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## WETLAND IMPACT LOCATION MAP

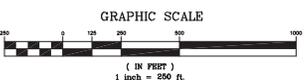
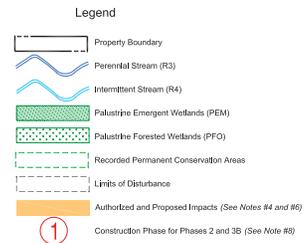
**MARBURY**  
 PHASES 1, 2, 3A, AND 3B  
 LOUDOUN COUNTY, VIRGINIA

PREPARED FOR ALLIED-MARBURY, LLC

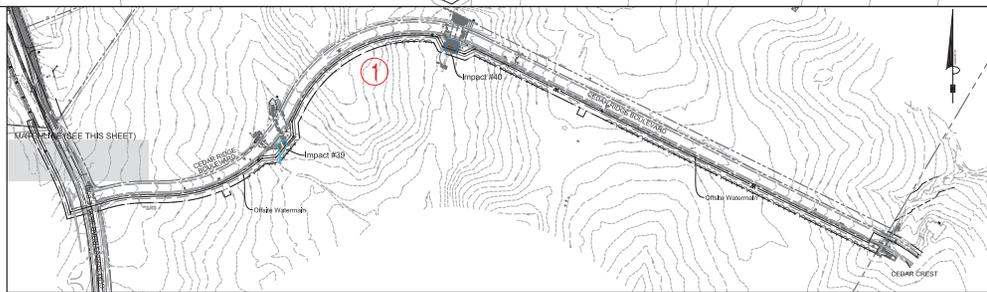


**NOTES:**

- The approximately 378-acre Marbury Project is identified as PNs 209-18-8194, 209-37-8763, 209-38-1065, 209-47-4265, 209-48-0263, 209-48-7811, 210-07-9845, 210-07-9877, 210-09-0099, 210-09-0811, 210-30-4840, and 210-38-3198, and located along the western side of Gum Spring Road (Route 659) at its intersection with Logansport Lane and south of Blackfoot Road in Loudoun County, Virginia. The Project is generally located at 38°54'43"N latitude and 77°52'43"W longitude on the Garrettsville and Arco USGS Quadrangle Maps. The Project drains towards Bull Run, which is located in the Upper Bull Run Critical LULU watershed (PLU2) in Hydrologic Unit Code 52070010 (Middle Potomac-Anacostia-Occoquan).
- The overall Project includes the development of a phased residential community, Phase 1 (northern portion), Phases 3A/3B (central portion along either side of the existing VEPCO easement), and Phase 2 (southern portion). This joint Permit Application for VWP and USACE Individual Permits covers the overall Marbury Project, including Phases 1 and 3A that are currently under construction as authorized under VWP General Permit No. WPA-11-0339 and 12-SPSP-01 authorization, and the remaining Phases 2 and 3B. Phases 1 and 3A of Marbury include the development of 115 single-family detached residential lots, 4 attached dwelling units, and associated infrastructure on the northern side of the VEPCO easement. The remainder of Marbury includes the development of 28 single-family detached lots in Phase 2, 136 single-family detached lots (3 of which are in Phase 3A) and 4 attached dwelling units in Phase 3B, an offsite wastewater connection to the existing Cedar Creek subdivision, a sanitary sewer pump station and force main along Bull Run, and other associated infrastructure.
- Proposed boundary, topography, existing conditions, maps, and proposed site plan information provided by Bowman Consulting Group, Ltd. (BCG).
- The waters of the U.S. and wetland boundaries at the Project were delineated by Phyllis Simmons and Associates, Ltd. based on the requirements of the Corps of Engineers Wetlands Delineation Manual (1987), and confirmed by the U.S. Army Corps of Engineers (USACE) during a jurisdictional determination (JLD) Project No. 2010-06-02 dated September 12, 2005. Given that the Marbury Project is currently covered by valid permits (see Note #1), the dates of the U.S. and wetland boundary delineation are as noted in the JLD. The waters of the U.S. and wetland boundaries for the offsite wetlands were delineated by BCG (Report and Map dated April 2, 2016) and confirmed by the USACE during a Jurisdictional Determination (USACE Project No. 2016-0871) dated May 28, 2016.
- Phases 1 and 3A of Marbury, the first phase of construction at the subdivision, are currently under construction and are authorized under VWP General Permit No. WPA-11-0339 and 12-SPSP-01 authorization, as issued by the Virginia Department of Environmental Quality (EQ) on July 16, 2012. This Permit authorizes permanent impacts to 1,455 linear feet (0.27 acre) of stream channel, 0.51 acre of palustrine emergent wetlands, and 0.10 acre of palustrine forested wetlands, and temporary impacts to 21 linear feet (0.01 acre) of stream channel, three authorized impacts for Phases 1 and 3A encompass Impacts #1 through #9 on this Wetland Impact Location Map.
- As a condition of VWP General Permit No. WPA-11-0339 and 12-SPSP-01 authorization for Phases 1 and 3A, Permanent Conservation Areas consisting of approximately 4,810 linear feet of stream and 27.1 acres of associated natural buffer were recorded, as outlined in green on this Map. The Permanent Conservation Area Plan and associated Declaration of Reservations are recorded in the land records of Loudoun County under Instrument No. 2010-0008-000780-0008378.
- The remaining portions of Marbury - Phases 2 and 3B, including the offsite wastewater connection, and the sanitary sewer pump station and force main along Bull Run - proposed wetlands, and 0.11 acre of palustrine forested wetlands, and 0.03 acre of palustrine forested wetlands, and 0.10 acre of palustrine forested wetlands, and 0.03 acre of palustrine forested wetlands, and 0.03 acre of palustrine forested wetlands.
- Taking cumulative impacts into consideration, overall Marbury (Phases 1, 2, 3A, and 3B) includes permanent impacts to 1,455 linear feet (0.27 acre) of stream channel, 0.59 acre of palustrine emergent wetlands, 0.10 acre of palustrine forested wetlands, and temporary impacts to 21 linear feet (0.01 acre) of stream channel, three authorized impacts for Phases 1 and 3A encompass Impacts #1 through #9 on this Wetland Impact Location Map.
- The Project also proposes to phase the required wetland and stream compensation for Phases 2 and 3B by purchasing the appropriate amount of wetland and/or stream credits for individual impacts prior to commencing construction activities within each designated phase of construction (Phase 2 and/or Phases 3A, 3B, 3C, 3D, and 4), as depicted on this Map and summarized in the Proposed Stream and Wetland Mitigation Planning for Phases 2 and 3B of Marbury Table.
- For more detailed information concerning the authorized and proposed waters of the U.S. and wetland impacts, refer to the Project's Joint Permit Application and the Individual Impact Plan View, Cross Section, and Profile sheets.



