

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

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): February 7, 2020

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENAP-OP-R-2019-1168-24
Springbrooke Boulevard Lot 3 Nolen Investments LLC 0 Dutton Mill Road DE

C. PROJECT LOCATION AND BACKGROUND INFORMATION: 36.592 acres, 0 Dutton Mill Road, north side of Springbrooke Boulevard, west side of Pennell Road (SR 452), approximately 0.7 mile north of U.S. Route 322, identified as Tax Parcel 02000037700.

State: Pennsylvania County/parish/borough: Delaware City: Aston Township
Center coordinates of site (lat/long in degree decimal format): Lat. 39.854249° **N**, Long. -75.429883° **W**.
Universal Transverse Mercator:

Name of nearest waterbody: Baldwin Run

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Chester Creek (via Baldwin Run)

Name of watershed or Hydrologic Unit Code (HUC): 02040202

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date:
 Field Determination. Date(s): 17 January 2020

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: Area 3 798.55 linear feet: 12 width (ft) and/or 0.28 acres.

Wetlands: Areas 3, 4 and 5, 0.556 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): Varies (approximately 136 to 126 feet going downstream on property).

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: **Areas 1 and 2, two wetlands with ephemeral water course. Wetlands 0.17 acre (two areas), with a 380-foot long ephemeral water course. No surface tributary connection to nearest stream, approximately 1,000 feet away.**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: N/A.

Summarize rationale supporting determination: N/A.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: N/A.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **acres**
Drainage area: **acres**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: .
Tributary stream order, if known: .

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:** Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

- Average width: feet
Average depth: feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: | |
| <input type="checkbox"/> Other. Explain: | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: Pick List

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: Pick List

Estimate average number of flow events in review area/year: Pick List

Describe flow regime:

Other information on duration and volume:

Surface flow is: Pick List. Characteristics:

Subsurface flow: Pick List. Explain findings:

- Dye (or other) test performed:

Tributary has (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Bed and banks | |
| <input type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain:

Identify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain:

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. Explain:
 - Ecological connection. Explain:
 - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres) Directly abuts? (Y/N) Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributary to Baldwin Run (Area 3).
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: **(0.28 acre) 798.55** linear feet **12** width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
- Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Area 3, 0.44 acre, abutting/contiguous.**
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: **0.44** acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **Areas 4 and 5, total 0.116** acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.**

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): **(0.06 acre) 379.29** linear feet, **6** width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 0.17 acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Plan prepared by Plan prepared by GHD; one sheet, Job Number 11201957; dated Oct 14, 2019; last revised 1-20-2020; entitled "SPRINGBROOKE BLVD LOT 3 WETLAND LOCATION MAP TRAMMELL CROW ...".
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Marcus Hook, 1:24,000.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Chester/Delaware Counties, Sheets 56 and 66.
- National wetlands inventory map(s). Cite name: U.S. FWS web site.
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Google Earth, various dates.
or Other (Name & Date): Agent report, ground photos Aug, Oct. 2019; Corps ground photos 17 Jan 2020.
- Previous determination(s). File no. and date of response letter: CENAP-OP-R-2001-0082-24, 18 March 2002.
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: See CENAP-OP-R Memorandum for Record dated 21 Jan 2020 (documenting site inspection of 17 Jan 2020), and SWANCC Information Sheet with supporting information.

Enclosure 1

Regulatory Action Type	Size	Cowardin	HGM	Geometry	Local Waterway
Regulatory Action Folder					
2019-1168 Baldwin Run (RAPANOS \ RPW)	.28 acre	R3	RIVERINE	Line	Baldwin Run
2019-1168 Wetland Area 3 (RAPANOS \ RPWWD)	.44 acre	PFO		Polygon	Baldwin Run
2019-1168 Wetland Area 4 (RAPANOS \ RPWWN)	.006 acre	PEM		Polygon	Baldwin Run
2019-1168 Wetland Area 5 (RAPANOS \ RPWWN)	.11 acre	PEM		Polygon	Baldwin Run
2019-1168 Isolated Wetland Area 1 (RAPANOS \ ISOLATE)	.09 acre	PFO		Polygon	Baldwin Run
2019-1168 Isolated Wetland Area 2 (RAPANOS \ ISOLATE)	.08 acre	PFO		Polygon	Baldwin Run
2019-1168 Isolated Water (RAPANOS \ ISOLATE)	.06 acre	R6		Line	Baldwin Run

