

August 19, 2020

Mr. Ron Stouffer U.S. Army Corps of Engineers Northern Virginia Field Office 18139 Triangle Plaza, Suite 213 Dumfries, Virginia 22026

RE: Mountain View Residential Property, Loudoun County, Virginia Wetland Delineation and Jurisdictional Determination Request

Dear Mr. Stouffer:

Bowman Consulting Group, Ltd. (BCG) is pleased to submit the following Wetland Delineation and Jurisdictional Determination (JD) Request for the above Property on behalf of the Applicants, 43474MountainViewDr LLC and 43500MountainViewDr LLC. On April 22, 2020 and August 5, 2020, BCG conducted field investigations at the Mountain View Residential Property in order to identify those areas that are most likely within the regulatory purview of the U.S. Army Corps of Engineers (USACE) according to the Corps of Engineers Wetlands Delineation Manual (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0, April 2012). Based on the results of the field investigation, there are approximately 0.10 acre of palustrine forested (PFO) wetlands and 0.01 acre of palustrine emergent (PEM) wetlands within the Property.

The following lists the general Property information:

Property Name: Mountain View Residential Property

Location:Loudoun CountyLatitude:38°54'53" NLongitude:77°29'56" W

USGS Quadrangle Map: Herndon, VA and Arcola, VA

Tributary: UT to Elklick Run HUC: PL45 (Cub Run),

02070010 (Middle Potomac – Anacostia – Occoquan)

The following lists the Applicant and Agent information for the Property:

Applicant: Applicant: Agent:

43474MountainViewDr LLC 43500MountainViewDr LLC Bowman Consulting Group, Ltd.

Attn: Mr. Sujith Maram Attn: Mr. Sujith Maram Attn: Mr. Sean Gagnon

13787 Lowe Street 22843 Angelique Drive 13461 Sunrise Valley Dr., St. 500

Chantilly, Virginia 20151 Ashburn, Virginia 20148 Herndon, Virginia 20171 Phone: 202.763.6528 Phone: 703.464.1000

Email: maramsujith@gmail.com Email: maramsujith@gmail.com Email: sgagnon@bowmancg.com

Letter to Mr. Ron Stouffer, USACE Mountain View Residential Property, Loudoun County, Virginia Wetland Delineation and Jurisdictional Determination Request August 19, 2020 Page 2 of 5

The following Wetland Delineation and Jurisdictional Determination Request Letter details the results of the study, and includes the Wetland Delineation Map, wetland delineation datasheets, representative photographs, and other accompanying exhibits.

Property Description

The approximately 8.35-acre Mountain View Residential Property is identified as PINs 128293895, 128294179, 128396515, and 128399805 and located at 43450, 43474, and 43500 Mountain View Drive in Loudoun County, Virginia. More generally, the Property is located at 38°54'53" N Latitude and 77°29'56" W Longitude on the Herndon, VA and Arcola, VA USGS Quadrangle Maps (see attached).

As shown on the attached Aerial Photograph, the majority of the Property consists of existing residential and commercial structures with associated maintained lawn, surface parking, and forested areas. The Property is bordered by Mountain View Drive to the south and west, residential properties to the east, and forested and residential properties to the north. The Property drains towards an unnamed tributary to Elklick Run, which is located within the Cub Run (PL45) watershed of Hydrologic Unit Code (HUC) 02070010 (Middle Potomac – Anacostia – Occoquan).

Methodology

The Corps of Engineers Wetlands Delineation Manual (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0, April 2012) follow a three-parameter approach to identifying wetlands: hydrophytic vegetation, hydric soils, and hydrologic indicators. All three parameters normally must be present for an area to be considered a jurisdictional wetland in accordance with Section 404 of the Clean Water Act. Wetlands are then classified according to the Cowardin System, as described in Classification of Wetlands and Deepwater Habitats of the United States (1979).

A preliminary evaluation of the three parameters was performed by BCG prior to the field investigation by examination of existing conditions and topographic mapping, the Herndon, VA and Arcola, VA USGS Quadrangle Maps (see attached), aerial photography (see attached), the U.S. Fish and Wildlife Service National Wetlands Inventory information obtained from the Wetlands Online Mapper and Data Download (http://www.fws.gov/wetlands/data/Mapper.html, see attached NWI Map), the USDA Loudoun County, Virginia Soils Survey (USDA Natural Resources Conservation Service, Web Soil Survey 3.3, http://websoilsurvey.nrcs.usda.gov, Survey Area Data: Version 17, June 4, 2020, see attached Soils Map), and GIS information obtained from the Loudoun County WebLogis Online Mapping System (https://logis.loudoun.gov/weblogis, see attached). The reference information was verified by site inspections conducted by BCG on April 22, 2020 and August 5, 2020 to characterize soils, vegetation, and hydrology, and to define the boundaries of waters of the U.S., including wetlands, that may be present within the Property.

Soils

A hydric soil is defined as a "soil 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, July 13, 1994). According to the USACE's Manuals, common hydric soil indicators include low chroma (chroma<2, value>4) matrix, concretions, or listing on local or national hydric soils lists. The National Hydric Soils List for Loudoun County, Virginia, published by the USDA Natural Resources Conservation Service, was reviewed to determine if the mapped soils are classified as

Letter to Mr. Ron Stouffer, USACE Mountain View Residential Property, Loudoun County, Virginia Wetland Delineation and Jurisdictional Determination Request August 19, 2020 Page 3 of 5

hydric. The *USDA Loudoun County, Virginia Soils Survey* maps the following soil types within the Property (see attached for the Soils Map):

Table 1: Soils Summary Table

Map Unit	Map Unit Name	Drainage Class ¹	National Hydric Soils List ²	Hydric Component
67B	Jackland and Haymarket soils, 2 to 7 percent slopes	WD	Yes	Waxpool (4%) Elbert (2%)
68B	Jackland and Haymarket soils, 2 to 7 percent slopes, very stony	WD	Yes	Waxpool (4%) Elbert (2%)
69A	Elbert silty clay loam, 0 to 2 percent slopes, frequently flooded	PD	Yes	Elbert (85%) Waxpool (5%)

¹PD – Poorly Drained: WD – Well Drained

During the field investigation, soil cores were taken to a depth of 12+ inches to describe soil morphological characteristics. Soil characteristics including texture, color (hue, chroma, and value), and odor were inspected for each sample. *Munsell Soil Color Charts* were used for determining the soil color.

Vegetation

Plant species observed on the site were identified and the wetland indicator status for each species was determined from the *Eastern Mountains and Piedmont – 2018 Regional Wetland Plant List* (May 2020). The indicator status of a species indicates the probability that the species will occur in a wetland of the northeast region of the United States, as follows: Obligate Upland (UPL, <1%), Facultative Upland (FACU, 1-33%), Facultative (FAC, 34-66%), Facultative Wet (FACW, 67-99%), and Obligate (OBL, >99%). Normally, more than 50 percent of the dominant species must be FAC or wetter for the hydrophytic vegetation indicator to be considered satisfied.

Hydrology

The USACE's Manuals state that wetland hydrology encompasses all hydrologic characteristics of areas that are periodically inundated or have soils that are saturated to the surface at some time during the growing season. Hydrologic indicators include, but are not limited to, sediment deposits, visual inundation, drift lines, soil erosion, and hummocking. Evidence of these indicators is present even during dry periods, and therefore are useful indicators of a wetland.

Results

Based on the results of the field investigation, there are approximately 0.10 acre of palustrine forested (PFO) wetlands and 0.01 acre of palustrine emergent (PEM) wetlands located within the Property. The enclosed Wetland Delineation Map depicts the location and extent of the flagged waters of the U.S. and wetland boundaries located within the Property, which have been field-located by BCG using a handheld GPS unit capable of sub-meter accuracy. Representative photographs and data point datasheets are also enclosed.

