



**WETLAND DELINEATION REPORT  
CORRIDOR CENTER  
CITY OF LAUREL, MARYLAND**

**TNT PROJECT NO.: 2807**

**FOR**

**PULTE GROUP**

**JULY 11, 2022**



July 11, 2022

Mr. Bobby Varner  
Pulte Group  
Via Email: [bobby.varner@pultegroup.com](mailto:bobby.varner@pultegroup.com)

TNT Project Number: 2807

Reference: Wetland Delineation Report, Corridor Center, City of Laurel, Maryland  
Latitude: 39° 5' 56" N, Longitude: -76° 52' 51" W

Dear Mr. Varner:

TNT Environmental, Inc. (TNT) is pleased to present this wetland delineation report for the above-referenced project in general accordance with TNT Proposal Number 3743 dated December 21, 2021. The wetlands and Waters of the U.S. identified during this investigation for the above-referenced project site were delineated by TNT based on the *Corps of Engineers' Wetlands Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic & Gulf Coast* and represent those areas that are most likely considered jurisdictional by the U.S. Army Corps of Engineers (USACE). The delineation entails the gathering of appropriate field data according to the applicable USACE Manuals, field flagging and mapping of approximate wetland and stream boundaries located onsite, preparation of this final report, and a request to the USACE for boundary confirmation and jurisdictional determination of Waters, including wetlands, identified onsite. Based on the field investigation conducted in April 2022, there are potentially jurisdictional Waters of the U.S., including wetlands, located within the study area.

### PROJECT SITE DESCRIPTION

The project site is approximately 28.28 acres situated north of Contee Road in the City of Laurel, Maryland (*Appendix I: Figure 1- Project Location Map*). The project site is further identified by physical addresses 6820, 6900, 6902 and 6920 Contee Road and 15203 Pirate Lane. The project site consists of moderately sloping terrain and is within the Crow Branch drainage basin (*Appendix I: Figure 2- USGS Topographic Map*). An existing automobile repair shop and parking lot are located in the western portion of the site, and existing residential buildings are located within the southern portion. The remainder of the site is unimproved and wooded.

### SECONDARY INFORMATION REVIEW

Secondary information entails the background research and review of recorded data and/or mapping associated with the project site. Resources reviewed include but are not limited to the following:

- U.S. Geological Survey's (USGS) National Geospatial Program, *The National Map Viewer* <https://apps.nationalmap.gov/viewer>
- U. S. Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) Online Mapper, <https://www.fws.gov/wetlands/data/mapper.html>
- Natural Resources Conservation Service (NRCS), National Cooperative Soil Survey (NCSS) Web Soil Survey, <https://websoilsurvey.nrcs.usda.gov/>
- Available aerial photography and GIS data

The USGS Beltsville quadrangle map shows elevations of approximately 280 to 330 feet above mean sea level (MSL). As shown on the USGS Map, the project site drains generally southeast to Crow Branch, located within the Patuxent watershed and identified as Hydrologic Unit Code (HUC) 02060006. The NWI map does not depict wetland or riverine features within the project site boundaries.

The soil survey indicates that the site is underlain primarily by Aquasco silt loam (ApB), Beltsville silt loam (BaB), Chillum silt loam (CaD), Matapeake silt loam (MpB), and Zekiah and Issue (ZS) soils. Zekiah and Issue soils (ZS) is classified by the NRCS as predominantly hydric.

### **FIELD INVESTIGATION & METHODOLOGY**

The analysis contained in this report uses the results of a field survey conducted by TNT in April 2022. Florescent pink demarcation flags were placed in the field and sequentially numbered to provide an onsite record of the location of wetlands and other Waters subject to the jurisdiction of state and federal agencies. The data sheets used in this investigation are enclosed (see *Appendix III*), along with a photographic log documenting site conditions (*Appendix IV*), and the delineation map showing approximate data point locations and boundaries of potentially jurisdictional wetlands and other Waters (*Appendix V*).

The delineation of wetlands was conducted using the *Corps of Engineers' Wetlands Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic & Gulf Coast Region*. The USACE Manual and associated Regional Supplement follow three parameters for the identification of wetlands: dominance of hydrophytic vegetation, presence of hydric soils, and hydrologic indicators. All three parameters must be present under normal conditions for an area to be considered a jurisdictional wetland in accordance with Section 404 of the Clean Water Act. Streams were delineated based on the limits of the ordinary high-water mark (OHWM), which can be determined by several factors. Physical characteristics include, but are not limited to, clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation/scouring; the presence of litter and debris, wrack lines; and other appropriate means such as gauge data, historical records, flood predictions, and statistical analysis.

For the purpose of this report and future permitting needs, wetlands and other Waters are then further classified according to the Cowardin System as described in *Classification of Wetlands and Deepwater Habitats of the United States* (1979).

## FINDINGS

Based on our field reconnaissance, TNT has identified and located wetlands and other Waters onsite. Wetlands identified on the project site are classified as palustrine forested (PFO). The main sources of hydrology for these wetlands include precipitation and high groundwater table. The wetlands are underlain by Aquasco silt loam (ApB) soil. Other waters on site include ephemeral (R6) streams located in the northern and southwestern portions of the site.

