlife Service or the PA Game Commission, BOF personnel should instead contact Merlin Benner (570) 724-8140, who will coordinate resolution with those agencies.
When instructed to contact Jeanne Harris, they should do so.

DEP and Conservation Districts should follow the instructions below when potential conflicts are indicated.

When details are displayed as part of the search result, the element's Scientific Name, Common Name, State Status, Proposed State Status and Number of Occurrences within the Search Area are listed.

Due to the sensitive nature of certain endangered species, species names are not displayed for species under the jurisdiction of the Pennsylvania Fish & Boat Commission and the U.S. Fish & Wildlife Service.

PNDI records indicate the following potential conflicts with ecological resources of special concern within the specified search area:

1 potential conflicts

The Applicant should FAX a cover letter including a project narrative, acreage to be impacted, how construction/maintenance activity is to be accomplished, township/municipality where project resides, USGS 7.5 minute quadrangle with project boundary marked, and quad name on the map to:

Non-Game and Endangered Species Unit Leader
Pennsylvania Fish and Boat Commission
Bureau of Fisheries and Engineering
450 Robinson Lane
Bellefonte, PA 16823
FAX number: (814) 359-5153

1 potential Plant conflicts:

ALOPECURUS AEQUALIS - SHORT-AWN FOXTAIL - N - TU (1)

The person conducting this search should FAX this Receipt, Supplement #1 (if applicable), USGS Topo, and **project narrative** to:

Jeanne Harris
Department of Conservation and Natural Resources
Bureau of Forestry
P.O. Box 8552
Harrisburg, PA 17105-8552
FAX number: (717) 772-0271

2 potential Land Invertebrate conflicts:

DATANA RANAECEPS - A HAND-MAID MOTH - - (1)
PHYCIODES BATESII - TAWNY CRESCENT - - (1)

Please Contact the following office regarding these potential conflicts:

Charles Bier
Director of Heritage Programs
Western Pennsylvania Conservancy
209 Fourth Avenue
Pittsburg, PA 15222
(412) 281-1487

Your search yielded potential conflicts with the following **Federally Listed** Species of Special Concern:

1 potential conflicts

The Applicant should FAX a cover letter including a copy of the PNDI Internet Database Search Results, a project narrative, acreage to be impacted, how construction/maintenance activity is to be accomplished, township/municipality where project resides, USGS 7.5 minute quadrangle with project boundary marked, and quad name on the map to:

Endangered Species Biologist
U.S. Fish and Wildlife Service
315 South Allen Street, Suite 322
State College, PA 16801
FAX Number: (814) 234-0748

PNDI is a site specific information system, which describes significant natural resources of Pennsylvania. This system includes data descriptive of plant and animal species of special concern, exemplary natural communities and unique geological features. PNDI is a cooperative project of the Department of Conservation and Natural Resources, The Nature Conservancy and the Western Pennsylvania Conservancy. This response represents the most up-to-date summary of the PNDI data files and is valid for 1 year. An absence of recorded information does not necessarily imply actual conditions on-site. A field site survey may reveal previously unreported populations.

Legal authority for Pennsylvania's biological resources resides with three administrative agencies. The handout entitled Pennsylvania Biological Resource Management Agencies, outlines which species groups are managed by these agencies. Feel free to contact our office if you have questions concerning this response or the PNDI system, and please refer to the PNDI Search Number at the top of this page in future correspondence concerning this project.

Bog Turtle Habitat Evaluation Form (revised 5/15/01)

Project Name/Description PADOT; 3rd Street Dam
GP# ___ County Delaware Quad Media Township Media
Lat _____ Long _____ (or inches up ____, over ____)
PNDI Search No. _____ and Results for FEDERAL species: ☐ no conflict ☐ conflict
Date of field evaluation 2Aug01 Evaluator(s) Slavitter
Agency: ☒ COE (Phili/Baltimore) ☐ FWS ☐ DEP - SE/SC/NE ☐ _____ CCD

