Jurisdictional Determination Request

Proposed Interstate 85 (I-85) Widening and Interchange Improvements Project

From Mile Marker 96 to Mile Marker 106

Cherokee County, South Carolina



Prepared for:



Prepared by:



March 2016

Proposed I-85 Widening and Interchange Improvements Project (MM 96 to MM 106), Cherokee County, SC Request for Jurisdictional Determination

Project Summary

The South Carolina Department of Transportation (SCDOT) proposes to widen a portion of Interstate 85 (I-85) from approximately 1-mile north of SC 18 (Exit 96) (near the Gaffney Ferry Road entrance slip ramp) to the South Carolina/North Carolina State Line (Exit 106). Additionally, the project proposes improvements to the existing interchanges within the limits of the widening. See Attachment E, Figure 1 for a Site Location Map. A project study area (PSA) has been established to encompass potential impacts of the project and is approximately 1,035 acres.

Prior to conducting field work, Three Oaks reviewed reference material including:

- U.S. Geological Survey (USGS) 7.5 minute topographic quadrangles. Blacksburg South, South Carolina (1974); Blacksburg North, South Carolina (1979); and Grover, South Carolina (1979)
- Natural Resource Conservation Service US Department of Agriculture (NRCS-USDA) Web Soil Survey. Reviewed October 2016
- NRCS-USDA National List of Hydric Soils Database; National List, All States. (Last updated December 2015; reviewed October 2016)
- USFWS National Wetlands Inventory (NWI) Seamless Wetlands data for South Carolina (Last updated October 2015)
- USFWS South Carolina Field Office. Endangered, Candidate, and At-Risk Species. County Listings. Cherokee County (Last Updated: April 29, 2015; Reviewed: October 2016)
- S.C. Department of Natural Resources (SCDNR). Rare, Threatened, and Endangered Species and Communities Known to Occur in Cherokee County (Last Updated June 2014; Reviewed: October 2016)
- South Carolina Department of Health and Environmental Control (SCDHEC). Integrated Report for 2014. Part I: Section 303(d) List of Impaired Waters
- National Agriculture Imagery Program (NAIP) Aerial Photography. Cherokee County (2015)

The PSA spans three USGS 7.5-minute topographic maps. From south to north, these include Blacksburg South, Blacksburg North, and Grover. Sixteen blue-line streams are depicted on USGS mapping within the PSA, including three named waters: Broad River, Buffalo Creek, and Mill Creek. Two small ponds are also depicted within the PSA. See Attachment E, Figures 2-1 through 2-5 for USGS Topography Maps.

According to the NRCS Web Soil Survey data, 38 soil map units (SMUs) are mapped within the PSA. Of these, Chewacla (Ch) and mixed wet alluvial land (Mw) are the only SMUs classified as hydric. All other soil map units mapped within the PSA are classified as nonhydric. See Attachment E, Figures 3-1 through 3-5 for NRCS Soil Map Unit Maps.

The USFWS National Wetland Inventory (NWI) classification system identifies 19 wetland communities within the PSA. These communities are defined as two Riverine systems (R2UBH and R2USC), 13 forested/shrub wetlands (PFO1A, PFO1C, and PSS1C), and four freshwater ponds (PUBHh and PUBHx). See Attachment E, Figures 4-1 through 4-5 for National Wetland Inventory Maps.

Two-foot contour data, derived from USGS Light Detection and Ranging (LiDAR) data, identified significant crenulations throughout the PSA. These areas were evaluated for evidence of flow, an ordinary high water mark, and other characteristics of Waters of the U.S. See Attachment E, Figures 5-1 through 5-5 for Two Foot Contour Maps.

- The

Three Oaks Engineering staff led field reviews of the PSA for the presence of wetlands and other waters of the U.S. between December 1, 2015-January 12, 2016, and September 15-October 6, 2016. Wetlands were determined using the three-parameter approach following guidelines as defined in the Army Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987) and the Eastern Mountains and Piedmont Regional Supplement to the Manual. Wetland boundaries were flagged with pink and black and/or orange and white striped flagging tape. Stream boundaries were flagged with blue and white striped flagging tape. Wetland and stream locations were located using a hand-held GPS unit with sub-meter accuracy. See Attachment E, Figures 6-1 through 6-30 for Delineated Waters of the U.S. Maps.

Three Oaks staff met with a Corps representative on March 6 and 7, 2017 to verify jurisdictional features. The following information reflects changes that were made to the field determinations.

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Pond ID	Figure	Latitude	Longitude	Area (acres)
P1	6-4, 6-5	35.127038	-81.558263	0.032
P2	6-17, 6-18	35.142722	-81.502848	0.216
P3	6-30	35.167192	-81.448047	0.053
P4	6-18	35.144896	-81.507289	0.405
			Total:	0.706 acres

Table 1. Ponds found within the Project Study Area.

Table 2. Wetlands within the PSA

Wetland ID	Figure	Latitude	Longitude	Area (acres)
WA	6-27	35.161177	-81.458139	0.0123
WB	6-26	35.159644	-81.462089	0.0338
WC	6-26	35.158606	-81.461904	0.0525
WD	6-26	35.158699	-81.461708	0.0096
WE	6-25	35.160080	-81.472241	0.1095
WF	6-26	35.159729	-81.470785	0.2229
WG	6-25	35.160687	-81.472278	0.1155
WH	6-25	35.160675	-81.473307	0.3129
WDD	6-1	35.115034	-81.578729	0.0691
WEE	6-1	35.115917	-81.574779	0.0014
WFF	6-1, 6-2	35.117047	-81.578188	0.3033
WGG	6-1	35.115483	-81.580303	0.0051
WII	6-2	35.119451	-81.573427	0.0429
WKK	6-4	35.126973	-81.550876	0.0088
WLL	6-4	35.127020	-81.551173	0.0171
WMM	6-7, 6-8	35.127057	-81.550249	0.0455
WNN	6-5	35.129574	-81.554357	0.0065
WOO	6-10	35.132435	-81.535939	0.5382
WPP	6-9	35.131751	-81.537981	0.3319
WQQ	6-9	35.131485	-81.539074	0.2195
WSS	6-13	35.138645	-81.511547	0.1400
WTT	6-8	35.131396	-81.543422	0.7907
WUU	6-9, 6-10	35.132261	-81.540096	0.2340
WVV	6-10	35.133259	-81.536145	1.7720
WWW	6-10	35.134181	-81.531633	0.1436
WXX	6-5	35.131058	-81.551618	0.1205
WYY	6-13	35.140573	-81.511583	0.0400
WZV	6-30	35.164365	-81.448311	0.0530
WZW	6-13	35.139026	-81.514335	0.0111

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Wetland ID	Figure	Latitude	Longitude	Area (acres)
WZX	6-13	35.138938	-81.515459	0.0541
WZY	6-13	35.141379	-81.512442	0.8037
WZZ	6-4	35.124922	-81.552246	0.0785
WAAA	6-18	35.144333	-81.502282	0.0061
WBBB	6-14	35.143237	-81.512244	0.0445
			Total:	6.7502

 Table 2. Wetlands within the PSA (continued)

Table 3. Streams identified within the PSA

		ined within the I SA				ted Area
Stream ID	Figure	Туре	Latitude	Longitude	Linear Feet	Acres
Broad River	6-1, 6-2	Tributary – Perennial	35.118250	-81.576194	1568	10.9574
Buffalo Creek	6-4, 6-7, 6-8	Tributary – Perennial	35.126186	-81.553110	2447	4.0642
Mill	6-30	Tributary – Seasonal	35.164453	-81.447879	196	0.0229
Creek/SZL	6-30	Tributary – Perennial	35.164402	-81.447437	72	0.0162
SA	6-30	Tributary – Seasonal	35.166975	-81.447384	64	0.0117
SB/SG	6-30	Tributary – Perennial	35.166149	-81.446407	454	0.0727
SF	6-30	Tributary – Seasonal	35.167575	-81.441280	93	0.0134
SH	6-30	Tributary – Seasonal	35.166454	-81.446216	137	0.0236
SJ	6-27	Tributary – Seasonal	35.162131	-81.456149	31	0.0018
SK	6-27	Tributary – Seasonal	35.161101	-81.458098	117	0.0109
SK	6-27	Tributary – Perennial	35.160217	-81.457248	166	0.0227
SM	6-26	Tributary – Perennial	35.159527	-81.462002	278	0.0204
	6-28	Tributary – Intermittent	35.163489	-81.453851	193	0.0174
SN	6-27	Tributary – Seasonal	35.161728	-81.455282	1137	0.1286
	6-27	Tributary – Perennial	35.160498	-81.456780	189	0.0141
SO	6-25	Tributary- Seasonal	35.160883	-81.473543	41	0.0025
SP	6-25, 6- 26	Tributary – Seasonal	35.160853	-81.472756	290	0.0276
SR	6-25	Tributary – Seasonal	35.160360	-81.475078	198	0.0297
ST	6-23	Tributary – Perennial	35.158760	-81.482581	672	0.0877

						ted Area
Stream ID	Figure	Туре	Latitude	Longitude	Linear Feet	Acres
SW	6-22	Tributary – Seasonal	35.154615	-81.485258	287	0.0249
5W	6-22	Tributary – Perennial	35.154323	-81.486043	279	0.0103
SX/SRRR	6-21, 6- 22	Tributary – Perennial	35.151667	-81.488099	377	0.0560
SBB	6-2	Tributary – Perennial	35.120063	-81.572960	583	0.0860
SCC	6-2	Tributary – Seasonal	35.120216	-81.572424	113	0.0055
SGG	6-3	Tributary – Perennial	35.123827	-81.564808	210	0.0163
SHH	6-3	Tributary – Perennial	35.124958	-81.561305	188	0.0186
SII	6-3, 6-4	Tributary – Seasonal	35.125972	-81.560904	105	0.0101
SKK	6-4	Tributary – Seasonal	35.125817	-81.558404	100	0.0047
SLL	6-5	Tributary – Seasonal	35.127371	-81.553500	225	0.0317
SMM	6-4, 6-5	Tributary – Perennial	35.129388	-81.554486	1962	0.6080
SNN	6-4	Tributary – Seasonal	35.125756	-81.553779	187	0.0119
SOO	6-7	Tributary – Perennial	35.126334	-81.549447	247	0.0344
SPP	6-7	Tributary – Seasonal	35.126136	-81.549478	153	0.0106
SQQ	6-5	Tributary – Perennial	35.130106	-81.553896	802	0.1491
SRR	6-5	Tributary – Seasonal	35.129426	-81.557631	190	0.0233
SIX	6-5	Tributary – Perennial	35.129920	-81.556203	851	0.1027
SSS	6-9, 6-10	Tributary - Perennial	35.132187	-81.539187	492	0.0903
STT	6-8	Tributary – Seasonal	35.130361	-81.543963	684	0.0755
SUU	6-8	Tributary – Seasonal	35.130214	-81.544091	115	0.0084
SWW	6-5, 6-6, 6-8	Tributary – Perennial	35.132118	-81.551540	1295	0.1681
SYY	6-8	Tributary – Seasonal	35.130408	-81.547989	181	0.0147
SZB	6-18	Tributary – Perennial	35.144243	-81.502444	35	0.0021
SZC	6-18	Tributary – Perennial	35.144459	-81.502427	144	0.0411

Table 3. Streams identified within the PSA (continued)

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						ted Area
Stream ID	Figure	Туре	Latitude	Longitude	Linear Feet	Acres
SZD	6-4	Tributary – Seasonal	35.125488	-81.552456	260	0.0234
SZN	6-14	Tributary – Perennial	35.143229	-81.511693	277	0.2053
SZZ	6-8	Tributary – Seasonal	35.129178	-81.548181	175	0.0180
SCCC	6-12, 6- 13	Tributary – Seasonal	35.137559	-81.515007	898	0.0708
SUL	6-16	Tributary – Perennial	35.136113	-81.510317	195	0.0158
SDDD	6-17	Tributary – Seasonal	35.138833	-81.512073	301	0.0283
SGGG	6-8	Tributary – Seasonal	35.130896	-81.544943	243	0.0227
SHHH	6-10	Tributary – Seasonal	35.134120	-81.531483	44	0.0007
SIII	6-10, 6- 11	Tributary – Perennial	35.135054	-81.530699	518	0.1107
SJJJ	6-11	Tributary – Seasonal	35.135018	-81.530494	72	0.0042
SKKK	6-13, 6- 17	Tributary – Seasonal	35.140571	-81.511131	805	0.0293
SLLL	6-13	Tributary – Perennial	35.139154	-81.514047	1628	0.1752
SMMM	6-18	Tributary – Perennial	35.144293	-81.502433	291	0.0170
SNNN	6-19	Tributary – Perennial	35.145519	-81.498651	376	0.0314
S000	6-19	Tributary – Perennial	35.146717	-81.498309	552	0.0368
SPPP	6-18	Tributary – Perennial	35.143255	-81.502477	258	0.0111
SQQQ	6-21	Tributary – Perennial	35.151324	-81.488535	302	0.0205
SSSS	6-21	Tributary – Seasonal	35.151652	-81.487685	66	0.0021
				Total:	25,407	17.973

Table 3. Streams identified within the PSA (continued)

					Delinea	ted Area
Feature ID	Figure	Туре	Latitude	Longitude	Linear Feet	Acres
SI	6-27, 6- 28	Non-Aquatic Linear Conveyance	35.162663	-81.456288	97	0.0265
SJ	6-27	Non-Aquatic Linear Conveyance	35.162497	-81.456238	147	0.0220
SO	6-25	Non-Aquatic Linear Conveyance	35.160516	-81.473197	36	0.0029
SP	6-25, 6- 26	Tributary – Intermittent	35.159957	-81.471343	244	0.0168
SV	6-23	Non-Aquatic Linear Conveyance	35.158440	-81.481994	976	0.0802
SY	6-21, 6- 22	Non-Aquatic Linear Conveyance	35.152492	-81.488816	108	0.0060
SZB	6-18	Non-Aquatic Linear Conveyance	35.143932	-81.502857	301	0.0099
				Total:	1,909	0.1643

Table 4. Non-Jurisdictional Features within the PSA

If you have any questions, or if we can be of additional assistance, please feel free to contact Skip Johnson at (803)727-8455.

Thank you,

Skip Johnson Three Oaks Engineering Attachment A

JD Checklist

JD Checklist*

Action	SCI Confiri			ultant irmation
1 Is the Jurisdictional Determiniation Request Form completed and signed?	Y	N	γ	N
2 Does the JD packet include:				
a) Location Map	Y	N	Y	N
b) Aerial photograph with project boundary?	Y	N	Y	N
c) Topographic map with project boundary?	Y	N	γ	N
d) Soil survey map with project boundary?	Y	N	Υ	N
e) Photographs of the site, wetlands, streams, ditches, etc?	Y	N	Υ	N
f) Table with Latitude and Longitude for each jurisdictional feature (wetland, stream pond, etc.)?	Y	Ν	Υ	Ν
Is the project boundary large enough to encompass all potential impacts including construction access?	Y	Ν	Υ	Ν
4 Is the acerage for the project area included on the wetland map?	Y	Ν	Υ	Ν
5 Are all wetlands and streams identified on a map or drawing?	Y	Ν	Υ	Ν
Is there a map included showing the surface connection of how the stream, wetland, or ditch connects to a downstream (named) tributary?	Y	N	Y	Ν
b) Do all identified streams contain a clear line or polygon with linear footage?	Y	Ν	Y	N
7 Could you use the maps and drawings to easily locate the site and the boundaries of the wetlands within the project area <u>without the consultant</u> <u>present</u> ?	Y	Ν	Y	Ν
8 Data Sheets:				
a) Are data sheets included?	Y	N	Y	Ν
b) Is a reference map included to indicate where the data points are located?	Y	Ν	Y	N

SCDOT

Consultant

* This checklist includes information that is not necessarily required for a Jurisdictional Determiniation but will ensure a streamlined review

Attachment B

JD Request Form

U.S. Army Corps of Engineers – Charleston District - Regulatory Division

JURISDICTIONAL DETERMINATION REQUEST

For Identifying Waters of the U.S., Including Wetlands and Tributaries, and Jurisdictional Status

This form is intended for use by anyone requesting a jurisdictional determination from the U.S Army Corps of Engineers, Charleston District (Corps). Please supply the following information and supporting documents described below. This document can be completed electronically and then printed. <u>This document must be signed by the current property owner(s) to be considered a formal request.</u> We require original signatures; faxes and emails with scanned copies are not acceptable. Per the required property owner's signature below, please be advised that submitting this request authorizes the Corps to conduct on-site investigations, if necessary, to inform the jurisdictional determination process. Please contact us if you need any assistance with filling out this form, as well as for jurisdictional determination requests associated with corridor projects involving multiple property owners. You may attach extra pages/authorizations if needed. The printed form and supporting documents should be mailed to the appropriate office (refer to the enclosed service area map):

Charleston Office:	Columbia Office:	Conway Office:
US Army Corps of Engineers	US Army Corps of Engineers	US Army Corps of Engineers
Regulatory Division	Regulatory Office	Regulatory Office
69A Hagood Avenue	1835 Assembly Street, Room 865 B-1	1949 Industrial Park Road, Room 140
Charleston, SC 29403	Columbia, SC 29201	Conway, SC 29526
(ph) 843-329-8044	(ph) 803-253-3444	(ph) 843-365-4239

Directions: Sections I-V must be completed upon submittal. Failure to do so may result in additional delays.

