

Paul VI High School

City of Fairfax, Virginia

WSSI #22763.03

Waters of the U.S. (Including Wetlands) Delineation and Resource Protection Area Evaluation

August 11, 2017

Prepared for:

The IDI Group Companies
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Arlington, VA 22209

Prepared by:



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Waters of the U.S. (Including Wetlands) Delineation And Resource Protection Area (RPA) Evaluation

Paul VI High School
(±16.1 acres)
WSSI #22763.03

Introduction

Wetland Studies and Solutions, Inc. (WSSI) has determined the boundaries of the jurisdictional wetlands and other waters of the U.S. (i.e., streams and ponds) on the referenced site. Additionally, Resource Protection Area (RPA) core components on and within 100 feet of the site were evaluated to determine the extent of the RPA on the project site. As discussed in this report, jurisdictional wetlands and other waters of the U.S. are not present on the site, but are present within 100 feet of the site. These waters of the U.S. include a tributary to Accotink Creek. An RPA associated with the unnamed tributary to Accotink Creek is also present on the site. Our findings are depicted (as a surveyed map) on the Waters of the U.S. (Including Wetlands) Delineation and Resource Protection Area Evaluation Map (Attachment I) and are discussed briefly below.

Project Location

The site is located on the south side of Fairfax Boulevard (Route 29/50) immediately west of its intersection with McLean Avenue in the City of Fairfax, Virginia. Exhibit 1 is a vicinity map that depicts the approximate boundaries of the site and its general location.

Methodology

This wetland delineation was performed pursuant to the “Corps of Engineers Wetlands Delineation Manual,” Technical Report Y-87-1 (1987 Manual) and subsequent guidance, and modified by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region*, Version 2.0 dated April 2012. The Routine On-Site Wetland Determination Method for sites more than 5 acres was used, however, because the site is predominantly developed, transects were not established, and the study area was systematically searched for jurisdictional wetlands and other waters of the U.S. Field work was performed by Benjamin N. Rosner, PWS, PWD, CT, CE ¹ on August 1, 2017.

Prior to conducting field work, relevant background information was reviewed, including site topography, the Fairfax, VA 1994 USGS quadrangle (Exhibit 2) and Digital National Wetlands Inventory (Exhibit 3; downloaded May 2016) maps, Fairfax County Soils Map data (Exhibit 4), the City of Fairfax Resource Protection Area (RPA) Map (Exhibit 5), and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Panels 5155240002C and 5155240001C (Exhibit 6; Effective 06/02/2006). Aerial photographs of the site, including Spring 2004 Color Infrared Imagery (Exhibit 7), and March 2013 natural color imagery from the Virginia Base Mapping Program (Exhibit 8), were also examined to investigate whether signatures indicative of wetlands are found on the site and to document any recent land use changes in the vicinity of the project site.

¹ Professional Wetland Scientist #1766, Society of Wetland Scientists Certification Program, Inc.; Virginia Certified Professional Wetland Delineator #3402-000080; Certified Level 1 Taxonomist: All Phyla, Society for Freshwater Science (SFS); Certified Ecologist, Ecological Society of America.



The site is predominantly developed, and natural communities are not present on the site, therefore data points were not performed and photographs of existing conditions were obtained. Photographs of the stream and existing site conditions are included in [Exhibit 9](#). The surveyed locations of delineated waters of the U.S., and the approximate locations of photographs are depicted on [Attachment I](#).

Waters of the U.S. Delineation Findings

In WSSI's opinion, no jurisdictional wetlands or other waters of the U.S. (i.e., streams, ponds, etc.) are present on this site. However, a tributary to Accotink Creek is present to the southwest of the site, and is an RPA component. The site is predominantly developed, consisting of a high school building, parking areas, athletic fields, and two residential properties with maintained lawns.

Resource Protection Area Evaluation

Based on WSSI's field work, the limits of the field-verified RPA on the site are similar to the City-mapped RPA boundary depicted on the City of Fairfax RPA Map ([Exhibit 5](#)). In accordance with Section 110.79 of the City of Fairfax Chesapeake Bay Preservation Ordinance, the perennial stream (i.e., the tributary to Accotink Creek) and all wetlands that are contiguous and connected by surface flow to the perennial stream are components of the RPA, and the field-verified RPA extends 100 feet landward of these features.

The field-verified RPA boundary, based on WSSI's delineation and survey, and RPA evaluation, is depicted on [Attachment I](#).

Summary

In WSSI's opinion, jurisdictional wetlands and other waters of the U.S. are not present on the site, based on our site observations, as described above and depicted on [Attachment I](#). There also is an RPA located along the stream off-site to the southwest.

Waters of the U.S. are regulated by Sections 401 and 404 of the Clean Water Act and by state wetlands laws and cannot be disturbed without the appropriate permits. Such permits may include permits from local agencies, as well as the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality, depending upon the extent and type of impacts.

Limitations

This study is based on examination of the vegetation, soils and hydrology and available reference documents. Field indicators can change with variations in hydrology and other factors. Therefore, our conclusions may vary significantly from future observation by others. This report assesses the potential for wetlands at the site at the time of our review and does not address conditions at a given time in the future.

Our review and report have been prepared in accordance with generally accepted guidelines for the conduct of a survey for potential wetlands. Conclusions presented herein are based upon our review of available information, the results of our field studies, and/or professional judgement. We make no other warranties, either expressed or implied, and our report is not a recommendation to buy, sell or develop the property.



We offer no opinion and do not purport to opine on the possible application of various building codes, zoning ordinances, other land use or platting regulations, environmental or health laws and other similar statutes, laws, ordinances, code and regulations affecting the possible use and occupancy of the Property for the purpose for which it is being used, except as specifically provided above.