² Per National Hydric Soils List for Loudoun County, Virginia published by USDA Natural Resources Conservation Service

Letter to Mr. Ron Stouffer, USACE Mountain View Residential Property, Loudoun County, Virginia Wetland Delineation and Jurisdictional Determination Request August 19, 2020 Page 4 of 5

Two roadside ditches are located along Mountain View Drive within the southern portion of the Property (Photo #1) and one roadside ditch is located along Mountain View Drive within the western portion of the Property (Photo #2). No jurisdictional features were identified within these areas. Data Point DP-C1 was collected within a depression in the western portion of PIN 128396515 (Photo #3). This area supports hydrophytic vegetation (silver maple, green ash, and broad-leaf cattail) and exhibits surface water, water-stained leaves, and hydric soils with a depleted matrix. However, it is evident that this area has developed within uplands after construction of an adjacent sanitary sewer. Therefore, this depression should not be considered a jurisdictional feature.

Wetland B, a palustrine forested wetland flagged B1/B2 through B7/B16, and measuring approximately 1,625 square feet (0.04 acre), is located within the western portion of the Property. Data Point DP-B1 was collected within the upper portion of Wetland B near Flags B1/B2 (Photo #4); this area supports hydrophytic vegetation (pin oak, green ash, silver maple, and poison ivy) and exhibits water-stained leaves, drainage patterns, FAC-neutral test, and hydric soils with a depleted matrix. Data Point DP-B2 was collected within the lower portion of Wetland B near Flags B14/B16 (Photo #5); this area supports hydrophytic vegetation (green ash, pin oak, silver maple, and poison ivy) and exhibits water-stained leaves, drainage patterns, FAC-neutral test, and hydric soils with a depleted matrix. Data Point DP-B3 was collected just downslope and outside of Wetland B near Flags B7/B16 (Photo #6); this area supports hydrophytic vegetation (green ash, pin oak, persimmon, and poison ivy) but does not exhibit hydric soils or wetland hydrology. A direct jurisdictional connection to downstream waters was not observed downslope of Wetland B.

Wetland A, a palustrine forested wetland flagged A1/A2 through A12/A19, and measuring approximately 1,787 square feet (0.04 acre) within its upper portion, is located within the northwestern portion of the Property (Photo #7). Data Point DP-A1 was collected within Wetland A near Flags A13/A15 (Photo #8); this area supports hydrophytic vegetation (slippery elm and pin oak) and exhibits a high water table, algal mat or crust, water-stained leaves, drainage patterns, FAC-neutral test, and hydric soils with a depleted matrix. Data Point DP-A2 was collected just upslope and outside of Wetland A near Flags A13/A15 (Photo #9); this area does not exhibit any of the three wetland parameters. Wetland A transitions to a palustrine emergent wetland flagged A12/A19 through A14/A21 and measuring approximately 414 square feet (0.01 acre) within a sanitary sewer easement at Flags A12/A19 (Photo #10). Wetland A transitions back to palustrine forested wetland flagged A14/A21 through Flags A24/A29, measuring approximately 1,154 square feet (0.03 acre) within the Property at Flags A14/A21. Photo #11 provides a representative view of the lower portion of Wetland A near Flags A20/A25. Wetland A continues to the north and outside the limits of investigation at Flags A26/A31 (Photo #12).

The following table summarizes the data points that were collected during the field investigation:

Table 2: Data Point Summary Table

Data Point	Mapped Soil Unit			Community ID		
DP-A1	68B	Yes	Yes	Yes	PFO Wetland	
DP-A2	68B	No	No	No	Upland	

Letter to Mr. Ron Stouffer, USACE Mountain View Residential Property, Loudoun County, Virginia Wetland Delineation and Jurisdictional Determination Request August 19, 2020 Page 5 of 5

Data Point	Mapped Soil Unit	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Community ID	
DP-B1	69A	Yes	Yes	Yes	PFO Wetland	
DP-B2	69A	Yes	Yes	Yes	PFO Wetland	
DP-B3	69A	Yes	No	No	Upland	
DP-C1	69A	Yes	Yes	Yes	Upland Depression	

The following table summarizes the waters of the U.S. and wetlands identified within the Property:

Table 3: Waters of the U.S. and Wetlands Summary Table¹

Classification ²	Length (LF)	Area (SF)	Area (Ac)
Palustrine Forested (PFO) Wetland	N/A	4,566	0.10
Palustrine Emergent (PEM) Wetland	N/A	414	0.01
Total Waters of the U.S.	N/A	4,980	0.11

 $[\]overline{\ }^{1}$ The amount of waters of the U.S. and wetlands indicated in the table reflects the amount located within the Property.

Based on the results of this field investigation, there are approximately 0.10 acre of palustrine forested (PFO) wetlands and 0.01 acre of palustrine emergent (PEM) wetlands located within the Property, as shown on the enclosed Wetland Delineation Map. The results of this wetland delineation study should be considered preliminary until they have been approved by the USACE during a JD site visit; a copy of the signed Pre-Application and/or Jurisdictional Waters Determination Request Form is attached.

We would like to schedule a JD site visit with you to review and confirm the boundaries of jurisdictional waters of the U.S. at the Property; please feel free to contact me at your earliest convenience to coordinate a date and time. If you have any questions concerning the Property or require additional information, please feel free to contact me at 703.464.1000 or sgagnon@bowmancg.com.

Sincerely,

BOWMAN CONSULTING GROUP, LTD

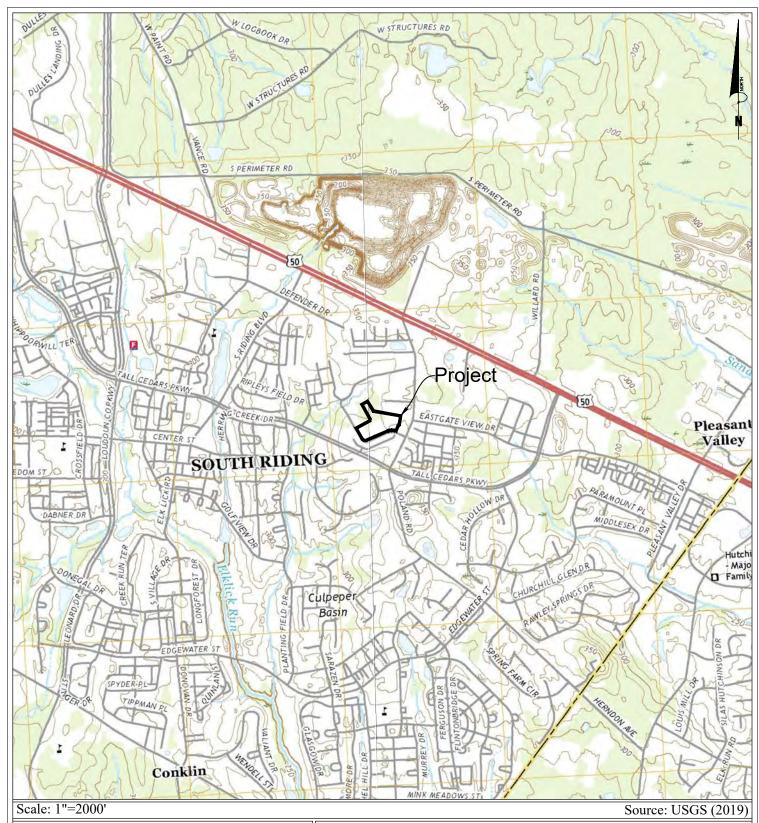
Sean Gagnon, PWD, ISA-CA Environmental Project Manager

Enclosures

cc:

Sujith Maram, 43474MountainViewDr LLC and 43500MountainViewDr LLC

²Wetland classifications are based on preliminary assessments conducted by BCG on April 22, 2020 and August 5, 2020.



G

Bowman Consulting Group, Ltd. 13461 Sunrise Valley Place Suite 500 Herndon, Virginia 20171

Phone: (703) 464-1000 Fax: (703) 481-9720 www.bowmanconsulting.com

Bowman Consulting Group, Ltd.

