



®



®

Regulatory Program

INTERIM APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in the Interim Approved Jurisdictional Determination Form User Manual.

SECTION I: BACKGROUND INFORMATION

A. COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (AJD): March 26, 2019

B. ORM NUMBER IN APPROPRIATE FORMAT (e.g., HQ-2015-00001-SMJ): CENAP-OP-R-2011-00306-75

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Pennsylvania County/parish/borough: Delaware City: Concord Township

Center coordinates of site (lat/long in degree decimal format): Lat. 39.840816, Long. -75.543765.

Map(s)/diagram(s) of review area (including map identifying single point of entry (SPOE) watershed and/or potential jurisdictional areas where applicable) is/are: attached in report/map titled .

Other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different jurisdictional determination (JD) form. List JD form ID numbers (e.g., HQ-2015-00001-SMJ-1): .

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office (Desk) Determination Only. Date: .
 Office (Desk) and Field Determination. Office/Desktop Dates: Field Date(s): 22-Mar-2019.

SECTION II: DATA SOURCES

Check all that were used to aid in the determination and attach data/maps to this AJD form and/or references/citations in the administrative record, as appropriate.

- Maps, plans or plat submitted by or on behalf of the applicant/consultant. Title/Date: .
 Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 Data sheets/delineation report are sufficient for purposes of AJD form. Title/Date: .
 Data sheets/delineation report are not sufficient for purposes of AJD form. Summarize rationale and include information on revised data sheets/delineation report that this AJD form has relied upon:
 Revised Title/Date: .

- Data sheets prepared by the Corps. Title/Date: .
 Corps navigable waters study. Title/Date: .
 CorpsMap ORM map layers. Title/Date: .
 USGS Hydrologic Atlas. Title/Date: .
 USGS, NHD, or WBD data/maps. Title/Date: .
 USGS 8, 10 and/or 12 digit HUC maps. HUC number: .
 USGS maps. Scale & quad name and date: .
 USDA NRCS Soil Survey. Citation: .
 USFWS National Wetlands Inventory maps. Citation: .
 State/Local wetland inventory maps. Citation: .
 FEMA/FIRM maps. Citation: .

- Photographs: Aerial. Citation: . or Other. Citation: Photos 1 through 6, taken on 22-Mar-2019 (attached).
 LiDAR data/maps. Citation: .
 Previous JDs. File no. and date of JD letter: CENAP-OP-R-2011-00306-75 Concord Ventures Residential Development DE, dated May 10, 2019. CENAP-OP-R-2011-00306-75 Wolfson Verrchia Group DE, dated 19-Sep-2012, and revised 11-Oct-2012.
 Applicable/supporting case law: .
 Applicable/supporting scientific literature: .

- Other information (please specify): Applicant has a valid Preliminary Jurisdictional Determination verification, and has requested an Approved Jurisdictional Determination for pending and/or current litigation. This office conducted a site visit on 22-Mar-2019. No changes to aquatic resource boundaries were observed. All of the supporting data for the previous JDs are included here as reference.

SECTION III: SUMMARY OF FINDINGS

Complete ORM "Aquatic Resource Upload Sheet" or Export and Print the Aquatic Resource Water Droplet Screen from ORM for All Waters and Features, Regardless of Jurisdictional Status – Required

A. RIVERS AND HARBORS ACT (RHA) SECTION 10 DETERMINATION OF JURISDICTION:

- "navigable waters of the U.S." within RHA jurisdiction (as defined by 33 CFR part 329) in the review area.

- **Complete Table 1 - Required**

NOTE: If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Section 10 navigable waters list, DO NOT USE THIS FORM TO MAKE THE DETERMINATION. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Section 10 RHA navigability determination.

B. CLEAN WATER ACT (CWA) SECTION 404 DETERMINATION OF JURISDICTION: "waters of the U.S." within CWA jurisdiction (as defined by 33 CFR part 328.3) in the review area. **Check all that apply.**

- (a)(1): All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (Traditional Navigable Waters (TNWs))

- **Complete Table 1 - Required**

This AJD includes a case-specific (a)(1) TNW (Section 404 navigable-in-fact) determination on a water that has not previously been designated as such. Documentation required for this case-specific (a)(1) TNW determination is attached.