A summary of the attached data sheets prepared during the study is included below in Table 1. Dominant wetland and riparian vegetation is listed below in Table 2. The dominant upland vegetation is listed below in Table 3. The remaining site contains an automobile repair shop in the western portion and residential buildings in the southern portion.

**Table 1 – Data Points Summary**

Data Point	Hydrophytic Vegetation	Hydric Soils	Hydrology	Classification
DP-1	No	No	No	Non-Wetland
DP-2	Yes	Yes	Yes	PFO Wetland
DP-3	No	No	No	Non-Wetland
DP-4	No	No	No	Non-Wetland

\*Refer to the enclosed data sheets for more information.

**Table 2 – Dominant Riparian Buffer and Wetland Vegetation**

Scientific Name	Common Name	Wetland Indicator*
Trees		
<i>Acer rubrum</i>	Red Maple	FAC
<i>Ilex opaca</i>	American Holly	FACU
Shrubs and Woody Vines		
<i>Smilax rotundifolia</i>	Roundleaf Greenbrier	FAC
Herbaceous		
<i>Lonicera japonica</i>	Japanese Honeysuckle	FACU

\* The indicator status of a species indicates the probability that the species will occur in a wetland, as follows: Obligate Upland (UPL, <1%), Facultative Upland (FACU, 1-33%), Facultative (FAC, 34-66%), Facultative Wetland (FACW, 67-99%), and Obligate Wetland (OBL, >99%) in accordance with the National List of Plant Species that Occur in Wetlands: National Summary (2012). NI means no wetland indicator is available.

**Table 3 – Dominant Upland Vegetation**

Scientific Name	Common Name	Wetland Indicator*
Trees		
<i>Acer rubrum</i>	Red Maple	FAC
<i>Carya tomentosa</i>	Mockernut Hickory	FACU
<i>Fagus grandifolia</i>	American Beech	FACU
<i>Ilex opaca</i>	American Holly	FAC
<i>Liriodendron tulipifera</i>	Tulip Poplar	FACU
<i>Liquidambar styraciflua</i>	Sweetgum	FAC
<i>Prunus serotina</i>	Black Cherry	FACU
<i>Quercus alba</i>	White Oak	FACU
<i>Quercus rubra</i>	Northern Red Oak	FACU
Shrubs and Woody Vines		
<i>Smilax rotundifolia</i>	Roundleaf Greenbrier	FAC
Herbaceous		
<i>Geum canadense</i>	White Avens	FAC
<i>Lonicera japonica</i>	Japanese Honeysuckle	FACU

### **REGULATORY DISCUSSION**

The Maryland Department of Environment (MDE) and the USACE regulate impacts to wetlands and Waters of the District by issuing a state certification under Section 401 of the Clean Water Act for activities requiring a USACE Section 404 Permit. The USACE - Baltimore District that regulates Waters of the District has implemented the State Programmatic General Permit (SPGP) program to streamline the permit process and avoid duplication of agency review. For those projects impacting less than 5,000 square feet of Waters of the United States, including jurisdictional wetlands, a Nationwide permit from the USACE can be obtained for most projects. For those projects that are not under USACE jurisdiction, a letter of authorization for activities in a wetland can be obtained from MDE. All SPGP permit applications are reviewed by the USACE but the permit authorization comes solely from MDE. Notification of potential impacts should be filed with the MDE by completing the Joint Permit Application (JPA) form which is submitted to MDE. Compensatory mitigation for unavoidable impacts to waters will generally be provided at a loss ratio 3:1 for all wetlands. Mitigation can include: the purchase or use of mitigation bank credits; wetland preservation; preservation of upland buffers; and in-lieu-fee contribution.

### **PROCEEDINGS**

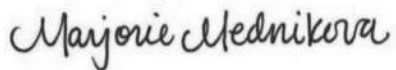
With your authorization, we will contact the USACE to schedule a field meeting to conduct a wetlands and Waters boundary confirmation and jurisdictional determination. This process takes an average of eight to ten weeks depending on the availability of USACE personnel. Once we have determined potential impacts we can assist you with permitting options and support to complete the process. In

the interim, we recommend further review of state and federal agency records pertaining to Section 7 (Federal Endangered Species Act) and Section 106 (National Historic Preservation Act). These reviews will generally be required to verify compliance for either the Nationwide Permit (NWP) or General Permit conditions.

TNT would like to thank you for the opportunity to provide you with this wetland delineation. We look forward to assisting you further with this project and other environmental concerns you may have. If you have any questions, please feel free to contact us at any time at (703) 466-5123.

