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Regulatory Program



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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): APR 30 2019

B. ORM NUMBER IN APPROPRIATE FORMAT (e.g., HQ-2015-00001-SMJ): CENAP-OP-R-2018-00913-75 River Station Mixed-Use Redevelopment - Phase 2

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Pennsylvania

County/parish/borough: Chester

City: Downingtown Borough and

East Caln Township

Center coordinates of site (lat/long in degree decimal format): Lat. 40.000608, Long. -75.704513.

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/Desk Dates: 01-Nov-2018, 21-Dec-2018, and 08-Feb-2019 Field Date(s): 05-Dec-2018 and 20-Feb-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, plots or plat submitted by or on behalf of the applicant/consultant. Title/Date: "Preliminary/Final Plan Phase 2 Wetland/Waters Delineation", sheets 1 through 3 of 3, dated October 2, 2017, prepared by Edward B. Walsh & Associates, Inc, and last revised April 15, 2019.

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: "Wetlands / Waters Delineation Report for River Station Mixed-Use Redevelopment", dated July 11, 2018, prepared for Brandywine Station, LLC, and prepared by Marathon Engineering & Environmental Consulting, LLC.

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: 1" = 2,000', Downingtown PA and Unionville PA, 2016; AND Historic Aerials, 1910.

USDA NRCS Soil Survey. Citation: NRCS Web Soil Survey, 8/5/2017.

USFWS National Wetlands Inventory maps. Citation: USFWS National Wetlands Inventory Mapper, 8/15/2017.

State/Local wetland inventory maps. Citation:

FEMA/FIRM maps. Citation: FEMA Flood Insurance Rate Maps 42029C0145G and 42029C0200G, 9/29/2017.

Photographs: Aerial. Citation: DVRPC, 2015; Google Earth, May 2016; Penn Pilot, 1971, 1958, 1937; AND Historic Aerials, 1968. or Other. Citation: Photos 1 through 17, April 2017; AND Photos 1 through 22, April 2017.

LiDAR data/maps. Citation:

Previous JDs. File no. and date of JD letter:

Applicable/supporting case law:

Applicable/supporting scientific literature:

Other information (please specify): "Pennsylvania Department of Environmental Protection Chapter 105 Joint Permit Application for River Station Mixed-Use Redevelopment - Phase 2", dated July 17, 2018, prepared for Brandywine Station, LLC, and prepared by Marathon Engineering & Environmental Consulting, LLC; PADEP NPDES Industrial Waster Permit No. PA0012815 Cancellation Letter; Field MFR 05-Dec-2018;

"Downingtown Paper Company Chester County, Pa. Sanitary Plot Plan Industrial Waste Treatment", Drawing Number D-25228-2, dated 7-15-59 and last revised 7-29-59, and prepared by Gilbert Associates Inc;

"Site Layout Map", Figure 3, dated April 29, 2008 (unrevised), and prepared by Environmental Standards;

"Downingtown Line Drawing and Water Balance, NPDES Number PA 0012815", undated;

additional information, dated January 31, 2019;

Field MFR 20-Feb-2019; and

additional information, dated March 11, 2019.

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

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.

- (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: None at this time.

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
N/A	N/A

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.
Aquatic Resource R001 Former Mill Raceway / Channel	Perennial	Brandywine Creek	Yes	The former mill raceway flows into the East Branch of Brandywine Creek outside of the review area, which flows into the Brandywine Creek (an (a)(2) Interstate Water and an (a)(1) Traditional Navigable Water), which flows across the Pennsylvania/Delaware state boundary and 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 abrupt change in plant community, sediment sorting, bed and banks, and destruction of terrestrial vegetation.
Aquatic Resource R004 East Branch of Brandywine Creek / Channel	Perennial	Brandywine Creek	Yes	The East Branch of Brandywine Creek flows into the Brandywine Creek (an (a)(2) Interstate Water and an (a)(1) Traditional Navigable Water) outside of the review area, which flows across the Pennsylvania/Delaware state boundary and 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 abrupt change in plant community, break in slope, sediment sorting, bed and banks, destruction of terrestrial vegetation, and multiple observed or predicted flow events.