- (a)(2): All interstate waters, including interstate wetlands.

- **Complete Table 2 - Required**

- (a)(3): The territorial seas.

- **Complete Table 3 - Required**

- (a)(4): All impoundments of waters otherwise identified as waters of the U.S. under 33 CFR part 328.3.

- **Complete Table 4 - Required**

- (a)(5): All tributaries, as defined in 33 CFR part 328.3, of waters identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

- **Complete Table 5 - Required**

- (a)(6): All waters adjacent to a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

- **Complete Table 6 - Required**

- Bordering/Contiguous.

Neighboring:

- (c)(2)(i): All waters located within 100 feet of the ordinary high water mark (OHWM) of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3.

- (c)(2)(ii): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 and not more than 1,500 feet of the OHWM of such water.

- (c)(2)(iii): All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of 33 CFR part 328.3, and all waters within 1,500 feet of the OHWM of the Great Lakes.

- (a)(7): All waters identified in 33 CFR 328.3(a)(7)(i)-(v) where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

- **Complete Table 7 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(7) waters identified in the similarly situated analysis. - Required**

- Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

- (a)(8): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3 not covered by (c)(2)(ii) above and all waters located within 4,000 feet of the high tide line or OHWM of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

- **Complete Table 8 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(8) waters identified in the similarly situated analysis. - Required**

- Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

C. NON-WATERS OF THE U.S. FINDINGS:

Check all that apply.

- The review area is comprised entirely of dry land.
- Potential-(a)(7) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
 - **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(7) waters identified in the similarly situated analysis. - Required**
- Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
- Potential-(a)(8) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
 - **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(8) waters identified in the similarly situated analysis. - Required**
- Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
- Excluded Waters (Non-Waters of U.S.), even where they otherwise meet the terms of paragraphs (a)(4)-(a)(8):
 - **Complete Table 10 - Required**
 - (b)(1): Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA.
 - (b)(2): Prior converted cropland.
 - (b)(3)(i): Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
 - (b)(3)(ii): Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
 - (b)(3)(iii): Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1)-(a)(3).
 - (b)(4)(i): Artificially irrigated areas that would revert to dry land should application of water to that area cease.
 - (b)(4)(ii): Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds.
 - (b)(4)(iii): Artificial reflecting pools or swimming pools created in dry land.¹
 - (b)(4)(iv): Small ornamental waters created in dry land.¹
 - (b)(4)(v): Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water.
 - (b)(4)(vi): Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways.¹
 - (b)(4)(vii): Puddles.¹
 - (b)(5): Groundwater, including groundwater drained through subsurface drainage systems.¹
 - (b)(6): Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.¹
 - (b)(7): Wastewater recycling structures created in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.
- Other non-jurisdictional waters/features within review area that do not meet the definitions in 33 CFR 328.3 of (a)(1)-(a)(8) waters and are not excluded waters identified in (b)(1)-(b)(7).
 - **Complete Table 11 - Required.**

D. ADDITIONAL COMMENTS TO SUPPORT AJD:

¹ In many cases these excluded features will not be specifically identified on the AJD form, unless specifically requested. Corps Districts may, in case-by-case instances, choose to identify some or all of these features within the review area.

Jurisdictional Waters of the U.S.

Table 1. (a)(1) Traditional Navigable Waters

(a)(1) Waters Name	(a)(1) Criteria	Rationale to Support (a)(1) Designation Include High Tide Line or Ordinary High Water Mark indicators, when applicable.
N/A	Choose an item.	N/A

Table 2. (a)(2) Interstate Waters

(a)(2) Waters Name	Rationale to Support (a)(2) Designation
Waters #1	Waters #1 (Unnamed Tributary (UNT) to Beaver Creek) flows across the Pennsylvania/Delaware state boundary at the tract boundary, as shown on the attached map of the review area. Indicators of Ordinary High Water Mark (OHWM) include bed and banks, a break in slope, destruction of terrestrial vegetation, leaf litter disturbed or washed away, multiple observed flow events, scour, deposition, and sediment sorting. Waters #1 is also an (a)(5) Tributary, which flows into Beaver Creek outside of the review area, which flows into Brandywine Creek (an (a)(1) water), which is on the List of Navigable and Non-navigable Waters in the Philadelphia District (as Brandywine River). The Brandywine Creek flows over several small low-head dams.

