PLEASE PRINT OR TYPE ALL ANSWERS. If a question does not apply to your project, please print N/A (not applicable) in the space provided. If additional space is needed, attach extra 8 $\frac{1}{2}$ x 11 inch sheets of paper.

CHECK ONE, if applicable:	Pre-Construction Notification (For Nationwide Permits ONL		SPGP 🗵
1. PROJECT LOCATION INFOR	PMATION		
	, such as a USGS topographic		nap showing the site location and project g the north direction.)
Address		City/County	
2712 Saint Brides Road West		Chesapeake	
Subdivision		Lot/Block/Parcel	
none		0850000000460)
Name of water body(ies) within pro	ject boundaries and drainage a	rea (acres or squa	are miles)
n/a			
Tributary(ies) to: Northwest River			
Basin:	Subbasin: Subbasin: Middle James River		
		<u> </u>	
Special Standards (based on DEQ	Water Quality Standards 9VAC	25-260 et seq.): —	
Project type (check one)		vate, non-comme nmunity, commerc	rcial, residential) cial, industrial, government)
Latitude and longitude at center of	project site: <u>36</u> - <u>38</u> - <u>56</u>	.8 / 76 - 14	32.41
USGS topographic map name: Fen			
8- digit USGS Hydrologic Unit Cod If known, indicate the 10-digit and 1			
Name of your project (Example: Wa	ater Creek driveway crossing) <u> </u>	lickory Manor_Pha	ase II
Is there an access road to the proje	ect? X Yes No. If yes, chec	k all that apply: 🔀	public private improved unimproved
From HWY 464, proceed straigh	t onto Hwy 168. Take first F	Hillcrest Parkway	sible landmarks or major intersections: y exit. Turn right at light onto Hillcrest ner of Edinburgh Parkway and Saint Brides.
Does your project site cross bound If so, name those localities:	aries of two or more localities (i	.e. cities/counties	/towns)? ☐ Yes ☒ No
		V.1.0= 0	
	FOR AGENC	Y USE ONLY	
		Notes:	
JPA#		i	

7

2. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR INFORMATION

The applicant(s) is/are the legal entity to which the permit may be issued. The applicant(s) can either be the property owner(s) or the person/people/company(ies) that intend(s) to undertake the activity. The agent is the person or company that is representing the applicant(s). If a company, please use the company name that is registered with the State Corporation Commission (SCC), or indicate no registration with the SCC.

Applicant(s) (For a company, Dragas Management Corpo	use SCC		ed name)	Agent (if applicable) (For a company, use SCC-registered name) Bay Environmental, Inc. Attn: Amy Conley				
Mailing address 4538 Bonney Road				Mailing address 648 Independence Parkway	Mailing address 648 Independence Parkway, Suite 100			
City Virginia Beach		State VA	Zip Code 23462	City Chesapeake	State VA	Zip Code 23320		
Phone number w/area code (757) 499-4303	Fax			Phone number w/area code (757) 436-5900 Fax (757) 436-5909		6-5909		
Mobile/pager	E-ma BKok		Iragas.com	Mobile/pager (757) 816-4997				
State Corporation Commission 54-1809196	n ID num	ber (if ap	pplicable)	State Corporation Commission N/A	n ID number	(if applicable)		
				ectronic mail. If the applicant wish ca@dragas.com; amy@bay-enviror		e their permit via		
Property owner(s), if different use SCC-registered name)	from app	licant (Fo	or a company,	Contractor, if known (For a coname) unknown at this time	mpany, use	SCC-registered		
Mailing address 4538 Bonney Road				Mailing address				
City Virginia Beach		State VA	Zip code 23462	City	State	Zip code		
Phone number w/area code (757) 499-4303	Fax	I	-1	Phone number w/area code	Fax	1		

3. PROVIDE A DESCRIPTION OF THE PROJECT, PROJECT PRIMARY AND SECONDARY PURPOSES, PROJECT NEED, INTENDED USE, AND ALTERNATIVES CONSIDERED (Attach additional sheets if necessary)

Mobile/pager

E-mail

State Corporation Commission ID number (if applicable)

- The purpose must include any new development or expansion of an existing land use and/or proposed future use of residual land
- Describe the physical alteration of surface waters

State Corporation Commission ID number (if applicable)

E-mail

BKokoska@dragas.com

- Include a description of alternatives considered to avoid or minimize impacts to surface waters, including wetlands, to the
 maximum extent practicable. Include factors such as, but not limited to, alternative construction technologies, alternative
 project layout and design, alternative locations, local land use regulations, and existing infrastructure
- For utility crossings, include both alternative routes and alternative construction methodologies considered
- For major surface water withdrawals, public surface water supply withdrawals, or projects that will alter instream flows, include the water supply issues that form the basis of the proposed project.

The Hickory Manor Phase I was permitted through WP4-16-0704. Phase II of the development proposes to construct 83 detached condominiums and associated infrastructure on 19.64 acres of land. The resources to be impacted on the property include a PEM wetland that is 10,116 acres and 30,081 sq ft of farm ditches that were used for irrigation when the property was a tree farm. The USACE called these ditches linear wetlands because the ditches had not been maintained, vegetation had grown in some of them, and they held water. All wetlands within the project boundary will be impacted due to the layout of the homes and geometry of the site. It is not preferable to leave a ditch running through the center of a neighborhood due to safety concerns. The proposed stormwater BMPs will contain and treat stormwater better than the existing ditches on the property. All wetlands will be mitigated except Impacts 7a, 7b, 8, 9 that lack vegetation. The applicant will purchase 0.499 wetland credits from a mitigation bank within the HUC.

Mobile/pager

47-2070639

3. PROVII	DE A DESCRIPTION OF THE PROJE	ECT (Continued)				
Date of prop Fall 2016	osed commencement of work (MM/D	D/YYYY)	Date of proposed completion of work (MM/DD/YYYY) summer 2017			
	mitting this application at the direction leral agency?Yes xxxNo	of any State,	Has any work commenced or has any portion of the project for which you are seeking a permit been completed? Yesxxx No			
performed th	ered "yes" to either question above, gine work, and which agency (if any) dir between completed work and proposi	ected you to subr	mit this	application. In ac	pleted and/or when it commenced, who ddition, you will need to clearly	
Are you awa (If yes, pleas	ire of any unresolved violations of envise explain)	rironmental law or	r litigati	on involving the p	roperty?Yes xxxx_No	
	JS SITE VISITS AND/OR PERMITS I on coordination or previous permits)	RELATED TO TH	HE PRO	OPOSED WORK (Include all Federal, State, and Local	
Agency	Activity	Permit/Project number, and explanation of r reporting Nationwide per previously used	mits	Action taken ** and Date of Action	If denied, give reason for denial	
USACOE	Jurisdictional Determination	NAO-2015-0	730	6/15/15	issued	
** Issued, de	enied, site visit	1				
5. PROJEC	T COSTS					
Approximate	e cost of the entire project, including m	naterials and labo	r: \$ <u>75</u> r	million		
	e cost of only the portion of the project nark in nontidal areas): \$250,0		vaters (below mean low v	water in tidal areas and below ordinary	

6. PUBLIC NOTIFICATION (Attach additional sheets if necessary)		
	I property owners adjacent to the project is located within a cove, you will		
	provide the requested information for	the first adjacent parcel beyond your	property line.
Property owner's name	Mailing address	City	State Zip code
N/A for general permit			
Name of newspaper having gen Address and phone number (ind newspapern/a	eral circulation in the area of the projectuding area code) of	ect: n/a	
Have adjacent property owners	been notified with forms in Appendix	A?Yes n/aNo (attach copi	ies of distributed forms)
7 TUREATENED AND ENDA	NCERED SPECIES INFORMATION		
7. THREATENED AND ENDA	NGERED SPECIES INFORMATION		
species (listed or proposed). At as database search results or ye	concerning the potential for your proje tach correspondence from agencies a our Corps' waters and wetlands deline d Fisheries and the Virginia Departmen 4 of this package.	and/or reference materials that addrest eation confirmation. Contact information	ss potential impacts, such ion for the Virginia
8. HISTORIC RESOURCES IN	FORMATION		
bridges, canals, etc. Prospective Corps from granting a permit or NHPA, has intentionally significate prevent it, allowed such significate	e but are not limited to archeological so we permittees should be aware that se other assistance to an applicant who, antly adversely affected a historic prop ant adverse effect to occur, unless the es that circumstances justify granting s	ction 110k of the NHPA (16 U.S.C. 47 with intent to avoid the requirements perty to which the permit would relate, Corps, after consultation with the Ad	70h-2(k)) prevents the of Section 106 of the , or having legal power to lvisory Council on Historic
xxxx Uncertain	ed within or adjacent to the project site		
if Yes, please provide a map sh	owing the location of the historic property	erty within or adjacent to the project s	ite.
	tures 50 years old or older located on owing the location of these buildings of		No xxxx Uncertain
	nistoric district? Yes xxxx No strict:		

Revised: July 2008

8. HISTORIC RESOURCES INFORMAT	ION (Continued)		
Has a survey to locate archeological sites Yes No _xxx_ Uncertain	and/or historic structures been	carried out on the property?	
If Yes, please provide the following inform	nation: Date of Survey:		
Name of firm:			
Is there a report on file with the Virginia D	epartment of Historic Resources	s? Yes No ^{XXX} _Ur	ncertain
Title of Cultural Resources Mana	agement (CRM) report:		
Was any historic property locate	d? Yes NoUnc	ertain	
9. WETLANDS, WATERS, AND DUNES	S/REACHES IMPACT INFORMA	ATION	
Report each impact site in a separate of ensure that the associated project drawdredging, mining, and excavating project.	wings clearly depict the location		
	Impact site number	Impact site number	Impact site number
Impact description (use all that apply):	1 Example: F, NT, PE, V	2	3
F=fill EX=excavation S=Structure T=tidal NT=non-tidal TE=temporary PE=permanent PR=perennial IN=intermittent SB=subaqueous bottom DB=dune/beach IS=hydrologically isolated V=vegetated NV=non-vegetated MC=Mechanized Clearing of PFO	See Attached Spreadsheet		
Wetland/waters impact area (square feet)			
Dune/beach impact area (square feet)			
Stream dimensions at impact site (length and average width in linear feet, and area in sq. ft.)			
Volume of fill below Mean High Water or Ordinary High Water (cubic yards)			
Cowardin classification of impacted wetland/water or geomorphological classification of stream	Example wetland: PFO Example stream: wide; bank eroding; braided channel Example stream: 'C' channel		
Average stream flow at site (flow rate under normal rainfall conditions) (cubic feet per second)			

Revised: July 2008

Contributing drainage area (acres or square miles)



Hickory Manor Phase II Impact Summary

Impact Site Number	Wetland/water impact description	Impact Area (ft²)	Cowardin Classification	Stream/ waters dimensions	Contributing drainage area
7a	F, PE, NV	5,429	PUB in ditch	n/a	<5
7b	F, PE, NV	5,902	PUB in ditch	n/a	<5
8	F, PE, NV	809	PUB in ditch	n/a	<5
9	F, PE, NV	5,989	PUB in ditch	n/a	<5
10	F, PE, V	11,952	PEM in ditch	n/a	<5
13	F, PE, V	10,116	PEM	n/a	<5
	TOTAL	40,197			

The Great Dismal Swamp RestorationBank, LLC

P. O. Box 6186 Chesapeake, VA 23323 Phone (757) 487-3441 Fax (757) 487-8680

September 21, 2016

Ms. Amy Conley

Bay Environmental, Inc. 648 Independence Parkway, Suite 100 Chesapeake, Virginia 23320

RE:

Hickory Manor Chesapeake, VA

Dear Ms. Conley:

The following information is provided in reply to your request to purchase approximately 1.389 wetland mitigation credits from The Great Dismal Swamp RestorationBank - Davis Wetland Bank for your project. These credits are available for purchase from our Davis Wetland Bank, which serves the subject watershed HUC 03010205.

The cost of 0.882 credits will be Seventeen Thousand, Three Hundred, Sixty-Two Dollars (\$ 17,362.00). This letter of availability will expire on December 31, 2016. To complete this transaction we will need payment, and the following information:

DEQ Project #:

Waterway:

Permittee Name:

Locality of Impact:

Permit action:

Impacts (acres/linear feet):

Impacts NWI classification:

Impacts Hydrologic Unit Code: 03010205

Mitigation Bank, Permittee, and Consultant agree not to discuss with any other party the details and/or pricing of this agreement, unless necessary for regulatory matters. Information contained herein shall be held in the strictest confidence.

Thank you for allowing us to quote on this project. We look forward to working with you.