I. PROPERTY AND AGENT INFORMATION

A. Project Details/Location:

Project Name:	Date:
County:	Latitude/Longitude:
Tax Map Sequence (TMS) #(s):	
Property Address(es):	
Acreage(s):	

B. Property Owner(s): (if there are multiple property owners, please attach additional pages)

Name:	
(*Current Legal Property C	vner Name and Contact Information are required.)
Company Name (if applicable):
Address:	·
Phone:	Email:
C. Requestor Of Jurisdiction	Determination (check here [] if same as Property Owner):
Name:	
Company Name (if applicabl):
Phone:	Email:

Select one:

I am the current property owner

- I am an interested buyer or am under contract to purchase the property
- Other, please explain.

D. Consultant/Agent (if applicable):

[1

[]

Consultant/Agent Name:		
Company Name (<i>if applicable</i>):		
Address:		
Phone:	Email:	

1

II. PROPERTY ACCESS AUTHORIZATION

I, the undersigned, a duly authorized owner of record of the below parcel number(s), do hereby authorize representatives of the U.S. Army Corps of Engineers, Charleston District, to enter upon the below parcel number(s) for the purposes of conducting on-site investigations (e.g., digging and refilling shallow holes) and issuing a jurisdictional determination associated with Waters of the U.S. subject to Federal Jurisdiction under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899.

I acknowledge that under South Carolina common law, a person who authorizes, advises, encourages, procures, or incites another to commit a trespass, is liable along with the actual perpetrator.

I further acknowledge that 18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

Mailing Address of Property Owner	Property Address
TMS #(s)	Property Owner Name (please print)
Signature of Property Owner:	Date:
II. AGENT/CONSULTANT AUTHORIZATION	Not applicable

I, the undersigned, do authorize the agent/consultant listed above (on page 1) to act in my behalf in the processing of this request and to furnish supplemental information in support of this request.

I acknowledge that 18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

Property Owner Name (or Requestor Name) (please print)

Signature of Property Owner (or Requestor): Date:

The Consultant/Agent is acting on behalf of the (check all that apply):

[] Property Owner [] Requestor [] Other, please explain:

*The SCDOT, acting under The Eminent Domain Procedure Act (South Carolina Code of Laws Title 28, Chapter 2, Article 1), has identified multiple properties which are being investigated for possible future right of way acquisition and/or easement access. The SCDOT is requesting assistance from the USACE to verify water features identified within the project study corridor having been accessed through The Eminent Domain Procedure Act (EDA).

A. I am an <u>environmental/wetland consultant representing a JD requestor</u> who is submitting a wetland delineation for review and verification by the Corps. Please refer to pages **4-8** for the "Information Required for Wetland Delineations and Jurisdictional Determination Submittals."

B. I am a <u>JD requestor without an environmental/wetland consultant</u> requesting that the Corps investigate the above property for the presence or absence of wetlands, tributaries, or other Waters of the U.S., and establish the geographic extent of these areas. *Please note that while the Corps offers wetland delineation services, time frames to fulfill requests are dependent on site size, property conditions, workload priorities, and staffing levels. To expedite the wetland delineation process, property owners and/or requestors are encouraged to hire an environmental consultant. A courtesy list of environmental consultants can be found on our website at www.sac.usace.army.mil/Missions/Regulatory/PermittingProcess.aspx.*

For requestors with no environmental/wetland consultant for box IV. B. above, the first three items listed below MUST accompany your request. Complete only this page and disregard the following pages.

1. Accurate location maps (from County Map, USGS Quad Sheet, etc.), street address and directions to site from a nearby major intersection.

2. Copy of Survey Property Plat, Tax Map of Property, or depiction showing project review area/property boundary with GPS coordinates.

3. Statement that the project review area/property boundaries are marked and a description of how the project review area/property boundaries are marked onsite. See below note* for more information.

4. Additional information, such as soil survey information, aerial photographs, etc.

*Note: The project review area/property boundaries must be accurately marked onsite PRIOR to the Corps site visit. The property owner may need to hire a registered land surveyor to locate and mark the property corners and/or boundaries. Small sites and/or sparsely vegetated sites may only require the property corners be marked. However, sites that are large, oddly shaped, and/or have thick vegetative cover may require additional marking efforts, such as cut sight lines, the use of a series of flags, etc., in order for Corps staff to identify and locate the boundaries while onsite.

V. Type of Jurisdictional Determination Requested (select one):

A. Accurate-Approved B. Approximate-Approved C. Accurate-Preliminary * D. Approximate-Preliminary

Description of the Types of Jurisdictional Determinations:

<u>Preliminary</u> – Preliminary determinations will identify whether wetlands or other waters are present on the site and will presume that they are jurisdictional. Preliminary jurisdictional determinations may be completed more quickly than Approved jurisdictional determinations and do not expire.

<u>Approved</u> – Approved jurisdictional determinations will identify whether wetlands or other waters are present on the site and will include a determination of their jurisdictional status. Approved jurisdictional determinations expire in 5 years.

Description of the Types of Delineations:

<u>Accurate:</u> Location and extent (boundaries) of all Waters of the U.S. are identified and <u>surveyed</u> by a registered land surveyor. Project review area/property boundary must be surveyed or represented by a tax map (or by GPS points if no Waters of the U.S. are present).

<u>Approximate</u>: Location and extent (boundaries) of all Waters of the U.S. are identified and depicted <u>approximately</u> on a sketch. Project review area/property boundary must be surveyed or represented by a tax map or GPS coordinates.

*Note: For Accurate-Preliminary Jurisdictional Determinations, although the jurisdictional determination will not expire, the surveyed location and extent (boundaries) of wetlands and/or waters will expire after 5 years.

Attachment C

Photographs

Wetland Photos (1-35)

	Title: Wetland WA Date: 12/02/2015 Taken By: Nathan Howell Description: Wetland WA is a small floodplain/toe-of-slope wetland located east of Stream SK. Photo taken at flag WA-3 facing northwest.
Photo 2	Title: Wetland WB
	Date: 12/02/2015 Taken By: Nathan Howell
	Description: Wetland WB is a small floodplain/toe-of-slope wetland located on both sides of Stream SM. Photo taken at flag WB-3 facing northwest.

Photo 3	Title:
	Wetland WC
	Date:
	12/03/2015
	Taken By: Nathan Howell
	Description: Wetland WC is a seepage slope wetland located west of
	Stream SM. Photo taken at point WC-10 facing west.
the second second second	
Dhata 1	Title:
Photo 4	
Photo 4	Wetland WD
	Wetland WD Date:
	Wetland WD Date: 12/03/2015
	Wetland WD Date:
	Wetland WD Date: 12/03/2015 Taken By: Nathan Howell Description:
	Wetland WD Date: 12/03/2015 Taken By: Nathan Howell Description: Wetland WD is a small floodplain/toe-of-slope wetland
	Wetland WD Date: 12/03/2015 Taken By: Nathan Howell Description:
	Wetland WD Date: 12/03/2015 Taken By: Nathan Howell Description: Wetland WD is a small floodplain/toe-of-slope wetland located east of Stream SM. Photo taken at point WD-3
	Wetland WD Date: 12/03/2015 Taken By: Nathan Howell Description: Wetland WD is a small floodplain/toe-of-slope wetland located east of Stream SM. Photo taken at point WD-3
	Wetland WD Date: 12/03/2015 Taken By: Nathan Howell Description: Wetland WD is a small floodplain/toe-of-slope wetland located east of Stream SM. Photo taken at point WD-3
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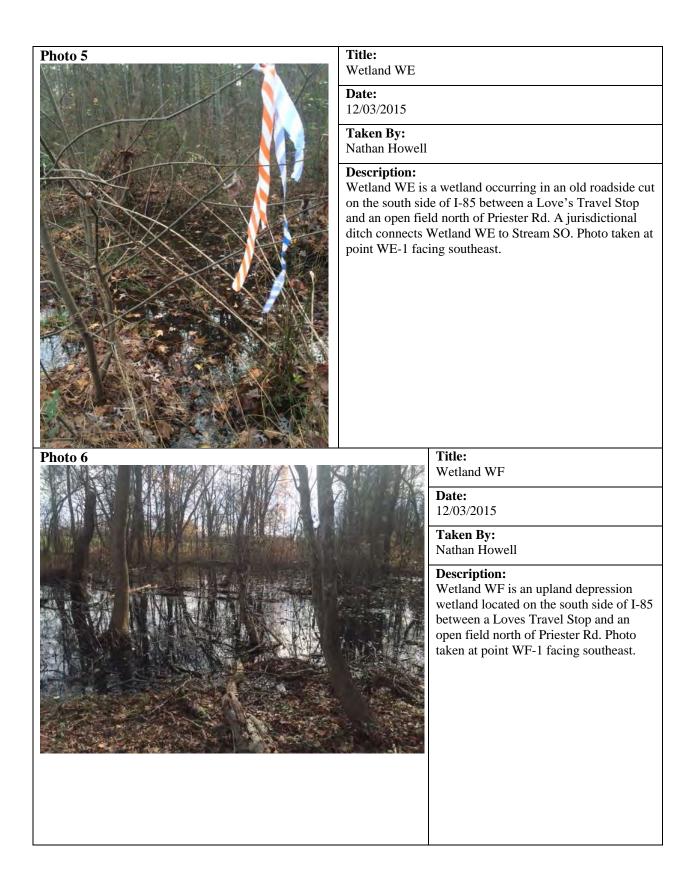
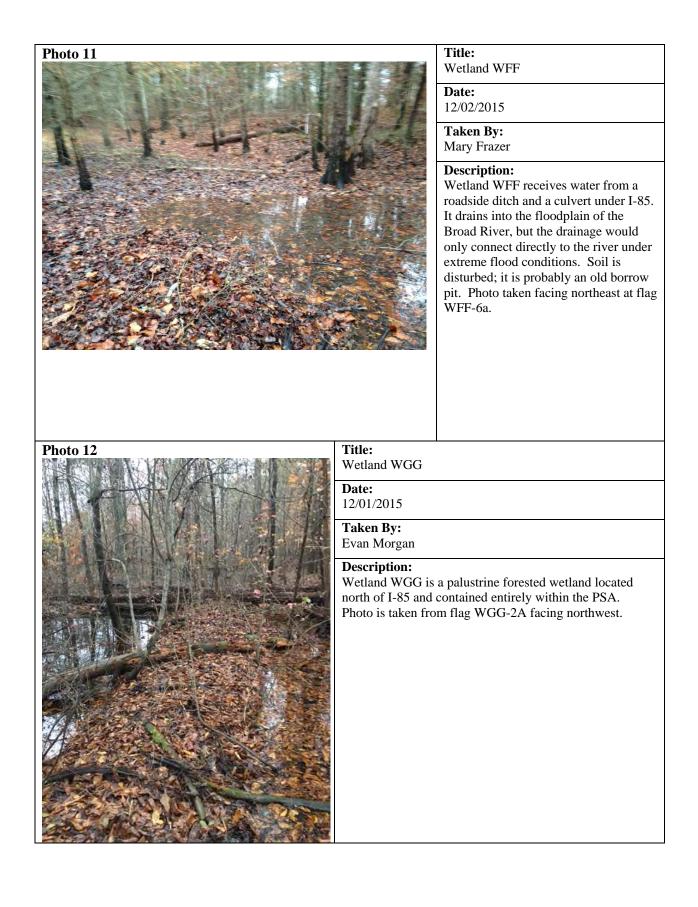
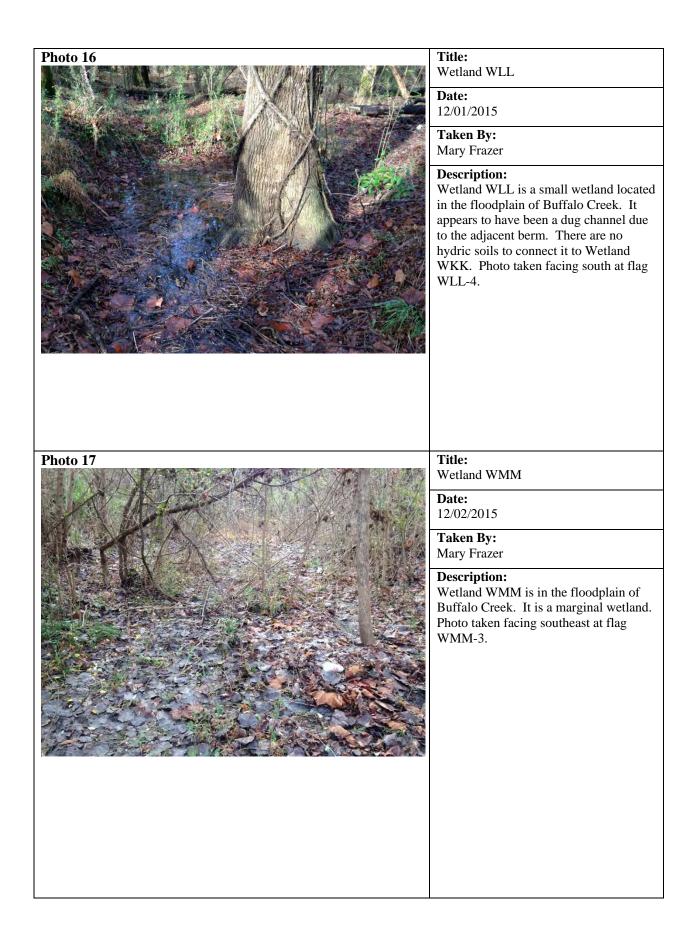


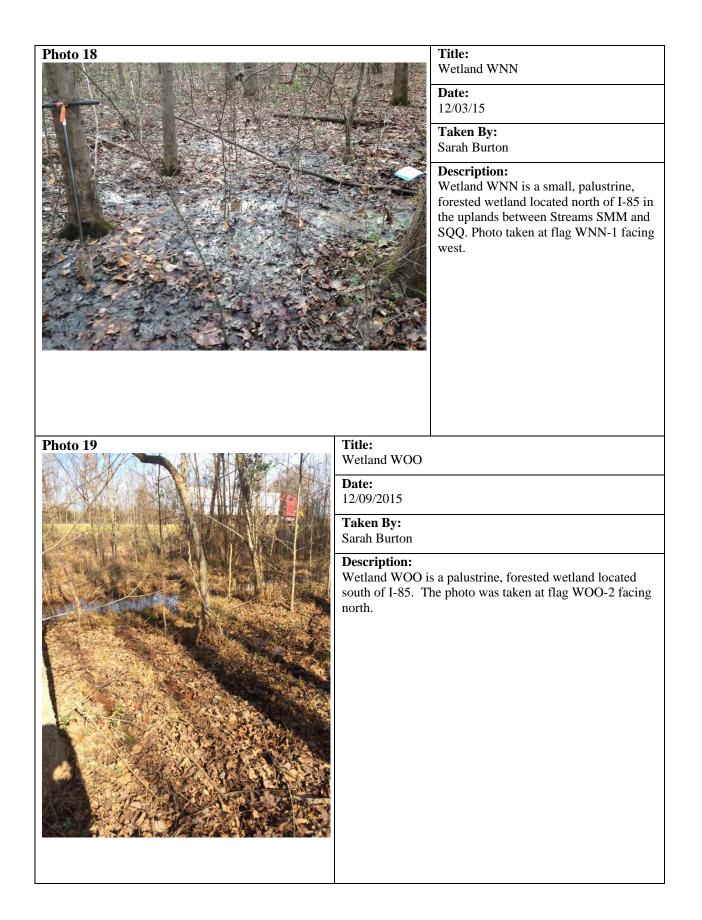
Photo 7	Title:
	Wetland WG
	Date:
	12/09/2015
	Taken By:
	Evan Morgan
	Description:
	Wetland WG is a palustrine forested wetland located on
	both sides of Stream SP. Photo is taken from point WG-8 looking east towards a powerline right-of-way crossing of
	the wetland.
29 REAL ARE AREAS	
A DE AND A DE ANTAR	
Photo 8	Title:
	Wetland WH
	Date:
	12/09/2015
WI En Main	Taken By:
	Nathan Howell
	Description:
	Wetland WH occurs along both sides of Stream SO.
	Photo is taken at flag WH-2 facing west where the wetland crosses a powerline right-of-way.
	1 0 1 1 1
E. V. Markey Markey and the	

Photo 9	Title:
	Wetland WDD
and the second	Date: 12/02/2015
and the second second	Taken By:
	Mary Frazer
	Description: Wetland WDD is a small depressional wetland occurring in a cutover area in the floodplain of the Broad River. Photo is facing northeast at flag WDD-3b.
Photo 10	Title:
	Wetland WEE
	Date: 12/01/2015
	Taken By: Mary Frazer
A land land land	Description: Wetland WEE is a small, isolated wetland found in a
	floodplain forest. Photo taken facing east at flag WEE-1.