Sincerely,

**TNT ENVIRONMENTAL, INC.**



Marjorie E. Mednikova  
Environmental Scientist  
[Marjorie@TNTenv.com](mailto:Marjorie@TNTenv.com)



Avi M. Sareen, PWD, ISA-CA  
Principal/President  
[Avi@TNTenv.com](mailto:Avi@TNTenv.com)



Jillian S. Moore, PWD, PWS, ISA-CA  
Senior Wetland Scientist  
[Jillian@TNTenv.com](mailto:Jillian@TNTenv.com)

## **APPENDIX I**

### **VICINITY MAP & USGS TOPOGRAPHIC MAP**



SCALE: 1" : 1,000'



## WETLAND DELINEATION REPORT

CORRIDOR CENTER

CITY OF LAUREL, MD

JULY 2022



**ENVIRONMENTAL**

**4455 BROOKFIELD  
CORPORATE DRIVE,  
SUITE 100  
CHANTILLY, VIRGINIA 20151**

## FIGURE 1

SITE LOCATION MAP

SOURCE: GOOGLE MAPS

TNT PROJECT NO: 2807



SCALE: 1" : 500'



## WETLAND DELINEATION REPORT

CORRIDOR CENTER

CITY OF LAUREL, MD

JULY 2022



**ENVIRONMENTAL**

**4455 BROOKFIELD  
CORPORATE DRIVE,  
SUITE 100  
CHANTILLY, VIRGINIA 20151**

## FIGURE 2

BELTSVILLE, MD USGS  
TOPOGRAPHIC MAP

SOURCE: USGS *THE  
NATIONAL MAP* (2020)

TNT PROJECT NO: 2807

## **APPENDIX II**

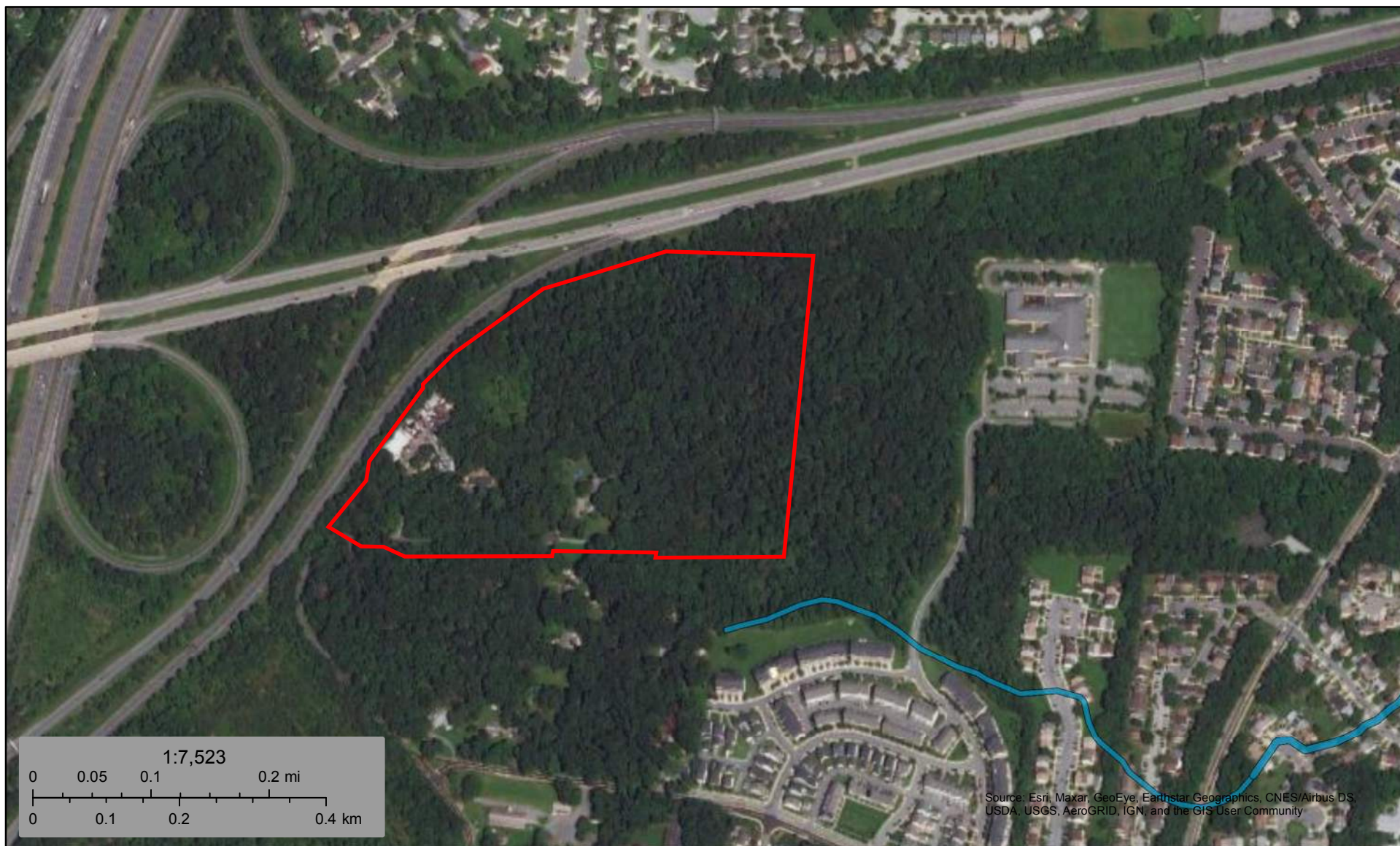
### **NATIONAL WETLAND INVENTORY MAP & NRCS SOILS MAP**