Sincerely,

Beverly M. White

Manager Accounting/Sales

GDSRB



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1096

June 15, 2015

PRELIMINARY JURISDICTIONAL DETERMINATION

Eastern Virginia Regulatory Section NAO-2015-0730 (St. Brides Ditch)

Greenbrier Farms Land LLC 1105 Madison Plaza Suite 110 Chesapeake, Virginia 23320

Dear Mr. Thrasher:

This letter is in regard to your request for a preliminary jurisdictional determination for waters of the U.S. (including wetlands) on an approximate 120.49 acre parcel known as Greenbrier Farms in Chesapeake, Virginia (tax map parcel # 0850000000470 & 0850000000460).

The map entitled "Greenbrier Farms", by Bay Environmental dated 5/28/2015 and Corps date stamped as received 5/28/2015 (copy enclosed) provides the location(s) of waters and/or wetlands on the property listed above. The basis for this delineation includes application of the Corps' 1987 Wetland Delineation Manual (and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region) and the positive indicators of wetland hydrology, hydric soils, and hydrophytic vegetation and the presence of an ordinary high water mark.

Discharges of dredged or fill material, including those associated with mechanized landclearing, into waters and/or wetlands on this site may require a Department of the Army permit and authorization by state and local authorities including a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ), a permit from the Virginia Marine Resources Commission (VMRC) and/or a permit from your local wetlands board. This letter is a confirmation of the Corps preliminary jurisdiction for the waters and/or wetlands on the subject property and does not authorize any work in these areas. Please obtain all required permits before starting work in the delineated waters/wetland areas.

This is a preliminary jurisdictional determination and is therefore not a legally binding determination regarding whether Corps jurisdiction applies to the waters or wetlands in question. Accordingly, you may either consent to jurisdiction as set out in this preliminary jurisdictional determination and the attachments hereto if you agree with the determination, or you may request and obtain an approved jurisdictional determination. This preliminary jurisdictional determination and associated wetland delineation map may be submitted with a permit application.

Enclosed is a copy of the "Preliminary Jurisdictional Determination Form". Please review the document, sign, and return one copy to Dan Bacon, of my staff, either via email (danny.r.bacon@usace.army.mil) or via standard mail to US Army Corps of Engineers, Regulatory Office, and ATTN: Dan Bacon, 803 Front Street Norfolk, Virginia 23510 within 30 days of receipt and keep one for your records. This delineation of waters and/or wetlands is valid for a period of five years from the date of this letter unless new information warrants revision prior to the expiration date.

If you have any questions, please contact Dan Bacon, of my staff, either via telephone at (757) 201-7060 or via email at danny.r.bacon@usace.army.mil

Sincerely,

Pete Kube

Chief, Eastern Virginia Regulatory Section

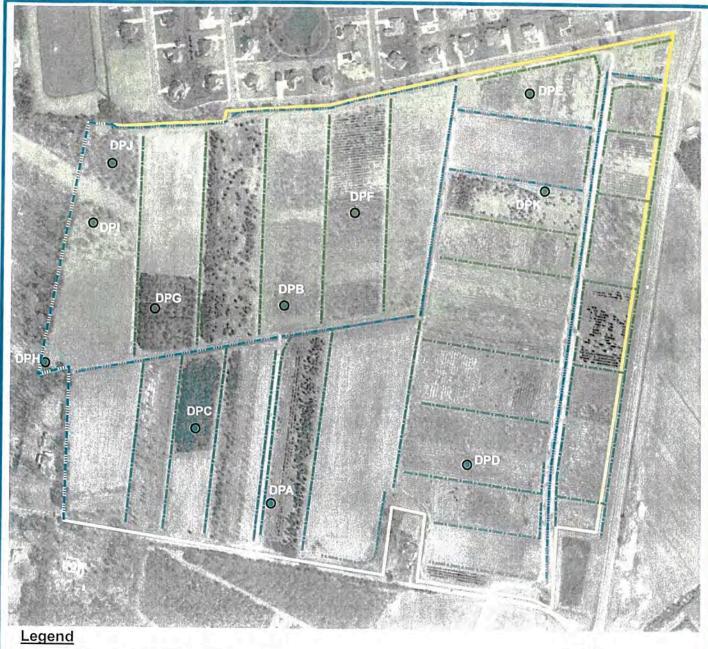
Enclosure(s)

Cc: Agent

Virginia Department of Environmental Quality

Dragas Management Group

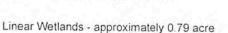
City of Chesapeake



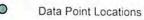
Property Boundary ~ 120.491 acres



Wetlands - approximately 0.29 acre



Non-jurisdictional ditches





0 100 200 400 600 800 Feet

Source: City of Chesapeake Parcel Data and USGS 2013 Orthophotograph; Wetlands marked by Trimble GeoXT.

Scale:1 in = 400 ft Bay #:14-204-01 Date: 5/28/15 Prepared by: AJLC VA PWD # 3402000113

Figure 2: Site Conditions Greenbrier Farms Wetland Delineation Chesapeake, Virginia



PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION:

Α.	REPORT COMPLETION	DATE FOR PRELIMINARY JURISDICTIONAL
	DETERMINATION (JD):	Monday, June 15, 2015

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Greenbrier Farms Land LLC 1105 Madison Plaza Suite 110 Chesapeake, Virginia 23320

C. DISTRICT OFFICE: Norfolk District (CENAO-REG)

FILE NAME: Greenbrier Farms

FILE NUMBER: NAO-2015-0730

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: VIRGINIA County/parish/borough: Chesapeake City:

Center coordinates of site (lat/long in degree decimal format):

Latitude: 36.648904 ° N Lo

Longitude: -76.241005

° W

Universal Transverse Mercator: 18

Name of nearest waterbody: Saint Brides Ditch to Northwest River

Identify (estimate) amount of waters in the review area:

Non-wetland waters:

linear feet:

width (ft); and/or

acres.

Cowardin Class:

Stream Flow:

Wetlands: 1.08

acres

Cowardin Class: PFO, PEM and WOUS

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal:

Non-Tidal:

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

Office (Desk) Determination. Date:

Field Determination. Date(s): May 20, 2015

- The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.
- 2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.
- 3. This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA:

Data reviewed for preliminary JD (check all that apply) - checked items should be included in case file and, where checked and requested, appropriately reference sources below.

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

Date	Date
Signature Regulatory Project Manager (REQUIRED)	Signature of person requesting Preliminary JD (REQUIRED, unless obtaining the signature is impracticable)
IMPORTANT NOTE: The information recorded verified by the Corps and should not be relied determinations.	
File no. and date of responsible File no. and date of responsible Property (Please Specify): Chesap	
Previous determination(s):	
or Other (Name & Date):	
☐ Photographs: ☒ Aerial (Name & Date)	: 1937, 1958, 1973, 1981, 1990, 1994, 1998
☐ 100-year Floodplain Elevation:	(National Geodetic Vertical Datum of 1929)
☐ FEMA/FIRM maps:	
☐ State/Local wetland inventory map(s):	
☐ National wetlands inventory map(s). Cite	e name:
Citation: 1993	
□ USDA Natural Resources Conservation	Service Soil Survey.
☑ U.S. Geological Survey map(s). Cite sca	le & quad name: 2013 Orthophotograph
USGS 8 and 12 digit HUC maps.	
USGS NHD data.	
	: 2002 City of Chesapeake Parcel Data
Corps navigable waters' study:	
☐ Data sheets prepared by the Corps:	,
Office does not concur with data sheet	SE SENSE SERVE STAND
	WE US
XI Data sheets prepared/submitted by or or	hehalf of the applicant/consultant



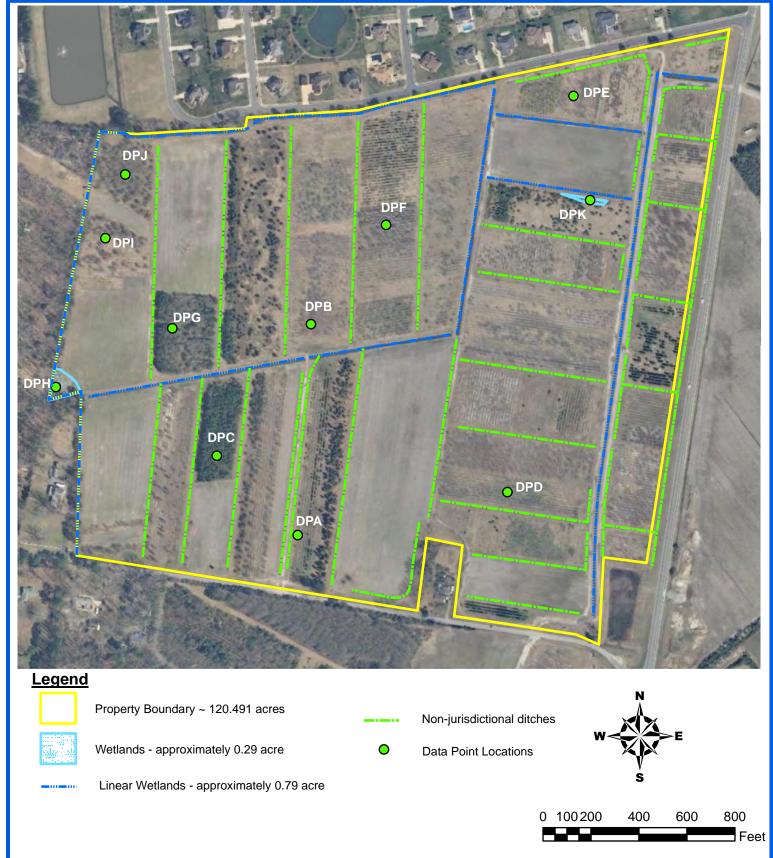
DEPARTMENT OF THE ARMY US ARMY CORPS OF ENGINEERS NORFOLK DISTRICT FORT NORFOLK 803 FRONT STREET NORFOLK VA 23510-1096

JUNE 15, 2015

Supplemental Preapplication Information

Project Number: NAO-2015-0730 Applicant: Greenbrier Farms Land LLC Project Location: Chesapeake, Virginia

1.	As	search of the Virginia Department of Historic Resources data revealed the following:
	\boxtimes	No known historic properties are located on the property.
		The following known architectural resources are located on the property:
		The following known archaeological resources are located on the property:
		The following known historic resources are located in the vicinity of the property (potential for effects to these resources from future development):
NO:	TE: 1) 2)	The information above is for planning purposes only. In most cases, the property has not been surveyed for historic resources. Undiscovered historic resources may be located on the subject property or adjacent properties and this supplemental information is not intended to satisfy the Corps' requirements under Section 106 of the National Historic Preservation Act (NHPA). Prospective permittees should be aware that Section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant.
2.	Co	earch of the data supplied by the U.S. Fish & Wildlife Service, the Virginia Department of nservation and Recreation and the Virginia Department of Game and Inland Fisheries ealed the following:
		No known populations of threatened or endangered species are located on or within the vicinity of the subject property.
	\boxtimes	The following federally-listed species may occur within the vicinity of the subject property: Northern long-eared bat (Myotis septentrionnalis)
		The following state-listed (or other) species may occur within the vicinity of the subject property:
		ote this information is being provided to you based on the preliminary data you submitted to the Corps relative to t boundaries and project plans. Consequently, these findings and recommendations are subject to change if the project scope changes or new information becomes available and the accuracy of the data.



Source: City of Chesapeake Parcel Data and USGS 2013 Orthophotograph; Wetlands marked by Trimble GeoXT.

Scale:1 in = 400 ft Bay #:14-204-01 Date: 5/28/15 Prepared by: AJLC VA PWD # 3402000113

Figure 2: Site Conditions Greenbrier Farms Wetland Delineation Chesapeake, Virginia



Project/Site: Greenbrier Farms - 2712 Saint Brides Road	City/County: Chesar	peake	Sampling Date: <u>3/23/2015</u>
Applicant/Owner: Dragas Management Corporation / Green	brier Farms Limited	State: <u>VA</u>	Sampling Point: DPA
D E : 1 I	Section, Township,		
Landform (hillslope, terrace, etc.):			Slope (%):
Subregion (LRR or MLRA):			
Soil Map Unit Name:		NWI classific	eation: Upland
Are climatic / hydrologic conditions on the site typical for thi			
Are Vegetation, Soil, or Hydrology			oresent? Yes ✓ _ No
Are Vegetation, Soil, or Hydrology	naturally problematic? (I	f needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling poin	t locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: The wetland hydrology parameter was not met. The wetland hydrology parameter was not met. The wetland hydrology parameter was not met.	lo _ ✓ _ within a We		No ✓
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all	that apply)	Surface Soil	
	Fauna (B13)		getated Concave Surface (B8)
	eposits (B15) (LRR U)	Drainage Pa	
	en Sulfide Odor (C1)	Moss Trim Li	ines (B16)
	d Rhizospheres along Living Ro	oots (C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2) Present	ce of Reduced Iron (C4)	Crayfish Bur	rows (C8)
Drift Deposits (B3) Recent	Iron Reduction in Tilled Soils (C	Saturation V	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Mo	uck Surface (C7)	Geomorphic	Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aqu	itard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)		Sphagnum n	noss (D8) (LRR T, U)
Field Observations:			
	pth (inches):		
Water Table Present? Yes No _ ✓ _ De			
Saturation Present? Yes _ No _ \(_ De \) (includes capillary fringe)	pth (inches): _>24"	Wetland Hydrology Preser	nt? Yes No✓
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspection	ons), if available:	
Remarks:			
No indicators of hydrology were observed. The v	vetland hydrology paramete	er was not met.	