The foregoing opinions are based on applicable laws, ordinances, and regulations in effect as of the date hereof and should not be construed to be an opinion as to the matters set out herein should such laws, ordinances or regulations be modified, repealed or amended.

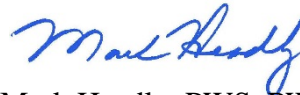
Any reuse or modification of any of this document (whether hard copies or electronic transmittals) prepared by WSSI without written verification or adaptation by WSSI will be at the sole risk of the individual or entity utilizing said document and such use is without the authorization of WSSI. WSSI shall have no legal liability resulting from any and all claims, damages, losses, and expenses, including attorney's fees arising out of the unauthorized reuse or modification of this document. Client shall indemnify WSSI from any claims arising out of unauthorized use or modification of the document whether hard copy or electronic.

This report does not constitute a jurisdictional determination of waters of the U.S. since such determinations must be verified by the U.S. Army Corps of Engineers or the Natural Resources Conservation Service (as applicable), and are subject to review by the U.S. Environmental Protection Agency. This report does not constitute a stream characterization determination; nor does it constitute a Resource Protection Area determination since such determinations must be verified by the City of Fairfax.

WETLAND STUDIES AND SOLUTIONS, INC.

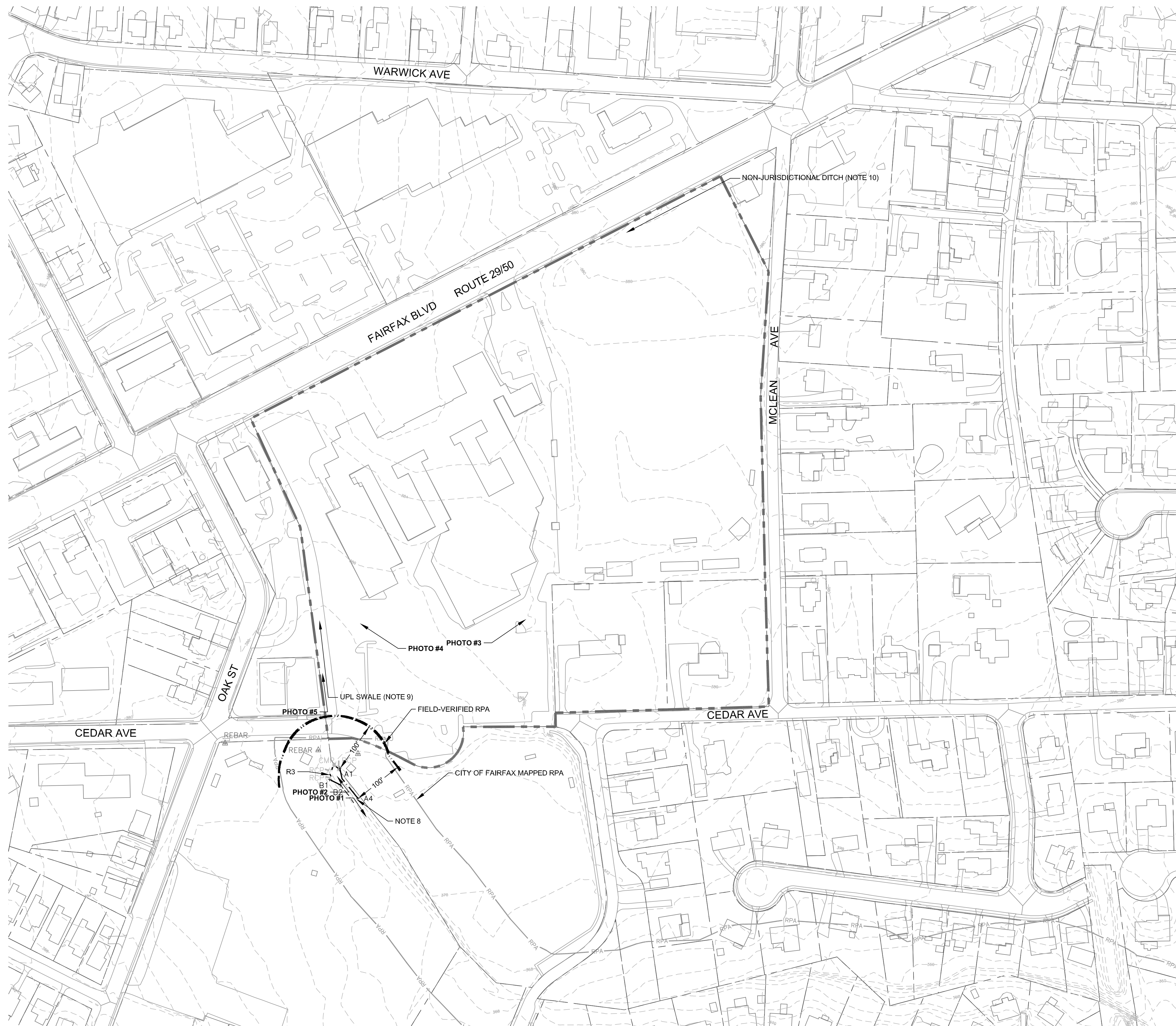


Benjamin N. Rosner, PWS, PWD, CE, CT
Manager – Environmental Science



Mark Headly, PWS, PWD, LEED® AP
Operations Manager

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VCS 1983 NORTH ZONE

LEGEND

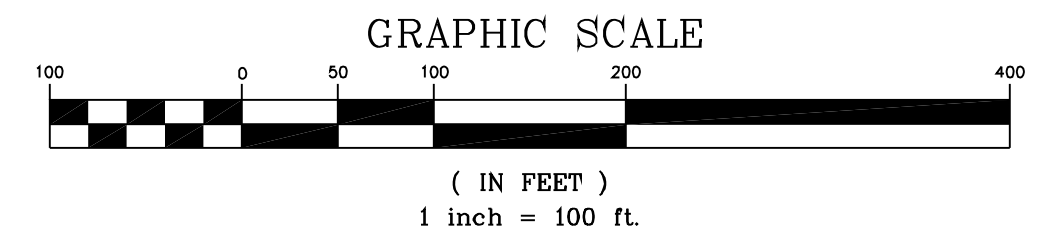
	SITE BOUNDARY
	PERENNIAL STREAM (PER WSSI'S OBSERVATIONS)
	APPROXIMATE LIMITS OF PERENNIAL STREAM (PER WSSI OBSERVATIONS - NOT SURVEYED) NOTE #14
	CITY OF FAIRFAX MAPPED RESOURCE PROTECTION AREA BOUNDARY
	FIELD VERIFIED RESOURCE PROTECTION AREA BOUNDARY
D6 +	WETLAND FLAGGING POINT/NUMBER (pink-glo)
DP2 #	DATA POINT LOCATION/NUMBER (orange and pink-glo) (SURVEYED)
RCP	REINFORCED CONCRETE PIPE
CMP	CORRUGATED METAL PIPE
	FLY POINT (WSSI)

COWARDIN CLASSIFICATION

R3 RIVERINE UPPER PERENNIAL

WATERS OF THE U.S. DELINEATION AND SURVEY NOTES:

- This map has been oriented to The Virginia Coordinate System of 1983, North Zone, using real time DGPS. Wetlands and other Waters of the U.S. (i.e. streams) flags, data points, and the monumentation shown were located in the field using conventional survey methods. Accuracy of field locations of wetlands meets or exceeds the standards set by the U. S. Army Corps of Engineers Memo CENAO-CO-R, dated September 30, 1998. Field locations were completed on August 1, 2017.
- The boundary line information shown hereon is for information purposes only and does not constitute a boundary survey by WSSI. Monumentation, including traverse stations and fly points, shown on this drawing should be used to orient wetland locations to any future boundary, topographic, or location survey.