USGS Quadrangle Map

Mountain View Residential Property
38°54'53" N, 77°29'56" W, Herndon, VA and Arcola, VA USGS Quadrangle Maps
PL45 (Cub Run), HUC 02070010 (Middle Potomac-Anacostia-Occoquan)
Loudoun County, Virginia

Prepared for:

43474MountainViewDr LLC 13787 Lowe Street Chantilly, Virginia 20151

43500MountainViewDr LLC 22843 Angelique Drive Ashburn, Virginia 20148



Scale: 1"=150' Source: ArcMap (2019)

Bowman Consulting Group, Ltd. 13461 Sunrise Valley Place Suite 500 Herndon, Virginia 20171

Phone: (703) 464-1000 Fax: (703) 481-9720 www.bowmanconsulting.com

Bowman Consulting Group, Ltd.

Aerial Photograph

Mountain View Residential Property

38°54'53" N, 77°29'56" W, Herndon, VA and Arcola, VA USGS Quadrangle Maps
PL45 (Cub Run), HUC 02070010 (Middle Potomac-Anacostia-Occoquan)
Loudoun County, Virginia

Prepared for:

43474MountainViewDr LLC 13787 Lowe Street Chantilly, Virginia 20151

43500MountainViewDr LLC 22843 Angelique Drive Ashburn, Virginia 20148

PISH A WHOLIPE SERVICE

U.S. Fish and Wildlife Service

National Wetlands Inventory

Mountain View Residential Property



August 4, 2020

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Pond

gent wetland

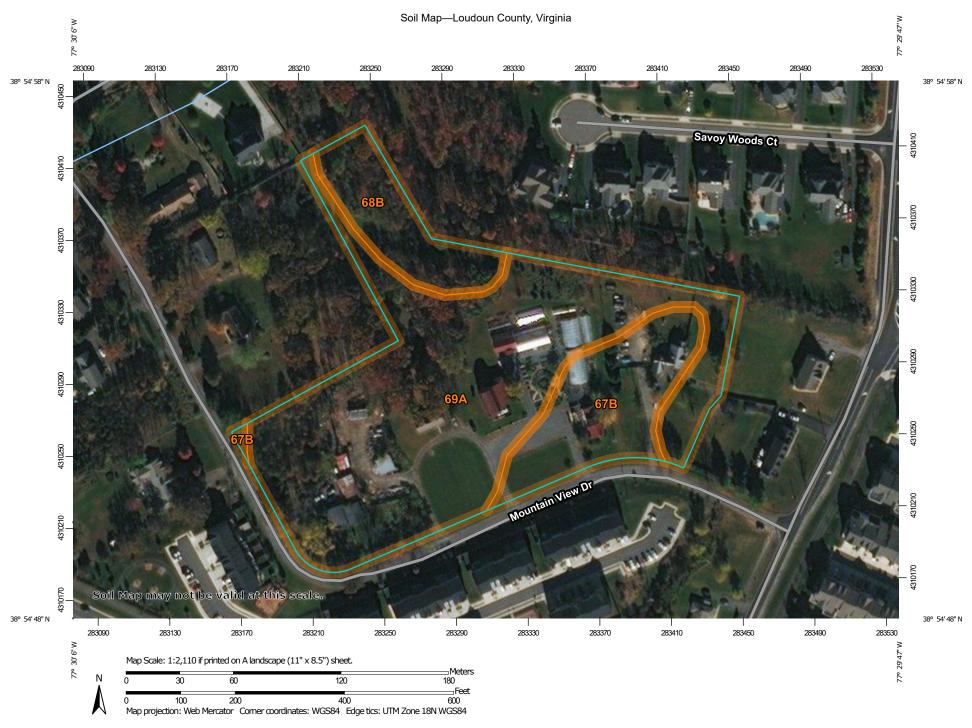
Lake

Other

Freshwater Forested/Shrub Wetland

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.



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

tos Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot
Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Wery Stony Spot

Wet Spot
 Other

Special Line Features

Water Features

Δ

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: Loudoun County, Virginia Survey Area Data: Version 17, Jun 4, 2020

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Sep 25, 2014—Mar 10, 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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
67B	Jackland and Haymarket soils, 2 to 7 percent slopes	1.5	18.1%
68B	Jackland and Haymarket soils, 2 to 7 percent slopes, very stony	1.0	11.7%
69A	Elbert silty clay loam, 0 to 2 percent slopes, frequently flooded	5.9	70.1%
Totals for Area of Interest	'	8.4	100.0%

Hydric Soils-Loudoun County, Virginia										
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria						
67B—Jackland and Haymarket soils, 2 to 7 percent slopes										
	Waxpool, occasionally ponded	4	Interfluves	2						
	Elbert	2	Drainageways	2, 3						
68B—Jackland and Haymarket soils, 2 to 7 percent slopes, very stony										
	Waxpool, occasionally ponded	4	Interfluves	2						
	Elbert	2	Drainageways	2, 3						
69A—Elbert silty clay loam, 0 to 2 percent slopes, frequently flooded										
	Elbert	85	Drainageways	2, 3						
	Waxpool, occasionally ponded	5	Interfluves	2						

Data Source Information

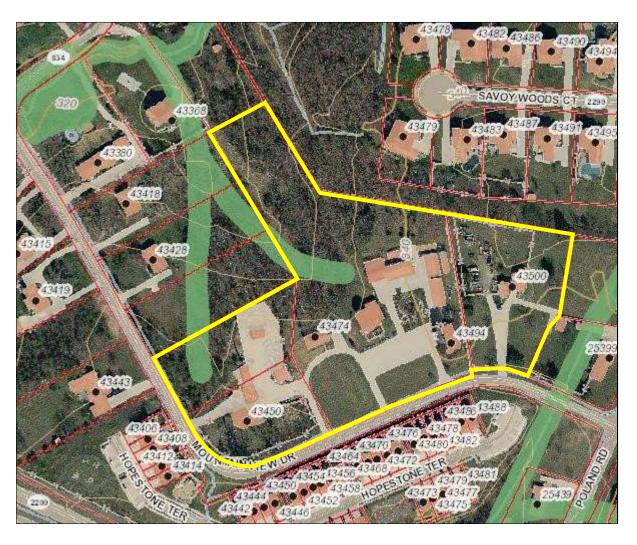
Soil Survey Area: Loudoun County, Virginia Survey Area Data: Version 17, Jun 4, 2020



Loudoun County, Virginia

www.loudoun.gov

(map not to scale)



Project/Site: Mountain View Residential Property City/County:	Loudoun County	Sampling Date: April 22, 2020			
Applicant/Owner: 43474MountainViewDr LLC and 43500MountainViewDr L	LC State: \	VA Sampling Point: DP-A1			
Investigator(s): S. Gagnon & B. Noveno Section, Tow					
Landform (hillslope, terrace, etc.): drainage feature Local relief (cond		eave Slope (%): 3%			
Subregion (LRR or MLRA): MLRA 148 Lat: 7017929.4183					
Soil Map Unit Name: 68B - Jackland and Haymarket soils, 2 to 7 percent s					
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X	No (If no, exp	lain in Remarks.)			
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumsta	ances" present? Yes X No			
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any	y answers in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showing sampling	` .	•			
Hydric Soil Present? Wetland Hydrology Present? Yes X No within Yes X No Remarks:		s_XNo			
Data Point DP-A1 was collected within Wetland A near	Flags A13/A15.				
HYDROLOGY					
Wetland Hydrology Indicators:		ry Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)		ace Soil Cracks (B6)			
Surface Water (A1) High Water Table (A2) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)		sely Vegetated Concave Surface (B8) nage Patterns (B10)			
High Water Table (A2)Saturation (A3)Hydrogen Sulfide Odor (C1)Oxidized Rhizospheres on Li		s Trim Lines (B16)			
Value Marks (B1) Presence of Reduced Iron (C		Season Water Table (C2)			
Sediment Deposits (B2) Recent Iron Reduction in Tille		fish Burrows (C8)			
Drift Deposits (B3) Thin Muck Surface (C7)		ration Visible on Aerial Imagery (C9)			
X Algal Mat or Crust (B4) Other (Explain in Remarks)		ted or Stressed Plants (D1)			
Iron Deposits (B5)		morphic Position (D2)			
Inundation Visible on Aerial Imagery (B7)		low Aquitard (D3)			
X Water-Stained Leaves (B9)	Micro	Microtopographic Relief (D4)			
Aquatic Fauna (B13)	× FAC-	-Neutral Test (D5)			
Field Observations:					
Surface Water Present? Yes No _X Depth (inches):					
Water Table Present? Yes X No Depth (inches): 7 inches					
Saturation Present? Yes No _X _ Depth (inches):	Wetland Hydrology	Present? Yes X No No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous in	spections), if available:				
Remarks:					
1					