Table 3. (a)(3) Territorial Seas

(a)(3) Waters Name	Rationale to Support (a)(3) Designation
N/A	N/A

Table 4. (a)(4) Impoundments

(a)(4) Waters Name	Rationale to Support (a)(4) Designation
N/A	N/A

Table 5. (a)(5)Tributaries

(a)(5) Waters Name	Flow Regime	(a)(1)-(a)(3) Water Name to which this (a)(5) Tributary Flows	Tributary Breaks	Rationale for (a)(5) Designation and Additional Discussion. Identify flowpath to (a)(1)-(a)(3) water or attach map identifying the flowpath; explain any breaks or flow through excluded/non-jurisdictional features, etc.
Waters #2	Intermittent	UNT to Beaver Creek	No	Waters #2 (UNT to Beaver Creek) flows into Waters #1 (an (a)(2) water) within the review area, which flows into Beaver Creek outside of the review area, which flows into Brandywine Creek (an (a)(1) water), which is on the List of Navigable and Non-navigable Waters in the Philadelphia District (as Brandywine River). The Brandywine Creek flows over several small low-head dams. Indicators of OHWM include bed and banks, a break in slope, destruction of terrestrial vegetation, multiple observed flow events, scour, and deposition.
Waters #3	Perennial	UNT to Beaver Creek	No	Waters #3 (UNT to Beaver Creek) flows into Waters #1 (an (a)(2) water) within the review area, which flows into Beaver Creek outside of the review area, which flows into Brandywine Creek (an (a)(1) water), which is on the List of Navigable and Non-navigable Waters in the Philadelphia District (as Brandywine River). The Brandywine Creek flows over several small low-head dams. Indicators of OHWM include bed and banks, a break in slope, a natural line impressed on the bank, destruction of terrestrial vegetation, multiple observed flow events, scour, and deposition.

Table 6. (a)(6) Adjacent Waters

(a)(6) Waters Name	(a)(1)-(a)(5) Water Name to which this Water is Adjacent	Rationale for (a)(6) Designation and Additional Discussion. Identify the type of water and how the limits of jurisdiction were established (e.g., wetland, 87 Manual/Regional Supplement); explain how the 100-year floodplain and/or the distance threshold was determined; whether this water extends beyond a threshold; explain if the water is part of a mosaic, etc.
Wetland Area #1	Waters #1	Wetland Area #1 is a palustrine forested (PFO) wetland. The limits of jurisdiction were established using the 1987 Corps of Engineers Wetland Delineation Manual and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0) (87 Manual/Regional Supplement). Wetland Area #1 abuts the OHWM of Waters #1 within the review area.

(a)(6) Waters Name	(a)(1)-(a)(5) Water Name to which this Water is Adjacent	Rationale for (a)(6) Designation and Additional Discussion. Identify the type of water and how the limits of jurisdiction were established (e.g., wetland, 87 Manual/Regional Supplement); explain how the 100-year floodplain and/or the distance threshold was determined; whether this water extends beyond a threshold; explain if the water is part of a mosaic, etc.
Wetland Area #2	Waters #1	Wetland Area #2 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #2 abuts the OHWM of Waters #1 within the review area.
Wetland Area #3	Waters #1	Wetland Area #3 is a palustrine scrub-shrub (PSS) wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #3 abuts the OHWM of Waters #1 within the review area.
Wetland Area #4	Waters #1	Wetland Area #4 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #4 abuts the OHWM of Waters #1 within the review area.
Wetland Area #5	Waters #1, Waters #2 and Waters #3	Wetland Area #5 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #5 abuts the OHWM of Waters #1, Waters #2 and Waters #3 within the review area.
Wetland Area #6	Waters #1	Wetland Area #6 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #6 abuts the OHWM of Waters #1 within the review area.
Wetland Area #7	Waters #3	Wetland Area #7 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #7 abuts the OHWM of Waters #3 within the review area.
Wetland Area #8	Waters #3	Wetland Area #8 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #8 abuts the OHWM of Waters #3 within the review area.
Wetland Area #9	Waters #1 and Waters #3	Wetland Area #9 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #9 abuts the OHWM of Waters #1 and Waters #3 within the review area.
Wetland Area #10	Waters #1	Wetland Area #10 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #10 abuts the OHWM of Waters #1 within the review area.
Wetland Area #11	Waters #1	Wetland Area #11 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #11 abuts the OHWM of Waters #1 within the review area.
Wetland Area #12	Waters #1	Wetland Area #12 is a PFO wetland. The limits of jurisdiction were established using the 87 Manual/Regional Supplement. Wetland Area #12 abuts the OHWM of Waters #1 within the review area.