<image/>	Title: Wetland WII Date: 12/01/2015 Taken By: Mary Frazer Description: Wetland WII is an old ditch leading toward Stream SBB; however, the end of the ditch is dammed up with sediment. Photo taken facing north at flag WII-2.
Photo 15	Title: Wetland WKK
	Date: 12/02/2015
	Taken By: Mary Frazer
	Description: Wetland WKK is a small ponded depression with scant vegetation; it is in the floodplain of Buffalo Creek. Photo facing southeast at flag WKK-1.





<image/>	Title: Wetland WPP Date: 12/09/2015 Taken By: Sarah Burton Description: Wetland WPP is located between pastures in a small depression east of Stream SSS. The photo is taken at flag WPP-7 facing south.
Photo 21	Title: Wetland WQQ Date: 12/09/2015
	Taken By: Sarah Burton
	Description: Wetland WQQ is in an active pasture and drains to Stream SSS. This photo was taken at flag WQQ-8 and is facing southeast.

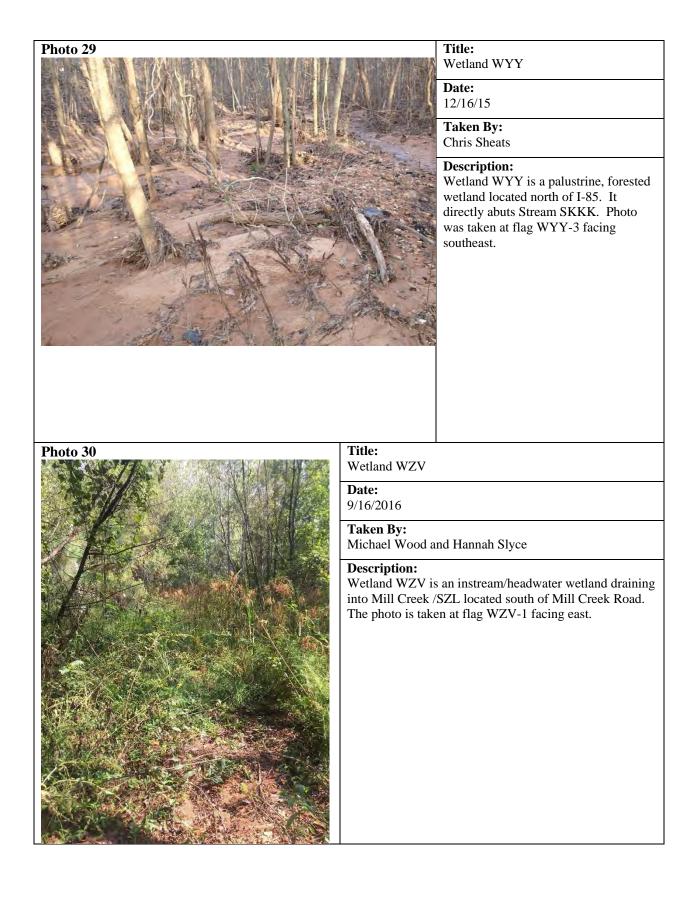
<image/>	Title: Wetland WSS Date: 12/10/2015 Taken By: Sarah Burton Description: Wetland WSS is in a large depression found on both sides of Stream DDD. This photo was taken at flag WSS-4 facing north.
<image/>	Title: Wetland WTT Date: 12/15/2015 Taken By: Sarah Burton Description: Wetland WTT is a large forested wetland with areas of standing water. The photo is taken at flag WTT-5 facing southwest.

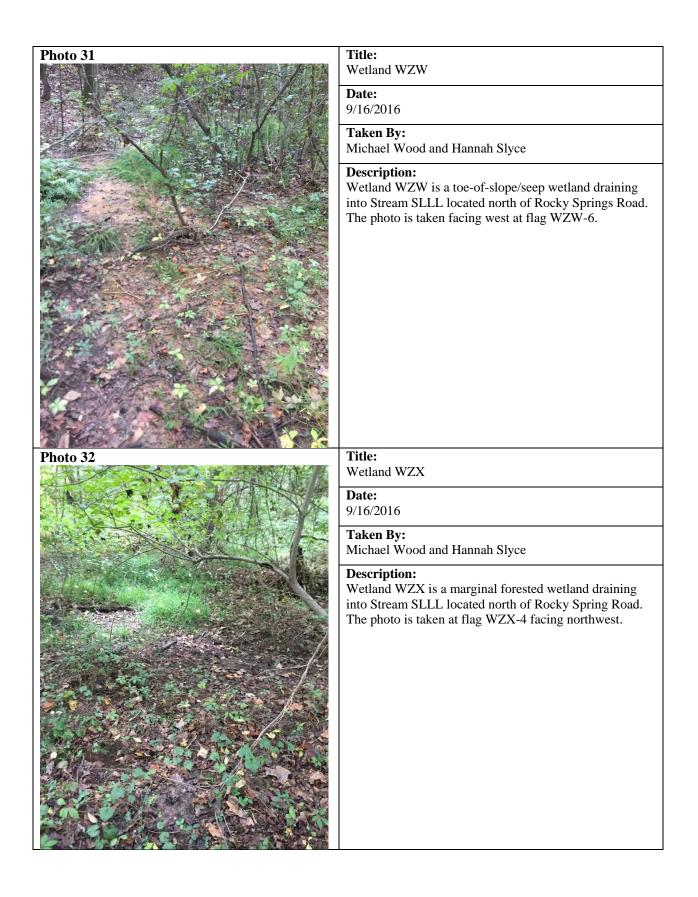


Wetland WUU is in an open area between woodlots. It is located north of I-85 and west of Stream SSS. This photo was taken at flag WUU-12 facing southwest.

Wetland WVV is a large wetland that contains some standing water. It is located in a depression next to a utility easement north of I-85. This photo is taken at flag WVV-2 facing north.

Photo 27	Title:
MA I MERRIA	Wetland WWW Date:
	12/15/2015
ALC HEX XAL	Taken By: Sarah Burton
	Description: Wetland WWW is in a disturbed area with pockets of standing water north of I-85. Stream SHHH is the source of water for this wetland. The photo is taken at flag WWW-1 facing east.
Photo 28	Title: Wetland WXX
	Date: 12/16/2015
	Taken By: Sarah Burton
	Description: Wetland WXX is part of a braided system with Stream SWW located east of Blacksburg Highway. The photo is taken facing southwest at flag WXX-1.





Title: Wetland WZY
Date: 9/16/2016
Taken By: Michael Wood and Hannah Slyce
Description: Wetland WZY is an old farm pond that has been drained; it flows into Stream SKKK located north of Rocky Springs Road. The photo is taken facing northwest at flag WZY-1.
Title: Wetland WAAA
Date: 10/05/2016
Taken By: Nathan Howell
Description: Wetland WAAA is a small, toe-of-slope seepage wetland that drains into Stream SZC located north of I-85. Photo taken at flag WAAA-2 facing southwest.



Title:

Wetland WBBB

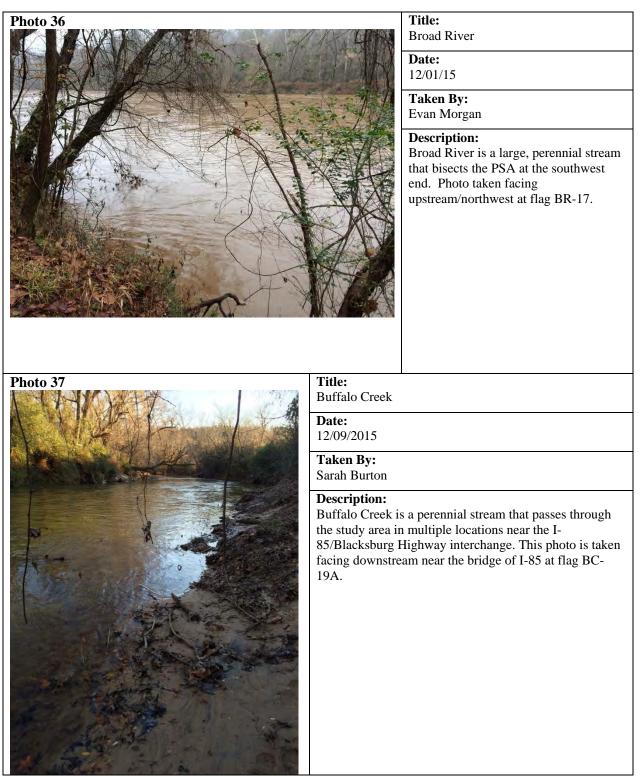
Date:

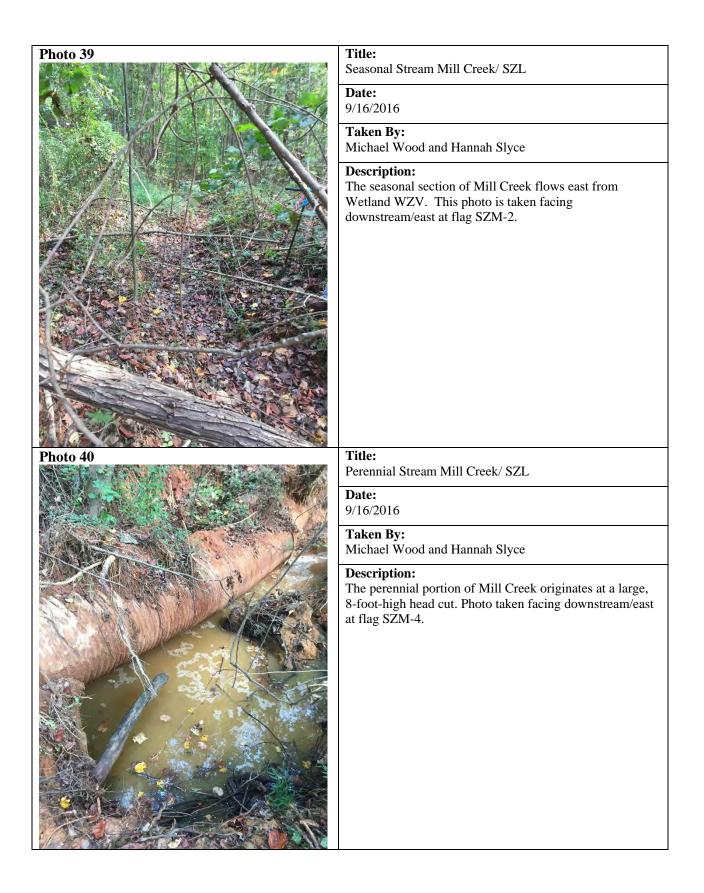
10/05/2016

Taken By: Nathan Howell

Description: Wetland WBBB is primarily fed by stream SZN and is contained by an old riprap dam. This system is located behind the Denny's/Flying J off I-85/SC 5. Photo is taken at flag WBBB-1 facing west.

Stream Photos (36-123)







Title:

Seasonal Stream SA

Date:

12/01/2015

Taken By:

Nathan Howell

Description:

View of Stream SA facing upstream from flag SA-3a located just upstream from the confluence of Streams SA & SB. Streams SA & SB merge and immediately flow into a culvert that runs south under Interstate 85. Photo taken facing west.

Title:

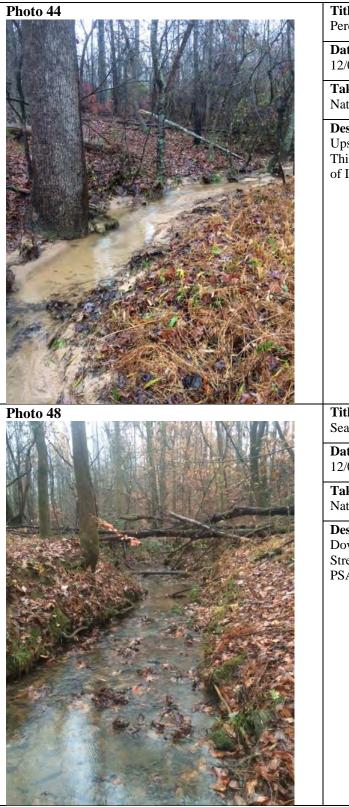
Perennial Stream SB/SG

Date: 12/01/2015

Taken By: Nathan Howell

Description:

Upstream view of Stream SB taken at flag SB-6. Stream SB is on the north side of I-85. Photo taken facing north.



Title:

Perennial Stream SB/SG

Date:

12/02/2015

Taken By:

Nathan Howell

Description:

Upstream view of Steam SG taken from flag SG-1b. This section of Stream SG is located on the south side of I-85. Photo is taken facing north.

Title:

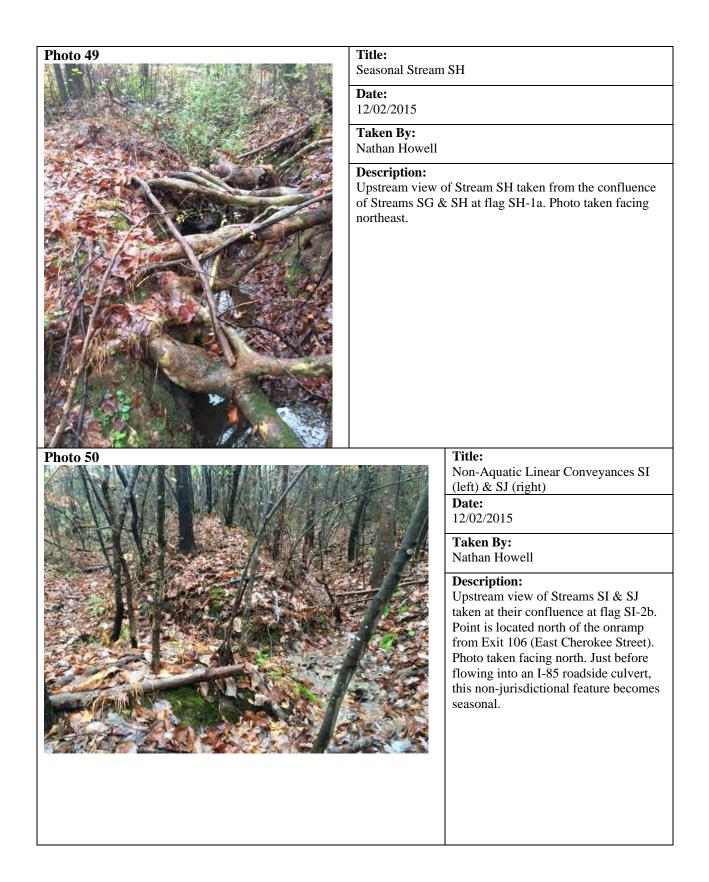
Seasonal Stream SF

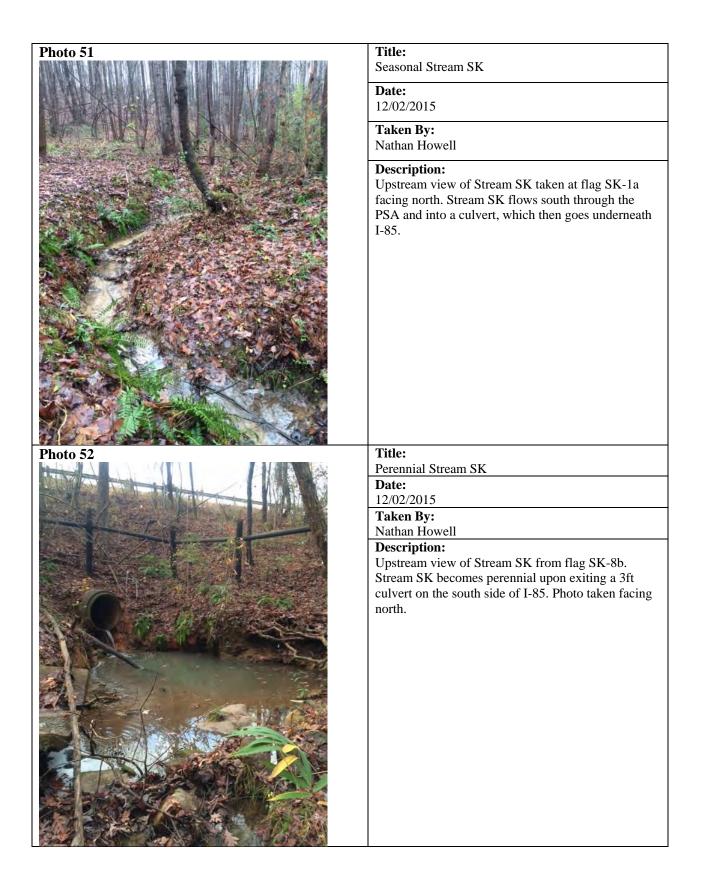
Date: 12/01/2015

Taken By: Nathan Howell

Description:

Downstream view of Stream SF taken at flag SF-5a. Stream SF is located at the northeast corner of the PSA. Photo taken facing south.







Perennial Stream SM

Date:

12/02/2015

Taken By:

Nathan Howell

Description:

Downstream view of Stream SM taken at flag SM-1a. Stream SM flows south through Wetland WB and into a culvert, which emerges on the south side of I-85. Photo taken facing south.