INFORMATION SHEET
 DETERMINATIONS OF NO JURISDICTION FOR ISOLATED, NON-NAVIGABLE, INTRA-STATE WATERS RESULTING
 FROM U.S. SUPREME COURT DECISION IN SOLID WASTE AGENCY OF NORTHERN COOK COUNTY
 V. U.S. ARMY CORPS OF ENGINEERS

DISTRICT OFFICE: Philadelphia

FILE NUMBER: CENAP-OP-R-2019-01168-24

REGULATORY PROJECT MANAGER: James Boyer, Ph.D. Date: February 7, 2020

PROJECT REVIEW/DETERMINATION COMPLETED: In the office N (Y/N) Date: _____
 At the project site Y (Y/N) Date: 17-JAN-2020

PROJECT LOCATION INFORMATION:

State: Pennsylvania

County: Delaware

Center coordinates of site by latitude & longitudinal coordinates: 39.854249° / -75.429883°

Approximate size of site/property (including uplands & in acres): 36.592

Name of waterway or watershed: Baldwin Run

SITE CONDITIONS:

Type of aquatic resource ¹	0-1 ac	1-3 ac	3-5 ac	5-10 ac	10-25 ac	25-50 ac	> 50 ac	Linear feet	Unknown
Lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
River	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stream	<input checked="" type="checkbox"/>	<input type="checkbox"/>							
Dry Wash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mudflat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sandflat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>							
Slough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prairie pothole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wet meadow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Playa lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vernal pool	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural pond	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other water (identify type)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹Check appropriate boxes that best describe type of isolated, non-navigable, intra-state water present and best estimate for size of non-jurisdictional aquatic resource area.

Migratory Bird Rule Factors ¹ :	If Known		If Unknown Use Best Professional Judgment		
	Yes	No	Predicted to Occur	Not Expected to Occur	Not Able To Make Determination
Is or would be used as habitat for birds protected by Migratory Bird Treaties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is or would be used as habitat by other migratory birds that cross state lines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is or would be used as habitat for endangered species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is used to irrigate crops sold in interstate commerce?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

¹Check appropriate boxes that best describe potential for applicability of the Migratory Bird Rule to apply to onsite, non-jurisdictional, isolated, non-navigable, intra-state aquatic resource area.

TYPE OF DETERMINATION: Preliminary Or Approved

ADDITIONAL INFORMATION SUPPORTING NJD (e.g., paragraph 1 – site conditions; paragraphs 2-3 – rationale used to determine NJD, including information reviewed to assess potential navigation or interstate commerce connections; and paragraph 4 – site information on waters of the U.S. occurring onsite):

SITE CONDITIONS

1. Background Information:

The property is located on the north side of Springbrooke Boulevard, and on the west side of Pennell Road (State Route 452), approximately 0.7 mile north of U.S. Route 322, in Aston Township, Delaware County, Pennsylvania. The 36.5-acre property (Lot 3) is a portion of a former 58-acre property, which was the subject of a prior jurisdictional determination (JD), which included a SWANCC determination, dated March 18, 2002, with a site inspection June 29, 2001 (CENAP-OP-R-2001-0082). The property was formerly used by Sun Oil Company as a gun club (“Mercury Gun Club”). The center of the property is situated on a ridge that divides two watersheds: the east side drains to Chester Creek, via Baldwin Run; and the west side drains toward Marcus Hook Creek. Both creeks flow separately into the Delaware River.

The overall (58-acre) property has been the subject of several prior permit actions by PADEP (with PA-SPGPs attached), including bog turtle screenings by the Corps, associated with a proposed residential development: CENAP-OP-R-2001-1362 (PA-SPGP-1), 2002-621 (bog turtle screen), 2002-2411 (PA-SPGP-2), 2006-171 (PA-SPGP-2), and 2006-6310 (bog turtle screen). Some of the authorized work has occurred, and some has not, with permits expired. Wetland mitigation has been constructed as required by PADEP (outside the lot for this JD), despite that previously authorized wetland impact not being done yet. According to the consultant’s 2019 report, plans for the residential development were put on hold in 2016.

2. Field Observations:

On 17 January 2020, the undersigned conducted a site inspection together with the applicant’s consultant, who had delineated various waters and wetlands on the property. Approximately half of the property has been disturbed from prior soil remediation activities, while the rest remains mainly forested. All delineated wetland boundaries were accurate as flagged in the field and shown on the survey plan. The consultant had divided the delineated features into 5 areas. Except for Areas 4 and 5, as noted below, the delineated waters and wetlands on this property were the same as noted in the previous JD noted above.