names of	•		Sampling Point:
Absolute	Dominant		Dominance Test worksheet:
			Number of Dominant Species
			That Are OBL, FACW, or FAC: 3 (A)
			Total Number of Dominant
			Species Across All Strata: 5 (B)
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: 60% (A/B)
			Providence Index weatheres
			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
40	= Total Cove	er	OBL species x 1 =
40		E4014/	FACW species x 2 =
			FAC species x 3 =
_ 5	Yes	FACU	FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B)
			December of Indian DIA
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			× 2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 ¹
15	= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
	10101 0010		data in Remarks or on a separate sheet)
5	Yes	N/A	Problematic Hydrophytic Vegetation ¹ (Explain)
_ 1	No	FAC	
			¹ Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
			Definitions of Four Vegetation Strata:
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of
			height.
			Sapling/Shrub – Woody plants, excluding vines, less
			than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
			Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
	= Total Cove	er ·	Woody vine – All woody vines greater than 3.28 ft in
2	No	FAC	height.
			Hydrophytic
			Hydrophytic Vegetation
	30 10 40 10 5 15 5 1	30 Yes Yes	10

Sampling Point: DP-A1

Profile Desc	ription: (Describe	to the de	oth needed to docur	nent the	indicator	or confirm	the absence	of indicate	ors.)	
Depth	Matrix			x Feature	<u>es</u> _ 1	. 2	_			
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹	Loc ²	<u>Texture</u>		Remarks	
0 - 12+	2.5Y 4/1	80	10YR 4/6	20	_ <u>C</u>	PL	silt loam			
	-									
¹ Type: C=Co	oncentration, D=Dep	letion, RM	I=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL	.=Pore Linir	ng, M=Matrix.	
Hydric Soil	Indicators:						Indica	tors for Pr	oblematic Hy	dric Soils³:
Histosol	(A1)		Dark Surface	e (S7)			2	cm Muck (A	A10) (MLRA 1 4	47)
Histic Ep	oipedon (A2)		Polyvalue Be	elow Surfa	ace (S8) (N	/ILRA 147,	148) C	oast Prairie	Redox (A16)	
Black Hi			Thin Dark Su			147, 148)		(MLRA 14		
	en Sulfide (A4)		Loamy Gleye		(F2)		P		oodplain Soils ((F19)
	d Layers (A5)		× Depleted Ma		==>		.,	(MLRA 13		(== 10)
	ick (A10) (LRR N)	o (A11)	Redox Dark Depleted Da	,	,				/ Dark Surface in in Remarks)	
	d Below Dark Surfac ark Surface (A12)	e (ATT)	Depleted Da		. ,		0	ше (Ехріа	iii iii Reiliaiks)	
	lucky Mineral (S1) (I	LRR N.	Iron-Mangan			LRR N.				
	\ 147, 148)		MLRA 13		, (
	Gleyed Matrix (S4)		Umbric Surfa	•	(MLRA 13	86, 122)	³ Ind	icators of h	ydrophytic veg	etation and
	Redox (S5)		Piedmont Flo						logy must be p	
Stripped	Matrix (S6)		Red Parent I	Material (l	F21) (MLR	A 127, 147	') unl	ess disturb	ed or problema	atic.
Restrictive I	Layer (if observed):	:								
Type:										
Depth (inc	ches):						Hydric Soil	Present?	Yes X	No
Remarks:							I			

Project/Site: Mountain View F	Residential Property	City/C	_{ounty:} Loudoun Coun	ty	Sampling Date: April 22, 2020			
Applicant/Owner: 43474Mour	ıtainViewDr LLC and	43500MountainVie	ewDr LLC	State: VA	Sampling Point: DP-A2			
Investigator(s): S. Gagnon &	D 11		n, Township, Range: N					
Landform (hillslope, terrace, etc					Slope (%): 3%			
Subregion (LRR or MLRA): ML								
Soil Map Unit Name: 68B - Ja	ckland and Haymark	cet soils, 2 to 7 per	cent slopes, very sto	ony NWI classific	cation: N/A			
Are climatic / hydrologic condition								
	-	-			present? Yes X No No			
Are Vegetation, Soil								
					, important features, etc.			
	— Attach site in	ap snowing sam	pinig point locatio	, ii dii 300ti	, important reatures, etc.			
Hydrophytic Vegetation Preser			Is the Sampled Area					
Hydric Soil Present?	Yes		within a Wetland?	Yes	NoX			
Wetland Hydrology Present? Remarks:	Yes	_ No X						
HYDROLOGY								
Wetland Hydrology Indicator				Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum o		all that apply)		Surface Soil	·			
Surface Water (A1)	•	True Aquatic Plants (314)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Patterns (B10)				
Saturation (A3)			es on Living Roots (C3)	Moss Trim L	· · ·			
Water Marks (B1)		Presence of Reduced			Water Table (C2)			
Sediment Deposits (B2)	!	Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Bur	rows (C8)			
Drift Deposits (B3)	<u> </u>	Thin Muck Surface (C	7)	Saturation V	isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	•	Other (Explain in Ren	narks)		tressed Plants (D1)			
Iron Deposits (B5)					Position (D2)			
Inundation Visible on Aeri	• • • •			Shallow Aquitard (D3)				
Water-Stained Leaves (BS))			Microtopographic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)			
Field Observations: Surface Water Present?	Yes No X	Donth (inches):						
Water Table Present?	Yes No _X							
Saturation Present?	Yes No _X	· · · · · · · · · · · · · · · · · · ·	Matland L	luduologu Droop	nt? Yes NoX			
(includes capillary fringe)	res No_X	Depth (inches)	welland F	tydrology Presei	nt? Yes NoX			
Describe Recorded Data (stream	am gauge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:				
Remarks:								
rtomante.								

VEGETATION (Four Strata) – Use scientific names of plants.

Trace Christians (Diet sine, 30 feet	Absolute	Dominant		Dominance Test works	neet:
<u>Free Stratum</u> (Plot size: 30 feet) Quercus alba	<u>% Cover</u> 30	Species? Yes	FACU	Number of Dominant Spe	4
Ulmus rubra	30	Yes	FAC	That Are OBL, FACW, or	FAC: 4 (A)
Prunus serotina	30	No No	FACU	Total Number of Domina	
				Species Across All Strata	a: <u>8</u> (B)
-				Percent of Dominant Spe	
·				That Are OBL, FACW, or	FAC: <u>50%</u> (A/B
<u> </u>				Prevalence Index works	sheet:
		- ——		Total % Cover of:	Multiply by:
-	70	= Total Cov		OBL species	x 1 =
apling/Shrub Stratum (Plot size: 30 feet	, , , , , , , , , , , , , , , , , , , 	- Total Cov	еі	FACW species	
Viburnum prunifolium	10	Yes	FACU	FAC species	
Ulmus rubra	10	Yes	FAC	FACU species	
Carya glabra	2	No	FACU		x 5 =
Diospyros virginiana	2	No	FAC		(A) (B)
Quercus rubra	2	No	FACU		
				Prevalence Index :	
				Hydrophytic Vegetation	Indicators:
				1 - Rapid Test for Hy	· · ·
<u> </u>				2 - Dominance Test	is >50%
0.				3 - Prevalence Index	a is ≤3.0 ¹
0		= Total Cov	er	4 - Morphological Ac	laptations¹ (Provide supportin
Herb Stratum (Plot size: 15 feet)		Total Cov	OI .	data in Remarks	or on a separate sheet)
. Rubus pensilvanicus	5	Yes	FAC	Problematic Hydroph	nytic Vegetation ¹ (Explain)
_Lonicera japonica	5	Yes	FACU		
3.					and wetland hydrology must
l				be present, unless distur	
5				Definitions of Four Veg	etation Strata:
3.					cluding vines, 3 in. (7.6 cm) or
7					st height (DBH), regardless of
3				height.	
)					plants, excluding vines, less
0				m) tall.	er than or equal to 3.28 ft (1
1				,	
2.				Herb – All herbaceous (r of size, and woody plants	non-woody) plants, regardless
	10	= Total Cov	er	or size, and woody plants	5 1035 triair 5.20 it tail.
<u>Voody Vine Stratum</u> (Plot size: 30 feet)					vines greater than 3.28 ft in
Lonicera japonica	5	Yes	FACU	height.	
	5	Yes	FAC		
s					
l <u>. </u>					
				Hydrophytic Vegetation	
5				0	No <u>×</u>
5					