Title:

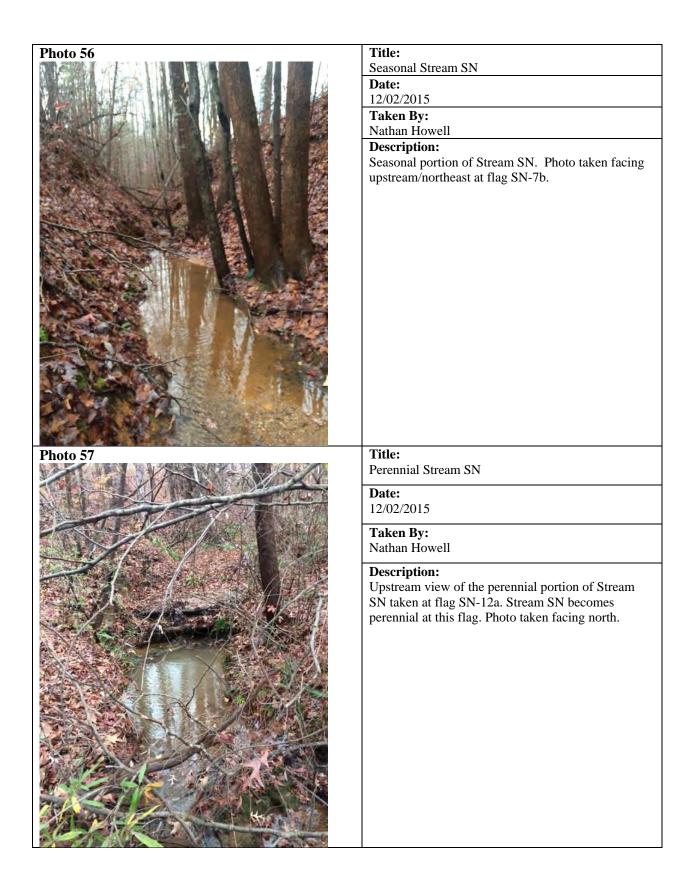
Seasonal Stream SN

Date: 12/02/2015

Taken By: Nathan Howell

Description:

Downstream view of Stream SN from taken from flag SN-2. Stream SN originates on the north side of I-85 in a small wooded area between the exit 106 off-ramp and I-85. Stream SN enters a culvert on the north side of the interstate and re-emerges on the south side, where it runs parallel with I-85 for several hundred feet. Photo taken facing southwest.



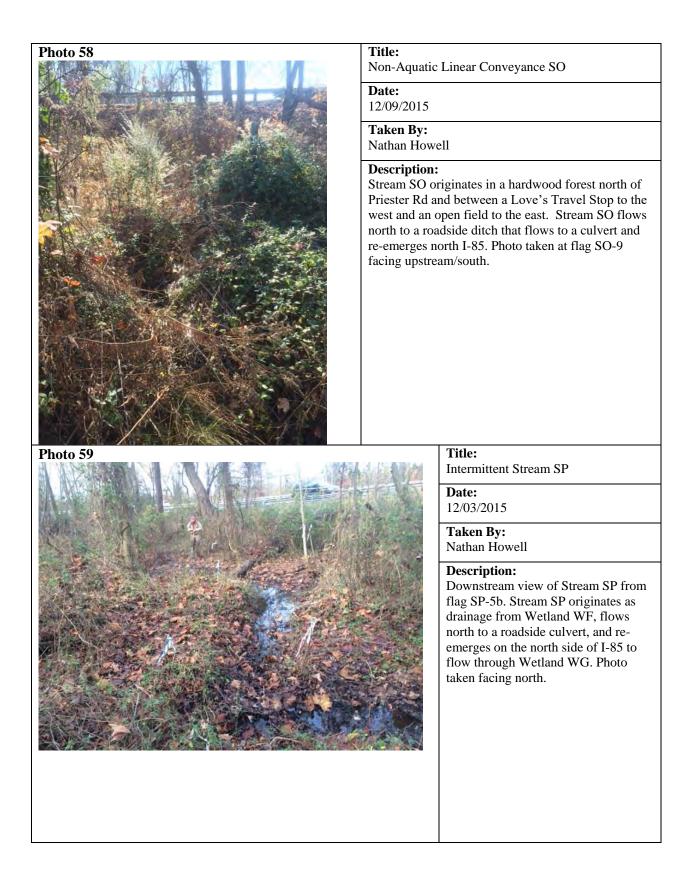
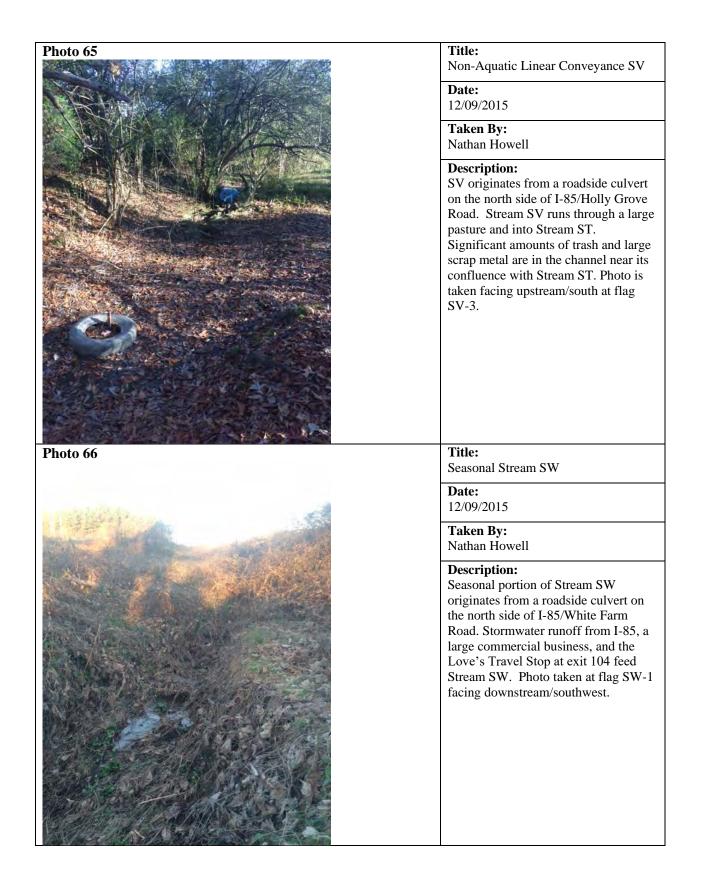


Photo 61	Title:
	Seasonal Stream SR
	Date:
	12/09/2015
	Taken By:
	Nathan Howell
	Description:
	Stream SR originates from a roadside stormwater retention area on the south
	side of I-85. A culvert directs water
	from the retention area to the north of I-
	85 (Stream SR origin) during high
	rainfall events. Photo taken facing downstream/north at flag SR-2a.
A CONTRACT OF THE PARTY OF	
Photo 63	Title:
Photo 63	Title: Perennial Stream ST
Photo 63	Perennial Stream ST Date:
Photo 63	Perennial Stream ST Date: 12/09/2015
Photo 63	Perennial Stream ST Date: 12/09/2015 Taken By:
Photo 63	Perennial Stream ST Date: 12/09/2015 Taken By: Nathan Howell
Photo 63	Perennial Stream ST Date: 12/09/2015 Taken By: Nathan Howell Description:
Photo 63	Perennial Stream ST Date: 12/09/2015 Taken By: Nathan Howell Description: Stream ST originates as groundwater
Photo 63	Perennial Stream ST Date: 12/09/2015 Taken By: Nathan Howell Description: Stream ST originates as groundwater and flows north, parallel to a large pasture. Photo is taken at stream origin
Photo 63	Perennial Stream ST Date: 12/09/2015 Taken By: Nathan Howell Description: Stream ST originates as groundwater and flows north, parallel to a large pasture. Photo is taken at stream origin facing downstream/northeast at flag
Photo 63	Perennial Stream ST Date: 12/09/2015 Taken By: Nathan Howell Description: Stream ST originates as groundwater and flows north, parallel to a large pasture. Photo is taken at stream origin facing downstream/northeast at flag ST-1b. Stream ST is located north of
	Perennial Stream ST Date: 12/09/2015 Taken By: Nathan Howell Description: Stream ST originates as groundwater and flows north, parallel to a large pasture. Photo is taken at stream origin facing downstream/northeast at flag
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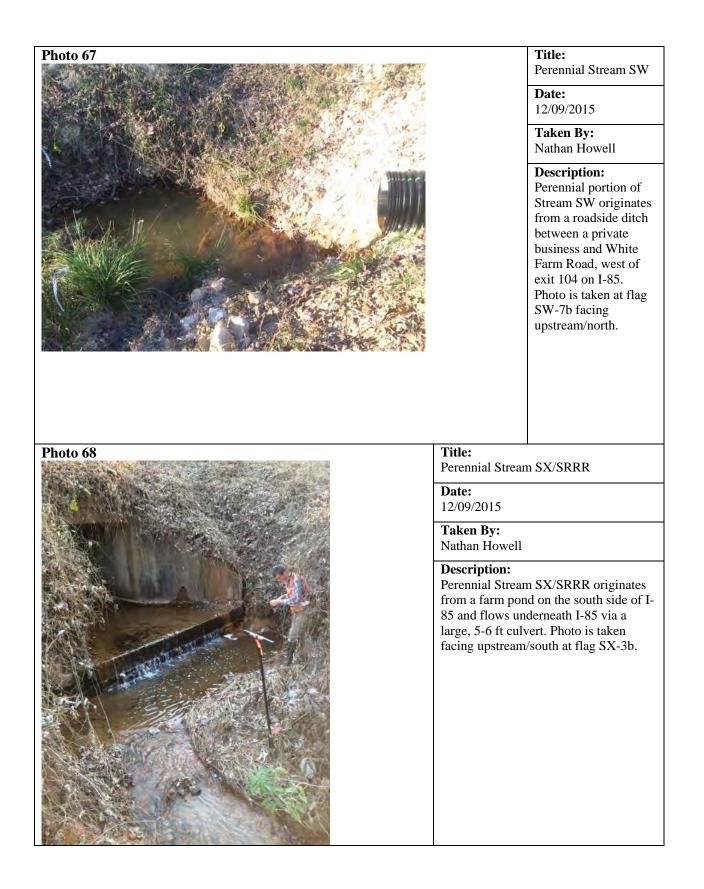


Photo 69	Title: Perennial Stream SX/SRRR
	Date:
	12/16/2015 Taken By:
	Sarah Burton
	Description: Stream SX/SRRR originates on the southside of I-85 and collects water from stream SQQQ near a culvert that flows under I-85. This photo was taken at flag SRRR-3 facing downstream/northwest.
Photo 70	Title:
	Non-Aquatic Linear Conveyance SY Date:
	12/09/2015
	Taken By: Nathan Howell
	Description: SY originates from surface water runoff from a steep roadside slope. Photo was taken at flag SY-1, facing downstream/west, where it merges with Stream SX north of White Farm Rd.

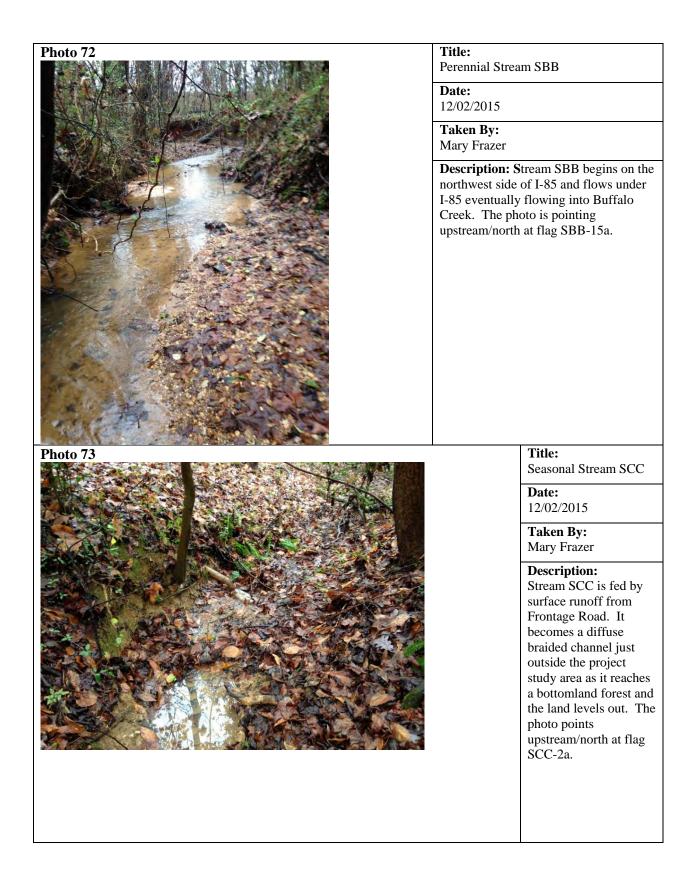
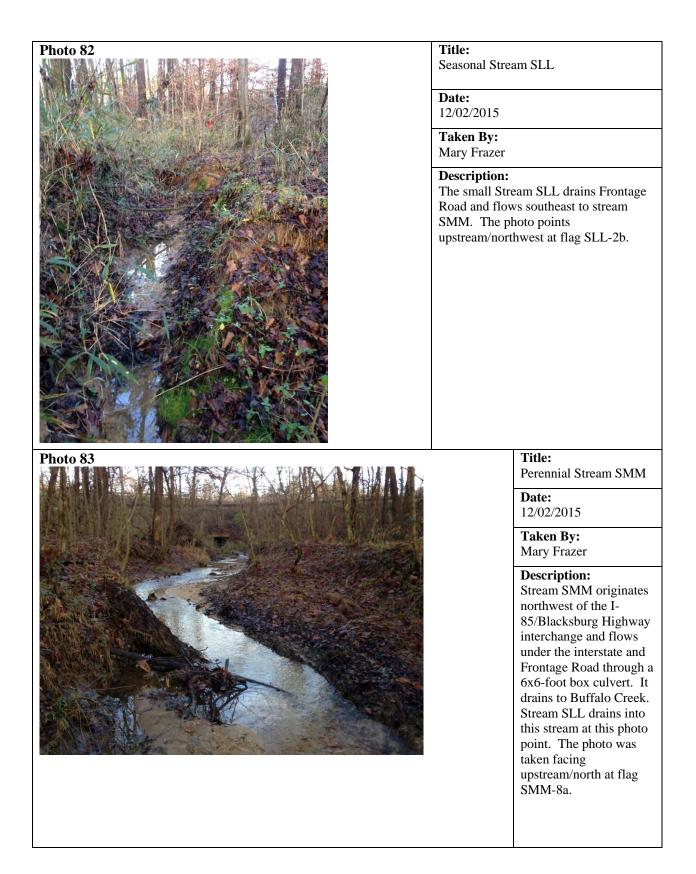


Photo 77	Title:
	Perennial Stream SGG
	Date: 12/02/2015
	Taken By:
	Mary Frazer
	Description:
	Stream SGG begins between I-85 and Orlando Drive. It flows south under I- 85 and continues into a bottomland area outside the project study area. The photo was taken pointing upstream/north at flag SGG-5b.
Photo 78	Title:
Photo 78	Title: Perennial Stream SHH
Photo 78	
Photo 78	Perennial Stream SHH Date: 12/02/2015 Taken By:
Photo 78	Perennial Stream SHH Date: 12/02/2015 Taken By: Mary Frazer
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Photo 78	Perennial Stream SHH Date: 12/02/2015 Taken By: Mary Frazer Description: This streams begins between I-85 and Orlando Drive. It flows south under I- 85 and a frontage road and continues
Photo 78	Perennial Stream SHH Date: 12/02/2015 Taken By: Mary Frazer Description: This streams begins between I-85 and Orlando Drive. It flows south under I- 85 and a frontage road and continues outside the project study area. The photo was taken pointing
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<section-header></section-header>	Perennial Stream SHH Date: 12/02/2015 Taken By: Mary Frazer Description: This streams begins between I-85 and Orlando Drive. It flows south under I- 85 and a frontage road and continues outside the project study area. The photo was taken pointing
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<image/>	Title: Seasonal Stream SIIDate: 12/02/15Taken By: Evan MorganDescription: Stream SII drains the area around Orlando Drive and I-85, flowing west. Photo taken at flag SII-2a facing downstream/west.
<image/>	Title: Seasonal Stream SKK Date: 12/02/2015 Taken By: Mary Frazer Description: Stream SKK originates from Pond 1 and flows south under I-85 and Frontage Road and drains to Buffalo Creek. The photo points upstream/northwest at flag SKK-3b.