20.5 !'	Absolute	Dominant I	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30-foot radius</u>)		Species?	Status	Number of Dominant Species
1. Planted Ornamental Holly	40.0	Yes	_	That Are OBL, FACW, or FAC: (A)
2			_	Total Number of Dominant
3				Species Across All Strata:3 (B)
4			_	Bassant of Bassis and One size
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)
6.				(VB)
		= Total Cove	- r	Prevalence Index worksheet:
50% of total cover: 20				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30-foot radius)	2070 01	total cover.		OBL species x 1 =
				FACW species x 2 =
1			-	FAC species x 3 =
2			_	FACU species x 4 =
3				UPL species x 5 =
4			_	Column Totals: 0 (A) 0 (B)
5				Column Totals (A) (B)
6				Prevalence Index = B/A =0
	0 :	= Total Cove	r	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30-foot radius)			_	✓ 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0¹
2.				' -
				Problematic Hydrophytic Vegetation ¹ (Explain)
3			_	
4			_	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			-	
6				Definitions of Five Vegetation Strata:
		= Total Cove		Tree – Woody plants, excluding woody vines,
50% of total cover:	20% of	total cover:		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30-foot radius)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Andropogon virginicus	60		FAC	Sapling – Woody plants, excluding woody vines,
2. <u>Setaria pumila</u>	50	Yes	FAC	approximately 20 ft (6 m) or more in height and less
3. Digitaria sanguinalis	15	No	FACU	than 3 in. (7.6 cm) DBH.
4. Daucus carota	10	No	UPL	Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7		-	_	herbaceous vines, regardless of size, and woody
				plants, except woody vines, less than approximately
8			_	3 ft (1 m) in height.
9				Woody vine - All woody vines, regardless of height.
10		-		
11			-	
	135	= Total Cove	r	
50% of total cover: <u>67.5</u>	20% of	total cover:	27	
Woody Vine Stratum (Plot size: 30-foot radius)				
1				
2				
3				
4.				
5				
		= Total Cove	ır.	Hydrophytic Vegetation
EOO/ official covers				Present? Yes No
50% of total cover:		total cover:		
Remarks: (If observed, list morphological adaptations belo				
The dominance test was met. The hydophytic vege	etation par	rameter is 1	net.	

Sampling Point: DPA

SOIL Sampling Point: DPA

7 to 18+ 1	Matrix Color (moist) 0 YR 4/2 0 YR 5/1	% 100 100	Color (moist)	x Features %	Type ¹			Remarks
1) to 7	0 YR 4/2	100			. , , , , ,	Loc ²	Texture	I VIII WILLY
7 to 18+ 1			10 YR 4/1				Texture	ailt laam
Type: C=Cond	.0 YR 5/1		10 YR 4/1					silt loam
				10	_			silt loam
						. 3.7		
				·	_			
						. 3.7		
					_			
ydric Soil Ind	entration, D=Dep	oletion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
	icators: (Applic	able to all	LRRs, unless other	wise note	ed.)		Indicators	for Problematic Hydric Soils ³ :
Histosol (A	1)		Polyvalue Be	low Surfac	ce (S8) (L	RR S, T, U) 1 cm N	Muck (A9) (LRR O)
Histic Epipe			Thin Dark Su					Muck (A10) (LRR S)
_ Black Histic	, ,		Loamy Mucky	•	, ,	O)		ed Vertic (F18) (outside MLRA 150A
Hydrogen S	, ,		Loamy Gleye		F2)			ont Floodplain Soils (F19) (LRR P, S,
Stratified La		T 111	✓ Depleted Mat		e)			alous Bright Loamy Soils (F20)
-	dies (A6) (LRR P y Mineral (A7) (L I		Redox Dark S Depleted Dar	,	*		-	RA 153B) arent Material (TF2)
	ence (A8) (LRR L		Redox Depre		` '			Shallow Dark Surface (TF12)
	(A9) (LRR P, T)	-,	Marl (F10) (L	•	• /			(Explain in Remarks)
	elow Dark Surfac	e (A11)	Depleted Och	•	MLRA 1	51)		(
	Surface (A12)	, ,	Iron-Mangan				T) ³ Indic	cators of hydrophytic vegetation and
	ie Redox (A16) (I		A) Umbric Surfa	ce (F13) (LRR P, T	U)	wet	tland hydrology must be present,
Sandy Muc	ky Mineral (S1) (I	LRR O, S)	Delta Ochric	(F17) (ML	RA 151)		unl	ess disturbed or problematic.
	ed Matrix (S4)		Reduced Ver					
Sandy Red			Piedmont Flo					4500)
Stripped Ma	, ,	C T 11)	Anomalous B	sright Loan	ny Solis (I	-20) (NILR	A 149A, 153C	, 153D)
	ce (S7) (LRR P, s ver (if observed)						1	
Type:	ci (ii obscived)	•						
Depth (inche	ve).						Hudric Soil	Present? Yes _ ✓ _ No _
							nyunc Son	Fleselit, les 7 10 7
emarks:								
The depleted r	natrix (F3) hydri	c soil indic	cator was observed.	The hydr	ic soil cri	teria is me	t.	

Project/Site: Greenbrier Farms - 27	12 Saint Brides Road	City/County: Chesapeake		Sampling Date: <u>3/23/2015</u>
Applicant/Owner: Dragas Managem	ent Corporation / Greenbrier F	arms Limited	State: VA	Sampling Point: DPB
Investigator(s): Bay Environment	al, Inc.	Section, Township, Rang	ie:	
Landform (hillslope, terrace, etc.): _				
Subregion (LRR or MLRA):				
Soil Map Unit Name:			NWI classific	
Are climatic / hydrologic conditions				
Are Vegetation, Soil				
Are Vegetation, Soil	, or Hydrology naturally	y problematic? (If need	ded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS -	Attach site map show	ring sampling point loo	cations, transects	, important features, etc.
Hydrophytic Vegetation Present?	Yes No _ ✓	— Is the Sampled A	rea	
Hydric Soil Present? Wetland Hydrology Present?	Yes ✓ No Yes No _ ✓	— within a Wetland	? Yes _	No ✓
Remarks:	16510	_		
The hydrophytic vegetation a	nd wetland hydrology para	meters were not met. This	is area is an upland.	
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of or	e is required; check all that ap	nlv)	Surface Soil	
Surface Water (A1)	Aguatic Fauna			getated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (, ,	Drainage Pa	
Saturation (A3)	Hydrogen Sulfi		Moss Trim Li	` '
Water Marks (B1)		ospheres along Living Roots (0		Water Table (C2)
Sediment Deposits (B2)		educed Iron (C4)	Crayfish Buri	` ,
Drift Deposits (B3)		eduction in Tilled Soils (C6)		sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surf	` ,		Position (D2)
Iron Deposits (B5)	Other (Explain	in Remarks)	Shallow Aqui	tard (D3)
Inundation Visible on Aerial In	nagery (B7)		FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)			Sphagnum m	noss (D8) (LRR T, U)
Field Observations:				
Surface Water Present? Ye	es No _ ✓ _ Depth (inc	:hes):		
Water Table Present? Ye	es No _ ✓ _ Depth (inc	:hes):		
Saturation Present? Ye	es No _ ✓ _ Depth (inc	:hes): 15" Wetla	and Hydrology Presen	t? Yes No _ ✓
(includes capillary fringe)			16 11-1-1	
Describe Recorded Data (stream				etale 1 have
Water level was as noted above	on 3/23/13 & 4/13/13. Only	1111eu in to 18 on 3/13/13 a	arter waiting approxim	atery 1 nour.
Remarks:				
No indicators of hydrology w	ere observed. The wetland	d hydrology parameter wa	is not met.	

20.5 !'	Absolute	Dominan	t Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30-foot radius</u>)			? Status	Number of Dominant Species
1. Planted Platanus occidentalis	40.0	Yes	FACW	That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3			_	Species Across All Strata:5 (B)
4				Devent of Developet Consider
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 40% (A/B)
6				(32)
	40 :	= Total Co	ver	Prevalence Index worksheet:
50% of total cover: 20				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30-foot radius)				OBL species x 1 =
1				FACW species x 2 =80
2				FAC species x 3 =66
3.				FACU species x 4 =556
4				UPL species x 5 =
		-	-	Column Totals: (A) (B)
5		_		3.49
6		- T-4-1 O-		Prevalence Index = B/A =0
500/ 51 1 1	0 :			Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cove	r:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30-foot radius)		Vac	EAC	2 - Dominance Test is >50%
1. <u>Ligustrum sinense</u>		Yes	FACU FACU	. 3 - Prevalence Index is ≤3.0¹
2. Prunus serotina		Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3			-	
4		_	- 	¹ Indicators of hydric soil and wetland hydrology must
5		_		be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	50 :	= Total Co	ver	Tree – Woody plants, excluding woody vines,
50% of total cover: 25	20% of	total cove	r: <u>10</u>	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30-foot radius)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Lonicera japonica	80	Yes	FACU	Sapling – Woody plants, excluding woody vines,
2. Allium vineale	25	Yes	FACU	approximately 20 ft (6 m) or more in height and less
3. Juniperus virginiana	4	No	FACU	than 3 in. (7.6 cm) DBH.
4. Magnolia grandiflora	2	No	FAC	Shrub – Woody plants, excluding woody vines,
5.				approximately 3 to 20 ft (1 to 6 m) in height.
6.				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8.				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.		_		3 it (1 m) in noight.
10.		_		Woody vine - All woody vines, regardless of height.
11		= Total Co		
EON/ oftatal across 56				
50% of total cover: 56	20% 01	total cove		
Woody Vine Stratum (Plot size: 30-foot radius)				
1			-	
2		_	-	
3			_	
4				
5			_	Hydrophytic
	:			Vegetation Present? Yes No _ ✓ _
50% of total cover:	20% of	total cove	r:	Present? Yes No _ ▼ _
Remarks: (If observed, list morphological adaptations belo	w).			
The dominance test and prevalence index were not	met. The	hydoph	ytic vegeta	tion parameter is not met.

Sampling Point: $\underline{^{DPB}}$

SOIL Sampling Point: DPB

Profile Desc	cription: (Describe	to the dep	th needed to docu	ment the i	indicator	or confirm	the absence	of indicators.)
Depth	Matrix	0/		ox Feature		2	T-10*****	Damaste
(inches)	Color (moist)		Color (moist)		Type ¹	_Loc²	Texture	Remarks
0 to 14	10 YR 5/1	100				<u></u>		silt loam
14 to 18+	10 YR 7/1	100	10 YR 4/6	10		3.6		silty clay
							_	
						<u></u>		
						2.6		
¹ Type: C=C	oncentration, D=Dep	oletion RM	=Reduced Matrix M	S=Masked	Sand Gr	ains	² Location:	PL=Pore Lining, M=Matrix.
	Indicators: (Applic							for Problematic Hydric Soils ³ :
Histosol			Polyvalue B			RR S. T. U	I) 1 cm N	Muck (A9) (LRR O)
_	oipedon (A2)		Thin Dark S					Muck (A10) (LRR S)
Black H	stic (A3)		Loamy Mucl	ky Mineral	(F1) (LRF	O)	Reduc	ed Vertic (F18) (outside MLRA 150A,B)
_ Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix ((F2)		Piedm	ont Floodplain Soils (F19) (LRR P, S, T)
_	d Layers (A5)		✓ Depleted Ma	, ,				alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR F		Redox Dark	•				RA 153B)
-	icky Mineral (A7) (L				` ′			arent Material (TF2)
-	esence (A8) (LRR l uck (A9) (LRR P, T)	J)	Redox Depr Marl (F10) (I		8)			Shallow Dark Surface (TF12) (Explain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted Oc	•	(MIRA 1	51)	Other	(Explain in Remarks)
	ark Surface (A12)	,	Iron-Mangar				T) ³ Indic	cators of hydrophytic vegetation and
_	rairie Redox (A16) (MLRA 150						land hydrology must be present,
Sandy N	Mucky Mineral (S1) (LRR O, S)	Delta Ochric	(F17) (ML	RA 151)		unl	ess disturbed or problematic.
_ Sandy C	Gleyed Matrix (S4)		Reduced Ve	rtic (F18) ((MLRA 15	0A, 150B)		
_	Redox (S5)		Piedmont FI	•	. ,	•	•	
	Matrix (S6)		Anomalous	Bright Loar	my Soils (F20) (MLR	A 149A, 153C	, 153D)
	rface (S7) (LRR P,						1	
	Layer (if observed)							
Туре:							l	
Depth (in	ches):						Hydric Soil	Present? Yes _ ✓ _ No
Remarks:								
The deplete	ed matrix (F3) hydri	c soil indic	cator was observed.	The hydr	ric soil cri	teria is me	t.	