Sampling Point: DP-A2

Profile Desc	ription: (Describe	to the dept	th needed to docum	ent the in	dicator c	r confirm	the absence	ce of indicato	ors.)		
Depth	Matrix			<u>Features</u>		2					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>		Remark	s	
0 - 8	7.5YR 4/4	100					clay loan	<u> </u>			
8 - 12+	10YR 5/8	100					clay				
								_			
								_			
								_			
								_			
								_			
								_			
¹ Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	=Masked \$	Sand Gra	ins.		PL=Pore Linir			
Hydric Soil I	ndicators:						Indi	icators for Pr	oblematic l	Hydric So	oils³:
Histosol	(A1)		Dark Surface					2 cm Muck (A	410) (MLRA	147)	
	pipedon (A2)		Polyvalue Bel		. , .		148)	Coast Prairie		6)	
Black His			Thin Dark Su			47, 148)		(MLRA 14			
	n Sulfide (A4)		Loamy Gleye	•	2)		_	Piedmont Flo	•	ls (F19)	
	Layers (A5)		Depleted Mat		.,			(MLRA 13 Very Shallow		.oo (TE10)	
	ick (A10) (LRR N) d Below Dark Surfac	ρ (Δ11)	Redox Dark S Depleted Dark		-		_	Other (Expla			'
	ark Surface (A12)	0 (/ (/ / /	Redox Depre				_	Other (Expla	iii iii rtoman	NO)	
	lucky Mineral (S1) (I	LRR N,	Iron-Mangane			.RR N,					
	A 147, 148)		MLRA 136		. , ,						
	ileyed Matrix (S4)		Umbric Surfac					ndicators of h			
	edox (S5)		Piedmont Flo					wetland hydro			
	Matrix (S6)		Red Parent M	aterial (F2	1) (MLR	A 127, 147	') ı	unless disturb	ed or proble	ematic.	
	_ayer (if observed):	:									
Type:											
Depth (inc	ches):						Hydric So	oil Present?	Yes	No_	<u>×</u>
Remarks:											

Project/Site: Mountain View	Residential Property	City/C	_{ounty:} Loudoun Coun	nty	Sampling Date: August 5, 2020			
Applicant/Owner: 43474Mou	ntainViewDr LLC and	43500MountainVie	ewDr LLC	State: VA	Sampling Point: DP-B1			
Investigator(s): B. Noveno &								
Landform (hillslope, terrace, et					Slope (%): 2%			
Subregion (LRR or MLRA): M	LRA 148 Lat:	7017566.7843	Long: 117	767326.4096	Datum: NAD83			
Soil Map Unit Name: 69A - E	lbert silty clay loam, 0	to 2 percent slopes	s, frequently flooded	NWI classific	ation: N/A			
Are climatic / hydrologic conditi	ions on the site typical fo	r this time of year? Ye	es X _{No}	(If no, explain in R	emarks.)			
		-			resent? Yes X No			
Are Vegetation, Soil								
					, important features, etc.			
				<u> </u>				
Hydrophytic Vegetation Prese Hydric Soil Present?		_ No _ No	Is the Sampled Area					
Wetland Hydrology Present?		within a Wetland?	Yes X	No				
Remarks:	163							
Data Point DP-B1 w								
HYDROLOGY								
Wetland Hydrology Indicato	ors:			Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum	of one is required; check	all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)		True Aquatic Plants (E	314)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Hydrogen Sulfide Odd		X Drainage Pa				
Saturation (A3)			es on Living Roots (C3)					
Water Marks (B1)		Presence of Reduced			Water Table (C2)			
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Buri				
Drift Deposits (B3)		Thin Muck Surface (C	·		sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Rem	iarks)		tressed Plants (D1)			
Iron Deposits (B5) Inundation Visible on Aer	rial Imagery (B7)			Geomorphic Position (D2)				
X Water-Stained Leaves (B				Shallow Aquitard (D3)Microtopographic Relief (D4)				
Aquatic Fauna (B13)	,0)			× FAC-Neutral				
Field Observations:					()			
Surface Water Present?	Yes No _X_	Depth (inches):						
Water Table Present?	Yes No _X							
Saturation Present?	Yes No _X	· · · · · · · · · · · · · · · · · · ·	Wetland H	Hydrology Presen	t? Yes X No			
(includes capillary fringe)					100 NO			
Describe Recorded Data (stre	∍am gauge, monitoring w	ell, aerial photos, prev	vious inspections), if ava	ailable:				
Remarks:								

<u>Free Stratum</u> (Plot size: 30 feet)	Absolute	Dominant Species?		Dominance Test worksheet:
1 Quercus palustris	25	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)
Fraxinus pennsylvanica		Yes	FACW	That Are OBL, FACW, or FAC: 8 (A)
Acer saccharinum	10	Yes	FACW	Total Number of Dominant Species Across All Strata: 10 (B)
^-				Species Across All Strata: 10 (B)
1				Percent of Dominant Species
5		·		That Are OBL, FACW, or FAC: 80% (A/B)
5				Prevalence Index worksheet:
.				Total % Cover of: Multiply by:
3				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 30 feet)	45	= Total Cov	er	FACW species x 2 =
Fraxinus pennsylvanica	20	Yes	FACW	FAC species x 3 =
Acer saccharinum	 15	Yes	FACW	FACU species x 4 =
3. Quercus palustris		Yes	FACW	UPL species x 5 =
				Column Totals: (A) (B)
1				Column Totals (A) (B)
5		·		Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
3				× 2 - Dominance Test is >50%
9		·		3 - Prevalence Index is ≤3.0 ¹
10				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 15 feet)	50	= Total Cov	er	data in Remarks or on a separate sheet)
<u>Herb Stratum</u> (Plot size: 15 leet) 1. <i>Toxicodendron radicans</i>	20	Yes	FAC	Problematic Hydrophytic Vegetation (Explain)
Lonicera japonica	 	Yes	FACU	Troblematic Trydrophytic Vegetation (Explain)
3. Fraxinus pennsylvanica	- 10 10	No	FACW	¹ Indicators of hydric soil and wetland hydrology must
Grass sp.	10	No No	N/A	be present, unless disturbed or problematic.
5. Rubus flagellaris	$-\frac{10}{5}$	No No	FACU	Definitions of Four Vegetation Strata:
5. Juncus effusus	$-\frac{5}{5}$	No No	FACW	
	$-\frac{3}{1}$		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Quercus palustris	_ <u> </u>	No No	FACU	height.
3. Parthenocissus quinquefolia			FACU	Sanling/Shrub Woody plants evaluding vines loss
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
Average Office Office (District 30 feet	67	= Total Cov	er	Weeds vine All woods vines greater than 2.20 ft in
Moody Vine Stratum (Plot size: 30 feet) Lonicera japonica	5	Yes	FACU	Woody vine – All woody vines greater than 3.28 ft in height.
Toxicodendron radicans	_ 5	Yes	FAC	
		- 163	<u> </u>	
3.				
3. 4.				Hydrophytic
3. 45.				Hydrophytic Vegetation
3. 4.		 = Total Cov		