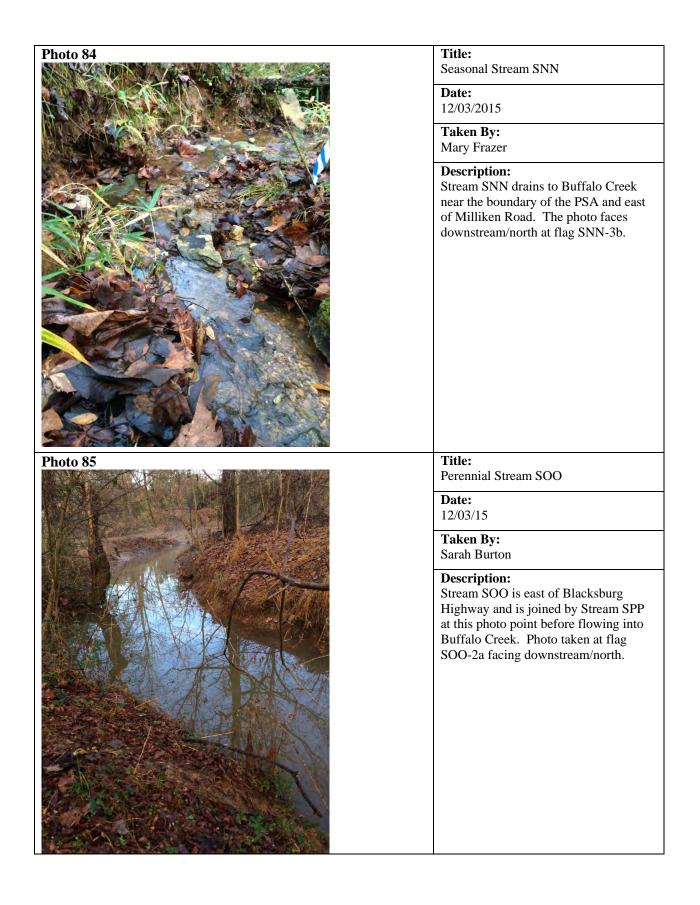
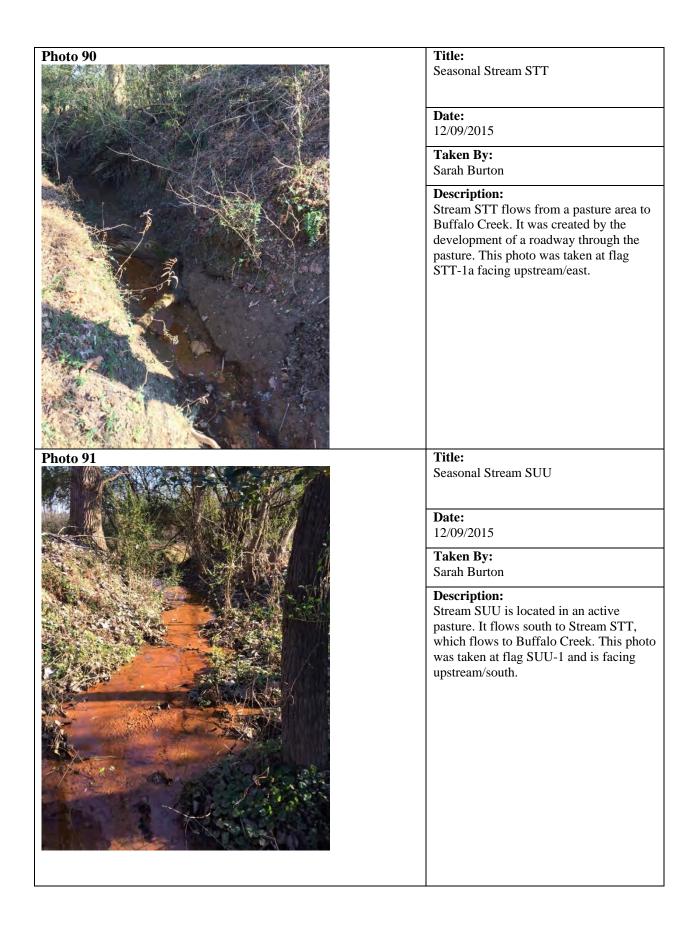
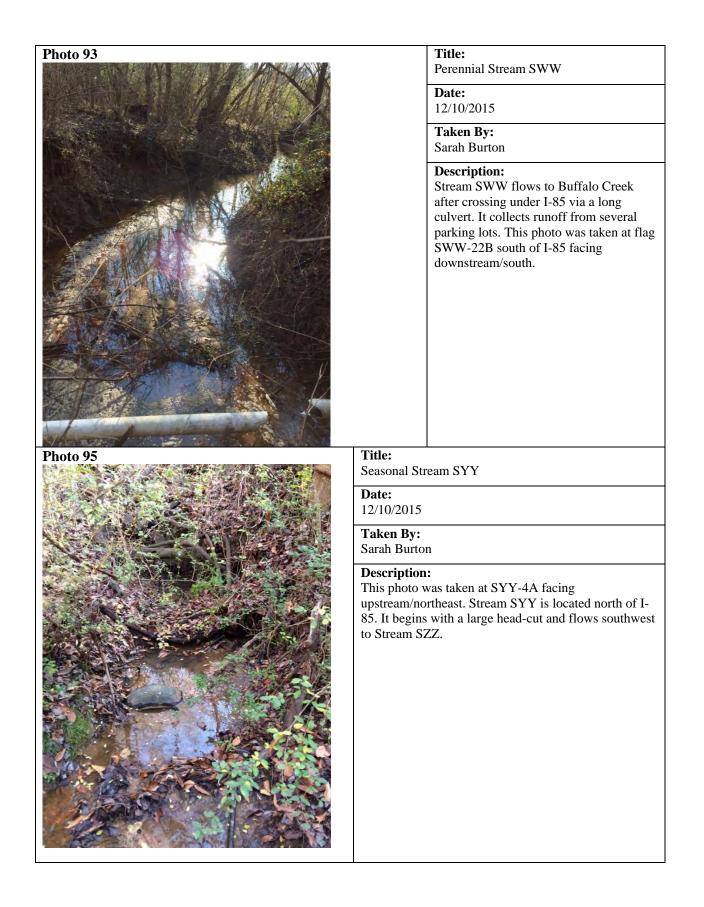


Photo 86	Title: Seasonal Stream SPPDate: 12/03/15Taken By:
	Sarah Burton Description: Stream SPP is located east of Blacksburg Highway and flows north to Stream SOO, which continues to join Buffalo Creek. Photo taken at flag SPP-2a facing downstream/north.
Photo 87	Title: Perennial Stream SQQ Date: 12/03/15 Taken By:
	Taken By: Evan MorganDescription: Stream SQQ flows parallel to Blacksburg Highway south through the PSA to its confluence with Stream SMM. Photo taken at flag SQQ-4b facing upstream/north.

Photo 88	Title: Perennial Stream SRR Date: 12/03/15 Taken By: Evan Morgan Description: Stream SRR is located north of Crawford Road and flows east/southest towards its confluence with Stream SMM. Photo taken at flag SRR-3b facing upstream/west.
<image/>	Title: Perennial Stream SSSDate: 12/09/1512/09/15Taken By: Sarah BurtonDescription: Stream SSS is located between WQQ to the west and Wetland WPP to the east. It flows north through the PSA joining Buffalo Creek outside of the PSA. Photo taken at flag SSS-7a facing downstream/north.





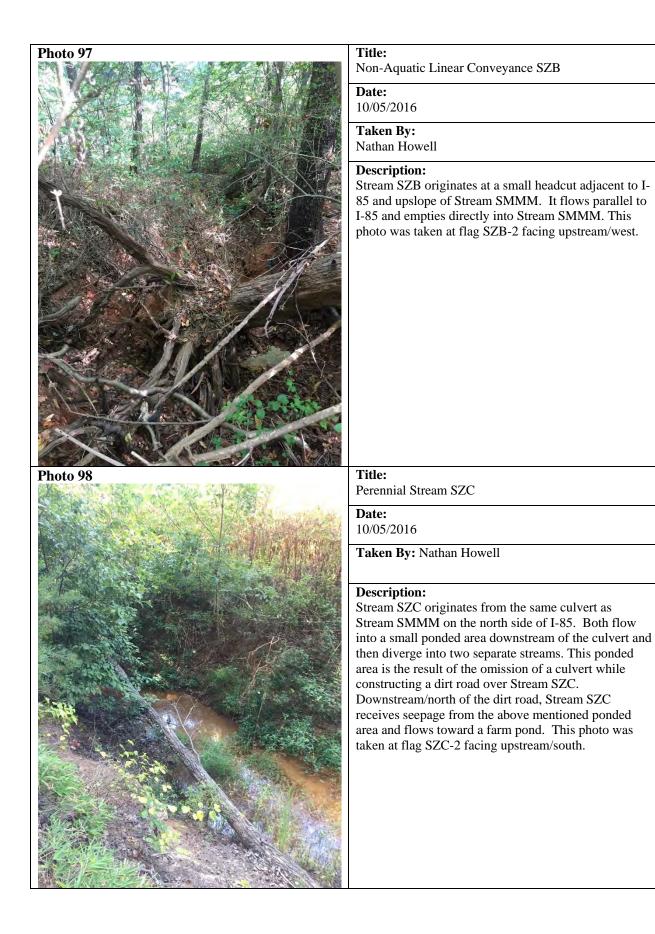


Photo 99



Title:

Seasonal Stream SZD

Date:

9/16/2016

Taken By:

Michael Wood and Hannah Slyce

Description:

Stream SZD is located between Milliken Road to the west and Blacksburg Highway to the east. It flows out of Wetland WZZ to the floodplain of Buffalo Creek. Once in the floodplain it loses its stream characteristics and ceases to be a stream before reaching Buffalo Creek. Photo taken at flag SZZ-4 facing downstream/north.

Photo 101



Title:

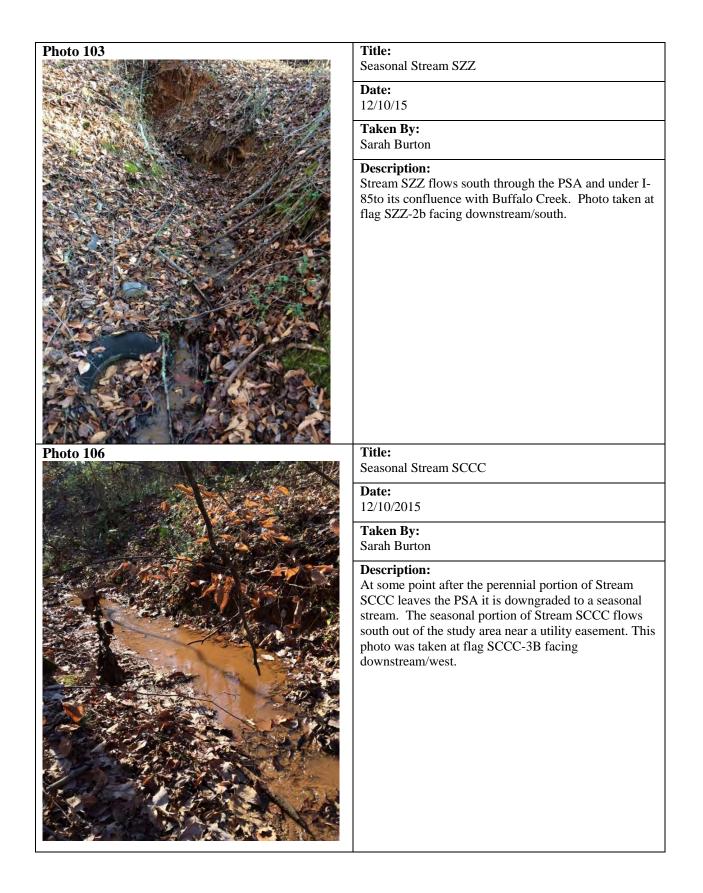
Perennial Stream SZN

Date: 10/05/2016

Taken By: Nathan Howell

Description:

This perennial portion of Stream SZN begins abruptly at a large headcut (point SZN-3). This photo was taken at flag SZN-4 facing upstream/east.





Perennial Stream SCCC

Date:

9/16/2016

Taken By:

Michael Wood and Hannah Slyce

Description:

Stream SCCC originates as a perennial stream at a spring east of SC Highway 5. Photo was taken at flag SZY-4 facing upstream/east. It flows out of the PSA and is downgraded to a seasonal stream before reentering the PSA south of Henson Road.

Title:

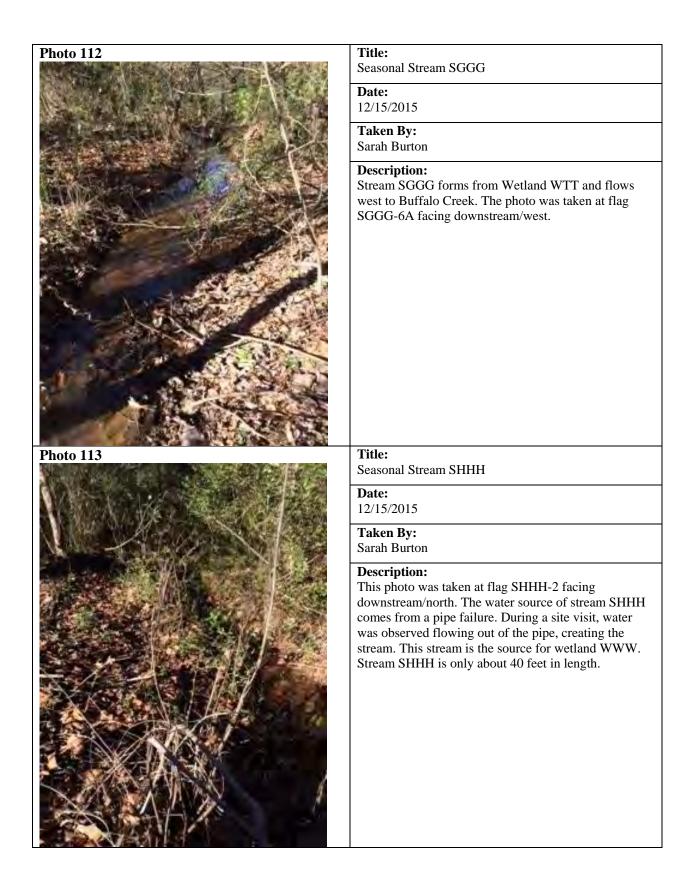
Seasonal Stream SDDD

Date: 12/10/2015

Taken By: Sarah Burton

Description:

Stream SDDD begins as intermittent stream but changes to seasonal at flag SDDD-4. It flows to I-85 and becomes a braided channel surrounded by Wetland WSS. This photo was taken at flag SDDD-6A facing downstream/southwest.





Perennial Stream SIII

Date:

12/15/2015

Taken By:

Sarah Burton

Description:

Stream SIII flows west under a railroad bridge, eventually depositing into Buffalo Creek and can be seen on USGS topography maps. This photo was taken at flag SIII-4 facing upstream/east.

Title:

Seasonal Stream SJJJ

Date: 12/15/2015

Taken By: Sarah Burton

Description:

This stream flows to stream SIII, upstream of the railroad bridge, which then deposits into Buffalo Creek. A head-cut with groundwater flowing out was observed. This photo was taken at flag SJJJ-2 facing upstream/east.



Seasonal Stream SKKK

Date:

12/16/2015

Taken By:

Sarah Burton

Description:

Stream SKKK I located north of Rocky Springs Road. This stream flows west/northwest. Wetland WYY is directly connected to the stream and downstream of this photo point SKKK flows into Wetland WZY. This photo was taken at flag SKKK-2A facing downstream/west.

Title:

Perennial Stream SLLL

Date: 12/16/2015

Taken By: Sarah Burton

Description:

This stream is fed by an outflow pipe of from Wetland WZY. From flag SLLL-8 to flag SLLL-11 concrete was laid creating a more stable channel. At flag SLLL-11 is a massive head-cut. This photo was taken at flag SLLL-3 facing downstream/south. Wetlands WZX and WZW are also adjacent to SLLL downstream of this photo point.