Project/Site: Greenbrier Farms	- 2712 Saint Brides	Road Cit	y/County: Chesapeak	e	Sampling Date: <u>3/23/2015</u>
Applicant/Owner: Dragas Mana	gement Corporation	/ Greenbrier Farms Li	imited	State: <u>VA</u>	Sampling Point: DPC
Investigator(s): Bay Environm	nental, Inc.	Se	ction, Township, Rar	nge:	
Landform (hillslope, terrace, etc					Slope (%):
					Datum:
Soil Map Unit Name:				NWI classific	
Are climatic / hydrologic condition					
Are Vegetation, Soil					
Are Vegetation, Soil	, or Hydrology _	naturally proble	ematic? (If ne	eded, explain any answe	rs in Remarks.)
SUMMARY OF FINDING	S – Attach site	e map showing s	ampling point lo	ocations, transects	, important features, etc.
Hydrophytic Vegetation Presently Hydric Soil Present?	Yes	✓ _ No ✓ _ No	Is the Sampled within a Wetlan		No√
Wetland Hydrology Present? Remarks:	res_	No_ ✓			
The wetland hydrology pa	arameters was no	t met. This area is a	an upland.		
HYDROLOGY					
Wetland Hydrology Indicato	rs:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum o	of one is required; c	heck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)		Aquatic Fauna (B13)		Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)	_	Marl Deposits (B15) (I	LRR U)	Drainage Pat	terns (B10)
Saturation (A3)	_	Hydrogen Sulfide Odo	or (C1)	Moss Trim Li	nes (B16)
Water Marks (B1)		Oxidized Rhizosphere	s along Living Roots	(C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2)		Presence of Reduced	Iron (C4)	Crayfish Burr	rows (C8)
Drift Deposits (B3)		Recent Iron Reduction	n in Tilled Soils (C6)	Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	Thin Muck Surface (C	7)	Geomorphic	Position (D2)
Iron Deposits (B5)	_	Other (Explain in Rem	arks)	Shallow Aqui	, ,
Inundation Visible on Aeri				FAC-Neutral	, ,
Water-Stained Leaves (BS	9)			Sphagnum m	noss (D8) (LRR T, U)
Field Observations:					
Surface Water Present?		✓ _ Depth (inches): _			
Water Table Present?		✓ _ Depth (inches): _			,
Saturation Present? (includes capillary fringe)	Yes _ No _	✓ _ Depth (inches): _	>24" We t	tland Hydrology Presen	t? Yes No _ ✓
Describe Recorded Data (stre	am gauge, monitori	ng well, aerial photos,	previous inspections)), if available:	
Remarks:					
No indicators of hydrolog	y were observed.	The wetland hydro	ology parameter w	vas not met.	

T Out (District 30-foot radius	Absolute		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30-foot radius</u>)		Species? Status	Number of Dominant Species
1. Pinus taeda	20.0	Yes FAC	That Are OBL, FACW, or FAC:5 (A)
2. Ilex opaca	25	Yes FAC	Total Number of Dominant
3. <u>Ligustrum sinense</u>	40	Yes FAC	Species Across All Strata:5 (B)
4. <u>Prunus serotina</u>	5	No FACU	Devent of Developet Consider
5			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6			
		Total Cover	Prevalence Index worksheet:
50% of total cover: 45			Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30-foot radius)	2070 01	total cover.	OBL species x 1 =
			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3			UPL species x 5 =
4			Column Totals: 0 (A) 0 (B)
5			Coldifilit Totals (A) (B)
6			Prevalence Index = B/A = 0
	0 =	= Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30-foot radius)			2 - Dominance Test is >50%
1. Ligustrum sinense	20	Yes	
•			3 - Prevalence Index is ≤3.0 ¹
2			Problematic Hydrophytic Vegetation ¹ (Explain)
3			
4			¹Indicators of hydric soil and wetland hydrology must
5			be present, unless disturbed or problematic.
6			Definitions of Five Vegetation Strata:
	20 =	= Total Cover	Tree – Woody plants, excluding woody vines,
50% of total cover: 25	20% of	total cover: _10	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30-foot radius)			(7.6 cm) or larger in diameter at breast height (DBH).
1. Ilex opaca	30	Yes	Sapling – Woody plants, excluding woody vines,
2.			approximately 20 ft (6 m) or more in height and less
3.			than 3 in. (7.6 cm) DBH.
			Shrub – Woody plants, excluding woody vines,
4			approximately 3 to 20 ft (1 to 6 m) in height.
5			
6			Herb - All herbaceous (non-woody) plants, including
7			herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately
8			3 ft (1 m) in height.
9			NAC- de des de la Companya de la Com
10			Woody vine – All woody vines, regardless of height.
11			
		= Total Cover	
50% of total cover: _ 56			
Woody Vine Stratum (Plot size: 30-foot radius)	2070 01	total cover.	
1			
2			
3			
4			
5			Hydrophytic
		Total Cover	Vegetation
50% of total cover:			Present? Yes No
Remarks: (If observed, list morphological adaptations belo			<u> </u>
The dominance test was met. The hydophytic vege	etation par	ameter is met.	

Sampling Point: DPC

SOIL Sampling Point: DPC

1 1 m m 4 l-		to the de				or confirm	the absence	of indicators.)	
Depth (inches)	Matrix Color (moist)		Color (moist)	<u>x Features</u> %	Type ¹	Loc ²	Texture	Remarks	
0 to 9	10 YR 4/1	100	COIOI (IIIOI31)		Турс		TOXIGIO	silt loam	
					_				
9 to 18+	10 YR 5/1	85	10 YR 6/6	15	-			silt loam	
							_		
					-				
	-			- ——					
								-	
Type: C=C	oncentration, D=Dep	oletion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.	
ydric Soil	Indicators: (Applic	cable to all	LRRs, unless other	rwise note	ed.)		Indicators	for Problematic Hydric Soils ³	:
Histosol	(A1)		Polyvalue Be				l) 1 cm l	Muck (A9) (LRR O)	
·	oipedon (A2)		Thin Dark Su					Muck (A10) (LRR S)	
	istic (A3)		Loamy Muck	-	` ' '	O)	_	ed Vertic (F18) (outside MLRA	,
	en Sulfide (A4)		Loamy Gleye		F2)			iont Floodplain Soils (F19) (LRR	P, S, T
	d Layers (A5) Bodies (A6) (LRR F) T III	✓ Depleted Ma Redox Dark		:e)			alous Bright Loamy Soils (F20) RA 153B)	
-	ucky Mineral (A7) (L			,	,		-	arent Material (TF2)	
	esence (A8) (LRR L		Redox Depre		` '			Shallow Dark Surface (TF12)	
	uck (A9) (LRR P, T)	-,	Marl (F10) (L	,	-,			(Explain in Remarks)	
	d Below Dark Surfac	ce (A11)	Depleted Ocl	hric (F11)	(MLRA 1	51)		,	
Thick Da	ark Surface (A12)		Iron-Mangan				T) ³ India	cators of hydrophytic vegetation	and
	rairie Redox (A16) (I		· —			, U)	we	tland hydrology must be present	,
	/lucky Mineral (S1) (LRR O, S)						ess disturbed or problematic.	
=	Sleyed Matrix (S4)		Reduced Ver						
· -	Redox (S5)		Piedmont Flo					4530)	
	l Matrix (S6) rface (S7) (LRR P, :	e T II)	Anomaious E	sright Loan	ny Solis (-20) (WILK	A 149A, 153C	, 153D)	
Dark Su									
							1		
testrictive l	Layer (if observed)								
estrictive Type:	Layer (if observed)						Hydric Soil	Present? Ves / No.	
estrictive I Type: Depth (in	Layer (if observed)						Hydric Soil	Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:						Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (in- emarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (in- emarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
Type: Depth (indemnate)	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (in- emarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ √ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ √ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ √ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
Type: Depth (indemnate)	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
Type: Depth (in Remarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
Type: Depth (in Remarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
Type: Depth (in Remarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
Type: Depth (indemnate)	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	
estrictive Type: Depth (indemarks:	Layer (if observed)	:	cator was observed.	The hydr	ic soil cri	teria is me		Present? Yes _ ✓ _ No	

Project/Site: Greenbrier Farms - 2712 Saint Brides R	Road City/County: Chesar	oeake	Sampling Date: <u>3/23/2015</u>
Applicant/Owner: Dragas Management Corporation	/ Greenbrier Farms Limited	State: VA	Sampling Point: DPD
Investigator(s): Bay Environmental, Inc.	Section, Township,	Range:	
Landform (hillslope, terrace, etc.):			
Subregion (LRR or MLRA):			
Soil Map Unit Name:		NWI classific	
Are climatic / hydrologic conditions on the site typical	I for this time of year? Yes _ ✓ _ No	o (If no, explain in R	Remarks.)
Are Vegetation, Soil, or Hydrology _	significantly disturbed? A	re "Normal Circumstances" r	oresent? Yes ✓ No
Are Vegetation, Soil, or Hydrology _		f needed, explain any answe	
SUMMARY OF FINDINGS – Attach site		t locations, transects	s, important features, etc.
Hydric Soil Present? Yes ✓	No Is the Samp within a We net. This area is an upland.		No ✓
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; che	eck all that apply)	Surface Soil	Cracks (B6)
	Aquatic Fauna (B13)		getated Concave Surface (B8)
	Marl Deposits (B15) (LRR U)	Drainage Pa	
<u> </u>	Hydrogen Sulfide Odor (C1)	Moss Trim L	` ′
	Oxidized Rhizospheres along Living Ro		Water Table (C2)
' ' '	Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C	Crayfish Bur	isible on Aerial Imagery (C9)
	Thin Muck Surface (C7)	,	Position (D2)
	Other (Explain in Remarks)	Shallow Aqu	` ′
Inundation Visible on Aerial Imagery (B7)	stror (Explain in Normanie)	FAC-Neutral	` ′
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No _ ✓	_ Depth (inches):		
Water Table Present? Yes No _ ✓	Depth (inches):		
	Depth (inches):	Wetland Hydrology Preser	nt? Yes No✓
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspecti	ons), if available:	
Remarks:			
No indicators of hydrology were observed.	The wetland hydrology parameter	er was not met.	

VEGETATION (Five Strata) – Use scientific na	mes of pla	ants.		Sampling Point: DPD
	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30-foot radius</u>) 1. Planted Quercus virginiana	<u>% Cover</u> 60.0	Species? Yes	Status FACU	Number of Dominant Species
	- —		TACU	That Are OBL, FACW, or FAC:3 (A)
2			_	Total Number of Dominant
3			_	Species Across All Strata:5 (B)
4		-		Percent of Dominant Species
5			· 	That Are OBL, FACW, or FAC: 60% (A/B)
6	60		_	Prevalence Index worksheet:
50% of total cover: 30		= Total Co		Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30-foot radius)	20% 01	total cover		OBL species x 1 =
				FACW species x 2 =
1	·			FAC species x 3 =
2			-	FACU species x 4 =
3		-		UPL species x 5 =
4 5				Column Totals: 0 (A) 0 (B)
6	0 :	- Total Co	ver	Prevalence Index = B/A =0
50% of total cover:	·			Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 30-foot radius)	20 70 01	total cover	·	1 - Rapid Test for Hydrophytic Vegetation
1. Ligustrum sinense	15	Yes	FAC	✓ 2 - Dominance Test is >50%
Liquidamabar styraciflua	5	Yes	FAC	3 - Prevalence Index is ≤3.0¹
3		105		Problematic Hydrophytic Vegetation ¹ (Explain)
4.				1
5				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6			-	Definitions of Five Vegetation Strata:
<u> </u>	20 :	= Total Co	ver	
50% of total cover: $_{10}$				Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30-foot radius)	20 70 01	10121 00101	··	(7.6 cm) or larger in diameter at breast height (DBH).
1. Eupatorium capillifolium	45	Yes	FACU	Sapling – Woody plants, excluding woody vines,
2. Andropogon virginicus	40	Yes	FAC	approximately 20 ft (6 m) or more in height and less
3. Setaria pumila	15	No	FAC	than 3 in. (7.6 cm) DBH.
4. Ranunculus spp.	20	No		Shrub – Woody plants, excluding woody vines,
5. Allium vineale	15	No	FACU	approximately 3 to 20 ft (1 to 6 m) in height.
6. Digitaria sanguinalis	20	No	FACU	Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8.				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.				
10				Woody vine – All woody vines, regardless of height.
11.				
		= Total Co	ver	
50% of total cover: _ 78	20% of	total cover	r: <u>31</u>	
Woody Vine Stratum (Plot size: 30-foot radius)				
1				
2.			_	
3.				
4.			_	
5				Hydrophytic
	0 :	= Total Co	ver	Vegetation
50% of total cover:				Present? Yes No
Remarks: (If observed, list morphological adaptations belo				
The dominance test was met. The hydophytic veg		rameter is	s met.	