U.S. Fish and Wildlife Service







# National Wetlands Inventory

## Corridor Center



March 25, 2022

### Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

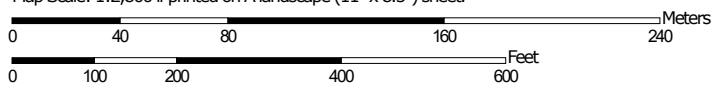
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



# Hydric Rating by Map Unit—Prince George's County, Maryland (Corridor Center)



Map Scale: 1:2,800 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



**Natural Resources  
Conservation Service**


Web Soil Survey  
National Cooperative Soil Survey

3/25/2022  
Page 1 of 5

# Hydric Rating by Map Unit—Prince George's County, Maryland (Corridor Center)







## MAP LEGEND

### Area of Interest (AOI)







 Area of Interest (AOI)

### Soils







#### Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


#### Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available






#### Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

### Water Features

 Streams and Canals

### Transportation

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

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Prince George's County, Maryland  
Survey Area Data: Version 19, Aug 27, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 3, 2015—Feb 22, 2017

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.

## Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ApB	Aquasco silt loam, 2 to 5 percent slopes	0	13.9	50.1%
BaB	Beltsville silt loam, 2 to 5 percent slopes	5	3.4	12.2%
CaD	Chillum silt loam, 10 to 15 percent slopes	0	7.4	26.8%
MpB	Matapeake silt loam, 2 to 5 percent slopes	0	1.8	6.5%
ZS	Zekiah and Issue soils, frequently flooded	61	1.2	4.3%
<b>Totals for Area of Interest</b>			<b>27.7</b>	<b>100.0%</b>

## Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

### References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.



Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

## Rating Options

*Aggregation Method:* Percent Present

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Lower

## **APPENDIX III**

### **WETLAND DATA SHEETS**

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Corridor Center City/County: City of Laurel Sampling Date: 2022-04-15  
 Applicant/Owner: Pulte Group State: Maryland Sampling Point: DP-1  
 Investigator(s): TNT Environmental Inc- D. Dellapenna, E. Williams Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Upland Local relief (concave, convex, none): None Slope (%): 1  
 Subregion (LRR or MLRA): S 149A Lat: 39.0997003 Long: -76.8805540 Datum: WGS 84  
 Soil Map Unit Name: ApB - Aquasco silt loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Upland data point taken outside flag A-8.</b>	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<u>Secondary Indicators (minimum of two required)</u>
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b>	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)
		<input type="checkbox"/> Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	<b>Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/></b>
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> (includes capillary fringe)	Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <b>Wetland hydrology not observed.</b>		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DP-1

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Quercus alba</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>28.6</u> (A/B)														
2. <u>Fagus grandifolia</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Quercus rubra</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
4. <u>Ilex opaca</u>	<u>10</u>		<u>FAC</u>															
5. _____																		
6. _____																		
<u>100%</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>125</u></td> <td>x 4 = <u>500</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>175</u> (A)</td> <td><u>650</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.71</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>125</u>	x 4 = <u>500</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>175</u> (A)	<u>650</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>50</u>	x 3 = <u>150</u>																	
FACU species <u>125</u>	x 4 = <u>500</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>175</u> (A)	<u>650</u> (B)																	
<u>65%</u> = Total Cover 50% of total cover: <u>32.5</u> 20% of total cover: <u>13.0</u>																		
<b>Sapling Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Ilex opaca</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Quercus alba</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Liriodendron tulipifera</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
4. _____																		
5. _____																		
6. _____																		
<u>65%</u> = Total Cover 50% of total cover: <u>32.5</u> 20% of total cover: <u>13.0</u>																		
<b>Shrub Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
_____ = Total Cover 50% of total cover: _____    20% of total cover: _____																		
<b>Herb Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Smilax rotundifolia</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>10%</u> = Total Cover 50% of total cover: <u>5.0</u> 20% of total cover: <u>2.0</u>																		
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____																		
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____    20% of total cover: _____																		
Remarks: (If observed, list morphological adaptations below).  <b>Hydrophytic vegetation does not dominate.</b>																		

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.  
  