As identified on the survey plan provided by the applicant’s agent, delineated wetlands (and waters) shown as Areas 1 and 2 (0.23 acre total wetlands and water course), in the western portion of the site, are the same as in the prior (2001) delineation and (2002) JD referenced above. These areas consist of two small wetlands, separated by a berm that was formerly part of a rifle range. Notes from the previous (2001) inspection indicate a pipe connecting the two wetlands. Both wetlands are forested, and one of the two wetlands drains by means of a small ephemeral water course, which flows down a slope until it comes to a berm next to a townhouse development, where concentrated flow ends with no direct connection to any other water course or water body. The channel was dry at the time of the previous inspection, and also at the time of the current inspection; although there is evidence that water from storm events may pond at the base of the slope along the berm at times. The ephemeral channel did not appear to have an obvious, continuous ordinary high water mark. As part of the prior JD, these wetlands and the water course were determined to be isolated and not part of any surface tributary system to Waters of the U.S. They are approximately 1,000 feet from Marcus Hook Creek.

Area 3 (0.72 acre total waters and wetlands), in the eastern part of the site, consists of an unnamed tributary to Baldwin Run, known locally as Dutton Run, within the Chester Creek watershed. The stream flows from northwest to southeast along the eastern border of Lot 3. There are abutting/contiguous wetlands along the stream. These wetlands are primarily forested, and mainly situated within the small flood plain of the creek (there is no formal delineated flood plain). The stream appears to have perennial flow (as also noted during the 2001 inspection). As such, it is “Relatively Permanent Waters” (RPW).

Two new areas of wetlands were delineated by the consultant on the eastern side of the property. They were situated within a sewer line right-of-way along the western side of the stream (RPW) described above (identified as Areas 4 and 5 on the survey plan, total 0.116 acre). These wetlands were not delineated previously. The sewer line appears to have been in place for a number of years. It is shown on the 2001

wetland survey from the previous JD. As such, even though the wetlands may have been formed as a result of grading for the sewer line, that condition represents normal circumstances. Neither of these two wetlands are contiguous with the stream channel noted above. However, they are within approximately 30 feet of the ordinary high water mark (OHWM) of the stream channel, and there is only an upland break of a few feet between these wetlands in the cleared sewer line and the forested wetlands that are contiguous with the stream.

3. Recommendation as to Adjacency:

As noted above, the tributary to Baldwin Run in the eastern part of the property is an RPW. As such, the stream is a Water of the U.S. The abutting/contiguous wetlands along the stream corridor are adjacent, and also federally regulated as Waters of the U.S. As such, no further discussion of adjacency is necessary for this area (i.e. the consultant's Area 3).

Based on their proximity to the tributary (RPW) referenced above (within approximately 30 feet), the two small wetland areas in the sewer line right-of-way (Areas 4 and 5) are neighboring to an RPW. As per 2008 joint Corps-EPA guidance, they are close enough in proximity to infer that they have an ecological interconnection with the adjacent tidally-flowed channel and wetland system. Therefore, these wetlands are adjacent to the RPW, and they are federally regulated as Waters of the U.S.

The wetlands of Areas 1 and 2 are near the top of a slope, close to the divide between watersheds. They are separated from Marcus Hook Creek, to the southwest, by approximately 1,000 feet, as well as about 40-50 feet in elevation. From old topographic maps, aerial photos and the 1960's mapping and photography in the county soil survey, no evidence was observed supporting a current or previous connection by these wetlands to Marcus Hook Creek or any other waterways. The ephemeral water course has no surface tributary connection to jurisdictional waters.

The wetlands and waters of Areas 1 and 2 are not part of a surface tributary system to waters of the U.S. Prior to the down-slope residential development, and construction of the small berm that interrupts surface flow down the slope, the USGS topographic map shows that the area would have drained toward Marcus Hook Creek. The soil survey, however, does not show a continuous historic link with the creek, either by channel or hydric soil. It is likely that the ephemeral channel disappeared as the slope flattened out, even without the berm.

These forested wetlands have no obvious hydrologic connection to Marcus Hook Creek, and they have no obvious habitat interrelationship. Based on the large intervening distance, they are not "reasonably close" enough in proximity, as per 2008 joint Corps-EPA guidance, to infer that they have an ecological interconnection with jurisdictional waters.