SOIL Sampling Point: DPD

		to the de	oth needed to docum			or confirm	the absence	of indicators.)	
Depth (inches)	Matrix Color (moist)	 %	Color (moist)	x Features %	Type ¹	Loc ²	Texture	Remarks	
0 to 5	10 YR 4/1	100	COIOI (IIIOISI)		1,00		Тожито	silt loam	
5 to 15	10 YR 5/1	100			=			silt loam	
			40.777.70		-				
15 to 21+	10 YR 5/1	85	10 YR 5/8				-	clay loam	
					_				
						.34			
Type: C=C	oncentration D=Der	letion RM	=Reduced Matrix, MS	: ——— S=Masked	Sand Gra	ains	² Location:	PL=Pore Lining, M=Mat	rix
			LRRs, unless other					for Problematic Hydric	
Histosol	(A1)		Polyvalue Be	low Surfac	ce (S8) (L	RR S, T, L	J) 1 cm l	Muck (A9) (LRR O)	
Histic Ep	oipedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm l	Muck (A10) (LRR S)	
	stic (A3)		Loamy Muck	•	` ' '	O)		ced Vertic (F18) (outside	,
	en Sulfide (A4)		Loamy Gleye		F2)			nont Floodplain Soils (F19	
	d Layers (A5) Bodies (A6) (LRR F	T 11)	✓ Depleted Mat Redox Dark \$		·6)			alous Bright Loamy Soils RA 153B)	(F20)
-	icky Mineral (A7) (L 1			•			-	Parent Material (TF2)	
	esence (A8) (LRR L		Redox Depre		` '			Shallow Dark Surface (TF	12)
	ıck (A9) (LRR P, T)		Marl (F10) (L	RR U)			Other	(Explain in Remarks)	
	d Below Dark Surfac	e (A11)	Depleted Oct				•		
	ark Surface (A12)		Iron-Mangan					cators of hydrophytic veg	
	rairie Redox (A16) (I ⁄lucky Mineral (S1) (· —			, u)		tland hydrology must be p less disturbed or problem	
	Gleyed Matrix (S4)	LKK 0, 3 <i>)</i>	Reduced Ver			OA. 150B)		less disturbed or problem	alic.
=	Redox (S5)		Piedmont Flo						
C1 .	Matrix (S6)		Anomalous B	right Loan	nv Soils (I	20) (MLR	A 149A, 1530	C, 153D)	
Stripped	Matrix (OO)				(.				
Dark Sui	rface (S7) (LRR P,		<u> </u>						
Dark Sui Restrictive I	, ,		_						
Dark Sui lestrictive I Type:	rface (S7) (LRR P, S Layer (if observed)								
Dark Suitestrictive I Type: Depth (inc	rface (S7) (LRR P, S Layer (if observed)						Hydric Soi	I Present? Yes _ ✓ _	No
Dark Sur Restrictive I Type: Depth (included) Remarks:	rface (S7) (LRR P, S Layer (if observed)	:						I Present? Yes ✓ _	_ No
Dark Sur lestrictive I Type: Depth (ind	rface (S7) (LRR P, S Layer (if observed)	:	cator was observed.			teria is me		I Present? Yes _ ✓ _	_ No
Dark Sur Restrictive I Type: Depth (included) Remarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Sur Restrictive I Type: Depth (included) Remarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		l Present? Yes ✓ _	No
Dark Sur Restrictive I Type: Depth (included) Remarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		l Present? Yes _ ✓ _	No
Dark Sur Restrictive I Type: Depth (included) Remarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	_ No <u>_</u>
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	_ No
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Sun Restrictive I Type: Depth (ind Remarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	
Dark Sun Restrictive I Type: Depth (ind Remarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Sun Restrictive I Type: Depth (ind Remarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Sur Restrictive I Type: Depth (included) Remarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	No
Dark Surestrictive I Type: Depth (indemarks:	rface (S7) (LRR P, S Layer (if observed)	:				teria is me		I Present? Yes _ ✓ _	

Project/Site: Greenbrier Farms - 2712 Saint Brides Road City/	County: Chesapeake	Sampling Date: 3/25/2015
Applicant/Owner: Dragas Management Corporation / Greenbrier Farms Lim	ited State: VA	Sampling Point: DPE
Investigator(s): Bay Environmental, Inc. Sect	ion, Township, Range:	
Landform (hillslope, terrace, etc.): Loca		
Subregion (LRR or MLRA): Lat: 36°39'6.59		
Soil Map Unit Name:	NWI class	
Are climatic / hydrologic conditions on the site typical for this time of year?		
Are Vegetation, Soil, or Hydrology significantly distu		s" present? Yes ✓ _ No
Are Vegetation, Soil, or Hydrology naturally problem		
SUMMARY OF FINDINGS – Attach site map showing sar		
Hydrophytic Vegetation Present? Yes _ ✓ _ No	Is the Sampled Area	
Hydric Soil Present? Yes _ ✓ _ No	within a Wetland? Yes _	No√
Wetland Hydrology Present? Yes No _ ✓ _		
Remarks:		
The wetland hydrology parameter was not met. This area is an	apland.	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Inc	dicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface S	Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely	Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LR		Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (m Lines (B16)
Water Marks (B1) Oxidized Rhizospheres	along Living Roots (C3) Dry-Seas	on Water Table (C2)
Sediment Deposits (B2) Presence of Reduced In		Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in	· · · — ·	n Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	, ,	hic Position (D2)
Iron Deposits (B5) Other (Explain in Remar	ks) Shallow A	Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		tral Test (D5)
Water-Stained Leaves (B9)	Sphagnur	m moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present? Yes No _ ✓ _ Depth (inches): _n/s	<u> </u>	
Water Table Present? Yes No _ ✓ _ Depth (inches): _>2	4"	
Saturation Present? Yes No _ ✓ _ Depth (inches): _>2	4" Wetland Hydrology Pres	sent? Yes No _ ✓
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:	
- Downston		
Remarks:		
No indicators of hydrology were observed. The wetland hydrol	ogy parameter was not met.	

20.6	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30-foot radius)		Species?		Number of Dominant Species
Planted Platanus occidentalis	40.0	Yes	FACW	That Are OBL, FACW, or FAC:3(A)
2			_	Total Number of Dominant
3				Species Across All Strata:4(B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:75% (A/B)
6.		_		(AB)
	40	= Total Co		Prevalence Index worksheet:
50% of total cover: 20				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30-foot radius)	20 /0 01	total cover	•	OBL species x 1 =
				FACW species x 2 =
1			-	FAC species x 3 =
2			-	FACU species x 4 =
3				UPL species x 5 =
4			-	
5				Column Totals: 0 (A) 0 (B)
6				Prevalence Index = B/A =0
	0 :	= Total Co	/er	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover	 :	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30-foot radius)				
Ligustrum sinense	5	Yes	FAC	✓ 2 - Dominance Test is >50%
·			-	3 - Prevalence Index is ≤3.0 ¹
2				Problematic Hydrophytic Vegetation¹ (Explain)
3				
4			_	¹ Indicators of hydric soil and wetland hydrology must
5		-	_	be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	5 :	= Total Co	/er	Tree – Woody plants, excluding woody vines,
50% of total cover: 25	20% of	total cover	10	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30-foot radius)				(7.6 cm) or larger in diameter at breast height (DBH).
1. Eupatorium capillifolium	50	Yes	FACU	Sapling – Woody plants, excluding woody vines,
2. Lonicera japonica	20	No	FACU	approximately 20 ft (6 m) or more in height and less
3. Andropogon virginicus	40	Yes	FAC	than 3 in. (7.6 cm) DBH.
4. Ranunculus spp.	25	No		Shrub – Woody plants, excluding woody vines,
5. Juniperus virginiana	5	No	FACU	approximately 3 to 20 ft (1 to 6 m) in height.
6. Symphyotrichum spp.	15	No No		Hards All banks as a configuration of the state of the st
			EAC.	Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody
7. Pinus taeda	5	_No	FAC	plants, except woody vines, less than approximately
8. Baccharis halimifolia		_No	FACW	3 ft (1 m) in height.
9. Persea borbonia		No	FACW	Woody vine – All woody vines, regardless of height.
10				7 troody vine 7 th woody vines, regulaless of height.
11			_	
		= Total Co	/er	
50% of total cover: 85	20% of	total cover	. 34	
Woody Vine Stratum (Plot size: 30-foot radius)				
1		-		
2			-	
3			_	
4		_	_	
5				Hydrophytic
	0 :	= Total Co	/er	Vegetation Present? Yes
50% of total cover:	20% of	total cover	:	Present? Yes <u>▼</u> No
Remarks: (If observed, list morphological adaptations belo	w).			
The dominance test was met. The hydophytic vego		ameter is	met	
	pai			

Sampling Point: $\underline{^{DPE}}$

SOIL Sampling Point: DPE

nches) Color (moist) % Color (moist) % Type ¹ Loc ² Texture Remarks			to the de	oth needed to docur			oi contir i	i ille absence	or muicators.)	
to 6	Depth <u>(inches)</u>	Matrix Color (moist)	%				_Loc ²	Texture	Remarks	
to 18+ 10 YR 5/1 80 10 YR 4/1 15) to 6								silt loam	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. rdric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)		10 VR 5/1	80	10 VR 4/1	15					
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. rdric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)	10 101	10 1K 3/1				-			Ciay Ioani	
Histosol (A1)		-		10 YR 6/8				-		
Histosol (A1)							<u>, , , , , , , , , , , , , , , , , , , </u>			
Histosol (A1)										
Histosol (A1)										
Histosol (A1)										
Histosol (A1)	·	encentration D-Day	oletion DN	I-Daduard Matrix M	C-Maakaa	Sand Cr	3.6	2l acation:	DI-Dara Lining M-Mat	eis.
Histosol (A1)							aii15.			
Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR P, T) Depleted Dark Surface (F7) Loamy Gleyed Matrix (F2) Marl (F10) (LRR U) Depleted Dark Surface (F7) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 150B) Piedmont Floodplain Soils (F19) (LRR O, P, T) Depleted Dark Surface (F7) Red Parent Material (TF2) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) SIndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Popth (inches): Depth (inches): Hydric Soil Present? Yes / No			, and to a				RRSTI			
Black Histic (A3)										
Stratified Layers (A5)										MLRA 150A,
Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S7) Sandy Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Destrictive Layer (if observed): Type: Depth (inches): Medox Depressions (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Expl	– Hydroge	en Sulfide (A4)		Loamy Gleye	- ed Matrix (F2)		Piedm	ont Floodplain Soils (F19) (LRR P, S, 1
Scm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Setrictive Layer (if observed): Type: Depleted Dark Surface (F7) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Iron-Manganese Masses (F12) (LRR O, P, T) wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Strictive Layer (if observed): Type: Depth (inches): Depth (inche	Stratifie	d Layers (A5)		✓ Depleted Ma	trix (F3)			Anoma	alous Bright Loamy Soils	(F20)
Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Setrictive Layer (if observed): Type: Depth (inches): marks: Marl (F10) (LRR U) Other (Explain in Remarks) Other (Expl	_				•	*		-	•	
1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Setrictive Layer (if observed): Type: Depth (inches): Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Iron-Manga						. ,			` ′	10)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Setrictive Layer (if observed): Type: Depth (inches): Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Wetland hydrology must be present, Wetla			(ل			8)			,	12)
Thick Dark Surface (A12)			se (Δ11)		•	(MIRA 1	543	Other	(Explain in Remarks)	
_ Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4)	-		æ (ATT)					T) ³ India	cators of hydrophytic year	etation and
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Setrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes _ ✓ _ No Penaltric (F17) (MLRA 151) unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Hydric Soil Present? Yes _ ✓ _ No			MLRA 150							
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Postrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Hydric Soil Present? Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Hydric Soil Present? Hydric Soil Present? Yes _ ✓ _ No		, , ,		· —			, -,			
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes _ ✓ _ No emarks:							0A, 150B)		·	
Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes _ ✓ _ No emarks:	Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	9 A)		
strictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes _ ✓ _ No emarks:		, ,		Anomalous E	Bright Loar	ny Soils (=20) (MLR	A 149A, 153C	;, 153D)	
Type: Depth (inches): Hydric Soil Present? Yes _ ✓ _ No emarks:								T		
Depth (inches): Hydric Soil Present? Yes _ ✓ _ No emarks:		Layer (IT observed)	:							
emarks:		ahaa):						Hudria Cail	Dragont? Voc. (No
		cnes).						nyunc son	Present? Tes_ / _	_ NU
he depleted matrix (F.5) hydric soil indicator was observed. The hydric soil criteria is met.		1 (50) 1 1	, . ,.			, .				
	he deplete	ed matrix (F3) hydr	ic soil indi	cator was observed.	The hydr	ic soil cri	teria is me	et.		