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.
N/A	N/A	N/A

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

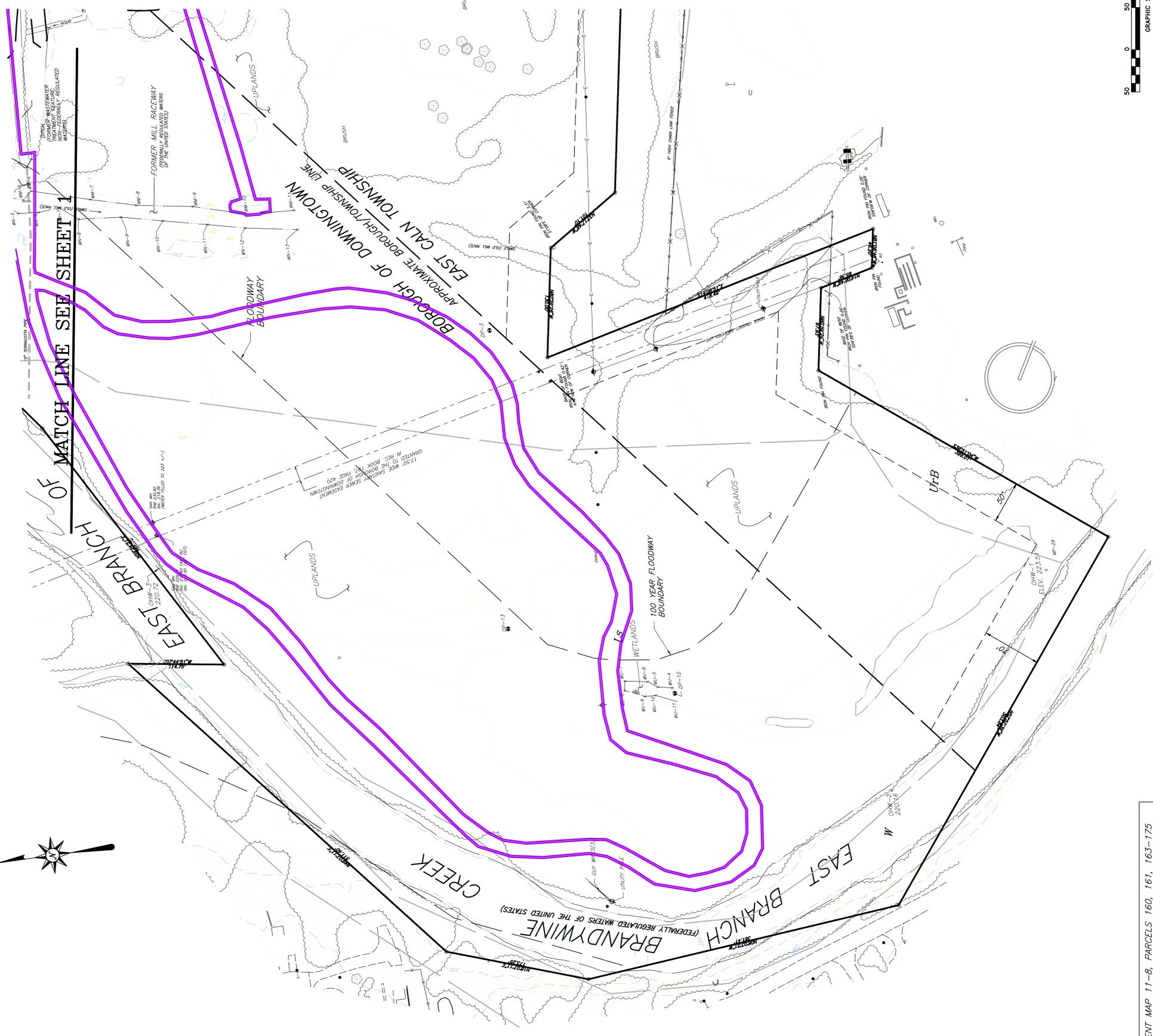
SPOE Name	Non-(a)(7)/(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water DOES NOT have a Significant Nexus	Basis for Determination that the Functions DO NOT Contribute Significantly to the Chemical, Physical, or Biological Integrity of the (a)(1)-(a)(3) Water. Identify SPOE watershed; explain 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.
Two concrete-lined basins, four former wastewater treatment lagoons, and associated drainage features	Sludge settling basins and earthen surface impoundments (i.e., concrete-lined basins and former wastewater treatment lagoons, respectively) were constructed in uplands to handle wastewater in the manufacture of paper products. A wastewater treatment plant was added later to treat process water prior to discharge to the East Branch of Brandywine Creek. Structures associated with wastewater treatment included the two concrete-lined basins and four former wastewater treatment lagoons, as well as pipes and ditches. The wastewater treatment plant operated under a NPDES Industrial Waste Permit (PA0012815). As such, these features/waters are excluded from the definition of waters of the United States under (b)(1).
Aquatic Resource R003 Stormwater Ditch / Channel	The ditch was constructed in uplands and exhibits ephemeral and intermittent flow. Stormwater runoff (ephemeral flow) represents the majority of hydrologic input to the ditch. Evidence of seasonal flow (intermittent flow) was observed in April 2017 and December 2018, along with observations of dry channel conditions during the summer months. In addition, groundwater elevations measured in monitoring wells in close proximity to the ditch were similar to the channel bottom elevations near the monitoring wells. Historic aerial photographs and other documents / resources indicate that the ditch was man-made and that it was not constructed in a tributary, nor was it part of a relocated tributary. In addition, no offsite wetlands were found to drain to the ditch. As such, the ditch is excluded from the definition of waters of the United States under (b)(3)(ii).