- Periodic flag numbers are shown depicting the survey-located boundary of wetlands and other waters of the U.S. (i.e., streams, ponds, etc.). Waters of the U.S. flags are pink-glo in color. Data points are flagged with orange-glo and pink-glo flagging tied together.
- Topo/boundary information obtained in digital format from Fairfax County digital data was used as a base for this Attachment.
- This delineation was performed pursuant to the "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1 (1987 Manual) and subsequent guidance and modification by the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0)* dated April 2012.
- The Routine On-Site Wetland Determination Method for sites more than 5 acres was used for this site.
- Field work was performed on August 1, 2017 by Benjamin N. Rosner, PWS, PWD, CE, CT.
- This water of the U.S. (i.e., stream or wetland) continues outside of the study area, downslope.
- Swales labeled "UPL SWALE (NOTE #9)" lack an ordinary high water mark and there was no evidence of flow during our field work. Hydric soil is also absent. Therefore, in WSSI's opinion, these swales are not jurisdictional waters of the U.S. (subject to COE concurrence).
- In WSSI's opinion, the ditch in the northeastern part of the site is not a jurisdictional water of the U.S. (subject to COE concurrence). Non-tidal drainage ditches excavated in uplands for the purpose of conveying stormwater are not generally considered waters of the U.S., per the commentary for 33 CFR Section 328.3 in the "Final Rule for the Regulatory Programs of the Corps of Engineers" (Fed. Reg. Vol. 51, No. 219, Pg. 41217). However, either the COE or the EPA may determine on a case-by-case basis that such features are jurisdictional waters of the U.S. At the time of the jurisdictional determination site visit, WSSI will request the COE to concur that this ditch is not a jurisdictional water of the U.S.
- The term "Perennial" used on this Attachment classifies and describes the flow regime character of the stream, is based on WSSI's field observations, and is only provided for state and local regulatory purposes. The flow regimes of streams are not verified by the COE; however, the geographic limits of these streams are all subject to COE jurisdiction, and the COE's approval of this delineation represents only the approval of the geographic limits of waters of the U.S.
- The field-verified limits of the Resource Protection Area (RPA) depicted on this Attachment are based on the surveyed location of the perennial water bodies and jurisdictional wetlands that are RPA core components. The RPA extends 100 feet landward of the RPA core components.
- The remainder of this site is designated as a Resource Management Area (RMA), as are all areas of the County not included as an RPA.
- WSSI has delineated and surveyed the outer limits of jurisdictional areas within the project site. The approximate limits of the stream is shown for informational purposes and does not affect the RPA.



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Attachment I: WATERS OF THE U.S. DELINEATION MAP

Prepared For: The IDI Group Companies
Paul VI High School
City of Fairfax, Virginia
Copyright © 2017 Wetland Studies and Solutions, Inc.