Sampling Point: DP-B1

Profile Desc	ription: (Describe	to the de	pth needed to docur	ment the	indicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix			x Feature	<u>es</u> _ 1	. 2	_		_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	-	Remarks	
0 - 2	7.5YR 3/2	100					silt loam			
2 - 12+	10YR 6/1	78	10YR 4/4	20	С	PL	silt loam			
			10YR 4/2	2	С	PL				
										
					·					
										_
1		letien DN	L Dardon and Marketin Mi	0. Maralar			21	Daniel Links	NA . NA - 4i	
Hydric Soil I		oletion, RIV	I=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL	=Pore Linir	ig, M=Matrix. oblematic Hy	dric Soils ³ ·
Histosol			Dark Surface	(97)					\10) (MLRA 1 4	
	oipedon (A2)		Polyvalue Be	. ,	ace (S8) (N	II RA 147			Redox (A16)	' '')
Black His			Thin Dark Su				0	(MLRA 14		
	n Sulfide (A4)		Loamy Gleye			, , , , ,	Pi		odplain Soils (F19)
	Layers (A5)		X Depleted Ma		` '			(MLRA 13	6, 147)	
	ck (A10) (LRR N)		Redox Dark	•	•				Dark Surface	
	Below Dark Surfac	e (A11)	Depleted Da				0	ther (Explai	n in Remarks)	
	ark Surface (A12)	. DD M	Redox Depre							
	lucky Mineral (S1) (I \ 147, 148)	LRK N,	Iron-Mangan MLRA 13		ses (F12) (LKK N,				
	leyed Matrix (S4)		Umbric Surfa	•	(MI RA 13	6 122)	³ Indi	cators of h	/drophytic vege	etation and
	ledox (S5)		Piedmont Flo						logy must be p	
	Matrix (S6)		Red Parent I					-	ed or problema	
Restrictive L	ayer (if observed):									
Type:										
Depth (inc	ches):						Hydric Soil	Present?	Yes X	No
Remarks:										

Project/Site: Mountain View	Residential Property	City/C	_{ounty:} Loudoun Coun	ity	Sampling Date: August 5, 2020		
Applicant/Owner: 43474Mou	untainViewDr LLC and	43500MountainVie	ewDr LLC	State: VA	Sampling Point: DP-B2		
Investigator(s): B. Noveno 8							
Landform (hillslope, terrace, e	tc.): depression	Local reli	ef (concave, convex, no	ne): concave	Slope (%): 2%		
Subregion (LRR or MLRA): N	1LRA 148 Lat:	7017610.5822	Long: 117	67287.3703	Datum: NAD83		
Soil Map Unit Name: 69A - E	Elbert silty clay loam, 0	to 2 percent slope:	s, frequently flooded	NWI classific	ation: N/A		
Are climatic / hydrologic condi	tions on the site typical fo	or this time of year? Ye	es X No	(If no, explain in R	emarks.)		
· · · ·	-	-			oresent? Yes X No No		
Are Vegetation, Soil _							
					, important features, etc.		
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes X	_ No	Is the Sampled Area within a Wetland?	Yes X	No		
Data Point DP-B2 v	vas collected with	nin the lower po	ortion of Wetland	d B near Fla	gs B14/B16.		
HYDROLOGY							
Wetland Hydrology Indicat					tors (minimum of two required)		
Primary Indicators (minimum		• • • • • • • • • • • • • • • • • • • •		Surface Soil			
Surface Water (A1)		True Aquatic Plants (I		Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)			
High Water Table (A2)		Hydrogen Sulfide Odd					
Saturation (A3)			es on Living Roots (C3)				
Water Marks (B1)Sediment Deposits (B2)		Presence of Reduced Recent Iron Reduction		Crayfish Bur	Water Table (C2)		
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rem	·		tressed Plants (D1)		
Iron Deposits (B5)	_	Curer (Explain III Ttell	iamo)		Position (D2)		
Inundation Visible on Ae	erial Imagery (B7)			Shallow Aqui			
X Water-Stained Leaves (Microtopographic Relief (D4)			
Aquatic Fauna (B13)	•			× FAC-Neutral	Test (D5)		
Field Observations:							
Surface Water Present?	Yes NoX	Depth (inches):					
Water Table Present?	Yes No _X	Depth (inches):					
Saturation Present?	Yes NoX	Depth (inches):	Wetland I	Hydrology Preser	t? Yes X No		
(includes capillary fringe) Describe Recorded Data (str	ream gauge, monitoring v	vell. aerial photos, prev	vious inspections), if ava	nilable:			
,	3 3 7 3	, , , , , , ,	, ,,				
Remarks:							

/EGETATION (Four Strata) – Use scientific	Absolute	Dominant	Indicator	Sampling Point: DP-B2 Dominance Test worksheet:
Tree Stratum (Plot size: 30 feet)		Species?		Number of Dominant Species
_{1.} Fraxinus pennsylvanica	35	Yes	FACW	That Are OBL, FACW, or FAC: 8 (A)
Quercus palustris	 15	Yes	FACW	
B. Diospyros virginiana		No	FAC	Total Number of Dominant Species Across All Strata: 8 (B)
				Openies Across All Ottala.
				Percent of Dominant Species That Are OBL FACW or FAC: 100% (A/B
5				That Are OBL, FACW, or FAC: 100% (A/B
5				Prevalence Index worksheet:
7		· <u></u>		Total % Cover of: Multiply by:
3				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 30 feet)	55	= Total Cov	er	FACW species x 2 =
1 Fraxinus pennsylvanica	10	Yes	FACW	FAC species x 3 =
Acer saccharinum	5	Yes	FACW	FACU species x 4 =
3. Quercus palustris	5	Yes	FACW	
				UPL species x 5 =
1				Column Totals: (A) (B)
5				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
3				× 2 - Dominance Test is >50%
9	_			,
10				3 - Prevalence Index is ≤3.0¹
	20	= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 15 feet)				data in Remarks or on a separate sheet)
1. Toxicodendron radicans	15	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2 _. Juncus effusus	5	Yes	FACW	
_{3.} Rubus pensilvanicus	_ 2	No	FAC	¹ Indicators of hydric soil and wetland hydrology must
_{4.} Lonicera japonica	_ 1	No	FACU	be present, unless disturbed or problematic.
5				Definitions of Four Vegetation Strata:
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
8				height.
9		·		Sapling/Shrub – Woody plants, excluding vines, less
10	_			than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
11 12.	_			Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30 feet)		= Total Cov	er	Woody vine – All woody vines greater than 3.28 ft in
Toxicodendron radicans	15	Yes	FAC	height.
2.				
3				
4				Hydrophytic
5				Vegetation
ô				Present?
		= Total Cov	ar .	

