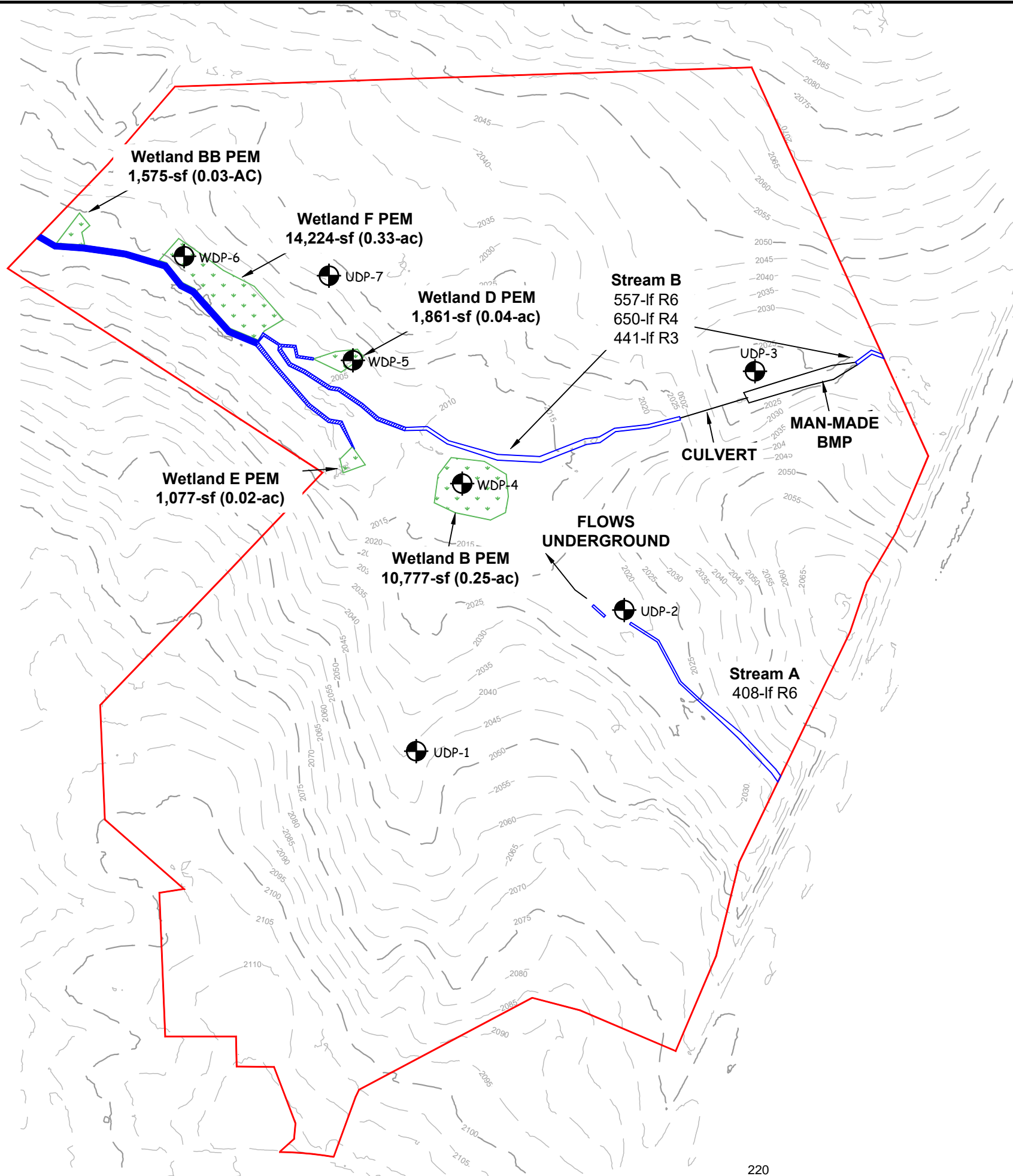


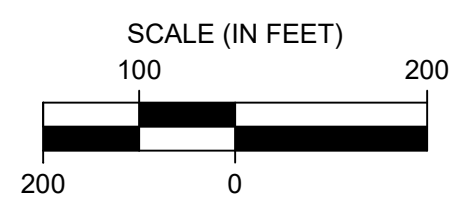
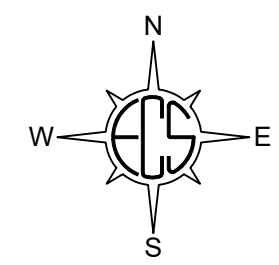
**APPENDIX B: PRELIMINARY WETLANDS AND JURISDICTIONAL  
WATERS EVALUATION**