Table 7. (a)(7) Waters

SPOE Name	(a)(7) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; discuss whether any similarly situated waters were present and aggregated for SND; discuss data, provide analysis, and summarize how the waters have more than speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A	N/A	N/A	N/A

Table 8. (a)(8) Waters

SPOE Name	(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to subject water and aggregated for SND; discuss data, provide analysis, and then summarize how the waters have more than speculative or insubstantial effect the on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A	N/A	N/A	N/A

Non-Jurisdictional Waters

Table 9. Non-Waters/No Significant Nexus

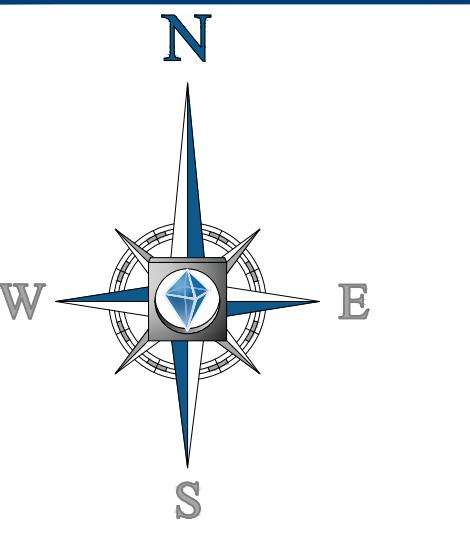
SPOE Name	Non-(a)(7)/(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water DOES NOT have a Significant Nexus	Basis for Determination that the Functions DO NOT Contribute Significantly to the Chemical, Physical, or Biological Integrity of the (a)(1)-(a)(3) Water. Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to the subject water; discuss data, provide analysis, and summarize how the waters did not have more than a speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water.
N/A	N/A	N/A	N/A

Table 10. Non-Waters/Excluded Waters and Features

Paragraph (b) Excluded Feature/Water Name	Rationale for Paragraph (b) Excluded Feature/Water and Additional Discussion.
N/A	N/A

Table 11. Non-Waters/Other

Other Non-Waters of U.S. Feature/Water Name	Rationale for Non-Waters of U.S. Feature/Water and Additional Discussion.
N/A	N/A



KEY MAP

SCALE: 1" = 600'