REVISIONS		App. By	C.I.: 2'
No.	Description	Rev. By	

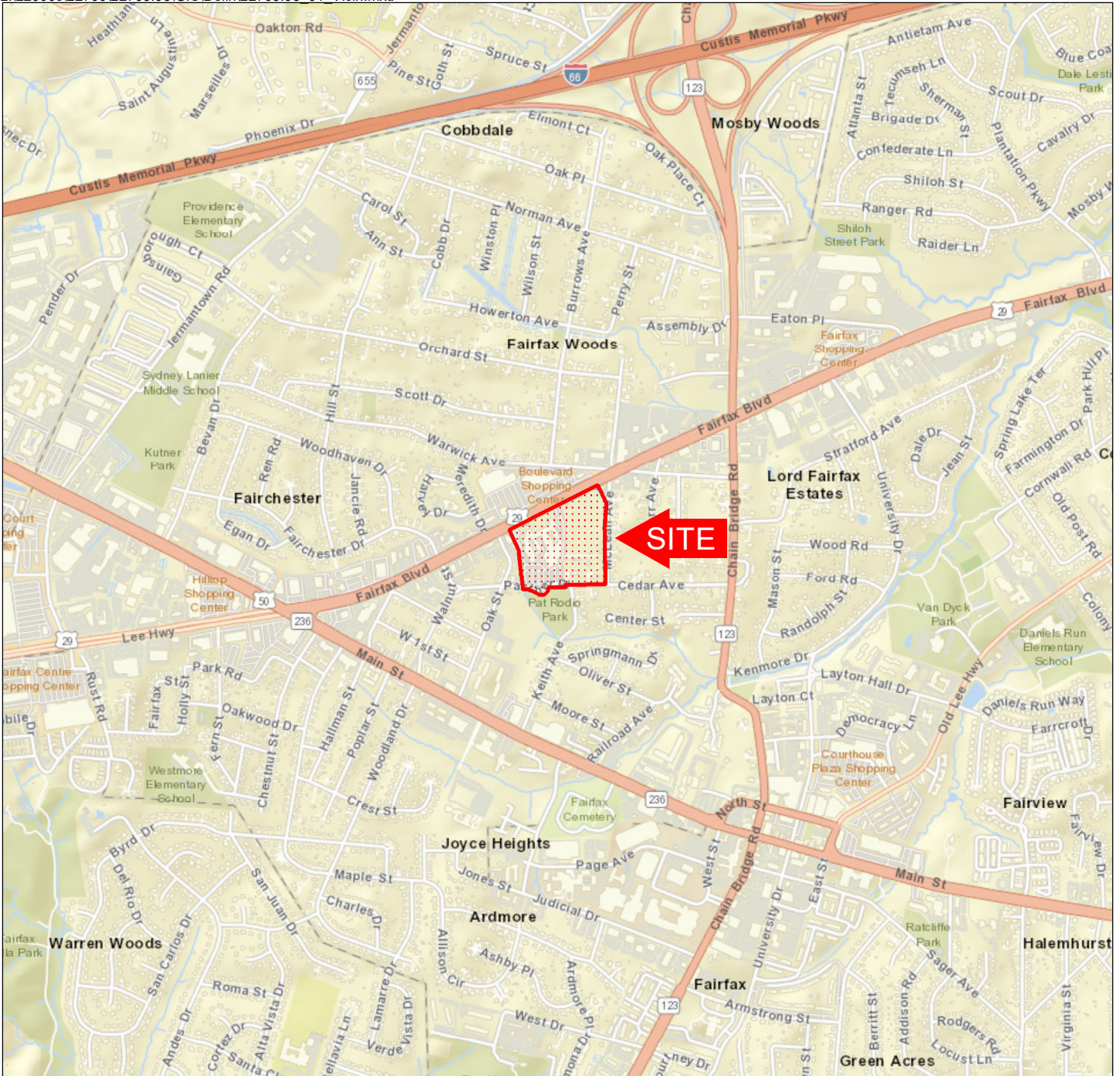
DATE: August 11, 2017 SCALE: 1" = 100'

Horizontal Datum: VCS NAD 83
Vertical Datum: NGVD 1929
Boundary and Topo Source:
City of Fairfax Digital Data

Design	Draft	Approved
BNR	BNR	MH

Sheet #
1 of 1

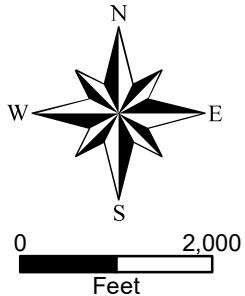
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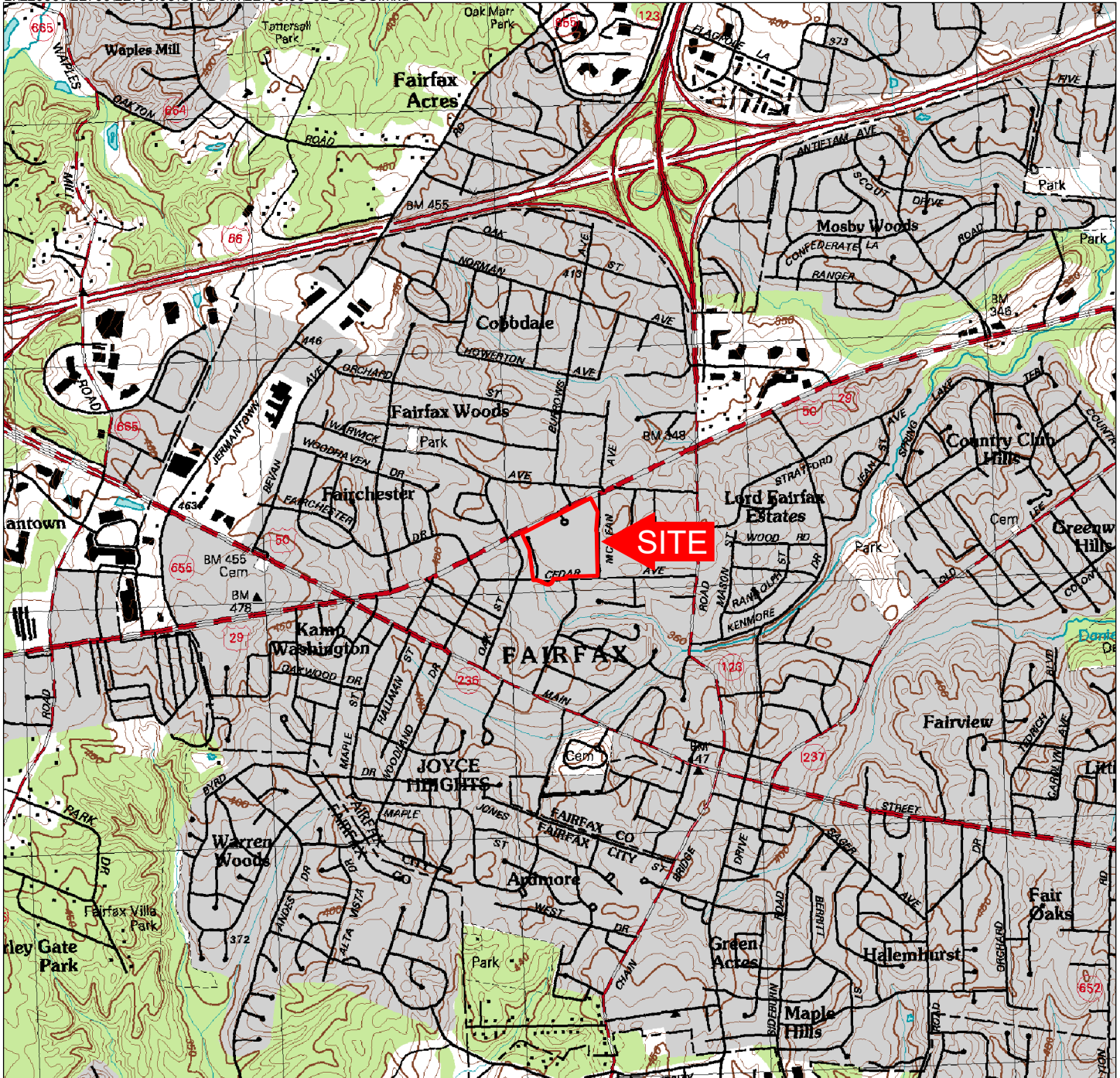