  
**Hydrophytic Vegetation Present?**      Yes \_\_\_\_\_ No ☒

**SOIL**

Sampling Point: DP-1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 3	10YR 3/3	100					Silt Loam	
3 - 16	10YR 5/3	100					Silt Loam	
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR O)</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) <b>(LRR S, T, U)</b>	<input type="checkbox"/> 2 cm Muck (A10) <b>(LRR S)</b>
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(LRR O)</b>	<input type="checkbox"/> Reduced Vertic (F18) <b>(outside MLRA 150A,B)</b>
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(LRR P, S, T)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> <b>(MLRA 153B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) <b>(LRR P, T, U)</b>	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) <b>(LRR U)</b>	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) <b>(LRR P, T)</b>	<input type="checkbox"/> Marl (F10) <b>(LRR U)</b>	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) <b>(MLRA 151)</b>	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) <b>(LRR O, P, T)</b>	
<input type="checkbox"/> Coast Prairie Redox (A16) <b>(MLRA 150A)</b>	<input type="checkbox"/> Umbric Surface (F13) <b>(LRR P, T, U)</b>	
<input type="checkbox"/> Sandy Mucky Mineral (S1) <b>(LRR O, S)</b>	<input type="checkbox"/> Delta Ochric (F17) <b>(MLRA 151)</b>	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) <b>(MLRA 150A, 150B)</b>	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) <b>(MLRA 149A)</b>	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) <b>(MLRA 149A, 153C, 153D)</b>	
<input type="checkbox"/> Dark Surface (S7) <b>(LRR P, S, T, U)</b>		

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

Hydric soil not observed.

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Corridor Center City/County: City of Laurel Sampling Date: 2022-04-15  
 Applicant/Owner: Pulte Group State: Maryland Sampling Point: DP-2  
 Investigator(s): TNT Environmental Inc- D. Dellapenna, E. Williams Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): 7  
 Subregion (LRR or MLRA): S 149A Lat: 39.0998708 Long: -76.8804252 Datum: WGS 84  
 Soil Map Unit Name: ApB - Aquasco silt loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: <b>PFO data point taken inside flag A-15.</b>	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) <b>(LRR U)</b> <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)		<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <b>Wetland hydrology observed.</b>		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DP-2

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Acer rubrum</u>	<u>70</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<u>70%</u> = Total Cover 50% of total cover: <u>35.0</u> 20% of total cover: <u>14.0</u>				<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>150</u></td> <td>x 3 = <u>450</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>155</u> (A)</td> <td><u>470</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.03</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>150</u>	x 3 = <u>450</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>155</u> (A)	<u>470</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>150</u>	x 3 = <u>450</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>155</u> (A)	<u>470</u> (B)																	
<u>60%</u> = Total Cover 50% of total cover: <u>30.0</u> 20% of total cover: <u>12.0</u>																		
<b>Sapling Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Acer rubrum</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Ilex opaca</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<u>60%</u> = Total Cover 50% of total cover: <u>30.0</u> 20% of total cover: <u>12.0</u>																		
<b>Shrub Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____    20% of total cover: _____																		
<b>Herb Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Smilax rotundifolia</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Lonicera japonica</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>25%</u> = Total Cover 50% of total cover: <u>12.5</u> 20% of total cover: <u>5.0</u>																		
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____    20% of total cover: _____																		
Remarks: (If observed, list morphological adaptations below).  <b>Hydrophytic vegetation dominates.</b>																		

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.  
  
  
**Hydrophytic Vegetation Present?**      Yes ☒      No \_\_\_\_\_



## SOIL

Sampling Point: DP-2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 9	10YR 4/1	90	10YR 3/6	10	C	M	Sandy Loam	
9 - 16	10YR 5/1	85	10YR 5/8	15	C	M	Sandy Loam	
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Hydric soil observed.

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Corridor Center City/County: City of Laurel Sampling Date: 2022-04-15  
 Applicant/Owner: Pulte Group State: Maryland Sampling Point: DP-3  
 Investigator(s): TNT Environmental Inc- D. Dellapenna, E. Williams Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Upland Local relief (concave, convex, none): Linear Slope (%): 3  
 Subregion (LRR or MLRA): S 149A Lat: 39.0998574 Long: -76.8820295 Datum: WGS 84  
 Soil Map Unit Name: ApB - Aquasco silt loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Upland data point taken outside flag A-32.</b>	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<u>Secondary Indicators (minimum of two required)</u>
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	<input checked="" type="checkbox"/> Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <b>One secondary wetland hydrology indicator observed.</b>		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DP-3

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Liriodendron tulipifera</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>28.6</u> (A/B)														
2. <u>Acer rubrum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. <u>Carya tomentosa</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>UPL</u>															
4. <u>Fagus grandifolia</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<u>100%</u> = Total Cover 50% of total cover: <u>50.0</u> 20% of total cover: <u>20.0</u>				<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>70</u></td> <td>x 4 = <u>280</u></td> </tr> <tr> <td>UPL species <u>40</u></td> <td>x 5 = <u>200</u></td> </tr> <tr> <td>Column Totals: <u>160</u> (A)</td> <td><u>630</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.94</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>70</u>	x 4 = <u>280</u>	UPL species <u>40</u>	x 5 = <u>200</u>	Column Totals: <u>160</u> (A)	<u>630</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>50</u>	x 3 = <u>150</u>																	
FACU species <u>70</u>	x 4 = <u>280</u>																	
UPL species <u>40</u>	x 5 = <u>200</u>																	
Column Totals: <u>160</u> (A)	<u>630</u> (B)																	
<u>50%</u> = Total Cover 50% of total cover: <u>25.0</u> 20% of total cover: <u>10.0</u>																		
<b>Sapling Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Ilex opaca</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Carya tomentosa</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>UPL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<u>50%</u> = Total Cover 50% of total cover: _____    20% of total cover: _____																		
<b>Shrub Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____    20% of total cover: _____																		
<b>Herb Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Lonicera japonica</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
<u>10%</u> = Total Cover 50% of total cover: <u>5.0</u> 20% of total cover: <u>2.0</u>																		
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____    20% of total cover: _____																		
Remarks: (If observed, list morphological adaptations below).  <b>Hydrophytic vegetation does not dominate.</b>																		