Sampling Point: DP-B2

Profile Desc	ription: (Describe	to the de	oth needed to docu	ment the	indicator	or confirm	the absence	of indicato	ors.)	
Depth	Matrix		Redo	x Feature	S					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0 - 3	10YR 4/3	98	10YR 4/4	2	<u>C</u>	_ <u>PL</u>	silt loam			
3 - 9	10YR 6/2	95	10YR 4/4	5	С	PL	silt loam			
9 - 12+	10YR 6/1	80	10YR 5/4	20	С	PL	silt loam			
								-		
						-				
		- —								
	-									
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	d Sand Gr	ains.	² Location: Pl	L=Pore Linir	ng, M=Matrix.	
Hydric Soil I			,						oblematic Hyd	ric Soils³:
Histosol	(A1)		Dark Surface	e (S7)			2	cm Muck (A	410) (MLRA 14	7)
	oipedon (A2)		Polyvalue Be		ce (S8) (I	VLRA 147,		•	Redox (A16)	<i>'</i>
Black Hi			Thin Dark Su		. , .		, <u> </u>	(MLRA 14		
	n Sulfide (A4)		Loamy Gleye				F		odplain Soils (l	F19)
Stratified	Layers (A5)		× Depleted Ma	ıtrix (F3)				(MLRA 13	6, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface (I	- 6)		\	ery Shallow	Dark Surface	(TF12)
Depleted	d Below Dark Surfac	e (A11)	Depleted Da	rk Surface	e (F7)		0	Other (Explai	in in Remarks)	
Thick Da	ark Surface (A12)		Redox Depre	essions (F	8)					
	lucky Mineral (S1) (I	LRR N,	Iron-Mangan		es (F12) (LRR N,				
	A 147, 148)		MLRA 13	•						
	lleyed Matrix (S4)		Umbric Surfa						ydrophytic vege	
	edox (S5)		Piedmont Flo						logy must be pr	
	Matrix (S6)		Red Parent I	Material (F	21) (MLR	RA 127, 147	7) un	less disturb	ed or problema	tic.
	_ayer (if observed)									
Type:										
Depth (inc	ches):						Hydric Soil	Present?	Yes X	No
Remarks:							•			

Project/Site: Mountain View Residential F	Property City	_{/County:} Loudoun Coun	ty	Sampling Date: August 5, 2020			
Applicant/Owner: 43474MountainViewDr	LLC and 43500Mountain\	/iewDr LLC	State: VA	Sampling Point: DP-B3			
Investigator(s): B. Noveno & O. Stelzig							
Landform (hillslope, terrace, etc.): upland				Slope (%): 1%			
Subregion (LRR or MLRA): MLRA 148	Lat: 7017629.6950	Long: 117	67293.5603	Datum: NAD83			
Soil Map Unit Name: 69A - Elbert silty clay	y loam, 0 to 2 percent slop	pes, frequently flooded	NWI classific	cation: N/A			
Are climatic / hydrologic conditions on the site	e typical for this time of year?	Yes X No	(If no, explain in R	Remarks.)			
Are Vegetation, Soil, or Hydro							
Are Vegetation, Soil, or Hydro							
SUMMARY OF FINDINGS – Attach							
				, ,			
	es No es No	Is the Sampled Area					
	es NoX	within a Wetland?	Yes	No <u>X</u>			
Remarks:	NO						
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is requir	rod: chack all that apply)		Surface Soil				
Surface Water (A1)	True Aquatic Plants	· (P14)					
High Water Table (A2)	Hydrogen Sulfide O		Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)				
Saturation (A3)		eres on Living Roots (C3)					
Water Marks (B1)	Presence of Reduce		Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduct		Crayfish Bur				
Drift Deposits (B3)	Thin Muck Surface			isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Re	emarks)	Stunted or S	tressed Plants (D1)			
Iron Deposits (B5)			Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7	7)		Shallow Aqu	itard (D3)			
Water-Stained Leaves (B9)			Microtopographic Relief (D4)				
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)			
Field Observations:	~						
	No X Depth (inches):						
	No X Depth (inches):						
Saturation Present? Yes I (includes capillary fringe)	No X Depth (inches):	Wetland H	Hydrology Preser	nt? Yes No_X			
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, p	revious inspections), if ava	ilable:				
Remarks:							

EGETATION (Four Strata) – Use scientific					ng Point: DP-B3
Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?		Dominance Test worksh	
Fraxinus pennsylvanica	20	Yes	FACW	Number of Dominant Spe	
Quercus palustris	15	Yes	FACW	That Are OBL, FACW, or	FAC: / (A)
·		· 		Total Number of Dominan	
•		· 		Species Across All Strata	<u>11</u> (B)
<u>. </u>				Percent of Dominant Spec	
5				That Are OBL, FACW, or	FAC: <u>63%</u> (A/B
i				Prevalence Index works	heet:
		· ——		Total % Cover of:	
l				OBL species	
South (Object Office Of	35	= Total Cov	er		
Sapling/Shrub Stratum (Plot size: 30 feet) Diospyros virginiana	15	Yes	FAC	FACW species	
				FAC species	
Viburnum prunifolium	$-\frac{10}{10}$	Yes	FACU	FACU species	
Quercus palustris	10	Yes	FACW	UPL species	
Fraxinus pennsylvanica	10	Yes	FACW	Column Totals:	(A) (B)
_{5.} Juniperus virginiana	5	. <u>No</u>	FACU	Prevalence Index =	R/Δ -
3				Hydrophytic Vegetation	
7					
3				1 - Rapid Test for Hy	
)				× 2 - Dominance Test is	
0				3 - Prevalence Index	
	50	= Total Cov	er		aptations ¹ (Provide supporting
Herb Stratum (Plot size: 15 feet)					r on a separate sheet)
1. Toxicodendron radicans	20	Yes	FAC	Problematic Hydroph	ytic Vegetation ¹ (Explain)
2. Parthenocissus quinquefolia	10	Yes	FACU		
_{3.} Lonicera japonica	10	Yes	FACU		nd wetland hydrology must
_{1.} Erechtites hieraciifolius	2	No	UPL	be present, unless disturb	*
5.				Definitions of Four Vege	etation Strata:
<u> </u>				Tree – Woody plants, exc	luding vines, 3 in. (7.6 cm) or
7.					t height (DBH), regardless of
3				height.	
).				Sapling/Shrub – Woody	plants, excluding vines, less
10				1	er than or equal to 3.28 ft (1
				m) tall.	
11					on-woody) plants, regardless
12	42			of size, and woody plants	less than 3.28 ft tall.
Noody Vine Stratum (Plot size: 30 feet)		= Total Cov	er	Woody vine – All woody	vines greater than 3.28 ft in
Lonicera japonica	5	Yes	FACU	height.	
Toxicodendron radicans		Yes	FAC		
	<u> </u>				
3					
1				Hydrophytic	
5				Vegetation	
5				Present? Yes	No
	10	= Total Cov	er		

Sampling Point: DP-B3

Profile Desc	ription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirm	the absence	of indicato	rs.)		
Depth	Matrix			x Feature		2					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remark	<u>s</u>	
0 - 2	10YR 3/2	100					silt loam				
2 - 12+	10YR 5/3	95	10YR 4/4	5	<u>C</u>	PL	silt loam				
											_
					-						
											_
					·			-			
1 _T 0-0-		letien DN	A-Dadwaad Matrix M		- ————————————————————————————————————		2 ₁ ti DI	-Dana Limin	- M-M-t-i		_
Hydric Soil I		letion, RIV	1=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL	_=Pore Linir ators for Pr			nile ³ ·
Histosol			Dark Surface	(97)				cm Muck (A		-	
	ipedon (A2)		Polyvalue Be		ace (S8) (N	ILRA 147.		ciri Muck (/ coast Prairie			
Black His			Thin Dark Su		. , .		0	(MLRA 14		• ,	
	n Sulfide (A4)		Loamy Gleye			, ,	P	iedmont Flo		ls (F19)	
Stratified	Layers (A5)		Depleted Ma	trix (F3)				(MLRA 13	6, 147)		
	ck (A10) (LRR N)		Redox Dark					ery Shallow)
	Below Dark Surfac	e (A11)	Depleted Da		. ,		c	ther (Explai	n in Remarl	ks)	
	rk Surface (A12)	DD N	Redox Depre			I DD N					
	ucky Mineral (S1) (I . 147, 148)	_KK N,	Iron-Mangan MLRA 13		ses (F12) (LKK N,					
	leyed Matrix (S4)		Umbric Surfa	•	(MLRA 13	6. 122)	³ Ind	icators of hy	drophytic v	egetation	and
	edox (S5)		Piedmont Flo					tland hydro			
	Matrix (S6)		Red Parent I					less disturb			
Restrictive L	.ayer (if observed):										
Type:											
Depth (inc	hes):						Hydric Soil	Present?	Yes	No_	×
Remarks:							•				