SURVEY OBSERVATIONS

Approx. air temp. 80 °F. Approx. % cloud cover 10 ☐Yes ☐No ☒Unknown - Drought conditions?
Approx. interval since last precipitation (if known): _____ days/hours
Wetland Type(s) present and % cover: ☒ PEM ___ ☒ PSS ___ ☐ PFO ___ ☐ POW ___
Approx. size of wetland (e.g., acres or __x__ feet) 1A
How much of the wetland is located within the site (property) boundaries? 100 %
How much of the wetland was investigated sufficiently to answer the questions below? 100 %
☒ Yes ☐ No Are there any signs of disturbance to *hydrology* (ditching, filling, ponds, roads)? If yes, describe Dam breaches
☐ Yes ☒ No Are there any signs of disturbance to *vegetation* (mowing, pasturing, burning)? If yes, describe Disturbed
Describe surrounding landscape (wetlands, forest, subdivision, agricultural field, fallow field, etc.):

Hydrology

☒ Yes ☐ No Springs evident?
☐ Yes ☒ No Spring houses in or adjacent to wetland?
☒ Yes ☐ No Rivulets present? If yes, average depth <1 inches.
☒ Yes ☐ No Saturated soils present? If yes, year-round? ☐ Yes ☐ No ☐ Unknown
☐ Yes ☒ No Standing/pooled water present? If yes, ave. depth ___ max ___ min ___ (inches)
☒ Yes ☐ No Evidence of flooding? If yes, describe indicators Hydrology

Soils

☒ Yes ☐ No Mucky/Muddy? If yes, one sinks about 2 inches into the muck/mud.
☐ Yes ☒ No Firm/Hard/Mineral? If yes, one sinks about ____ inches into the wet soil.
☐ Yes ☒ No Pockets of peat present? If yes, average depth ____ inches.

Vegetation [check if present (≥10% areal coverage), and also circle if prevalent (≥30% coverage)]

☐ tussock-forming sedges ☒ rushes ☐ sphagnum moss ☒ skunk cabbage ☐ cattails
☐ rice-cut grass ☐ reed canary grass ☐ red maple ☐ Phragmites ☐ purple loosestrife

Herptiles

☐ Yes ☒ No Were any bog turtles observed? If yes, how many? ____
Herptile species observed: _____

☒ Yes ☐ No **Additional comments** and/or observations are included on back of the form or attached.