Base Map Source: ESRI

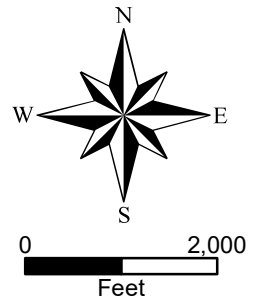


Vicinity Map
Paul VI High School
WSSI #22763.03
Original Scale: 1" = 2000'

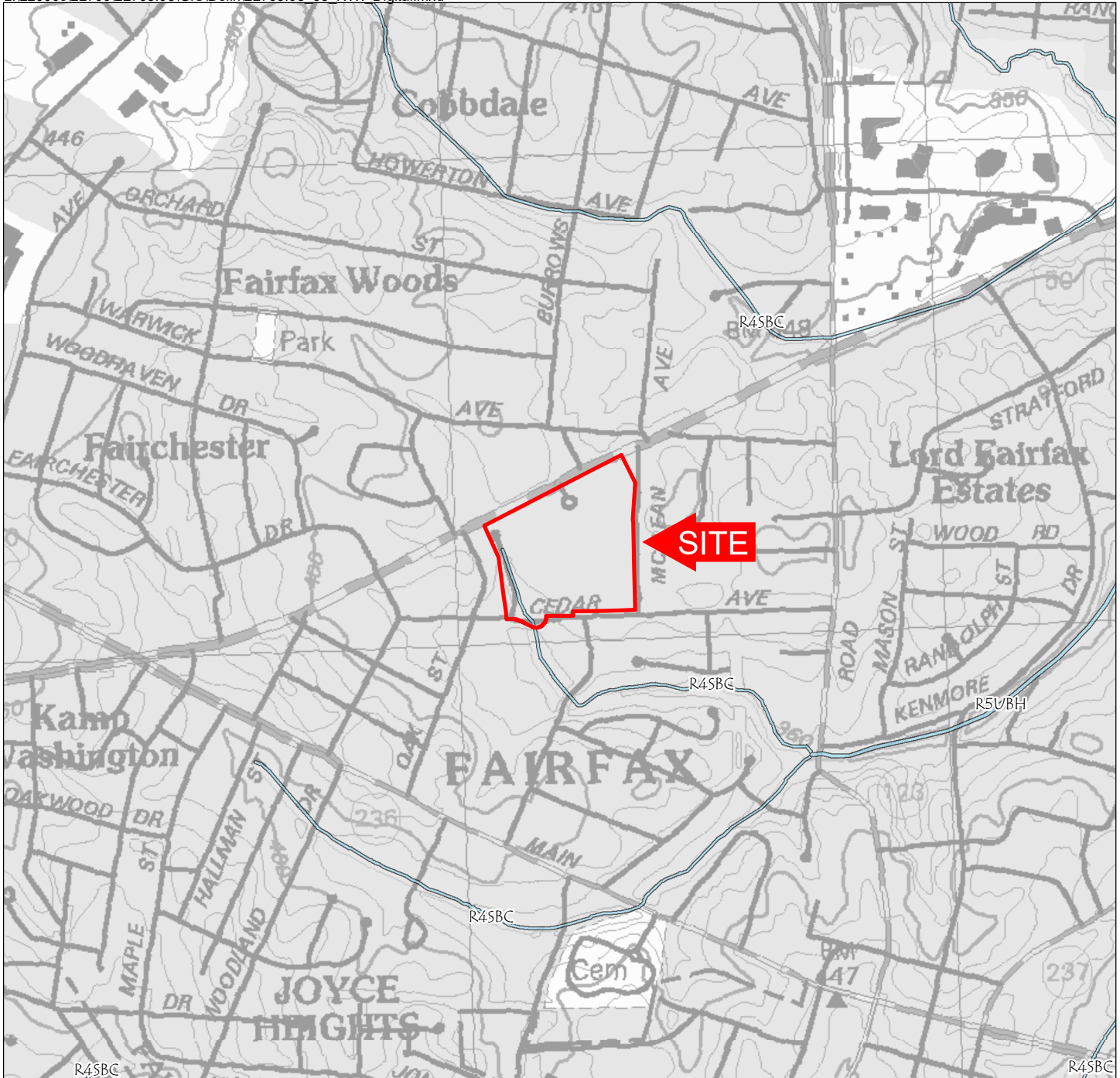




USGS Quad Map
 Fairfax, VA 1994
 Paul VI High School
 WSSI #22763.03
 Original Scale: 1" = 2000'