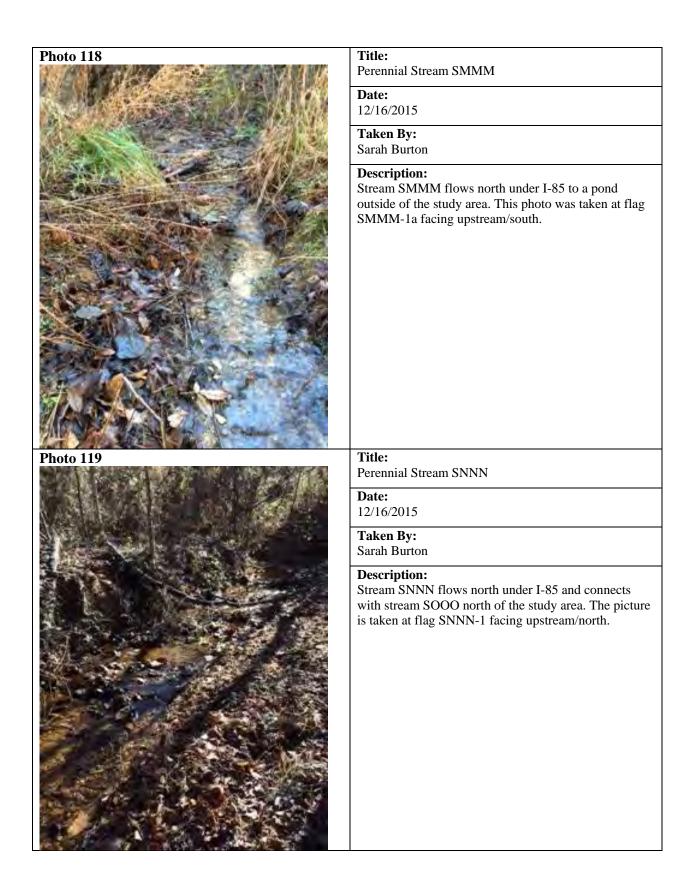
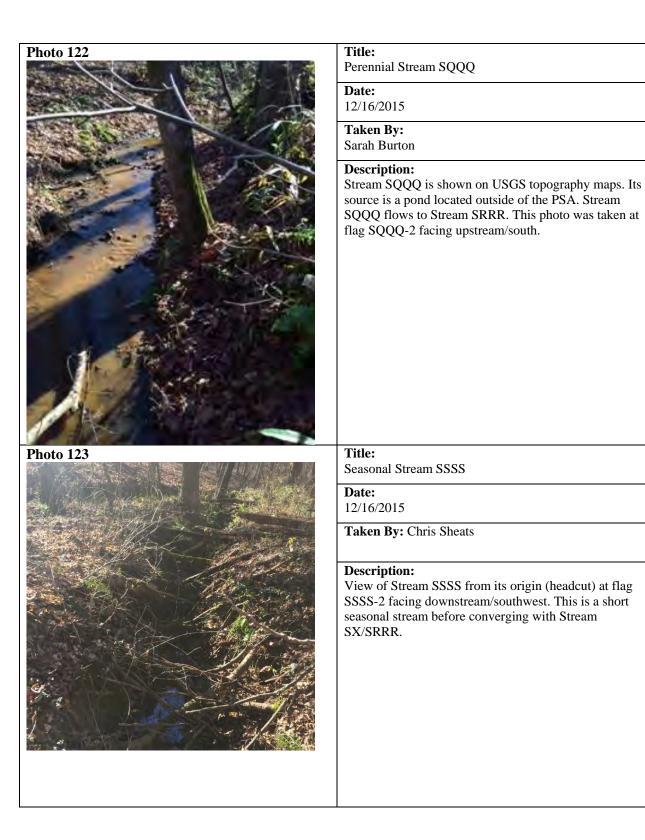


Photo 120 Title: Perennial Stream SOOO Date: 12/16/2015 Taken By: Sarah Burton **Description:** Stream SOOO joins with SNN outside of the study area. A portion of Stream SOOO is in full sunlight. This photo was taken at flag SOOO-1 facing downstream/north. Title: Photo 121 Perennial Stream SPPP Date: 12/16/15 Taken By: Sarah Burton **Description:** Stream SPPP flows from the outflow of Pond 2 to its confluence with Stream SMMM. Photo taken at flag SPPP-2 facing downstream/northeast.



Attachment D

Data Sheets

Sampling Date: <u>/2/02/24</u> State: <u>S</u> Sampling Point: <u>UA-2</u> <u>A</u> <u>Fove</u> <u>C</u> <u>NC</u> <u>State: <u>S</u> Sampling Point: <u>UA-2</u> <u>A</u> <u>Fove</u> <u>Sope</u> <u>Sope</u></u>
-Fore :NC e): <u>-458139</u> Datum: <u>NAP - 8</u> _ NWI classification:
e): <u>flaf - 5//5hfly (*Slope (%):</u> <u>D</u> <u>- 4 58 13 9</u> Datum: <u>NAD - 8</u>
<u>458139</u> Datum: <u>NAD - 8</u> NWI classification: f no, explain in Remarks.) Circumstances' present? YesNo explain any answers in Remarks.) ns, transects, important features, etc
NWI classification: f no, explain in Remarks.) Circumstances" present? YesNo (plain any answers in Remarks.) ns, transects, împortant features, etc
f no, explain in Remarks.) Circumstances" present? Yes <u> No </u> xplain any answers in Remarks.) ns, transects, important features, etc
Circumstances" present? Yes <u>No</u> plain any answers in Remarks.) ns, transects, important features, etc
plain any answers in Remarks.) ns, transects, important features, etc
ns, transects, important features, etc
Yes No
Yes No
Secondary Indicators (minimum of two required)
Surface Soil Cracks (B6)
Sparsely Vegetated Concave Surface (B8)
Drainage Patterns (B10)
Moss Trim Lines (B16)
_ Dry-Season Water Table (C2)
Crayfish Burrows (C8)
Saturation Visible on Aerial Imagery (C9)
Stunted or Stressed Plants (D1)
Geomorphic Position (D2)
Geomorphic Position (D2) Shallow Aquitard (D3)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Geomorphic Position (D2) Shallow Aquitard (D3)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
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Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
1

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	Absolute	Dominant	Indicator	Dominance Test worksheet:
ree Stratum (Plot size: 48265/5 m)		Species?	111212202020	
	40	V	FACU	Number of Dominant Species
Lireodendron tulieferg	-70	1		That Are OBL, FACW, or FAC: (A)
Acer rubrum	_10_	1	FAC	Total Number of Dominant
				Species Across All Strata:
4				
				Percent of Dominant Species 57% (A/B)
				That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
		4		The second se
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50	= Total Cov	/er	Total % Cover of: Multiply by:
50% of total cover: 25	20% of	total cover:	2010	OBL species x 1 =
apling/Shrub Stratum (Plot size: 5/5m)		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	100 B	FACW species x 2 =
Quercus nigra	5	Y	FAC'	FAC species x 3 =
				FACU species x 4 =
Corylus americans	3	No	FACY	
Liquidambar styraciflug	3	No	FAC	UPL species x 5 =
Liquistrum smerse	5	Y	FAKU	Column Totals: (A) (B)
3				
-			· — – ·	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Bapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
		1		
	14	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover 8		total cover:		4 - Morphological Adaptations ¹ (Provide supporting
5070 61 total cover.	20% of	total cover:	2.6	data in Remarks or on a separate sheet)
erb Stratum (Plot size: 5/5 m)			-	Problematic Hydrophytic Vegetation ¹ (Explain)
Microstegium Vinineum	10	1	FAC.	Problematic Hydrophysic vegetation (Explain)
Microstegium vinineum Polystichum ac costichoides	5	Y	FALL	
				¹ Indicators of hydric soil and wetland hydrology must
			()	be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
				incigit.
				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
D		_		m) tall.
1.				
	15	= Total Cov		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 7.5	-15	total cover:		or size, and woody plants less than 5.20 it tall.
	20% 0	total cover:		Woody vine - All woody vines greater than 3.28 ft in
		V	-nr	height.
			en.	
	20		FAC	
Lonicena japonica	20		EFC	
	20		<u> </u>	
	20	_		
	20			Hydrophytic
	20			Hydrophytic Vegetation
		= Total Cov		Hydrophytic Vegetation Present? Yes No
Lonicena japonica		= Total Cover		Vegetation
Lonicena japonica 50% of total cover: 10	<u>20</u> 20% of	= Total Cover:		Vegetation
Lonicena japonica 50% of total cover: 10	<u>20</u> 20% of	and the second second		Vegetation
<u>Lonicena</u> japonica 50% of total cover: <u>10</u> emarks: (Include photo numbers here or on a separate st		total cover:		Vegetation
Lonicena japonica 50% of total cover: 10		total cover:		Vegetation
50% of total cover: <u>10</u> emarks: (Include photo numbers here or on a separate st		total cover:		Vegetation
<u>Lonicena</u> japonica 50% of total cover: <u>10</u> emarks: (Include photo numbers here or on a separate st		total cover:		Vegetation
<u>Lonicena</u> japonica 50% of total cover: <u>10</u> emarks: (Include photo numbers here or on a separate st		total cover:		Vegetation
Lonicena japonica 50% of total cover: <u>10</u> emarks: (Include photo numbers here or on a separate sh		total cover:		Vegetation
50% of total cover: <u>10</u> Emarks: (Include photo numbers here or on a separate sh		total cover:		Vegetation

5

12

COU

6214/1-35

-I.k. Is Y R S (I State Is Y R S (I State State -I.k. Is Y R S (I State Is Y R S (I State State -I.k. Is Y R S (I State Is Y R S (I State State -I.k. Is Y R S (I State Is Y R S (I State State -I.k. -Is Y R S (I State -Is Y R S (I State State -I.k. -Is Y R S (I State -Is Y R S (I State State -Is Y R S (I State -Is Y R S (I State -Is Y R S (I -Is Y R S (I) -Is Y	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
	ng, M=Matrix. oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) nodplain Soils (F19) 6, 147) Dark Surface (TF12)
-1/2 bYR 5/1 50 10YR 5/R 2 d A 54L	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
Image: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, Indicators for Prob ric Soil Indicators: Indicators (S1) 2 cm Muck (A10) Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Re Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Re Stratified Layers (A5) Loamy Gleyed Matrix (F2) Piedmont Flood Combuck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dc Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydro wetland hydrolog Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydro wetland hydrolog Stripped Matrix (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrolog unless disturbed	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
ic Soil Indicators: Indicators for Prob distosol (A1)	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
Soil Indicators: Indicators for Prob stosol (A1) Dark Surface (S7) 2 cm Muck (A10) stic Epipedon (A2) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Re ack Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Flood ratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 12) cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Da epleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in the fourth of the fourt	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
Soil Indicators:Indicators for Probstosol (A1)	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
Soil Indicators:Indicators for Probstosol (A1)Dark Surface (S7)2 cm Muck (A10)stic Epipedon (A2)Polyvalue Below Surface (S8) (MLRA 147, 148)Coast Prairie Reack Histic (A3)Thin Dark Surface (S9) (MLRA 147, 148)(MLRA 147, 148)drogen Sulfide (A4)Loamy Gleyed Matrix (F2)Piedmont Floodactified Layers (A5)Depleted Matrix (F3)(MLRA 136, 12)m Muck (A10) (LRR N)Redox Dark Surface (F6)Very Shallow Dapleted Below Dark Surface (A11)Depleted Dark Surface (F7)Other (Explain inick Dark Surface (A12)Redox Depressions (F8)Other (Explain inndy Mucky Mineral (S1) (LRR N,Iron-Manganese Masses (F12) (LRR N,Indicators of hydrometic surface (F13) (MLRA 136, 122)Indicators of hydrometic surface of hydrometic surface (S5)ndy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 148)wetland hydrologipped Matrix (S6)Red Parent Material (F21) (MLRA 127, 147)unless disturbed dis	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
Soil Indicators: Indicators for Prob istosol (A1)	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
c Soil Indicators: Indicators for Prob istosol (A1)	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
Soil Indicators: Indicators for Prob stosol (A1) Dark Surface (S7) 2 cm Muck (A10) stic Epipedon (A2) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Re ack Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Flood ratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 12) cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Da epleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in the fourth of the fourt	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
c Soil Indicators: Indicators for Prob istosol (A1)	oblematic Hydric Soils A10) (MLRA 147) Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
istosol (A1) Dark Surface (S7) 2 cm Muck (A10) istic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Re lack Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Re ydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Flood tratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 12) cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Da repleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in hick Dark Surface (A12) andy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,	A10) (MLRA 147) Redox (A16) 7, 148) sodplain Soils (F19) 6, 147) Dark Surface (TF12)
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Ref Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Flood Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 12) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Da Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Chick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydro wetland hydrology Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed of the stripped Matrix (S6)	Redox (A16) 7, 148) oodplain Soils (F19) 6, 147) Dark Surface (TF12)
	/drophytic vegetation an
	ed or problematic.
/pe: epth (inches): Hydric Soil Present? Y	Yes No
rks:	100 100
50 X 1	

ŝ

		ORIVI – Eastern Wounta		
		_ City/County: _ Cheray		Sampling Date: 12-7-15
	- Oslasir	12112020000000000		Sampling Point: WA3 ()
Investigator(s): N. Howell d				1.7
Landform (hillslope, terrace, etc.): \underline{H}	15000	ocal relief (concave, convex, no		Slope (%): 12
Subregion (LRR or MLRA): LRR-	P Lat: 35.16		81.45813	
Soil Map Unit Name: Tm DZ - 7	latum very find sand	y loan 10-1590 eroce	NWI classifi	cation:
Are climatic / hydrologic conditions on	the site typical for this time of	year? Yes No	(If no, explain in F	Remarks.)
Are Vegetation, Soil, d	or Hydrology//_ significant	ly disturbed? Are "Norma	al Circumstances"	present? YesNo
Are Vegetation, Soil, d	or Hydrology naturally (problematic? (If needed,	explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS -			ons. transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No Yes No	 Is the Sampled Area within a Wetland? 	Yes	No
Wetland Hydrology Present?	Yes No/	-	103	
Remarks:				
HYDROLOGY	ten on foot slupe ju	Land	ken of vie	n dwa
Wetland Hydrology Indicators:			Socondary India	ators (minimum of two required)
Primary Indicators (minimum of one	is required, check all that apply	A	and the second sec	Cracks (B6)
Surface Water (A1)	True Aquatic		Constant of the	getated Concave Surface (B8)
High Water Table (A2)		lfide Odor (C1)	Drainage Pa	
Saturation (A3)		zospheres on Living Roots (C3)		
Water Marks (B1)		Reduced Iron (C4)		Water Table (C2)
Sediment Deposits (B2)		Reduction in Tilled Soils (C6)	Crayfish Bur	
Drift Deposits (B3)	Thin Muck Su	Contraction of the second s		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		n in Remarks)		tressed Plants (D1)
Iron Deposits (B5)			Geomorphic	Position (D2)
Inundation Visible on Aerial Ima	gery (B7)		Shallow Aqu	itard (D3)
Water-Stained Leaves (B9)			Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutra	Test (D5)
Field Observations:				
Surface Water Present? Yes	No Depth (inche			
Water Table Present? Yes	No Depth (inche			
Saturation Present? Yes (includes capillary fringe)	No Depth (inche	es): Wetland	Hydrology Prese	nt? Yes No Yes
Describe Recorded Data (stream ga	uge, monitoring well, aerial pho	otos, previous inspections), if av	ailable:	
Remarks:			-	
Remarks.				

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

Sampling Point: WA-3 UP

 $[2^{n}\lambda_{1}^{n},2^{n})^{-1}$

orksheet:
t Species 5
N, or FAC:
ninant 7
Strata: (B)
Species 219
N, or FAC: FI 10 (A/B)
orksheet:
f: Multiply by:
x 1 =
x 2 =
x 3 =
x 4 =
x 5 =
(A) (B)
ex = B/A =
ation Indicators:
or Hydrophytic Vegetation
fest is >50%
ndex is ≤3.0 ¹
al Adaptations ¹ (Provide supporting
irks or on a separate sheet)
rophytic Vegetation ¹ (Explain)
soil and wetland hydrology must
sturbed or problematic.
Vegetation Strata:
, excluding vines, 3 in. (7.6 cm) or
preast height (DBH), regardless of
ody plants, excluding vines, less reater than or equal to 3.28 ft (1
reater that of equal to 5.26 it (1
us (non-woody) plants, regardless
ants less than 3.28 ft tall.
ody vines greater than 3.28 ft in
1
res No
a wetland

Sampling Point: 1/A - 3 UP SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) % Type¹ Loc² (inches) Color (moist) % Texture Remarks INR 3/3 0-CI 100 IOYA 100 CL -1 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils³: Histosol (A1) Dark Surface (S7) ____ 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? No Yes Remarks:

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US Army Corps of Engineers

	City/County: Cheroke	<u> </u>
vestigator(s):N.Howey J.S	Poberts Section, Township, Range:	Grover, NC
	_ Local relief (concave, convex, no 59649 Long:-2	
		Datum: NTP 00
oil Map Unit Name: TME Tatum Very fine San	1	NWI classification:
e climatic / hydrologic conditions on the site typical for this time		(If no, explain in Remarks.)
re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> signific		al Circumstances" present? Yes No
re Vegetation $\underline{\land 0}$, Soil $\underline{\land 0}$, or Hydrology $\underline{\land 0}$ natural	lly problematic? (If needed,	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	wing sampling point locati	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes <u>No</u> Hydric Soil Present? Yes <u>No</u> Wetland Hydrology Present? Yes <u>No</u> Remarks:	Is the Sampled Area within a Wetland?	Yes No
YDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap	(אוסנ	Surface Soil Cracks (B6)
	tic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
	Sulfide Odor (C1)	Drainage Patterns (B10)
	Rhizospheres on Living Roots (C3) of Reduced Iron (C4)	Moss Trim Lines (B16) Dry-Season Water Table (C2)
	on Reduction in Tilled Soils (C6)	Dry-season water Table (C2)
	Surface (C7)	Saturation Visible on Aerial Imagery (C9)
	olain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)		Geomorphic Position (D2)
Water-Stained Leaves (B9)		Shallow Aquitard (D3) Microtopographic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No Depth (inc		
Vater Table Present? Yes No Depth (inc		
Saturation Present? Yes No V Depth (inc	ches): Wetland I	Hydrology Present? Yes <u>No</u>
includes capillary fringe)	photos previous inspections) if av	ailable:
	onotos, previous inspections), ir avi	
Describe Recorded Data (stream gauge, monitoring well, aerial p	silotos, previous inspections), il avi	
Describe Recorded Data (stream gauge, monitoring well, aerial p		
Describe Recorded Data (stream gauge, monitoring well, aerial p		of ireeK
Describe Recorded Data (stream gauge, monitoring well, aerial p		of ireeK
Describe Recorded Data (stream gauge, monitoring well, aerial p		of ireeK
Describe Recorded Data (stream gauge, monitoring well, aerial p		of i reek
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p Remarks: Flood Plai'n Wetland (smarl) 10 S Toe of slope		of ireeK
Describe Recorded Data (stream gauge, monitoring well, aerial p		of ireeK
Describe Recorded Data (stream gauge, monitoring well, aerial p		of i reek
Describe Recorded Data (stream gauge, monitoring well, aerial p		of ireeK