Project/Site: Greenbrier Farms - 2712 Saint Brides Roa	d City/County: Chesa	peake	Sampling Date: <u>3/25/2015</u>			
Applicant/Owner: Dragas Management Corporation / G	reenbrier Farms Limited	State: VA	Sampling Point: DPF			
ъ п :	Range:					
Landform (hillslope, terrace, etc.):						
Subregion (LRR or MLRA):						
Soil Map Unit Name:		NWI classific				
Are climatic / hydrologic conditions on the site typical fo						
Are Vegetation, Soil, or Hydrology			present? Yes ✓ _ No			
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain any answe	ers in Remarks.)			
SUMMARY OF FINDINGS - Attach site m	ap showing sampling poir	nt locations, transects	s, important features, etc.			
Hydric Soil Present? Yes ✓ _	No Is the Samp within a West. This area is an upland.		No√			
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is required; check	(all that apply)		Surface Soil Cracks (B6)			
	uatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2) Mar	l Deposits (B15) (LRR U)	Drainage Pa				
I .	drogen Sulfide Odor (C1)	Moss Trim L	ines (B16)			
	dized Rhizospheres along Living R	oots (C3) Dry-Season	Water Table (C2)			
Sediment Deposits (B2)	sence of Reduced Iron (C4)	Crayfish Bur	rows (C8)			
Drift Deposits (B3) Rec	cent Iron Reduction in Tilled Soils (C6) Saturation V	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Thir	n Muck Surface (C7)	Geomorphic	Position (D2)			
Iron Deposits (B5) Oth	er (Explain in Remarks)	Shallow Aqu	itard (D3)			
Inundation Visible on Aerial Imagery (B7)		FAC-Neutra	Test (D5)			
Water-Stained Leaves (B9)		Sphagnum r	moss (D8) (LRR T, U)			
Field Observations:						
	Depth (inches):					
Water Table Present? Yes No _ ✓ _						
Saturation Present? Yes No _ ✓ _ (includes capillary fringe)	Depth (inches): _>24"	Wetland Hydrology Preser	nt? Yes No _ ✓			
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspect	ions), if available:				
Remarks:						
No indicators of hydrology were observed. The	ne wetland hydrology paramet	er was not met.				

Sampling Point: DPF

SOIL Sampling Point: DPF

Profile Desc Depth	cription: (Describe Matrix	to the dep		ment the i ox Feature		or confirm	the absence	ot indicators.)	
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks	
0 to 4	10 YR 4/1	100				. 3.6		silt loam	
4 to 18+	10 YR 5/1	85	10 YR 4/1	10				silt loam	
			10 YR 6/8	5	_				
					_		-		
				_					
					_				
						. 1.6			
						3.6	2		
	oncentration, D=De Indicators: (Applie					ains.		PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils ³ :	
Histosol			Polyvalue Be			RR S, T, U		Muck (A9) (LRR O)	
_ Histic E	pipedon (A2)		Thin Dark So	urface (S9) (LRR S,	T, U)	2 cm N	Muck (A10) (LRR S)	
	istic (A3)		Loamy Muck	-		O)		ced Vertic (F18) (outside MLRA 150A,B)	
	en Sulfide (A4)		Loamy Gley		(F2)			nont Floodplain Soils (F19) (LRR P, S, T)	
•	d Layers (A5) Bodies (A6) (LRR I	> T II)	✓ Depleted Ma Redox Dark	, ,	- 6)			alous Bright Loamy Soils (F20) RA 153B)	
-	ucky Mineral (A7) (L			•				arent Material (TF2)	
Muck Pi	resence (A8) (LRR I	J)	Redox Depr	essions (F	8)		Very Shallow Dark Surface (TF12)		
	uck (A9) (LRR P, T)		Marl (F10) (I				Other	(Explain in Remarks)	
=	d Below Dark Surfac ark Surface (A12)	ce (A11)	Depleted Od Iron-Mangar		-	-	T) ³ India	cators of hydrophytic vegetation and	
-	rairie Redox (A16) (MLRA 150						tland hydrology must be present,	
	/Jucky Mineral (S1)		Delta Ochric		•	,		ess disturbed or problematic.	
	Gleyed Matrix (S4)		Reduced Ve						
-	Redox (S5)		Piedmont Fl					453D)	
	l Matrix (S6) Irface (S7) (LRR P, I	S T III	Anomaious i	Bright Loai	my Solls (I	-20) (NILK)	A 149A, 153C	., 153U)	
	Layer (if observed)								
Туре:									
Depth (in	ches):						Hydric Soil	l Present? Yes ✓ No	
Remarks:							1		
The deplete	ed matrix (F3) hydr	ic soil indic	ator was observed.	The hydr	ric soil cri	teria is me	t.		

Project/Site: Greenbrier Farms	- 2712 Saint Brides	Road	City/County: Ches	apeake		Sampling Date: <u>3/25/2015</u>	
Applicant/Owner: Dragas Mana	gement Corporation	n / Greenbrier Farms	Limited	s	State: VA	Sampling Point: DPG	
Investigator(s): Bay Environmental, Inc. Section, Township, Range:							
Landform (hillslope, terrace, etc.						Slope (%):	
						Datum:	
Soil Map Unit Name:					NWI classific		
Are climatic / hydrologic condition							
Are Vegetation, Soil							
Are Vegetation, Soil	, or Hydrology	naturally pro	blematic?	(If needed, e	xplain any answe	rs in Remarks.)	
SUMMARY OF FINDING	S – Attach sit	e map showing	sampling poi	nt locatio	ns, transects	, important features, etc.	
Hydrophytic Vegetation Prese Hydric Soil Present? Wetland Hydrology Present? Remarks: The wetland hydrology pa	Yes Yes _	✓ _ No	Is the Sam within a W		Yes _	No√	
HYDROLOGY							
Wetland Hydrology Indicato		h l II 4b - 4 b A			-	ators (minimum of two required)	
Primary Indicators (minimum o	of one is required; o				Surface Soil	` ′	
Surface Water (A1)		Aquatic Fauna (B1	-	,	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	_	Marl Deposits (B15			Drainage Patterns (B10)		
Saturation (A3)	_	Hydrogen Sulfide C	, ,	Panta (C2)	Moss Trim Li	` '	
Water Marks (B1)		Oxidized Rhizospho		(0018 (C3)	•	Water Table (C2)	
Sediment Deposits (B2) Drift Deposits (B3)		Presence of Reduction Recent Iron Reduction	,	(C6)	Crayfish Bur	isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Thin Muck Surface		(00)		Position (D2)	
Iron Deposits (B5)	_	Other (Explain in R	, ,		Shallow Aqui	` '	
Inundation Visible on Aeri	ial Imagery (R7)	Other (Explain III IX	emarks)		FAC-Neutral	` '	
Water-Stained Leaves (B	• • • •					noss (D8) (LRR T, U)	
Field Observations:						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Surface Water Present?	Yes No	✓ _ Depth (inches)	: n/a				
Water Table Present?		✓ _ Depth (inches)					
Saturation Present?		✓ _ Depth (inches)		Wetland H	ydrology Presen	nt? Yes No_√	
(includes capillary fringe)							
Describe Recorded Data (stre	am gauge, monitori	ing well, aerial photo	s, previous inspec	tions), if avai	lable:		
Remarks:							
	ana ahaamuad	The westland ha	dual a arr manana	tom ****** m o t	mat		
No indicators of hydrolog	y were observed	. The wettand ny	drology parame	ter was not	met.		

20.5 !'	Absolute	Dominant Indica	tor Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30-foot radius</u>)		Species? Stat	Number of Dominant Species
1. Planted Quercus phellos	40.0	Yes FACV	That Are OBL, FACW, or FAC: 3 (A)
2. Pinus taeda	40	Yes FAC	Total Number of Dominant
3. Prunus serotina	10	No FACU	Species Across All Strata: 5 (B)
4. <u>Ligustrum sinense</u>	10	No FAC	Percent of Dominant Species
5. <u>Liquidambar styraciflua</u>		No	That Are OBL, FACW, or FAC:60% (A/B)
6			Prevalence Index worksheet:
	105 :	= Total Cover	Total % Cover of: Multiply by:
50% of total cover: 53	20% of	total cover: 21	OBL species x1 =
Sapling Stratum (Plot size: 30-foot radius)			FACW species x 2 =
1			- 1
2			FAC species x 3 = FACU species x 4 =
3			
4			UPL species x 5 =
5			Column Totals: 0 (A) 0 (B)
6			Prevalence Index = B/A =0
	0 :	= Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30-foot radius)			✓ 2 - Dominance Test is >50%
1. <u>Ligustrum sinense</u>	20	Yes FAC	3 - Prevalence Index is ≤3.0 ¹
2			Problematic Hydrophytic Vegetation ¹ (Explain)
3			
4			Indicators of hydric soil and wetland hydrology must
5			be present, unless disturbed or problematic.
6			Definitions of Five Vegetation Strata:
	20 :	= Total Cover	Tree Moody plants, evaluding woody vines
50% of total cover:	20% of	total cover:	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30-foot radius)			(7.6 cm) or larger in diameter at breast height (DBH).
1. Lonicera japonica	40	Yes	Sapling – Woody plants, excluding woody vines,
2. Juniperus virginiana	20	Yes	U approximately 20 ft (6 m) or more in height and less
3. Ilex opaca		No FAC	than 3 in. (7.6 cm) DBH.
4. Ligustrum sinense	10	No FAC	Shrub – Woody plants, excluding woody vines,
5			approximately 3 to 20 ft (1 to 6 m) in height.
6.			Herb – All herbaceous (non-woody) plants, including
7			herbaceous vines, regardless of size, and woody
8.			plants, except woody vines, less than approximately 3 ft (1 m) in height.
9.			
10			Woody vine - All woody vines, regardless of height.
11.			
		= Total Cover	_
50% of total cover: 38			
Woody Vine Stratum (Plot size: 30-foot radius)			_
1			
			-
2			-
3			
4			-
J		T-4-1 C	- Hydrophytic
		= Total Cover	Vegetation Present? Yes ✓ No
50% of total cover:		total cover:	<u> </u>
Remarks: (If observed, list morphological adaptations belo			
The dominance test was met. The hydophytic vege	etation par	rameter is met.	