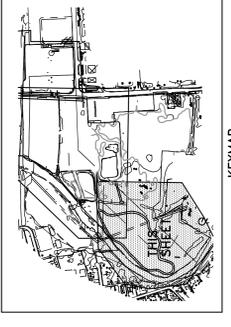
Table 11. Non-Waters/Other

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



ORDINARY HIGH WATER MARKS

POINT	ELEVATION
OHW 2	220.16
OHW 3	220.72
OHW 4	222.26
OHW 5	224.58
OHW 6	224.42
OHW 7	224.68



KEYMAP
1"=800'

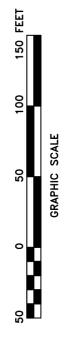
LEGEND

---	EXISTING INDEX CONTOUR
---	EXISTING INTERIOR CONTOUR
---	EXISTING INLET
---	EXISTING STORM SEWER PIPE
---	EXISTING STORM MANHOLE
○	WELL
●	EXISTING SANITARY MANHOLE
●	EXISTING SANITARY SEWER PIPE
---	EXISTING GAS LINE
---	EXISTING ELECTRIC LINE
---	EXISTING WATER LINE
---	SOILS LINE
---	FLOODWAY BOUNDARY
---	CALCULATED 100 YEAR BOUNDARY
---	WETLAND BOUNDARY
---	EDGE OF WATER
---	EXISTING FENCE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING CURB
---	EXISTING TIE/LINE
---	EXISTING BUILDING
---	EXISTING RAILROAD TRACKS
---	LIGHT POLE & FIXTURE
---	EXISTING SIGN
○	WATER METER
○	WATER VALVE
○	EXISTING D-W ENDWALL
○	EXISTING ENDWALL
---	DP--XX
---	OHW--XX
---	WV--XX
---	WETLANDS/WATERS DELINEATION
---	ORDINARY HIGH WATER POINT
---	WETLANDS/WATERS BOUNDARY
---	PHASE 2 BOUNDARY (PROJECT STUDY AREA)