**Definitions of Five Vegetation Strata:**  
  
**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  
  
**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  
  
**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  
  
**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  
  
**Woody vine** – All woody vines, regardless of height.  
  
  
**Hydrophytic Vegetation Present?**      Yes \_\_\_\_\_ No ☒

## SOIL

Sampling Point: DP-3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 3	10YR 3/3	100					Silt Loam	
3 - 6	10YR 4/2	100					Loam	
6 - 16	10YR 5/4	100					Loam	
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> (MLRA 153B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

Hydric soil not observed.

# WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Corridor Center City/County: City of Laurel Sampling Date: 2022-04-15  
 Applicant/Owner: Pulte Group State: Maryland Sampling Point: DP-4  
 Investigator(s): TNT Environmental Inc- D. Dellapenna, E. Williams Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): Linear Slope (%): 2  
 Subregion (LRR or MLRA): S 149A Lat: 39.0983117 Long: -76.8854414 Datum: WGS 84  
 Soil Map Unit Name: CaD - Chillum silt loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: <b>Upland data point taken outside flag G-4.</b>	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<u>Secondary Indicators (minimum of two required)</u>
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)
_____ High Water Table (A2)	_____ Marl Deposits (B15) <b>(LRR U)</b>	<input checked="" type="checkbox"/> Drainage Patterns (B10)
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b>		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <b>One secondary wetland hydrology indicator observed.</b>		

**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: DP-4

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Quercus alba</u>	<u>45</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>42.9</u> (A/B)														
2. <u>Acer rubrum</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. <u>Prunus serotina</u>	<u>15</u>		<u>FACU</u>															
4. _____																		
5. _____																		
6. _____																		
<u>85%</u> = Total Cover 50% of total cover: <u>42.5</u> 20% of total cover: <u>17.0</u>				<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>60</u></td> <td>x 3 = <u>180</u></td> </tr> <tr> <td>FACU species <u>90</u></td> <td>x 4 = <u>360</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>165</u> (A)</td> <td><u>615</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.73</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>60</u>	x 3 = <u>180</u>	FACU species <u>90</u>	x 4 = <u>360</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>165</u> (A)	<u>615</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>60</u>	x 3 = <u>180</u>																	
FACU species <u>90</u>	x 4 = <u>360</u>																	
UPL species <u>15</u>	x 5 = <u>75</u>																	
Column Totals: <u>165</u> (A)	<u>615</u> (B)																	
<u>35%</u> = Total Cover 50% of total cover: <u>17.5</u> 20% of total cover: <u>7.0</u>																		
<b>Sapling Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Acer rubrum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Carya tomentosa</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>UPL</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
<u>35%</u> = Total Cover 50% of total cover: <u>17.5</u> 20% of total cover: <u>7.0</u>																		
<b>Shrub Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Lonicera tatarica</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
<u>10%</u> = Total Cover 50% of total cover: <u>5.0</u> 20% of total cover: <u>2.0</u>																		
<b>Herb Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Lonicera japonica</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.														
2. <u>Geum canadense</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
<u>35%</u> = Total Cover 50% of total cover: <u>17.5</u> 20% of total cover: <u>7.0</u>																		
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
_____ = Total Cover 50% of total cover: _____    20% of total cover: _____																		
Remarks: (If observed, list morphological adaptations below).  <b>Hydrophytic vegetation does not dominate.</b>																		

## SOIL

Sampling Point: DP-4**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 10	10YR 3/3	100					Silt Loam	
10 - 16	10YR 4/3	100					Silt Loam	
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>LRR S, T, U</b> )	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR O</b> )
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) ( <b>LRR S, T, U</b> )	<input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR S</b> )
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>LRR O</b> )	<input type="checkbox"/> Reduced Vertic (F18) ( <b>outside MLRA 150A,B</b> )
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>LRR P, S, T</b> )
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) ( <b>LRR P, T, U</b> )	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> ( <b>MLRA 153B</b> )
<input type="checkbox"/> 5 cm Mucky Mineral (A7) ( <b>LRR P, T, U</b> )	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) ( <b>LRR U</b> )	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR P, T</b> )	<input type="checkbox"/> Marl (F10) ( <b>LRR U</b> )	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) ( <b>MLRA 151</b> )	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) ( <b>LRR O, P, T</b> )	
<input type="checkbox"/> Coast Prairie Redox (A16) ( <b>MLRA 150A</b> )	<input type="checkbox"/> Umbric Surface (F13) ( <b>LRR P, T, U</b> )	
<input type="checkbox"/> Sandy Mucky Mineral (S1) ( <b>LRR O, S</b> )	<input type="checkbox"/> Delta Ochric (F17) ( <b>MLRA 151</b> )	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) ( <b>MLRA 150A, 150B</b> )	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) ( <b>MLRA 149A</b> )	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) ( <b>MLRA 149A, 153C, 153D</b> )	
<input type="checkbox"/> Dark Surface (S7) ( <b>LRR P, S, T, U</b> )		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**Type: GravelDepth (inches): 14Hydric Soil Present? Yes ☐ No ☒

Remarks:

Hydric soil not observed.