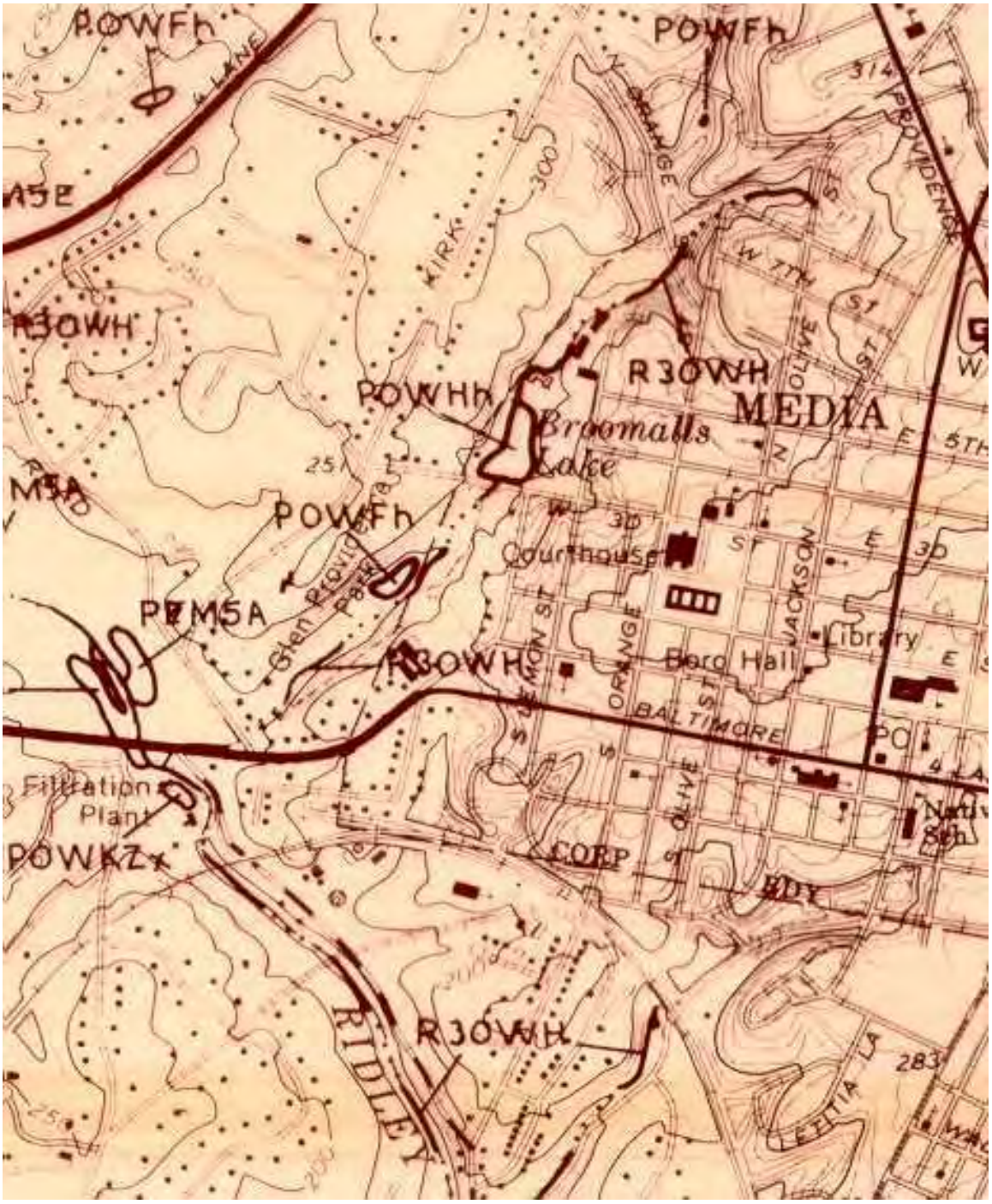
INVESTIGATOR'S DETERMINATION

☐ Yes ☒ No In the investigator's opinion, this wetland is potential bog turtle habitat.

Investigator's Signature

3 Dec 01
Date

Use copy of form for each of the following: Investigator, Fish and Wildlife Service, Applicant, ...



National Wetland Inventory Map (Media Quad)

ATTACHMENT 7

CULTURAL RESOURCE SEARCH

Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093

December 2, 2003

R. Scott Christie, P.E. Acting Director
Bureau of Design, Dept. of Transportation
P O Box 2966
Harrisburg, PA 17105

TO EXPEDITE REVIEW USE
BHP REFERENCE NUMBER

Re: ER 02-8034-045-C
COE/DOT: Proposed Third Street Dam Project,
Media Borough, Delaware County

Dear Mr. Christie:

The Bureau for Historic Preservation (the State Historic Preservation Office) has reviewed the above named project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation as revised in 1999. These requirements include consideration of the project's potential effect upon both historic and archaeological resources.

We concur with the findings of the report that the proposed project will have no adverse effect to the following National Register eligible resource: Glen Providence Park, Media, Delaware County. In addition, we concur that no additional archaeological investigations are necessary for this project area. Please submit the additional copies of the Phase I Archaeological Survey as requested in our October 15, 2003 letter.

If you need further information in this matter please consult Susan Zacher at (717) 783-9920.

Sincerely,

Kurt W. Carr, Chief
Division of Archaeology &
Protection

cc: COE, Philadelphia
KWC/smz

ATTACHMENT 8

WETLAND BOUNDARY PLAN

REV	DESCRIPTION	DATE

DELINEATED BY: SLK
DRAWN BY: MJM
CHECKED BY: JPH

SHARON L. KROCK
DATE: 5/19/2011
PENNSYLVANIA PROFESSIONAL WETLANDS SCIENTIST 1457

Schnabel ENGINEERING
510 East Goy Street
West Chester, PA 19380
Phone: 610-696-3500
Fax: 610-696-7777
schnabel-eng.com

THIRD STREET DAM/BRIDGE
DELAWARE COUNTY, PENNSYLVANIA

WETLAND BOUNDARY PLAN

PREPARED FOR: BOROUGH OF MEDIA

PROJECT: 00151134

DATE: 5/19/2011

ATTACHMENT 8