- LEGEND**
- PERENNIAL STREAM CHANNEL (R3)
  - INTERMITTENT STREAM CHANNEL (R4)
  - EPHEMERAL STREAM CHANNEL (R6)
  - PALUSTRINE EMERGENT WETLAND (PEM)
  - APPROXIMATE WETLAND DATAPOINT LOCATION
  - STUDY AREA
  - MAN-MADE BMP

\*WATER FEATURES WERE DELINEATED BY ECS ON FEBRUARY 17, 2022 AND LOCATED USING A SUB-METER ACCURACY GPS UNIT.

\*\*WATER FEATURES DEPICTED HEREIN SHOULD BE CONSIDERED PRELIMINARY UNTIL CONFIRMED BY THE U.S. ARMY CORPS OF ENGINEERS.



**GLADE ROAD PROPERTY**  
**1000 GLADE ROAD**  
**BLACKSBURG, VIRGINIA**



**WATERS OF THE U.S.**  
**DELINEATION MAP**  
**CARY HOPPER**

ECS REVISIONS	
ENGINEER	DRAFTING
AMM	JMH
SCALE	
AS SHOWN	
PROJECT NO.	
47:13438-A	
SHEET	
1 OF 1	
DATE	
FEBRUARY 2022	

## Michael Formica

---

**From:** Justin M. Hughes, CHMM, PWS <JHughes@ecslimited.com>  
**Sent:** Thursday, July 14, 2022 5:21 PM  
**To:** Michael Formica; Meredith Jones; caryhopper@msn.com  
**Cc:** Steven S. Hay  
**Subject:** RE: Glade Road Waters of the US Draft Map

Thank you for sending, Michael.

Meredith, I overlaid the wetland/stream features on the proposed grading contours and came up with 537 lf R6 stream impacts and 0.11-ac PEM wetland proposed impacts. Also, for planning purposes if we cannot get that central feature ruled as non-jurisdictional that would add 0.25-ac of PFO wetland impacts. PEM wetland impacts are mitigation on a 1:1 basis and PFO on a 2:1 basis. We talked to some mitigation banks in the area and found credits for \$425/linear foot of stream and \$50,000/acre of wetland impacts.

Stream

537 lf x \$425=\$228,225

Wetland

PEM 0.11-ac x \$50k = \$5,500

PFO (if needed) 0.5-ac x \$50k = \$25,000

Total \$233,725

Total with PFO \$258,725

This is a good ballpark number to use during your meetings with the City but I do think we can get it down some as the streams proposed for impact are not of very good quality so we will likely not have to mitigate for each LF based on their USM scores. Please let me know if you have any questions!