## **APPENDIX IV**

### **PHOTOGRAPHS**



**Photograph 1:** View to the northeast showing the forested uplands at DP-1, taken outside flag A-8 within the northeastern portion of the project site.



**Photograph 2:** View to the east showing the PFO wetland at DP-2, taken inside flag A-15 within the northeastern portion of the project site.





**Photograph 3:** View to the north showing the forested uplands at DP-3, taken outside flag A-32 within the northern portion of the project site.



**Photograph 4:** View to the east showing the forested uplands at DP-4, taken outside flag G-4 within the southwestern portion of the project site.





**Photograph 5:** View to the east showing the PFO wetland at flag A-23, taken within the northeastern portion of the project site.



**Photograph 6:** View upstream to the north showing the ephemeral stream at flag E-7, taken within the northern portion of the project site.





**Photograph 7:** View downstream to the south showing the ephemeral stream at flag A-39, taken within the northwestern portion of the project site.



**Photograph 8:** View upstream to the north showing the existing culvert at flag A-54, taken within the northern portion of the site.





**Photograph 9:** View to the northwest showing the existing culvert at flag F-1, taken within the southwestern portion of the project site.



**Photograph 10:** View downstream to the southeast showing the ephemeral stream at flag F-1, taken within the southwestern portion of the project site.





**Photograph 11:** View to the north showing the forested uplands and existing residence, taken within the southern portion of the project site.



**Photograph 12:** View to the north showing the powerlines, existing driveway and parking lot for the automobile repair shop in the western portion of the project site.





**Photograph 13:** View to the southwest showing the automobile repair shop, parking lot, and forested uplands, taken in the western portion of the project site.



**Photograph 14:** View to the north showing the uplands and household debris within the northwestern portion of the site.





**Photograph 15:** View to the west showing the forested uplands within the southern portion of the project site.

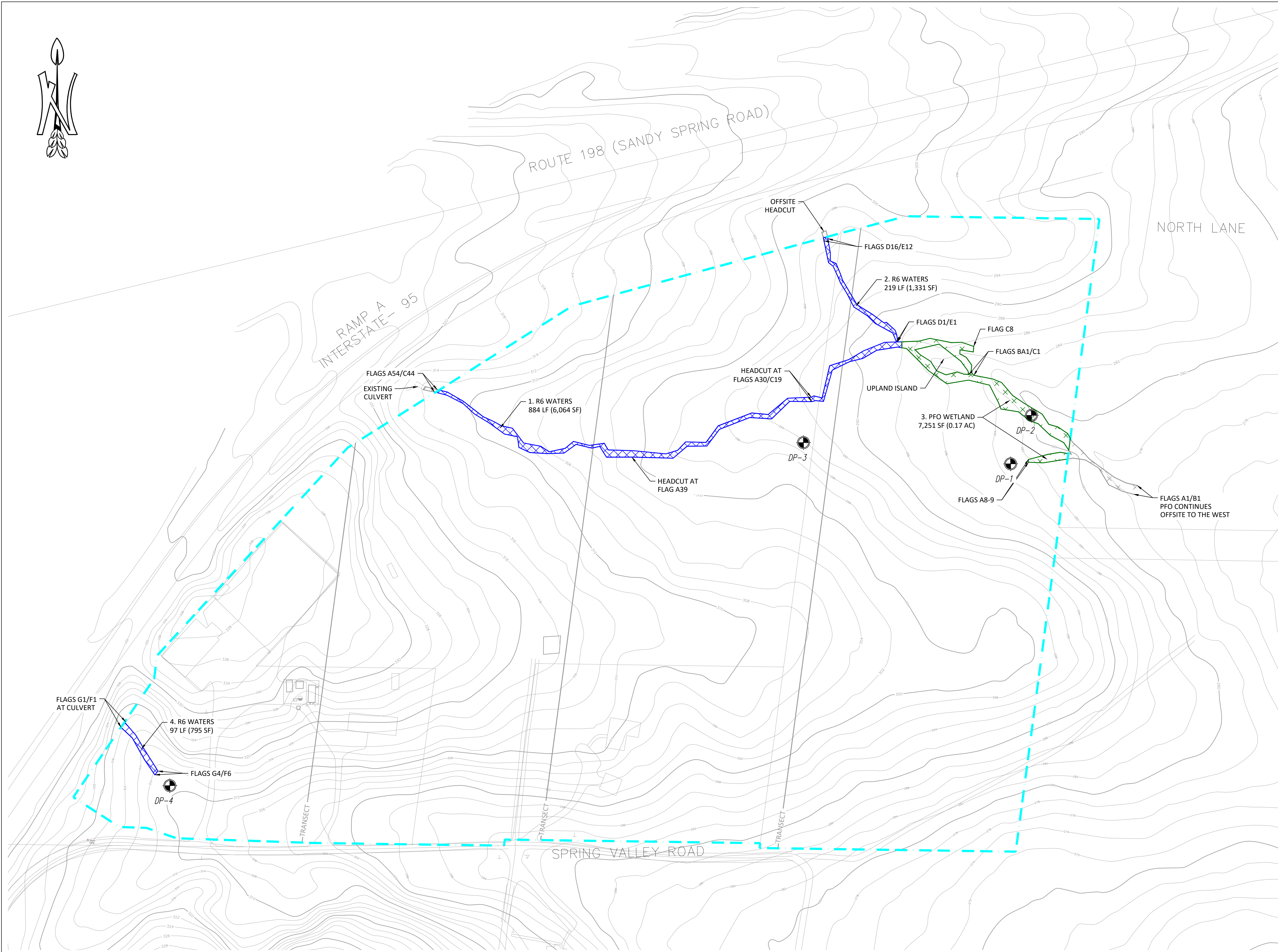
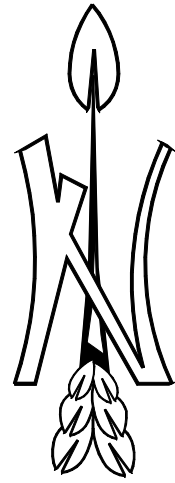