Nothing has occurred since the prior (2002) JD that would change the prior determination for these two areas in regard to adjacency. These wetlands (and the ephemeral water course) have been determined to be isolated, and not adjacent to Crooked Creek, based on: a) the distance from jurisdictional waters (Marcus Hook Creek), approximately 1,000 feet to the southwest; b) the intervening natural uplands lying between them with no evidence of a continuous surface tributary connection prior to development that has occurred; and c) the complete lack of any hydrologic or habitat inter-relationships between them and the jurisdictional waters.

4. Navigation:

There are no navigable waters, including tidally flowed waters, on or adjacent to the property. The tributary to Baldwin Run (Dutton Run) joins Baldwin Run approximately 0.5 mile downstream of the subject property. Baldwin Run flows into Chester Creek about 2 miles farther downstream. The confluence of Chester Creek with the Delaware River is about 4 miles below that. Chester Creek is subject to the ebb and flow of the tide for roughly a mile above the Delaware River.

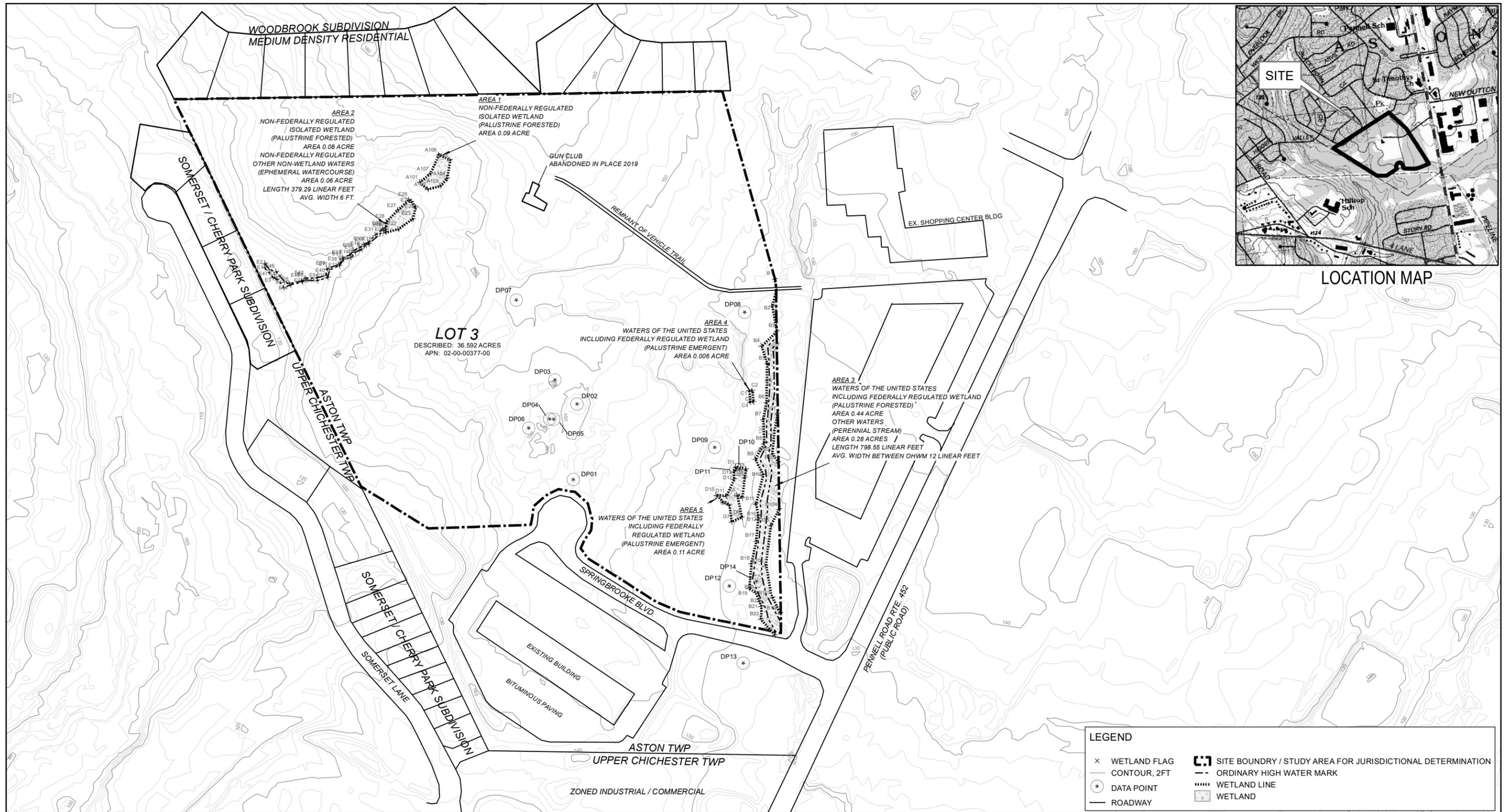
5. Nexus to Interstate Commerce:

Based upon observations during the site inspection:

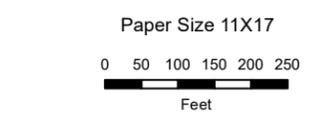
- a. None of the isolated wetlands and waters (i.e. Areas 1 and 2) contain fish or shellfish, as they do not have standing or flowing water during normal conditions. As such, it is unlikely that fish or shellfish would be taken from any of the isolated wetlands and waters. In the past, this property included a gun club associated with Sunoco, who has a nearby tank farm. There was a shooting range on the property at one time. That use has discontinued. Recreational use, including hunting or fishing, within this private property, surrounded by residential and commercial properties, would not be expected.
- b. There is no industrial or commercial use of the isolated wetlands and waters, nor is there reasonable expectation for such a use to develop given the nature of the area, which is proposed for residential development.
- c. There is no use of the isolated wetlands and waters for irrigation of crops; nor is there a reasonable expectation of exploiting them for the production of timber or fiber products.
- d. There are no known uses of the property for educational or scientific purposes that would generate expenditures across state lines.

6. Recommended Finding:

- a. The unnamed tributary to Baldwin Run (known locally as Dutton Run) is a perennial water course. As such, it is a “relatively permanent water” (RPW), within the Chester Creek watershed, in the Delaware River Basin. Chester Creek is tidally-influenced near its mouth at the Delaware River. As such, the on-site RPW tributary flows directly into a navigable water of the U.S., and the waterway and abutting/contiguous wetlands, which together make up Area 3, are regulated as Waters of the U.S.
- b. The two small wetlands (Areas 4 and 5), which have developed on the sewer line right-of-way, are not contiguous with (i.e. not abutting) the tributary to Baldwin Run referenced above. However, they are neighboring based on the close proximity to that stream (approximately 30 feet). These emergent wetlands (due to sewer line maintenance) are not similar in nature to the forested wetlands, and they have no obvious habitat interrelationship. There is no delineated flood plain for this stream. However, these wetlands likely are regularly flooded when the stream over-flows its bank during high flows. As per 2008 joint Corps-EPA guidance, the wetlands are close enough in proximity to the stream to infer that they have an ecological interconnection with the adjacent tidally-flowed channel and wetland system. As such, these wetlands are adjacent to the RPW, and are regulated as Waters of the U.S.
- c. The non-tidal wetlands and water course indicated as Areas 1 and 2 are isolated. They have no surface connection to a Water of the U.S. There is no information to indicate that the small ephemeral channel may have had a connection with Marcus Hook Creek prior to development of the townhouse development in the intervening area. Given the ill-defined nature of the ephemeral feature, it is possible that, prior to development, it may have lost definition on the lower, flatter slope where the townhouses are situated. These waters/wetlands are not navigable in fact, and they do not have a nexus to Interstate Commerce. They are not known to historically have been part of any known tributary connection to Marcus Hook Creek. The wetlands are not adjacent to (i.e. “bordering, contiguous, or neighboring”) any Waters of the U.S. (per 33 CFR 328.3). Therefore, they are not subject to regulation by the U.S. Army Corps of Engineers.



No.	Revision	Drawn	Approved	Date
1	REVISED PER CORPS SITE VISIT ON 1-17-2020	GK	SB	1-20-2020



Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet



NOTES:
 1. LOT 3 PARCEL DATA GEOREFERENCED FROM ALTA/NPS LAND TITLE SURVEY DRAWINGS PRODUCED BY STANTEC CONSULTING SERVICES, INC. DATED AUGUST 8, 2019.



SPRINGBROOKE BLVD LOT 3 WETLAND LOCATION MAP

TRAMMELL CROW
 ASTON TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA

Job Number | 11201957
 Revision | 1
 Date | Oct 14, 2019