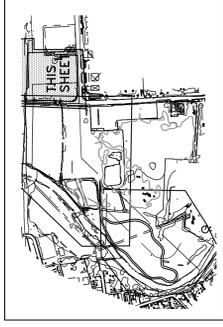
SOILS CLASSIFICATION
 Th - THORNDALE SILT LOAM
 Urb - URBAN LAND, 0 TO 8 PERCENT SLOPES

PRELIMINARY/FINAL PLAN
 PHASE 2
 WETLAND/WATERS DELINEATION

LAND DEVELOPMENT PLAN
 OF
RIVER STATION
 DOWNINGTOWN BOROUGH/EAST GAIN TOWNSHIP
 CHESTER COUNTY, PA.
 Edward B. Walsh & Associates, Inc.
 CIVIL ENGINEERS & SURVEYORS
 12000 State Street
 Easton, Pennsylvania 18041
 Phone (610) 903-0060
 Fax (610) 903-0060
 Project: 3198
 Date: 10-2-17
 Scale: 1"= 50'
 Drawn: SIM
 Checked: AIB
 Sheet: 2 OF 3
 PWS: E:\NEW\3198\PCS\3198-922.dwg Ver: 000



ASSESSMENT MAP 11-8, PARCELS 160, 161, 163-175
 UPI #11-8-160, 161, 163-175
 ASSESSMENT MAP 40-3, PARCEL 4.5 (UPI NO. 40-3-4.5)



KEYMAP
1"=600'

LEGEND	
---	EXISTING INDEX CONTOUR
.....	EXISTING INTERIOR CONTOUR
---	EXISTING INLET
---	EXISTING STORM SEWER PIPE
---	EXISTING STORM MANHOLE
○	WELL
●	EXISTING SANITARY MANHOLE
●	EXISTING SANITARY SEWER PIPE
○	EXISTING GAS LINE
---	EXISTING ELECTRIC LINE
---	EXISTING WATER LINE
---	SOILS LINE
---	FLOODWAY BOUNDARY
---	CALCULATED 100 YEAR BOUNDARY
---	WETLAND BOUNDARY
---	EDGE OF WATER
---	EXISTING FENCE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING CURB
---	EXISTING TIELINE
---	EXISTING BUILDING
---	EXISTING RAILROAD TRACKS
---	LIGHT POLE & FIXTURE
---	EXISTING SIGN
○	WATER METER
○	WATER VALVE
○	EXISTING D-W ENDWALL
○	EXISTING ENDWALL
DP--XX	WETLAND/WATERS DELINEATION
OW--XX	ORDINARY HIGH WATER POINT
WY--XX	WETLANDS/WATERS BOUNDARY
---	PHASE 2 BOUNDARY (PROJECT STUDY AREA)

SOILS CLASSIFICATION

Th - THORNDALE SILT LOAM
Urb - URBAN LAND, 0 TO 8 PERCENT SLOPES

PRELIMINARY/FINAL PLAN
PHASE 2
WETLAND/WATERS DELINEATION

LAND DEVELOPMENT PLAN
OF

RIVER STATION

EDWARD B. WALSH & ASSOCIATES, INC.

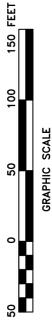
CHESTER COUNTY, PA.
DOWNTOWN BOROUGH/EAST GLEN TOWNSHIP

Project-- 3198
Date-- 10-2-17
Scale-- 1"= 50'

Drawn-- SIM
Checked-- AJB

Station, Pennsylvania 19341
Phone (610) 303-0060
Fax (610) 303-0060

Sheet-- 3 OF 3
Printed: 3/27/2019
PWS: E:\NEW\3198\PCS\3198-022.dwg



GRAPHIC SCALE

ASSESSMENT MAP 11-8, PARCELS 160, 161, 163-175
UPI #11-8-160, 161, 163-175
ASSESSMENT MAP 40-3, PARCEL 4.5 (UPI NO. 40-3-4.5)