Latitude: 38°51'16" N
 Longitude: 77°18'49" W
 Hydrologic Unit Code (HUC): 020700100402
 Stream Class: III
 Name of Watershed: Accotink Creek
 COE Region: Eastern Mountains and Piedmont








Digital National Wetlands Inventory Map

Paul VI High School

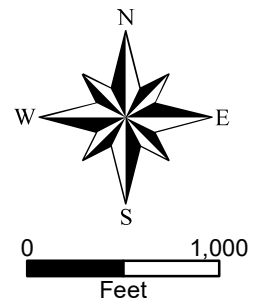
WSSI #22763.03

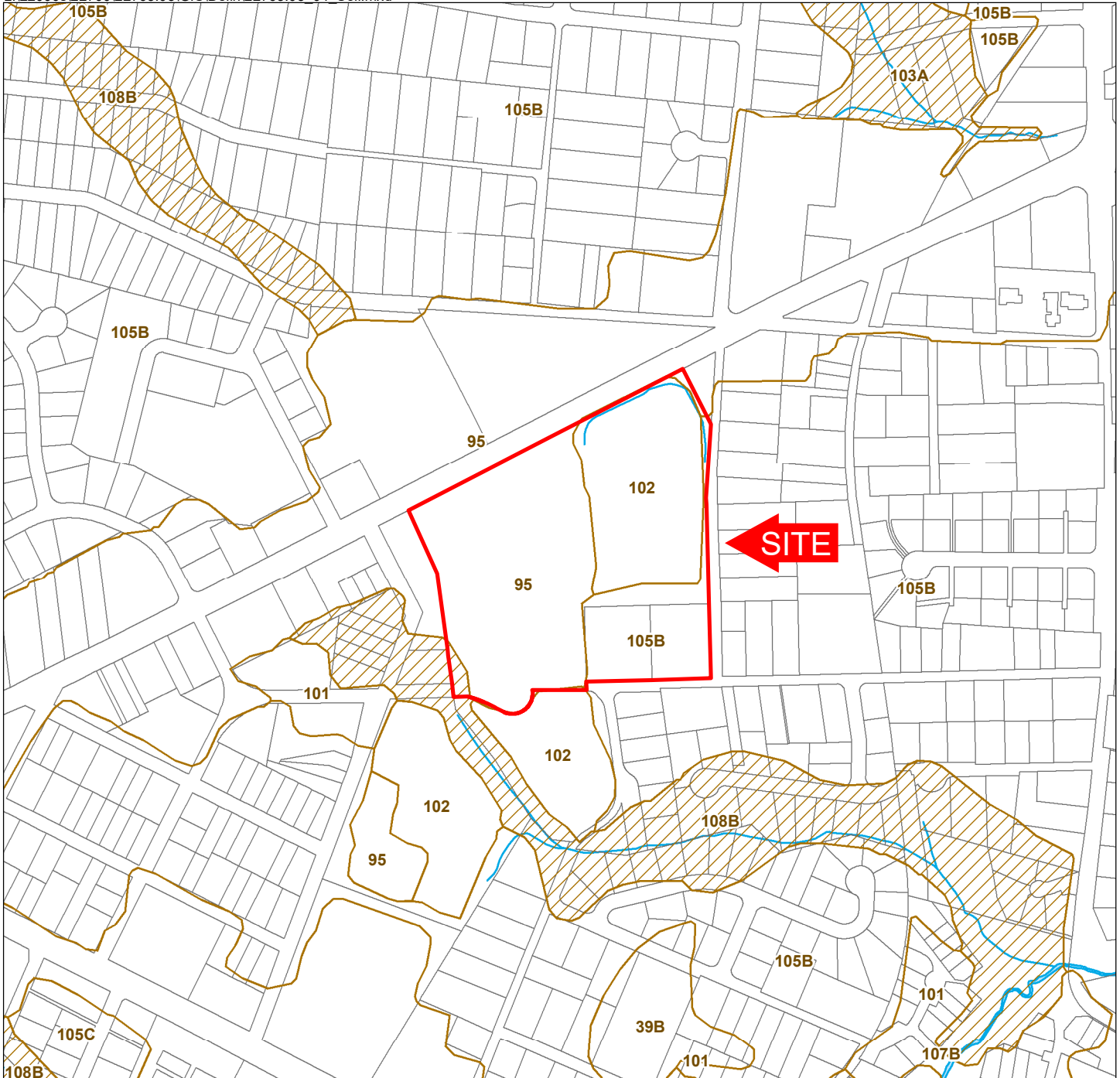
Original Scale: 1" = 1000'

Wetland Type




-  Open Water
-  Estuarine and Marine Wetland
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Other Wetland

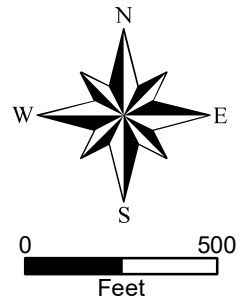
Data Updated: May 2016
 Source: <http://www.fws.gov/wetlands/Data/State-Downloads.html>





Soils Map
Fairfax City Digital Data
Paul VI High School
WSSI #22763.03
Original Scale: 1" = 500'