Project/Site: Mountain View Residential Property City/Cou	nty: Loudoun County Sampling Date: August 5, 2020
Project/Site: Mountain View Residential Property City/Courant/Owner: 43474MountainViewDr LLC and 43500MountainViewDr LC and 43500MountainViewDr	/Dr LLC State: VA Sampling Point; DP-C1
Investigator(s): B. Noveno & O. Stelzig Section,	
Landform (hillslope, terrace, etc.): depression Local relief	
Subragion (LBB or MLRA): MLRA 148 Lat: 7017596.0780	Leng: 11767503.0831 Detum: NAD83
Subregion (LRR or MLRA): MLRA 148 Lat: 7017596.0780 Soil Map Unit Name: 69A - Elbert silty clay loam, 0 to 2 percent slopes,	frequently flooded
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil _X, or Hydrology _X significantly disturbed	
Are Vegetation, Soil, or Hydrology naturally problematic	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing samp	ling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
Lludria Cail Dragant?	s the Sampled Area
Wetland Hydrology Present? Yes X No No	vithin a Wetland? Yes NoX
Remarks:	
Data Point DP-C1 was collected within a depression	in the western portion of PIN 128396515. It is
evident that this area has developed within uplands	
Therefore, this depression should not be considered	, , , , , , , , , , , , , , , , , , ,
Therefore, the depression should here a constacted	a janoarottenar roatare.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
X Surface Water (A1) True Aquatic Plants (B1	4) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor	(C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres	
Water Marks (B1) Presence of Reduced Ir	
Sediment Deposits (B2) Recent Iron Reduction i	
Drift Deposits (B3) Thin Muck Surface (C7)	
Algal Mat or Crust (B4) Other (Explain in Remai	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
X Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	X FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes X No Depth (inches): < 1 inc	th.
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	us inspections), if available:
Remarks:	
Hydrology disturbed by sewer installation.	
l l l l l l l l l l l l l l l l l l l	

Sampling Point: DP-C1 **VEGETATION** (Four Strata) – Use scientific names of plants. Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: 30 feet % Cover Species? Status **Number of Dominant Species** 1. Acer saccharinum 15 **FACW** Yes That Are OBL, FACW, or FAC: ____ (A) 2 Fraxinus pennsylvanica 10 Yes **FACW Total Number of Dominant** 5 ___ (B) Species Across All Strata: Percent of Dominant Species 100% That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species _____ x 1 = 25 ____ = Total Cover Sapling/Shrub Stratum (Plot size: 30 feet FACW species _____ x 2 = ____ 1. Acer saccharinum FAC species _____ x 3 = FACU species _____ x 4 = ____ UPL species _____ x 5 = ____ Column Totals: _____ (A) ____ (B) Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** __ 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 ___ 4 - Morphological Adaptations¹ (Provide supporting 5 = Total Cover data in Remarks or on a separate sheet) Herb Stratum (Plot size: 15 feet) 35 Yes OBL Problematic Hydrophytic Vegetation¹ (Explain) 1. Typha latifolia 2. Eupatorium serotinum Yes FAC 3 Lonicera japonica 10 Nο **FACU** ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. FACW 10 No 4 Persicaria maculosa **Definitions of Four Vegetation Strata:** 5 Scirpus cyperinus 10 No **FACW** 6. Festuca arundinacea 2 No UPL Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 7 Toxicodendron radicans Nο FAC height. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 93____ = Total Cover Woody Vine Stratum (Plot size: 30 feet Woody vine - All woody vines greater than 3.28 ft in height. 1. Lonicera japonica Hydrophytic Vegetation Yes <u>×</u> No____ Present? 3 = Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

Sampling Point: DP-C1

Profile Desc	cription: (Describe	to the de	pth needed to docu	ment the	indicator	or confirn	n the absence	of indicate	ors.)	
Depth	Matrix		Red	ox Feature	<u>s</u>					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0 - 7	10YR 4/2	95	10YR 3/4	5	С	PL	silt loam			
7 - 12+	10YR 5/2	80	10YR 6/4	20	С	PL	silt loam			
	_		-				-			
				. ———						
							<u> </u>	<u> </u>		
		_					-			
			· -	· -	· -		· -			
					· -					
17 0-0			4-Dadwaad Matrix N	IC-Maaka			2 ₁ ti D	I – Dana Lini	an Manager	
Hydric Soil		pletion, Riv	1=Reduced Matrix, M	iS=Masked	a Sand Gr	ains.			ng, M=Matrix. roblematic Hy	dric Soile ³ :
_			Dork Curfoo	o (C7)					-	
Histosol	pipedon (A2)		Dark Surfac Polyvalue B	. ,	oo (S8) (I	/II DA 1/17			A10) (MLRA 1 4 e Redox (A16)	+1)
	istic (A3)		Thin Dark S				, 140) \	MLRA 14)		
	en Sulfide (A4)		Loamy Gley			147, 140)			oodplain Soils (F19)
	d Layers (A5)		X Depleted Ma		(- –)			(MLRA 13		,
	uck (A10) (LRR N)		Redox Dark		- 6)		`		v Dark Surface	(TF12)
Depleted	d Below Dark Surfac	ce (A11)	Depleted Da	ark Surface	e (F7)		(Other (Expla	in in Remarks)	
	ark Surface (A12)		Redox Depr	essions (F	(8)					
	Mucky Mineral (S1) (LRR N,	Iron-Manga		es (F12)	LRR N,				
	A 147, 148)		MLRA 1				2			
	Bleyed Matrix (S4)		Umbric Surf						ydrophytic vege	
	Redox (S5)		Piedmont Fl						logy must be p	
	Matrix (S6)	_	Red Parent	Material (F	-21) (MLF	A 127, 147	7) ui	nless disturb	ed or problema	itic.
	Layer (if observed)):								
Type:							l		🗸	
Depth (in	ches):						Hydric Soi	I Present?	Yes X	No
Remarks:	oile dieturbed	by cov	ver installatior	,						
	ons disturbed	by sev	vei ilistaliatioi	1						
										1



Photo #1: View to the southeast of a roadside ditch along Mountain View Drive in the southern portion of the Property; no jurisdictional features were identified within this area (April 22, 2020, by B. Noveno, BCG).



Photo #2: View to the northwest of a roadside drainage ditch along Mountain View Drive within the western portion of the Property; no jurisdictional features were identified within this area (August 5, 2020, by B. Noveno, BCG).



Photo #3: View to the northwest of Data Point DP-C1, which was collected within a depression in the western portion of PIN 128396515; this area exhibits all three wetland parameters. However, it is evident that it has developed within a recently disturbed area associated with the recently constructed adjacent sanitary sewer (August 5, 2020, by B. Noveno, BCG).



Photo #4: View to the northwest of Data Point DP-B1, which was collected within the upper portion of Wetland B near Flags B1/B2 (August 5, 2020, by B. Noveno, BCG).



Photo #5: View to the southeast of Data Point DP-B2, which was collected within the lower portion of Wetland B near Flags B14/B16 (August 5, 2020, by B. Noveno, BCG).



Photo #6: View to the northwest of Data Point DP-B3, which was collected just downslope and outside of Wetland B near Flags B7/B16; this area supports hydrophytic vegetation but does not exhibit hydric soils or wetland hydrology (August 5, 2020, by B. Noveno, BCG).



Photo #7: Downslope view of Wetland A from its origin at Flags A1/A2 (April 22, 2020, by B. Noveno, BCG).



Photo #8: View to the northwest of Data Point DP-A1, which was collected within the upper portion of Wetland A near Flags A13/A15 (April 22, 2020, by B. Noveno, BCG).



Photo #9: View to the east of Data Point DP-A2, which was collected just upslope and outside of Wetland A near Flags A13/A15; this area does not exhibit any of the three wetland parameters (April 22, 2020, by B. Noveno, BCG).



Photo #10: Downslope view of Wetland A from near Flags A12/A19, where it transitions to palustrine emergent wetland (April 22, 2020, by B. Noveno, BCG).



Photo #11: Upslope view within the lower portion of Wetland A from Flags A20/A25 (April 22, 2020, by B. Noveno, BCG).



Photo #12: Downslope view of Wetland A from Flags A26/A31, where Wetland A continues to the north and outside the limits of investigation (April 22, 2020, by B. Noveno, BCG).