FOR INFORMATION PURPOSES ONLY



**SUMMARY OF AUTHORIZED, PROPOSED AND TOTAL PROJECT IMPACTS**

	AUTHORIZED IMPACTS (PHASES 1 AND 3A)		PROPOSED IMPACTS (PHASES 2 AND 3B)		TOTAL PROJECT IMPACTS (PHASES 1, 2, 3A, AND 3B)	
	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres
Permanent Stream Impacts	1,455 LF	0.27 Ac	2,190 LF	0.41 Ac	3,645 LF	0.68 Ac
Permanent Wetland Impacts	0.61 Ac		0.18 Ac		0.79 Ac	
Permanent Stream and Wetland Impacts	0.68 Ac		0.59 Ac		1.47 Ac	
Temporary Stream Impacts	21 LF	0.01 Ac	513 LF	0.14 Ac	534 LF	0.15 Ac
Temporary Wetland Impacts	0 Ac		0.04 Ac		0.04 Ac	
Temporary Stream and Wetland Impacts	0.01 Ac		0.18 Ac		0.19 Ac	
<b>Total Stream Impacts</b>	<b>1,476 LF</b>	<b>0.28 Ac</b>	<b>2,703 LF</b>	<b>0.55 Ac</b>	<b>4,179 LF</b>	<b>0.83 Ac</b>
<b>Total Wetland Impacts</b>	<b>0.61 Ac</b>		<b>0.22 Ac</b>		<b>0.83 Ac</b>	
<b>Total Stream and Wetland Impacts</b>	<b>0.89 Ac</b>		<b>0.77 Ac</b>		<b>1.86 Ac</b>	

**PROPOSED STREAM AND WETLAND MITIGATION PHASING FOR PHASES 1 AND 3B OF MARBURY**

Construction Phase	Impact #s	Total Stream Impacts (LF)	Total Wetland Impacts (Ac)	Required Stream Credits <sup>1</sup>	Required Wetland Credits <sup>2</sup>
1. Pump Station	28, 27, 26, 25, 24, 23, 22	230	0.03	230	0.03
2. Section 1	34, 35, 36, 37, 38, 40	220	0.00	220	0.00
2. Section 2	13, 16, 19, 20, 24, 25, 29	676	0.05	727	0.07
3. Section 3	10, 11, 12, 31	456	0.02	511	0.02
4. Section 4	14, 15, 17, 18, 21, 22, 23	558	0.11	658	0.10
<b>Total Impacts and Mitigation Required</b>		<b>2,180</b>	<b>0.21</b>	<b>2,562</b>	<b>0.31</b>

1. Includes permanent stream mitigation.  
 2. Includes permanent PFO and PFM wetland credits, as well as PFO or PFM construction impacts.  
 3. Based on USACE results.  
 4. Based on 1 mitigation-to-3 wetland ratio for PFO impacts, 2:1 for PFO impacts, and 1:1 for PFM construction impacts.

**PLAN STATUS**

DATE	DESCRIPTION
DESIGN	JAM JLF
DRAWN	CHKD
SCALE	H: 1"=250'
	V:
JOB No.	5113-03-001
DATE	January 31, 2013
FILE No.	
SHEET	1 of 1