Sampling Point: $\underline{^{DPG}}$

SOIL Sampling Point: DPG

Profile Des	cription: (Describe Matrix	to the dep	oth needed to docu	ment the i ox Feature		or confirm	tne absence	ot indicators.)		
(inches)	Color (moist)	%	Color (moist)	<u> </u>	Type ¹	Loc ²	<u>Texture</u>	Remarks		
0 to 5	10 YR 4/2	100						silt loam		
5 to 18+	10 YR 5/2	85	10 YR 5/6	15				silt loam		
					_					
				_	-		-			
			-	_						
					-					
	-		-			<u> </u>		-		
	-		-			3.6				
			=Reduced Matrix, M			ains.		PL=Pore Lining, M=Matrix.		
		cable to all	LRRs, unless othe					s for Problematic Hydric Soils ³ :		
_ Histosol	` ,		Polyvalue Bo					Muck (A10) (LRR O)		
_	pipedon (A2) istic (A3)		Thin Dark S Loamy Muck					Muck (A10) (LRR S) ced Vertic (F18) (outside MLRA 150A,B)		
	en Sulfide (A4)		Loamy Gley	-		. •,		nont Floodplain Soils (F19) (LRR P, S, T)		
Stratifie	d Layers (A5)		✓ Depleted Ma	atrix (F3)				alous Bright Loamy Soils (F20)		
-	Bodies (A6) (LRR I		Redox Dark	•	*			RA 153B)		
	ucky Mineral (A7) (L resence (A8) (LRR I) Depleted Da Redox Depr				Red Parent Material (TF2) Very Shallow Dark Surface (TF12)			
	uck (A9) (LRR P, T)	•	Marl (F10) (I		0)			(Explain in Remarks)		
	d Below Dark Surfa		Depleted Oc	•	(MLRA 1	51)	, 55.	(=-,F-:)		
_ Thick D	ark Surface (A12)		Iron-Mangar	nese Mass	es (F12) (LRR O, P,	T) ³ Indio	cators of hydrophytic vegetation and		
	rairie Redox (A16) (· —	. ,		, U)		tland hydrology must be present,		
	Mucky Mineral (S1) (Gleyed Matrix (S4)	(LRR O, S)	Delta Ochric	. , .	,	OA 450E)	uni	less disturbed or problematic.		
	Redox (S5)		Reduced Ve Piedmont Fl				9 A)			
•	d Matrix (S6)						A 149A, 153C	c, 153D)		
Dark Su	ırface (S7) (LRR P,	S, T, U)	_	_						
Restrictive	Layer (if observed):								
Туре:										
Depth (in	ches):						Hydric Soil	I Present? Yes _ ✓ _ No		
Remarks:										
The Deplet	ed Matrix hydric so	oil indicato	r was observed. The	e hydric so	oil criteria	is met.				

Project/Site: Greenbrier Farms - 2712 Saint Brides Road	City/County: Chesapea	ke	Sampling Date: <u>3/25/2015</u>
Applicant/Owner: Dragas Management Corporation / Greenberg	rier Farms Limited	State: VA	Sampling Point: DPH
D T ' 11	Section, Township, Ra		
Landform (hillslope, terrace, etc.):			Slope (%):
Subregion (LRR or MLRA): La			
Soil Map Unit Name:			cation: PEM
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil, or Hydrology sig			oresent? Yes ✓ _ No
Are Vegetation, Soil, or Hydrology na		eeded, explain any answe	
SUMMARY OF FINDINGS – Attach site map s	howing sampling point	locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes _ ✓ _ No Hydric Soil Present? Yes _ ✓ _ No Wetland Hydrology Present? Yes _ ✓ _ No Remarks: All of the three parameters were met. This area is a	within a Wetla		No
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all th	at apply)	Surface Soil	
	auna (B13)		getated Concave Surface (B8)
✓ High Water Table (A2) Marl Depo	osits (B15) (LRR U)	Drainage Pa	- · · ·
l .	Sulfide Odor (C1)	Moss Trim L	ines (B16)
	Rhizospheres along Living Root		Water Table (C2)
Sediment Deposits (B2) Presence	of Reduced Iron (C4)	Crayfish Bur	rows (C8)
Drift Deposits (B3) Recent Iro	on Reduction in Tilled Soils (C6)	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muc	k Surface (C7)	Geomorphic	Position (D2)
Iron Deposits (B5) Other (Ex	plain in Remarks)	Shallow Aqu	itard (D3)
Inundation Visible on Aerial Imagery (B7)		√ FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)		Sphagnum r	noss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes _ ✓ _ No Dept	h (inches):		
Water Table Present? Yes _ ✓ _ No Dept			
Saturation Present? Yes _ ✓ _ No Dept		etland Hydrology Preser	nt? Yes ✓ No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, as	erial photos, previous inspection	s), if available:	
Remarks:			
Surface water, high water table, saturation within 1. The wetland hydrology parameter was met.	2", and oxidized rhizospher	res were observed. It i	met the FAC-Neutral test.

EGETATION (Five Strata) – Use scientific na	mes of pla	ants.	Sampling Point: DPH
20 foot radius		Dominant Ind	
<u>ree Stratum</u> (Plot size: <u>30-foot radius</u>)	% Cover	Species? S	Atus Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
			Total Number of Damin and
			Total Number of Dominant Species Across All Strata: 3 (B)
			(B)
			Percent of Dominant Species
·			That Are OBL, FACW, or FAC:100% (A/B)
		= Total Cover	Prevalence Index worksheet:
50% of total cover: 20			Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30-foot radius)	20 /0 01	total cover	OBL species x 1 =
·			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
i			UPL species x 5 =
· <u> </u>			Column Totals: 0 (A) 0 (B)
i			-
i			Prevalence Index = B/A =0
		= Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30-foot radius)		**	✓ 2 - Dominance Test is >50%
. Liquidambar styraciflua	5	Yes	. 3 - Prevalence Index is ≤3.0 ¹
). 			Problematic Hydrophytic Vegetation ¹ (Explain)
3			
l		_	Indicators of hydric soil and wetland hydrology must
5			be present, unless disturbed or problematic.
3			Definitions of Five Vegetation Strata:
	5	= Total Cover	Tree 10/a adv mlanta avalvaling was devine
50% of total cover: 3			Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30-foot radius)		_	(7.6 cm) or larger in diameter at breast height (DBH).
Juncus effusus	45	Yes	Sapling – Woody plants, excluding woody vines,
Scirpus cyperinus	30	Yes	
Symphyotrichum spp.	20	No	than 3 in. (7.6 cm) DBH.
Ranunculus spp.	15	No	Shrub – Woody plants, excluding woody vines,
Eupatorium capillifolium	10	No FA	approximately 3 to 20 ft (1 to 6 m) in height.
Arundinaria tecta	7		- Herb – All herbaceous (non-woody) plants, including
Andropogon virginicus	5	No FA	_ Herb / All Herbaceeds (Herr weedy) plants, including
	- —		plants, except woody vines, less than approximately
B			. 3 ft (1 m) in height.
)			Woody vine - All woody vines, regardless of height.
0			
1			
		= Total Cover	
50% of total cover: 66	20% of	total cover: 2	
Voody Vine Stratum (Plot size: 30-foot radius)			
·			
2			
3			
k			
5			- Hydrophytic
	0	= Total Cover	Vegetation
			Present? Yes ✓ No
50% of total cover:	20% ot	total cover: _	

SOIL Sampling Point: DPH

Depth	Matrix	o allo dopi	h needed to docum Redo	x Feature		voiiiiiIII	45501100	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 18+	10 YR 5/1	80	10 YR 6/8	20				silt loam
							_	
						-		
			Reduced Matrix, MS			ains.		PL=Pore Lining, M=Matrix.
		cable to all	LRRs, unless other					s for Problematic Hydric Soils ³ :
Histosol	* *		Polyvalue Be					Muck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					Muck (A10) (LRR S)
	istic (A3)		Loamy Mucky	-		(O)		ced Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)			nont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	5 T III	✓ Depleted Mat		-c)			alous Bright Loamy Soils (F20)
_	Bodies (A6) (LRR F Jcky Mineral (A7) (L		Redox Dark S Depleted Dar	,	*			RA 153B) Parent Material (TF2)
	resence (A8) (LRR I		Redox Depre					Shallow Dark Surface (TF12)
	uck (A9) (LRR P, T)	. ,	Marl (F10) (L		0)			(Explain in Remarks)
	d Below Dark Surfac	ce (A11)	Depleted Oct	•	(MLRA 1	51)	Cirio	(Explain in Nomano)
	ark Surface (A12)	,	Iron-Mangan				T) ³ Indio	cators of hydrophytic vegetation and
	rairie Redox (A16) (MLRA 150A						tland hydrology must be present,
Sandy N	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric	(F17) (M I	LRA 151)		unl	less disturbed or problematic.
Sandy (Gleyed Matrix (S4)		Reduced Ver	tic (F18)	(MLRA 15	0A, 150B)		
Sandy F	Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 149	9 A)	
Stripped	l Matrix (S6)		Anomalous B	Bright Loa	my Soils (F20) (MLR /	4 149A, 153C	C, 153D)
	rface (S7) (LRR P,							
Restrictive	Layer (if observed)):						
Туре:								
Depth (in	ches):						Hydric Soil	I Present? Yes _ ✓ _ No
Remarks:								
The deplete	ed matrix hydric soi	il indicator v	vas observed. The	hydric so	il criteria	is met.		

Project/Site: Greenbrier Farms - 2712 Saint Brides Road	d City/County: Chesar	peake	Sampling Date: <u>3/25/2015</u>
Applicant/Owner: Dragas Management Corporation / Gr	reenbrier Farms Limited	State: VA	Sampling Point: DPI
D D 1	Section, Township,		
Landform (hillslope, terrace, etc.):		-	
Subregion (LRR or MLRA):			
Soil Map Unit Name:		NWI classific	
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation, Soil, or Hydrology			present? Yes ✓ _ No
Are Vegetation, Soil, or Hydrology	naturally problematic? (I	f needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling poin	nt locations, transects	, important features, etc.
Hydric Soil Present? Yes ✓ _	Is the Samp within a We No _ ✓ _ Use the Samp within a We within a We		No√
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soil	
	atic Fauna (B13)		getated Concave Surface (B8)
	Deposits (B15) (LRR U)	Drainage Pa	
I .	rogen Sulfide Odor (C1)	Moss Trim L	ines (B16)
	dized Rhizospheres along Living Ro	oots (C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2) Pres	sence of Reduced Iron (C4)	Crayfish Bur	rows (C8)
Drift Deposits (B3) Rec	ent Iron Reduction in Tilled Soils (C	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin	Muck Surface (C7)	Geomorphic	Position (D2)
Iron Deposits (B5) Othe	er (Explain in Remarks)	Shallow Aqu	itard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)		Sphagnum n	noss (D8) (LRR T, U)
Field Observations:			
	Depth (inches):n/a		
Water Table Present? Yes No _ ✓ _			
Saturation Present? Yes No _ ✓ _ (includes capillary fringe)	Depth (inches): _>24"	Wetland Hydrology Preser	nt? Yes No ✓
Describe Recorded Data (stream gauge, monitoring w	rell, aerial photos, previous inspecti	ons), if available:	
Remarks:			
No indicators of hydrology were observed. The	ne wetland hydrology paramete	er was not met.	

VEGETATION (Five Strata) – Use scientific nai	mes of pla	ants.		Sampling Point: DPI
20 5 - 4 - 2 1 - 2		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30-foot radius)	% Cover		Status_	Number of Dominant Species
1. Planted Prunus x yedoensis	40.0	Yes	FACW	That Are OBL, FACW, or FAC:4 (A)
2. Planted Quercus phellos	40	Yes	FACW _	Total Number of Dominant
3			_	Species Across All Strata: 6 (B)
4		_	_	Percent of Dominant Species
5			_	That Are OBL, FACW, or FAC: 67% (A/B)
6			_	Prevalence Index worksheet:
		= Total Co		Total % Cover of:Multiply by:
50% of total cover: 20	20% of	total cover	r:	OBL species x 1 =
Sapling Stratum (Plot size: 30-foot radius)				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4		-		Column Totals: 0 (A) 0 (B)
5				(A) (B)
6				Prevalence Index = B/A =0
	0 :			Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover	r:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30-foot radius)		* 7	LIDI	✓ 2 - Dominance Test is >50%
1. Rhus copallinum		Yes	UPL	. 3 - Prevalence Index is ≤3.0¹
2. Pinus taeda		Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Liquidambar styraciflua</u>	5	No	FAC	
			<u> </u>	¹ Indicators of hydric soil and wetland hydrology must
5			-	be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	30 :	= Total Co	ver	Tree – Woody plants, excluding woody vines,
50% of total cover: 15	20% of	total cover	r: <u>6</u>	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30-foot radius)		**	T. C	(7.6 cm) or larger in diameter at breast height (DBH).
1. Andropogon virginicus	40	Yes	FAC	Sapling – Woody plants, excluding woody vines,
2. Pinus taeda	20	Yes	FAC	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3. Liquidambar styraciflua	7	No	FAC	
4. Ilex opaca		No	FAC	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
5. <u>Juncus effusus</u>		_No	OBL	
6				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				,,,,,,,
11				
		= Total Co		
50% of total cover: 40	20% of	total cover	r: <u>16</u>	
Woody Vine Stratum (Plot size: 30-foot radius)				
1		-		
2			-	
3			-	
4		-		
5			_	Hydrophytic
	:			Vegetation Present?
50% of total cover:		total cover	r:	165 · NU
Remarks: (If observed, list morphological adaptations belo	ow).			
The dominance test was met. The hydophytic veg	etation par	rameter is	s met.	