-  Hydric Soils
-  Soils with Hydric Inclusions
-  Non-hydric Soils



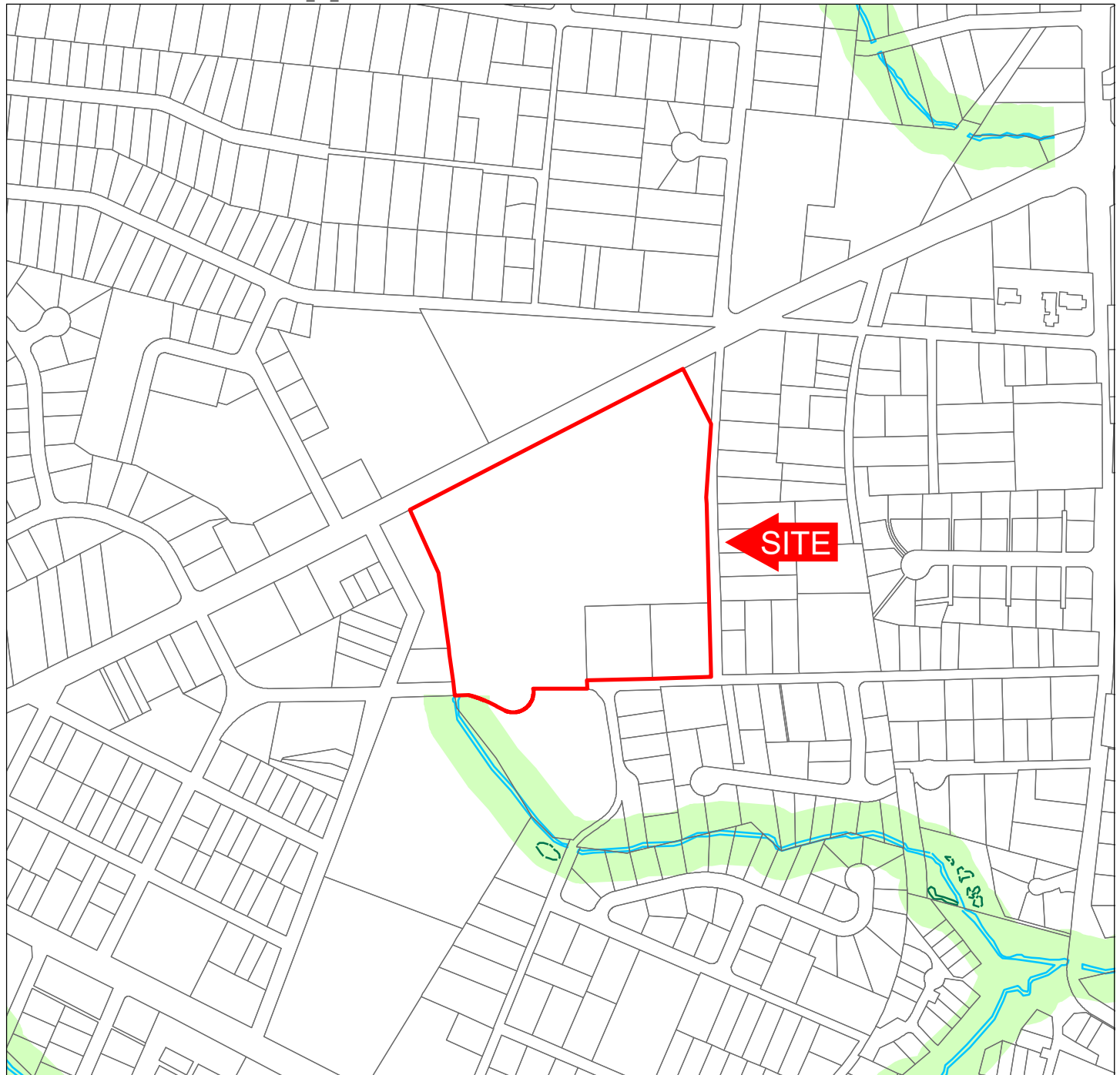
Mapped Soils Report for Paul VI High School