**Photograph 16:** View to the east showing the forested uplands within the northeastern portion of the project site.

**APPENDIX V**

**WETLANDS AND WATERS OF THE U.S.  
DELINEATION MAP**





**LEGEND**

- EPHEMERAL WATERS (R6)
- PALUSTRINE FORESTED (PFO) WETLAND
- OFFSITE EPHEMERAL WATERS (R6)
- OFFSITE PALUSTRINE FORESTED (PFO) WETLAND
- APPROX. DATAPPOINT LOCATION
- STUDY AREA

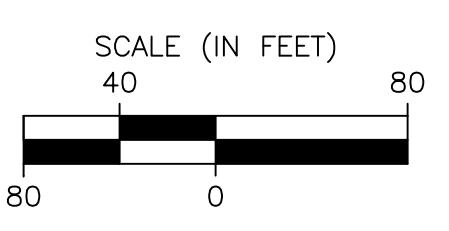
**NOTES:**

1. THE WETLAND DELINEATION WAS CONDUCTED BY TNT ENVIRONMENTAL, INC. (TNT) IN APRIL 2022. EXISTING CONDITION, TOPOGRAPHY AND WETLAND FLAGS WERE SURVEYED BY SOLTESZ, LLC, 2022.

2. THE WETLAND AND OTHER WATERS BOUNDARIES DEPICTED HEREON ARE PRELIMINARY UNTIL CONFIRMED DURING A JURISDICTIONAL DETERMINATION WITH THE US ARMY CORPS OF ENGINEERS (USACE).

3. THE STREAM ASSESSMENTS CONDUCTED ARE BASED ON THE FAIRFAX COUNTY "PERENNIAL STREAM FIELD IDENTIFICATION PROTOCOL", DATED MAY 2003.

4. THIS DELINEATION WAS PERFORMED PER THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 (1987 MANUAL) AND SUBSEQUENT GUIDANCE AND MODIFICATION BY THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: ATLANTIC & GULF COASTAL PLAIN REGION (VERSION 2) DATED NOVEMBER 2010. THE STUDY AREA IS APPROXIMATELY 28-ACRES; AS SUCH THE ROUTINE ON-SITE WETLAND DETERMINATION METHOD FOR SITES GREATER THAN 5 ACRES WAS USED, WITH MULTIPLE TRANSECTS PERFORMED AS DEPICTED HEREON.



SUMMARY OF FEDERALLY JURISDICTIONAL WATERS (INCLUDING WETLANDS)				
AR ID	PFO (SF)	PFO (AC)	R6 (LF)	R6 (AC)
1	-	-	884	0.14
2	-	-	219	0.03
3	7,251	0.17	-	-
4	-	-	97	0.02
Total	7,251	0.17	1,200	0.19

AR- Aquatic Resource; PFO - Palustrine Forested; R6 - Ephemeral Stream

Total Waters of the U.S. (Linear Feet):	1,200	LF
Total Wetlands (Acreage):	0.17	Acres

4455 Brookfield Corporate Drive, Suite 100  
Chantilly, VA 20151  
PH: 703-466-5123 WWW.TNTENVIRONMENTALINC.COM

**ENVIRONMENTAL**

CORRIDOR CENTER

CITY OF LAUREL, MARYLAND

SURVEYED WETLANDS &  
WATERS MAP

REVISIONS	
DATE	COMMENTS

SHEET 1 OF 1

SCALE: 1" = 80'

PROJECT DATE:  
7/11/22

DRAFT: MEM	CHECK: AMS
FILE NUMBER: 2807	