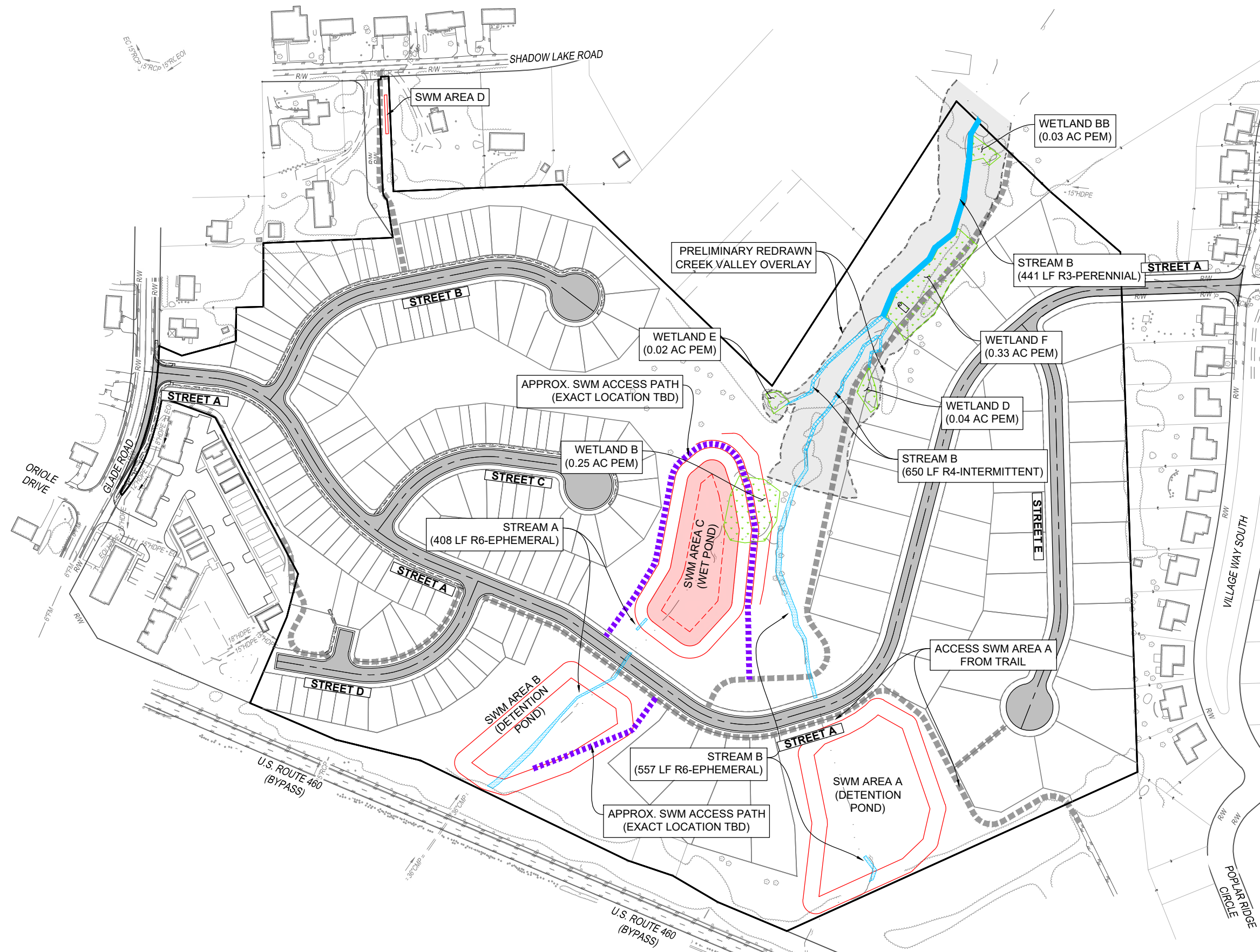
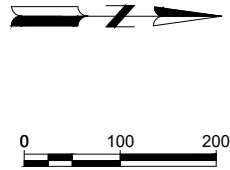
Thanks,

**JUSTIN M. HUGHES, CHMM, PWS** | Environmental Senior Project Manager  
**ECS MID-ATLANTIC, LLC** | T 804.353.6333 D 804.299.4880 C 804.971.3576  
JHughes@ecslimited.com | www.ecslimited.com

*Confidential/proprietary message/attachments. Delete message/attachments if not intended recipient.*

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C:\DROPOBOX\EA\CARY HOPPER\GLADE SPRING\CAD\REZONING CAD\IRZ-SWIM.DWG  
 11/16/2022 11:07:13 AM



**EDEN & ASSOCIATES**  
 engineering • planning • development  
 1700 KRAFT DRIVE, SUITE 2350  
 BLACKSBURG, VIRGINIA 24060  
 VOICE 276-632-6231  
 FAX 276-632-3648

No.	Revision / Issue	Date

**STORMWATER MANAGEMENT  
 AREAS EXHIBIT**

PROPOSED DEVELOPMENT OF  
**GLADE SPRING CROSSING**  
 PROPERTY OF GLADE HGTS, LLC - TAX PARCELS  
 225-(A)-3, 225-(A)-4, & 224-(A)-57 - 45.0976 AC.  
 TOWN OF BLACKSBURG - PRICES FORK DISTRICT  
 MONTGOMERY COUNTY, VIRGINIA

Drawn By: MSF	Scale: AS SHOWN
Checked By: PJB	Date: 11/15/2022
Sheet No. 1 of 1	<b>SWM</b>