SOIL Sampling Point: DPI

Profile Des	cription: (Describe Matrix	to the dep	oth needed to docu			or confirm	the absence	e of indicators.)
(inches)	Color (moist)	%	Color (moist)	ox Feature %	Type ¹	_Loc ²	Texture	<u>Remarks</u>
0 to 8	10 YR 4/1	100				. 3.5		silt loam
8 to 18+	10 YR 4/1	95	10 YR 6/8	5				clay loam
				_	_			
				_			-	
	-					. 3.5		
						.3.4		
			=Reduced Matrix, M			ains.		PL=Pore Lining, M=Matrix.
		cable to all	LRRs, unless othe					s for Problematic Hydric Soils ³ :
Histosol	` '		Polyvalue Bo					Muck (A9) (LRR O)
	pipedon (A2) istic (A3)		Thin Dark S Loamy Muck					Muck (A10) (LRR S) ced Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley	-		. •,		nont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		✓ Depleted Ma		· –,			alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark	Surface (F	- 6)			RA 153B)
	ucky Mineral (A7) (L							Parent Material (TF2)
	resence (A8) (LRR uck (A9) (LRR P, T)	•	Redox Depr Marl (F10) (I		8)			Shallow Dark Surface (TF12) (Explain in Remarks)
	d Below Dark Surfa		Depleted Oc	•	(MLRA 1:	51)	Other	(Explain in Remarks)
	ark Surface (A12)	(, , , ,)	Iron-Mangar		-	-	T) ³ Indio	cators of hydrophytic vegetation and
Coast P	rairie Redox (A16)	(MLRA 150	A) Umbric Surfa	ace (F13)	(LRR P, T	, U)	we	tland hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)		. , .	,		unl	less disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Fl				0.6\	
-	d Matrix (S6)						9A) A 149A, 153C	C. 153D)
	ırface (S7) (LRR P,	S, T, U)			, (, ,
Restrictive	Layer (if observed):						
Туре:								
Depth (in	ches):						Hydric Soil	I Present? Yes _ ✓ _ No
Remarks:							•	
The deplete	ed matrix (F3) hydr	ric soil indi	cator was observed.	The hydr	ric soil cri	teria is met	t.	

Project/Site: Greenbrier Farms -	2712 Saint Brides Road	City/County: Chesapeake		Sampling Date: <u>3/25/2015</u>
Applicant/Owner: Dragas Manag	ement Corporation / Greenbrier Fa	arms Limited	State: <u>VA</u>	Sampling Point: DPJ
Investigator(s): Bay Environme	ntal, Inc.	Section, Township, Range	e:	
Landform (hillslope, terrace, etc.)				Slope (%):
				Datum:
			NWI classifi	
Are climatic / hydrologic condition				
Are Vegetation, Soil				
Are Vegetation, Soil	_, or Hydrology naturally	problematic? (If need	ded, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS	 Attach site map show 	ing sampling point loc	cations, transects	s, important features, etc.
Hydrophytic Vegetation Present Hydric Soil Present? Wetland Hydrology Present? Remarks: None of the three paramete	Yes No _ ✓ Yes No _ ✓ Yes No _ ✓ Yes No _ ✓	within a Wetland		No ✓
HYDROLOGY				
Wetland Hydrology Indicators				ators (minimum of two required)
	one is required; check all that app			Cracks (B6)
Surface Water (A1)	Aquatic Fauna			getated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (atterns (B10)
Saturation (A3)	Hydrogen Sulfi	, ,	Moss Trim l	` ,
Water Marks (B1)		spheres along Living Roots (C	,	Water Table (C2)
Sediment Deposits (B2)		educed Iron (C4)	Crayfish Bu	` '
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surf	duction in Tilled Soils (C6)		/isible on Aerial Imagery (C9) c Position (D2)
Iron Deposits (B5)	Other (Explain	, ,	Shallow Aqu	` ′
Inundation Visible on Aerial		iii Nemarka)	FAC-Neutra	` '
Water-Stained Leaves (B9)	• • • •			moss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?	Yes No _ √ _ Depth (inc	hes): n/a		
1	Yes No _ ✓ _ Depth (inc			
1	Yes No _ ✓ _ Depth (inc		and Hydrology Prese	nt? Yes No ✓
(includes capillary fringe)				
Describe Recorded Data (stream	m gauge, monitoring well, aerial p	notos, previous inspections), i	if available:	
Remarks:				
	ware observed. The wetlen	l hydrology poromotor wo	s not mat	
No indicators of hydrology	were observed. The wetland	i nydrology parameter wa	s not met.	

The dominance test and prevalence index were not met. The hydophytic vegetation parameter is not met.

Sampling Point: DPJ

SOIL Sampling Point: DPJ

Depth	cription: (Describe Matrix	, to the del	oth needed to docu Red	mentine i ox Feature		or continu	mie anzence	or mulcators.)	
(inches)	Color (moist)	%	Color (moist)	<u> %</u>	Type ¹	Loc ²	Texture	Remarks	
0 to 14	10 YR 4/1	100				3.4		silt loam	
14 to 18+	10 YR 6/1	80	10 YR 6/6	20				silt loam	
				_					
				_		. 3.6	-		
								-	
						. 3.4			
Type: C=C	oncentration. D=De	pletion. RM	=Reduced Matrix, M	S=Masked	d Sand Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.	
			LRRs, unless othe					for Problematic Hydric Soils ³ :	:
Histosol	(A1)		Polyvalue Bo	elow Surfa	ice (S8) (L	RR S, T, U) 1 cm l	Muck (A9) (LRR O)	
Histic E	pipedon (A2)		Thin Dark S	urface (S9) (LRR S,	T, U)	2 cm l	Muck (A10) (LRR S)	
	istic (A3)		Loamy Muck	-	. , .	O)	_	ed Vertic (F18) (outside MLRA	
	en Sulfide (A4)		Loamy Gley		(F2)			ont Floodplain Soils (F19) (LRR	P, S, T)
	d Layers (A5)	B T III	Depleted Ma	` '	-e.\			alous Bright Loamy Soils (F20)	
_	Bodies (A6) (LRR ucky Mineral (A7) (L		Redox Dark) Depleted Da	,	,			RA 153B) arent Material (TF2)	
	resence (A8) (LRR		Redox Depr		. ,			Shallow Dark Surface (TF12)	
	uck (A9) (LRR P, T)	•	Marl (F10) (I	,	-,			(Explain in Remarks)	
	d Below Dark Surfa		Depleted Oc	hric (F11)	(MLRA 1	51)			
•	ark Surface (A12)		Iron-Mangar		, , ,			cators of hydrophytic vegetation a	
	rairie Redox (A16)	•	· —			, U)		tland hydrology must be present,	,
	Mucky Mineral (S1)	(LRR O, S)		. , .		OA 450D)	uni	ess disturbed or problematic.	
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Fl				0.6\		
	Matrix (S6)						эд) A 149A, 153C	:. 153D)	
	rface (S7) (LRR P,	S, T, U)	/	D.1.g.11. 200.	,	20) (, 1002/	
	Layer (if observed								
Туре:									
Depth (in	ches):		<u> </u>				Hydric Soil	Present? Yes _ No	_ ✓ _
Remarks:							1		
No hydric s	soil indicators were	observed.	The hydric soil crit	eria is not	met.				
,			,						

Project/Site: Greenbrier Farms - 2712 Saint Brides Road	City/County: Chesape	eake	Sampling Date: <u>3/25/2015</u>
Applicant/Owner: Dragas Management Corporation / Greenbrier Fa	arms Limited	State: VA	Sampling Point: DPK
D F :		Range:	
Landform (hillslope, terrace, etc.):			Slope (%):
Subregion (LRR or MLRA): Lat:			
Soil Map Unit Name:		NWI classific	
Are climatic / hydrologic conditions on the site typical for this time of			
Are Vegetation, Soil, or Hydrology significa			present? Yes ✓ _ No
Are Vegetation, Soil, or Hydrology naturally			
		needed, explain any answe	,
SUMMARY OF FINDINGS – Attach site map show	ing sampling poin	t locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: All of the three parameters were met. This area is a wet	within a Wet		No
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	oly)	Surface Soil	Cracks (B6)
Surface Water (A1) Aquatic Fauna	(B13)		getated Concave Surface (B8)
✓ High Water Table (A2) Marl Deposits ((B15) (LRR U)		atterns (B10)
✓ Saturation (A3) Hydrogen Sulfi		Moss Trim L	ines (B16)
	spheres along Living Ro		Water Table (C2)
Sediment Deposits (B2) Presence of Re	educed Iron (C4)	Crayfish Bur	rrows (C8)
Drift Deposits (B3) Recent Iron Re	duction in Tilled Soils (C	6) Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surf	face (C7)	Geomorphic	Position (D2)
Iron Deposits (B5) Other (Explain	in Remarks)	Shallow Aqu	uitard (D3)
Inundation Visible on Aerial Imagery (B7)		√ FAC-Neutra	l Test (D5)
Water-Stained Leaves (B9)		Sphagnum r	moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No _ ✓ _ Depth (inc	hes):		
Water Table Present? Yes _ ✓ _ No Depth (inc	hes): 5"		
Saturation Present? Yes _ ✓ _ No Depth (inc		Wetland Hydrology Prese	nt? Yes ✓ No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspection	ons), if available:	
Remarks:			
High water table and saturation within 12" were observe met.	ed. It met the FAC-N	eutral test. The wetland	l hydrology parameter was

Remarks: (If observed, list morphological adaptations below).

The vegetation represented in this data sheet was a composite sample within the small wetland area. The dominance test was met. The hydophytic vegetation parameter is met.

Sampling Point: DPK

SOIL Sampling Point: DPK

		to the de	oth needed to docur			or confirm	tne absence	of indicators.)
Depth (<u>inches)</u>	Matrix Color (moist)	 %	Color (moist)	<u>x Feature:</u> %	Type ¹	Loc ²	Texture	Remarks
0 to 6	10 YR 3/1	100			1,00		Тожито	silt loam
			40.770.474		_			
6 to 18+	10 YR 5/1	90	10 YR 6/6	10	-			silty clay
					-		_	
				- ——				
								-
Гуре: С=С	oncentration, D=Dep	oletion, RM	=Reduced Matrix, M	S=Maskec	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
ydric Soil	Indicators: (Applic	able to all	LRRs, unless other	rwise note	ed.)		Indicators	for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be					Muck (A9) (LRR O)
·	pipedon (A2)		Thin Dark Su					Muck (A10) (LRR S)
	istic (A3)		Loamy Muck	-	` ' '	O)	_	ced Vertic (F18) (outside MLRA 15
	en Sulfide (A4) d Layers (A5)		Loamy Gleye ✓ Depleted Ma		F2)			nont Floodplain Soils (F19) (LRR P,
	Bodies (A6) (LRR F	> T II)	Redox Dark		·6)			alous Bright Loamy Soils (F20) RA 153B)
_	ucky Mineral (A7) (L			•	*		•	arent Material (TF2)
	resence (A8) (LRR L		Redox Depre					Shallow Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) (L		,			(Explain in Remarks)
Deplete	d Below Dark Surfac	e (A11)	Depleted Ocl	hric (F11)	(MLRA 1	51)		
Thick Da	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) (LRR O, P,	T) ³ Indi	cators of hydrophytic vegetation and
	rairie Redox (A16) (I		· —			, U)		tland hydrology must be present,
	Mucky Mineral (S1) (LRR O, S)						ess disturbed or problematic.
=	Gleyed Matrix (S4)		Reduced Ver					
· -	Redox (S5)		Piedmont Flo					4.62D)
	l Matrix (S6) Irface (S7) (LRR P, 3	S T II)	Anomalous E	siigiii Loai	ily Solis (-20) (IVILK	A 149A, 153C	., 1550)
							T	
estrictive	Layer (if observed)							
estrictive Type:	Layer (if observed)						Hydric Soil	I Present? Yes / No
estrictive I Type: Depth (in	Layer (if observed)						Hydric Soi	I Present? Yes _ ✓ _ No _
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was absormed. The	by duin and	il anitonia	ia mat	Hydric Soi	I Present? Yes _ ✓ _ No
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No _
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Sol	l Present? Yes _ ✓ _ No _
estrictive Type: Depth (in- emarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soi	I Present? Yes _ ✓ _ No _
estrictive Type: Depth (in- emarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No _
estrictive Type: Depth (in- emarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No _
estrictive Type: Depth (inc emarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No _
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No
estrictive Type: Depth (in- emarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No _
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ √ _ No _
estrictive Type: Depth (in- emarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No _
Type: Depth (indemnates)	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No _
Type: Depth (indemnates)	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No _
Type: Depth (indemnate)	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No
Type: Depth (indemnates)	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No
Type: Depth (indemnates)	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No
estrictive Type: Depth (indemarks:	Layer (if observed)	:	was observed. The	hydric so	il criteria	is met.	Hydric Soil	I Present? Yes _ ✓ _ No _
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