*WETLAND Area #1:
244 s.f. (0.006 Ac.)
(39°50'25"N 75°32'21"W)*

*WETLAND Area #2:
2,373 s.f. (0.054 Ac.)
(39°50'26"N 75°32'23"W)*

*WETLAND Area #3:
6,148 s.f. (0.141 Ac.)
(39°50'25"N 75°32'28"W)*

*WETLAND Area #4:
13,965 s.f. (0.321 Ac.)
(39°50'25"N 75°32'33"W)*

*WETLAND Area #5:
107,340 s.f. (2.464 Ac.)
(39°50'25"N 75°32'44"W)*

*WETLAND Area #6:
321 s.f. (0.007 Ac.)
(39°50'25"N 75°32'30"W)*

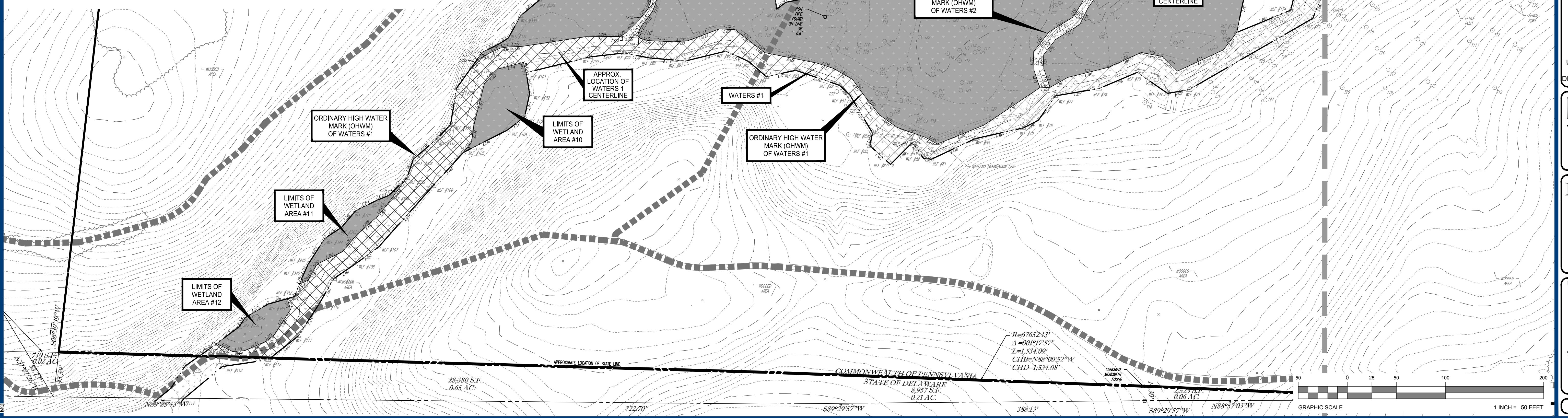
*WETLAND Area #7:
3,951 s.f. (0.091 Ac.)
(39°50'29"N 75°32'45"W)*

WATERS #1:
51,958 s.f. (1.193 Ac.)
3,155 L.F.

WATERS #2:
2,570 s.f. (0.059 Ac.)
291 L.F.

WATERS #3:
4,976 s.f. (0.114 Ac.)
450 L.F.

TOTAL WATERS Area:
59,504 s.f. (1.366 Ac.)



DRAWING LEGEND

TRACT BOUNDARY

EXISTING MONUMENT

EXISTING NAIL / SPIKE / POST

— — — EXISTING CONTOUR W/ELEVATION

~~~~~ EXISTING TREE LINE

~~~~~ EXISTING BRUSH LINE

———— EXISTING FLOODPLAIN BOUNDARY

3 EXISTING GRADE

== = EXISTING STORM SEWER

———— EXISTING GAS LINE

———— EXISTING WATER LINE

———— EXISTING ELECTRIC LINE

———— EXISTING TELEPHONE LINE

———— EXISTING OVERHEAD LINE

 EXISTING WETLANDS

 EXISTING WATERS

REVISIONS

**FOR EXHIBIT
PURPOSES ONLY**

BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10
WORKING DAYS IN DESIGN
STAGE - STOP CALL

IT No.: J140618
BY: MG
D BY: BC

PLANNED RESIDENTIAL DEVELOPMENT PLAN

**FOR
CONCORD
CENTURES L.P.
PROPOSED
RESIDENTIAL
DEVELOPMENT
ROUTE 202 & WATKIN AVENUE
CONCORD TOWNSHIP**

The logo for Bohler Engineering features the company name "BOHLER" in large, bold, blue capital letters at the top. Below it, the word "ENGINEERING" is written in a smaller, grey, sans-serif font.

J. CROWDER
PROFESSIONAL ENGINEER

10 of 10

IOLOGICAL SSESSMENT PLAN - A

NUMBER: _____

2
OF 4

REVISION 0 - 02/19/2018

REVISION 3 - 02/10/2010