Project Number: 22763.03

Applicant / Owner: The IDI Group Companies

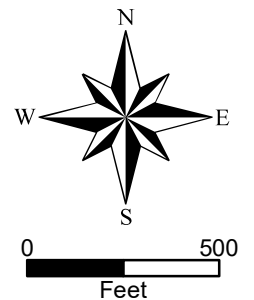
County: Fairfax, VA

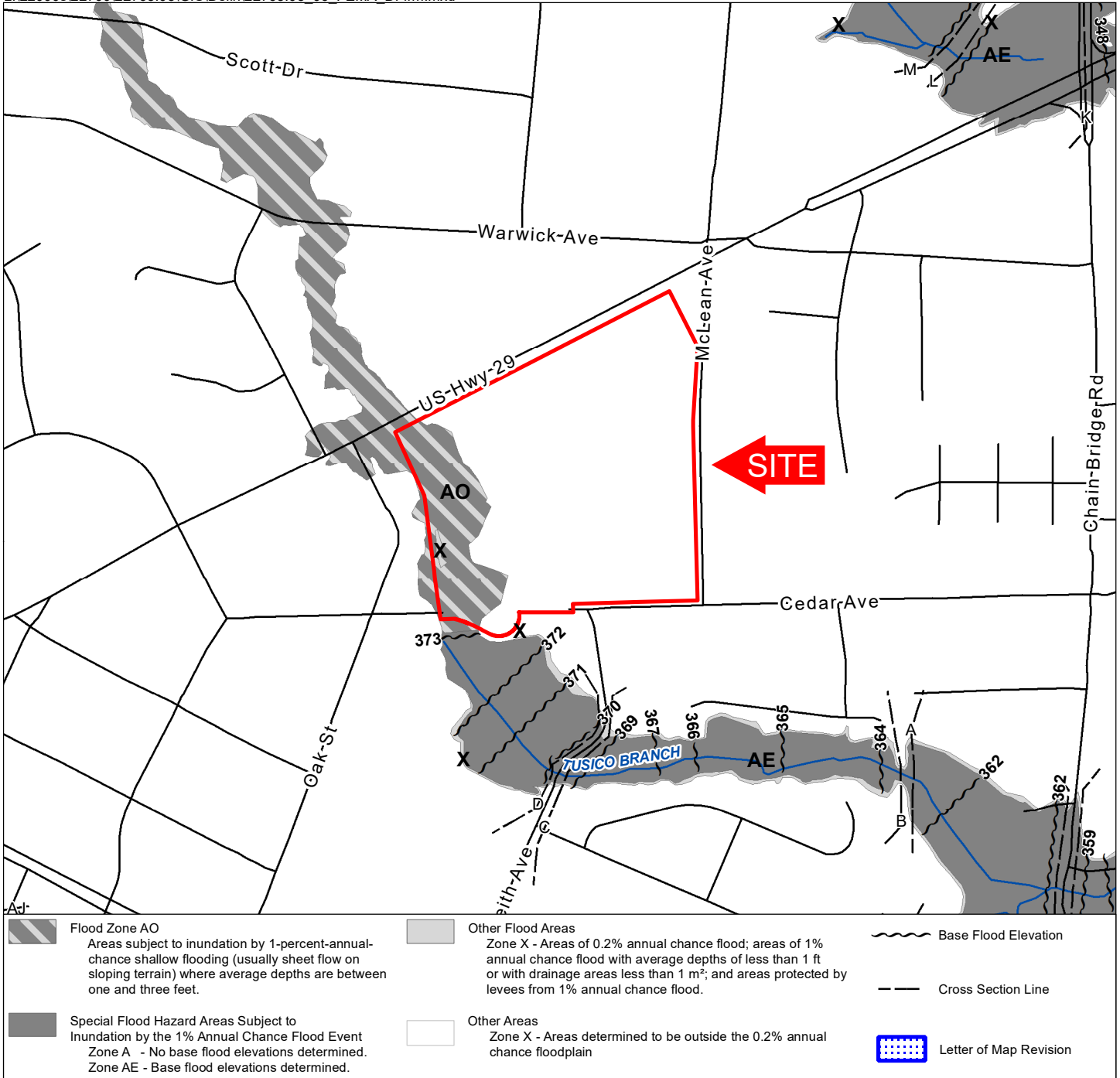
Map Symbol	Map Unit Name	Taxonomy	Drainage Class	Hydric National List	Hydric Local List	Hydric Inclusions
95	Urban land	N/A	N/A	NO	NO	NO
102	Wheaton loam, 2-25% slopes	Typic Udorthents	well	NO	NO	NO
105B	Wheaton-Glencol complex, 2-7% slopes	Typic Udorthents	well	NO	NO	NO
105Bi	Wheaton-Glencol complex, 2-7% slopes	Typic Hapludults	well	NO	NO	NO
108	Wheaton-Sumerduck complex, 2-7% slopes	Typic Udorthents	well	NO	NO	YES
108i	Wheaton-Sumerduck complex, 2-7% slopes	Aquic Hapludults	mod well-smwt poor	NO	NO	YES



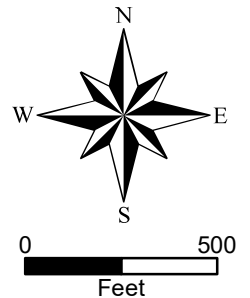
Resource Protection Area (RPA) Map
Fairfax City Digital Data
Paul VI High School
WSSI #22763.03
Original Scale: 1" = 500'

-  Intermittent RPA Streams
-  Perennial Streams
-  Contiguous Wetlands
-  Non Contiguous Wetlands in RPA
-  Ponds
-  Fairfax City RPA





FEMA Digital Flood Insurance Rate Map
Panel 5155240002C Effective 6/2/2006
Panel 5155240001C Effective 6/2/2006
Paul VI High School
WSSI #22763.03
Original Scale: 1" = 500'





**Spring 2004 Color Infrared Imagery
Paul VI High School
WSSI #22763.03
Original Scale: 1" = 200'**

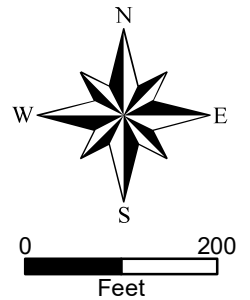


Photo Source: Wetland Studies and Solutions, Inc.



Spring 2017 Natural Color Imagery
Paul VI High School
WSSI #22763.03
Original Scale: 1" = 200'

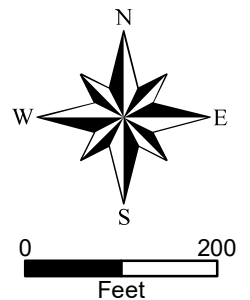


Photo Source: Pictometry®

**EXHIBIT 9
SITE PHOTOGRAPHS
PAUL VI HIGH SCHOOL
WSSI #22763.03**



1. Looking southeast (downstream) at the unnamed tributary to Accotink Creek located south of the site.



2. Looking northwest (upstream) at the unnamed tributary to Accotink Creek located south of the site.

**EXHIBIT 9
SITE PHOTOGRAPHS
PAUL VI HIGH SCHOOL
WSSI #22763.03**



3. Looking northeast at the developed areas that comprise the majority of the site.



4. Looking northwest at the developed areas that comprise the majority of the site.

**EXHIBIT 9
SITE PHOTOGRAPHS
PAUL VI HIGH SCHOOL
WSSI #22763.03**



5. **Looking north-northwest at an upland swale along the western boundary of the site. This swale lacks a continuous ordinary high water mark and appears to only receive stormwater. In WSSI's opinion, this swale is not jurisdictional (subject to COE concurrence).**