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Contraction of the second	Dominant		Sampling Point: <u>WB-3W</u> Dominance Test worksheet:
	Species?	Status	Number of Dominant Species 2
50	1	FAC	That Are OBL, FACW, or FAC: (A)
40	Y	TALU	
			Total Number of Dominant Species Across All Strata:5 (B)
			Species Across All Strata: (B)
			Percent of Dominant Species / /
	·	<u> </u>	That Are OBL, FACW, or FAC: (A/B)
			Base of the second second second
		<u></u>	Prevalence Index worksheet:
90.	= Total Cov	er	Total % Cover of: Multiply by:
20% of	total cover:	18	OBL species 20 x1 = 20
			FACW species 3 x 2 = 6
5	Ye	FALL	FAC species $60 \times 3 = 90$
		<u>anco</u>	FACU species 50 x4 = 200
			and a set of a second sec
			UPL species $x_5 = \frac{127}{24}$
		· · · · · ·	Column Totals: 133 (A) 3/6 (B)
			7.38
			Prevalence Index = B/A =
		3	Hydrophytic Vegetation Indicators:
		1	1 - Rapid Test for Hydrophytic Vegetation
		<u> </u>	2- Dominance Test is >50%
	_		3 - Prevalence Index is ≤3.0 ¹
5.	= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supporting
_ 20% of	total cover:	1	
			data in Remarks or on a separate sheet)
10	Y.	-	Problematic Hydrophytic Vegetation ¹ (Explain)
	N	TR/ IN	
	A/		¹ Indicators of hydric soil and wetland hydrology must
	-10		be present, unless disturbed or problematic.
\$10	<u> </u>	OBL	Definitions of Four Vegetation Strata:
			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of height.
			neight.
			Sapling/Shrub - Woody plants, excluding vines, less
			than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
			Herb - All herbaceous (non-woody) plants, regardless
36 .	Total Cove	er	of size, and woody plants less than 3.28 ft tall.
20% of t	total cover:	7.6	
	1212102000		Woody vine - All woody vines greater than 3.28 ft in
10	V	FAL	height.
10		riv	
	_	_	*
	=	_	10040-0010
	_		Hydrophytic
			Hydrophytic Vegetation Present? Yes No
	Total Cove		Vegetation
	20% of 5 20% of 5 20% of 5 20% of 10 36 36	$\frac{2}{40} = \text{Total Cover};$ $\frac{40}{40} = \text{Total Cover};$ $\frac{5}{5} = \text{Total Cover};$ $\frac{5}{20\% \text{ of total cover};}$ $\frac{10}{36} = \text{Total Cover};$ $\frac{10}{36} = \text{Total Cover};$	$\frac{40}{90} = Total Cover$ $\frac{90}{20\% of total cover} = 1\%$ $\frac{5}{9} = Total Cover$ $\frac{5}{20\% of total cover} = 1\%$ $\frac{5}{20\% of total cover} = 1\%$ $\frac{10}{20\% of total cover} = 1\%$ $\frac{10}{5} = Total Cover} = 1\%$ $\frac{10}{5} = \frac{10}{5} = \frac{10}{5}$ $\frac{10}{5} = \frac{10}{5} = \frac{10}{5}$

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Depth Matrix	epth needed to document th Redox Featu		m the absence of	Sampling Point: <u>WB-3</u> indicators.)
(inches) Color (moist) %	Color (moist) %	Type' Loc ²	Texture	Remarks
-14 INR 4/2 75	10124/6 25	C PL	CL	
		- I		
			9 <u></u> 95	
			1.	
		<u></u>		
· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	(<u> </u>	
¹ Type: C=Concentration, D=Depletion, RM	M=Reduced Matrix MS-Mack	ed Sand Graine	2 ocation, DI -	Pore Lining, M=Matrix.
Hydric Soil Indicators:	M-NEODCED MADIA, MO-MASA	ed Sand Grains.	Indicator	rs for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)		2 cm	Muck (A10) (MLRA 147)
Histic Epipedon (A2)		face (S8) (MLRA 147		st Prairie Redox (A16)
Black Histic (A3) Hydrogen Sulfide (A4)	Thin Dark Surface (S /Loamy Gleyed Matri	(MLRA 147, 148)		ILRA 147, 148) mont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)			ILRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface	(F6)		Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surfa		Othe	r (Explain in Remarks)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N,	Redox Depressions Iron-Manganese Mas			
MLRA 147, 148)	MLRA 136)			
Sandy Gleyed Matrix (S4)	Umbric Surface (F13			ors of hydrophytic vegetation and
Sandy Redox (S5) Stripped Matrix (S6)		Soils (F19) (MLRA 1 (F21) (MLRA 127, 14		nd hydrology must be present, s disturbed or problematic.
Restrictive Layer (if observed):		(i ci) (maiori 12/, 14		
Туре:			1.5 1.5	1
Depth (inches):			Hydric Soil Pre	esent? Yes V No
Remarks:				1

roject/Site: 6214 / I-85		- Eastern Mountai	no and i toan	
Decusite: OFIT T	City/	County: Cherok	ee	Sampling Date: 12/02/2015
oplicant/Owner: SCDOT			State: 54	_ Sampling Point: WB.3
	J. Roberts Sect	ion, Township, Range:		NC
ndform (hillslope, terrace, etc.):		lief (concave, convex, no		X Slope (%): 1-2
bregion (LRR or MLRA): LRA - P			1.46208	
the second s	and the second s		1000 CO 104	and the second se
il Map Unit Name: <u>TW]E- Tatorn</u>	1	10 V	NWI classific	
e climatic / hydrologic conditions on the sit			(If no, explain in R	
e Vegetation \underline{n} , Soil \underline{n} , or Hydr			I Circumstances" p	present? Yes No
e Vegetation <u>ND</u> , Soil <u>ND</u> , or Hydr	ology <u>nD</u> naturally problem	atic? (If needed,	explain any answe	ers in Remarks.)
UMMARY OF FINDINGS - Attac	h site map showing sar	mpling point location	ons, transects	, important features, etc.
Hydric Soil Present? Y	Ves No Ves No No	Is the Sampled Area within a Wetland?	Yes	No
			_	
YDROLOGY				
Vetland Hydrology Indicators:	en a la ser en mela contra		And the second second	ntors (minimum of two required)
Primary Indicators (minimum of one is requi		(014)	Surface Soil	Mark States and the second states are seen as reading
Surface Water (A1) High Water Table (A2)	True Aquatic Plants Hydrogen Sulfide Oc		Drainage Pa	getated Concave Surface (B8)
Saturation (A3)	the second s	res on Living Roots (C3)	Moss Trim Li	
Water Marks (B1)	Presence of Reduce			Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction	on in Tilled Soils (C6)	Crayfish Bur	rows (C8)
Drift Deposits (B3)	Thin Muck Surface (isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Res	marks)		tressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B	(7)		Geomorphic Shallow Aqui	Position (D2)
Water-Stained Leaves (B9)	4			aphic Relief (D4)
Aquatic Fauna (B13)	~		FAC-Neutral	
	T 7 (C) C 10 (C)			
ield Observations:				
	No Depth (inches):			
Surface Water Present? Yes	No Depth (inches): No Depth (inches):	= 11		1.
Surface Water Present? Yes Vater Table Present? Yes Saturation Present? Yes		Wetland H	lydrology Preser	nt? Yes No
Vater Table Present? Yes	No Depth (inches): No Depth (inches):			nt? Yes No
Surface Water Present? Yes Vater Table Present? Yes Saturation Present? Yes includes capillary fringe)	No Depth (inches): No Depth (inches):			nt? Yes <u>No</u>

6214/I-85

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

Sampling Point: WB - 3 V @

110.	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 10 (10 M) 1. Acer rubrun	50	Species?	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Quercu: alba		<u> </u>	FACH	Total Number of Dominant (B)
4 5		_	\equiv	Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)
6				
7				Prevalence Index worksheet:
	50	= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 40	20% of	total cover:	16	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 5/5 m)	F			FACW species x 2 =
1. Prunus serating		1	FACM	FAC species x 3 =
2. Nyssa sylvatica		<u> </u>	FDC -	FACU species x 4 =
3. Quercus phello	3	1	FFC	UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	- PI	1		3 - Prevalence Index is ≤3.0 ¹
FOR ALL STATES		= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5/5 m)	20% of	total cover:		data in Remarks or on a separate sheet)
1. Pubus SP.	25	N	-	Problematic Hydrophytic Vegetation ¹ (Explain)
2				¹ Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10		<u> </u>		m) tall.
11	25			Herb - All herbaceous (non-woody) plants, regardless
50% of total cover: 12, 5	20% of	Total Cove	er 🖂	of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:	20% 01	total cover:		Woody vine - All woody vines greater than 3.28 ft in
Voldy ville stratum (Plot size)				height.
2				
*				Hydrophytic
				Vegetation Present? Yes No
		 Total Covertotal Covertotal Covertotal 		
50% of total cover:				

Sampling Point: WB-3 UP SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth **Redox Features** Matrix Color (moist) % Type¹ Loc² (inches) Color (moist) % Texture Remarks 4/4 0-3 INR 100 L 6/6 CL 100 71 ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: Histosol (A1) 2 cm Muck (A10) (MLRA 147) Dark Surface (S7) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) _ 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, ____ Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:

6214/I-85

WETLAND DETERMINATION DATA FORM	I – Eastern Mountains and Piedmont Region
Project/Site: 6214 / I-85 City/	County: Cherokee Sampling Date: 12/03/2018
Applicant/Owner: SCDOT	State: SC_ Sampling Point: WC - 2 (
Investigator(s): N. Howell 4 J. Roberts Sect	tion, Township, Range: Grover, NC
	elief (concave, convex, none): <u>Slightly (and PX</u> Slope (%): <u>1D</u>
	C Long: -81. 46 1904 Datum: NAD 83
Soil Map Unit Name: TME- tatum veni fine sandu loc	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation 10, Soil 10, or Hydrology 10, significantly distu	
Are Vegetation <u>VIP</u> , Soil <u>VIP</u> , or Hydrology <u>VIP</u> naturally problem	
	mpling point locations, transects, important features, etc.
SolviviART OF Findbings - Attach site map showing sai	inping point locations, transects, important reatures, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No No	Is the Sampled Area within a Wetland? Yes <u>No</u>
HYDROLOGY Wetland Hydrology Indicators:	Cocondon (Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants	
High Water Table (A2) Hydrogen Sulfide Oc	
	res on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduce	
Sediment Deposits (B2) Recent Iron Reduction Drift Deposits (B3) Thin Muck Surface (on in Tilled Soils (C6) Crayfish Burrows (C8) (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Re	
Iron Deposits (B5)	Geomorphic Position (D2)
 Inundation Visible on Aerial Imagery (B7) 	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes Vo Depth (inches):	8
Saturation Present? Yes <u>No</u> Depth (inches):	5 Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	
Netland originates from hillside seep	
- inginates from hillside see?	
	- I- 89
- 13	
him top we we	40 48B
5M	

6214/I-85

Tree Stratum (Plot size: 10 K 10 m)			Indicator	Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Carenus caroliniana	20		FAL	That Are OBL, FACW, or FAC: (A)
2. Platanus occidentalis	10	- <u>v</u> -	FACIL	Total Number of Dominant Q
3. Lireode dran tuly fora			FACH	Species Across All Strata:
5				Percent of Dominant Species
6				
7				Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:	8	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10 × 10 m)				FACW species x 2 =
1. Alnus serrolata	-10	7	OBL	FAC species x 3 =
2. Elacagnus umbellata		4		FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6. <u>-</u>				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
B				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.01
	e_12	= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: Herb Stratum (Plot size: しがくしかの)	20% of	total cover:	2	data in Remarks or on a separate sheet)
1. Arundinania tecta	F	N	5650	Problematic Hydrophytic Vegetation ¹ (Explain)
			FACU	
2. Poly stichum acrottice pickes 3. Chelone glabra	5	7.	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5	- <u></u> -			
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	<u> </u>			height.
				Sapling/Shrub - Woody plants, excluding vines, less
<u></u>				
				than 3 in. DBH and greater than or equal to 3.28 ft (1
9			_	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9 10	_		_	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
9 10 11	20	= Total Cov		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9 10 11 50% of total cover:(20			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
9	20	= Total Cov	6	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9 10 11 50% of total cover:(20	= Total Cov		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	20	= Total Cov	6	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	20	= Total Cov	6	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
Noody Vine Stratum (Plot size: <u>16 X10 m)</u> 1. Lonicera japonicon 2	20	= Total Cov	6	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
9	20	= Total Cov	6	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9 10 11 <u>Noody Vine Stratum</u> (Plot size: <u>16 Xlo m</u>) 1. LoniClerg jefen i Con 2 2 3	20 20% of 	= Total Cov	5 FAC	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix Redox Features Color (moist) % Color (moist) % Type' Loc' Texture Remarks S IOYR 3/Z 80 IOYR 4/Z 5 M L IOYR 5/3 IS M L S IOYR 5/3 75 IOYR 4/Z 15 M L IOYR 5/3 IS IOYR 4/Z 15 M L IOYR 5/3 IS IOYR 5/3 IS IOYR 5/Z IOYR 5/Z
Color (moist) % Color (moist) % Type' Loc' Texture Remarks $\Delta = 3$ $IOYR 3/Z$ BO $IOYR 4/Z$ 5 D M L $\Delta = 3$ $IOYR 3/Z$ BO $IOYR 4/Z$ 5 D M L 5 $IOYR 5/3$ 75 $IOYR 4/Z$ 15 D M L 5 $IOYR 5/3$ 75 $IOYR 4/Z$ 15 D M L 5 $IOYR 5/3$ 75 $IOYR 4/Z$ 15 D M L 5 $IOYR 5/3$ 75 $IOYR 4/Z$ 10 M L $SYR 5/6$ IO $$ L $DVerburden M/x/N$ $N/x/N$ R $IOYR 5/Z$ 85 $IOYR 5/Z$ D M SCL R $IOYR 5/Z$ IO C PL $IOYR 5/Z$ $IOYR 5/Z$ R $IOYR 5/Z$ RS $IOYR 5/Z$ IO PL $IOYR 5/Z$ $IOYR 5/Z$ $IOYR 5/Z$
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
5 10 YR 5/3 75 10 YR 4/2 15 D M L 8 10 YR 5/2 85 10 YR 6/1 5 D M Sc/L 8 10 YR 5/2 85 10 YR 6/1 5 D M Sc/L 9 5 YR 5/6 10 C PL 0 Verburden Mix M 9 5 YR 5/6 10 C PL 0 Verburden Mix M 9 5 YR 5/6 10 C PL 0 Verburden Mix M 9 5 YR 5/6 10 C PL 0 Verburden Mix M 9 5 YR 5/6 10 C PL 0 Verburden Mix M 9 5 YR 5/6 10 C PL 0 Verburden Mix M 9 5 YR 5/6 10 C PL 0 Verburden Mix M 9 5 YR 5/6 10 C PL 0 Verburden Mix M 9 10 C PL 0 Verburden Mix M 0 Verburden Mix M 10 0 Dark Surface (S7) 10 2 cm Muck (A10) (MLRA 147) 0 Coast Prairie Redox (A16)
SYR 5/6 ID
SYR 5/6 ID
ID YR 5/Z 85 16 YR G/1 5 D M Sc.L SVR 5/R 10 C PL Sc.L Sc.L Solid 10 C PL Sc.L Sc.L Sc.L C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators: Soil Indicators: Indicators: Indicators for Problematic Hydric Soil tosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) tic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) grogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
SVR 5/6 ID C PL Solid Indicators: Indicators: Indicators: tosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) tic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) drogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Soil Indicators: Indicators for Problematic Hydric Soil tosol (A1)
Soil Indicators: Indicators for Problematic Hydric Soil tosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) tic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) drogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
Soil Indicators: Indicators for Problematic Hydric Soil tosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) tic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) drogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
Soil Indicators: Indicators for Problematic Hydric Soil tosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) tic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) drogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
Soil Indicators: Indicators for Problematic Hydric Soil tosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) tic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) drogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
Soil Indicators: Indicators for Problematic Hydric Soil tosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) tic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) drogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
tosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) tic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) drogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
tic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) grogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
ck Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) frogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
atified Layers (A5)Depleted Matrix (F3) (MLRA 136, 147)
- Mush (A10) (LDD N) Dedu Dark Surface (FC)
The Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Deleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks)
ck Dark Surface (A12) Redox Depressions (F8)
ndy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,
/LRA 147, 148) MLRA 136)
Indy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation a Indy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present,
pped Matrix (S6) Red Parent Material (F21) (MLRA 146) wetand hydrology must be present,
tive Layer (if observed):
h (inches): Hydric Soil Present? Yes No
S:

- 2

	6214	City/Co	ounty: <u>Chero</u> y		Sampling Date: 12-3-15
Applicant/Owner: SCPUT	te a station	1		_ State: SC	_ Sampling Point: WC-2
Investigator(s): J. Ruber	-75, N. Howel	Section Section	n, Township, Range:	Grover,	NC
andform (hillslope, terrace, e	c.): blaishere	Local relie	ef (concave, convex, no	ne): CONVEX	Slope (%):0
Subregion (LRR or MLRA): <u></u>	-RR-P 1	at: 35, 1581000	Long: _ 2	1.461904	Datum: NAD 8
Soil Map Unit Name: Trn (E- tatum ve	sm fine sandy 1	loam	NWI classific	ation:
Are climatic / hydrologic condi	tions on the site typica	I for this time of year? Ye	as No	(If no, explain in R	emarks.)
Are Vegetation, Soil			and the second se		present? Yes No
Are Vegetation <u>no</u> , Soil		and the second se		explain any answe	
	and the second				, important features, etc.
SOMMART OF FINDIN	GS - Allach Sile	map showing sam	ping point locati	JIIS, U alisects	, important reatures, etc.
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present?	Yes	No.	Is the Sampled Area within a Wetland?	Yes	_ No
Remarks: Upland	, ,	old along fi		bove we fi	
IYDROLOGY	-				
Wetland Hydrology Indicate	ors:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum	of one is required; chr	eck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	1.00	_ True Aquatic Plants (B		Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odor	a second second and the second second second	Drainage Pat	and the second sec
Saturation (A3)	÷-	the second	s on Living Roots (C3)	Moss Trim Li	
Water Marks (B1) Sediment Deposits (B2)		Presence of Reduced Recent Iron Reduction		Crayfish Bur	Water Table (C2)
Drift Deposits (B3)	-	Thin Muck Surface (C7		the second se	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rema		and the second	ressed Plants (D1)
Iron Deposits (B5)		- Carlo de Brendel Anno		Geomorphic	Position (D2)
Inundation Visible on Ae	ial Imagery (B7)			Shallow Aqui	tard (D3)
Water-Stained Leaves (B	9)			the second se	phic Relief (D4)
	Propher Street Street	-3		FAC-Neutral	Test (D5)
Aquatic Fauna (B13)		/			
Field Observations:	Qu	Dopth (inchoc):			
Field Observations: Surface Water Present?	Yes No	Depth (inches):			
Field Observations: Surface Water Present? Water Table Present?	Yes No	Depth (inches):	-		10 Mar 11/
Field Observations: Surface Water Present? Water Table Present? Saturation Present?			Wetland F	lydrology Presen	t? Yes No
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No Yes No	Depth (inches): Depth (inches):			t? Yes No
	Yes No Yes No	Depth (inches): Depth (inches):			t? Yes No

6214/1-85

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

Sampling Point: WC-2 (dry)

Tree Stratum (Plot size: 10 m²) 1. L'Erodendran talipifera	Absolute <u>% Cover</u>	Dominant Species? 7		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
2. Quercus alba 3. Accor rubrum	20	N N	FAL	Total Number of Dominant Species Across All Strata: 7 (B)
4. Quertes montance			<u>upl</u>	Percent of Dominant Species 42% (A/B) That Are OBL, FACW, or FAC:
6		-		Prevalence Index worksheet:
	45	= Total Cov		Total % Cover of:Multiply by:
50% of total cover:	520% of	total cover	19	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10 m ²)	20/0 01	total cover.		FACW species x 2 =
1. Co-mas charthan	30	Y	FAC'	FAC species x 3 =
2. Caryo tomentosa			HC.	FACU species x 4 =
		_1	<u> </u>	
3			ن <u>س</u>	UPL species x 5 =
4				Column Totals: (A) (B)
5		-		Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8,			(in the second	2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:	4	[1] J. K. M. M. S. M. S. K. S. M. M. Markov, J. Mathematical Model and Physics of Activity of Activ
Herb Stratum (Plot size: 5m2)				data in Remarks or on a separate sheet)
1. Allon vineale	2	Y	TACLE	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Pelvistichen acrostichadic	2	Y	FACH	
	Z	Y	FAC	¹ Indicators of hydric soil and wetland hydrology must
3. Laviten Japanica				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5			·	Total Marchineland and alter days at 17.6
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7	S	_		height.
8,				
9			-	Sapling/Shrub - Woody plants, excluding vines, less
10				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
11	6		\rightarrow	Herb – All herbaceous (non-woody) plants, regardless
50% of total cover:		Total Cover: total cover:		of size, and woody plants less than 3.28 ft tall.
	_ 20% 01	total cover:	11-	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 5m ²)	5	V	FAR	height.
1. Lonzer lepenice		<u> </u>	FAC	
2				
3				
4			-	Manada and Andra
				Hydrophytic Vegetation
5.	5	Total Cove		Present? Yes No
5		10101 004	1	
5				

6214/1-85 Sampling Point: WC-2 (dry) SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix **Redox Features** Color (moist) Color (moist) % Type' Loc² Texture Remarks (inches) 0 -172 2/3 100 100 1/2.4 6 80 OYR 612 IDYR SIL iD 5 7/2 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: Hydric Soil Indicators: Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) ____ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) ___ 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleved Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Redox (S5) wetland hydrology must be present. Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Stripped Matrix (S6) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No Depth (inches): Remarks:

WETLAND DETER roject/Site: 6214 / I-85		1 - Eastern Mountai	같은 가슴에 있는 것은 가슴에 가지 않는다.	egion 12/03/2015
pplicant/Owner: SCPOT	City	County. Operope		pling Point: WP-2 (WE
	Roberts see		Grover, NC	ipling Point: UP & C
			-	
andform (hillslope, terrace, etc.):		elief (concave, convex, no		Slope (%):
Subregion (LRR or MLRA): LRP - P	Lat: 35. 15 8699	Long:	31.461708	Datum: NAD 83
ioil Map Unit Name: <u>TME- tatum</u>	n very fine sandy l	sam	NWI classification:	<u> </u>
re climatic / hydrologic conditions on the	site typical for this time of year?	Yes No	(If no, explain in Remarks)
re Vegetation <u>70</u> , Soil <u>00</u> , or Hyd	· 이번 20 · · · · · · · · · · · · · · · · · ·		I Circumstances" present?	Yes No
re Vegetation <u>10</u> , Soil <u>10</u> , or Hy			explain any answers in Re	
			and the second	
SUMMARY OF FINDINGS - Atta	ch site map showing sa	impling point location	ons, transects, impo	ortant features, etc.
Hydrophytic Vegetation Present?	Yes No	126.24.08.03		
Hydric Soil Present?	Yes L No	Is the Sampled Area within a Wetland?	Yes L No	
Wetland Hydrology Present?	Yes No	within a wettand?	Yes No	
Remarks:		4	(
IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is rec	the second se		Secondary Indicators (mi	(B6)
Surface Water (A1)	True Aquatic Plants	and the second se		Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide C	the second	Drainage Patterns (8	
Saturation (A3) Water Marks (B1)	Oxidized Rhizosphe Presence of Reduc	eres on Living Roots (C3)	Moss Trim Lines (B1 Dry-Season Water T	
Sediment Deposits (B2)		tion in Tilled Soils (C6)	Crayfish Burrows (C	
Drift Deposits (B3)	Thin Muck Surface	And a second sec	Saturation Visible on	The second se
Algal Mat or Crust (B4)	Other (Explain in R	NO 13	Stunted or Stressed	이 가슴이 가지 않는 것 같아요. 집에 가슴 같아요. 이 가지 않는 것이 않는 것이 같아요. 이 가지 않는 것이 않는 것이 같아요. 이 가지 않는 것이 않는 않는 것이 않는 않 않는 것이 않 않는 것이 않이 않는 않는 것이 않 않이 않는 것이 않는 것이 않는 것이 않는 않는 않는 않이 않. 이 않는 않는 것
Iron Deposits (B5)			Geomorphic Position	1 (D2)
_ Inundation Visible on Aerial Imagery	(B7)		Shallow Aquitard (D3	The second se
Water-Stained Leaves (B9)			Microtopographic Re	
Aquatic Fauna (B13)			FAC-Neutral Test (D	5)
Field Observations:	./			
Surface Water Present? Yes	No Depth (inches):	7		
Vater Table Present? Yes	No pth (inches):	F		. /.
Saturation Present? Yes		Wetland	Hydrology Present? Ye	s No
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, p	revious inspections), if available	ailable:	
Remarks:				
Scismonder = Provess	5.e.			
and an ar	T			

6214/1-85

	Absolute	Dominant	Indicator	Dominance Test worksheet:
ree Stratum (Plot size: 525 m) Selix n'arg (50 - 60 ft fail!)		Species?		Number of Dominant Species 2
Licedendron tuliofera	60	V	FACU	That Are OBL, FACW, or FAC: (A)
Eraxinus pennsylvanica	10	N	FACW	Total Number of Dominant Species Across All Strata:(B)
		·		Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B
		-		That Are OBL, FACW, or FAC: (A/B Prevalence Index worksheet:
	80	= Total Cove		Total % Cover of: Multiply by:
50% of total cover:	_ 20% of	total cover:		OBL species $10 \times 1 = 10$ FACW species $15 \times 2 = 30$
<u> Platanus o cidentalis</u>	5	Y	FACH	FACW species $15 \times 2 = 30$ FAC species $10 \times 3 = 30$
Quercus alba	5	7	FACH	FACU species 105. x4 = 420
	10	7_	FACU	UPL species $x 5 =$ Column Totals: <u>14D</u> (A) <u>49D</u> (B)
	_	\equiv		Prevalence Index = $B/A = 3.5$
		-		Hydrophytic Vegetation Indicators:
				 1 - Rapid Test for Hydrophytic Vegetation 2 Dominance Test is + 50%
	-		\equiv	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 10	_ 20% of	= Total Cove total cover:_	*4	4 - Morphological Adaptations ¹ (Provide supporting
Postatum (Plot size:, <u>5×5 m</u>)	IE	V	FACIN	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
Polýstichum acrostichoides.	19		FACU	
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		=	\equiv	Definitions of Four Vegetation Strata:
		_		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.
	_	=		Sapling/Shrub – Woody plants, excluding vines, less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.
	15 -	Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 4.5 body Vine Stratum (Plot size: 575 in)	_ 20% of 1	total cover:	3	Woody vine – All woody vines greater than 3.28 ft in height.
Lonicera japonica	10	1	<u>EAC</u>	
			\equiv	Hydrophytic
	10 -	Total Cove		Vegetation Present? Yes <u>No X</u>
50% of total cover: _5		total cover:_		and a state of the
marks: (Include photo numbers here or on a separate she Devote absence of bydraph		18	ce tat	ion, the area
Despite absence of hydroph is considered a we	tla	d		
		100		

6214/I-85 Sampling Point: WD-2/we4) SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth **Redox Features** Matrix (inches) Color (moist) Loc2 Texture Remarks Color (moist) % % Type 4/2 75 7,5 YR 4, 0 -UY2 20 C M OXIDIZED Thizespheres 6 5/3 5 M IC YR 1 t. 5/12 D 60 M 25 51 CL m CYR AL 20 P 50 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils³: Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Thin Dark Surface (S9) (MLRA 147, 148) Black Histic (A3) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) ³Indicators of hydrophytic vegetation and Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Stripped Matrix (S6) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? No YPS Remarks:

Applicant/Owner: $\underline{SC007}$ Investigator(s): $\underline{SC007}$ Investigator(s): $\underline{SC007}$ Landform (hillslope, terrace, etc.): $\underline{HilSlopl}$ Local relief (concave Subregion (LRR or MLRA): $\underline{LRL-R}$ Lat: $\underline{3S.1581699}$ Soil Map Unit Name: $\underline{TmE-tatum}$ Very find same for the	convex, none):
applicant/Owner: SC001 nvestigator(s): Stopents, N. Hystell Three Orks Ensection, Townsh andform (hillslope, terrace, etc.): Hill (Ipt) Local relief (concave subregion (LRR or MLRA): Let S. 153te99 soil Map Unit Name: Imt E + tatum very func sandy form Sandy form we vegetation Soil M, or Hydrology A/ significantly disturbed? we vegetation Soil M, or Hydrology M naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling pc Hydro Soil Present? Yes Wetland Hydrology Present? Yes Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Sufface Water (A1) True Aquatic Plants (B14) Sufface Water (A1) Presence of Reduced Iron (C4) Sufface Water (A1) Presence of Reduced Iron (C4) Sufface Balant Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Sufface (C7) Mater Station Visible on Aerial Imagery (B7) Other (Explain in Remarks) Iron Deposits (B3) Thin Muck Sufface (C7) Mater Station Leaves (B9) Other (Explain in Remarks) Iron Deposits (B3) Thin Muck Sufface (C7) Mater Table	b. Range: Image: Image: NC convex, none): Image: Slope
westigator(s): 0. Polonds, N. Hurell Three Oaks Egisection, Townsh andform (hillslope, terrace, etc.): Hill Upt Local relief (concave ubregion (LRR or MLRA): LRA - R Lat: 25.153/2019 ioli Map Unit Name: Im E - tathum Vary Flac same law local relief (concave ubregion (LRR or MLRA): LRA - R Lat: 25.153/2019 re Vegetation	b. Range: Image: Image:
andform (hillslope, terrace, etc.): Hill Lipe Local relief (concave ubregion (LRR or MLRA): LRE - R Lat: 35.1537699 ioil Map Unit Name: Im E - tertum Year, Place 20.1537699 re Vegetation A. Soil A. or Hydrology A. re Vegetation A. Soil A. or Hydrology maturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling po Hydrophytic Vegetation Present? Yes No Is the Sar Hydro Soil Present? Yes No Is the Sar within a W Wetland Hydrology Present? Yes No Is the Sar Wetland Hydrology Indicators: Remarks: Wetland O OCCUTS at the discoption of Subres on Living Surface Water (A1) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks)	convex, none): <u>MSC_S/000</u> Slope (%): 10 Long: <u>Slope</u> Datum: <u>NAP</u> NWI classification:
ubregion (LRR or MLRA): LRL - R Lat: 35, 1531699 oil Map Unit Name: Im E + tatum Year Find: sandy feature re vegetation M. Soil Or Hydrology significantly disturbed? re Vegetation M. Soil Or Hydrology naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling pc Hydrophytic Vegetation Present? Yes No within a W Wetland Hydrology Present? Yes No within a W Wetland Hydrology Indicators: Wetland d Occurs at tat of slopt. Up Sufface Water (A1) True Aquatic Plants (B14) High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Water Marks (B1) Presence of Reduced iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drit Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inon denor Visible on Aerial Imagery (B7) Water Stained Leaves (B8) Aquatic Fauna (B13) Field Observations: Yes No Depth (inches):	Long: NAD
iiii Map Unit Name: Im E - Hattum Very fine randy form re climatic / hydrologic conditions on the site typical for this time of year? Yes	NWI classification:
are climatic / hydrologic conditions on the site typical for this time of year? Yes are Vegetation	No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes No (If needed, explain any answers in Remarks.) Int locations, transects, important features, etc. upled Area retland? Yes No
re Vegetation M, Soil M, or Hydrology M, naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling potentic? SUMMARY OF FINDINGS - Attach site map showing sampling potentic? Hydrophytic Vegetation Present? Yes No Is the Samwithin a W Hydric Soil Present? Yes No Is the Samwithin a W Wetland Hydrology Present? Yes No Is the Samwithin a W Wetland Hydrology Present? Yes No Is the Samwithin a W Remarks: Wet / and Occours at tae of state of state. Up IVDROLOGY Surface Water (A1) True Aquatic Plants (B14) High Water Table (A2) Hydrogen Sulface Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water Table Present? Yes No Mater Table Present? Yes No Depth (inches): Sufface Water Present? Yes <td>Are "Normal Circumstances" present? Yes V No (If needed, explain any answers in Remarks.) Int locations, transects, important features, etc. Inpled Area Inpled Area Intervention Yes No V</td>	Are "Normal Circumstances" present? Yes V No (If needed, explain any answers in Remarks.) Int locations, transects, important features, etc. Inpled Area Inpled Area Intervention Yes No V
re Vegetation	(If needed, explain any answers in Remarks.) nt locations, transects, important features, etc. pled Area retland? Yes No
SUMMARY OF FINDINGS – Attach site map showing sampling por Hydrophytic Vegetation Present? Yes No Is the Samwithin a Within	nt locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No No Is the Sar Hydric Soil Present? Yes No No within a W Wetland Hydrology Present? Yes No Is the Sar Wetland Hydrology Present? Yes No Is the Sar Remarks: Wetland Occurs at tat of store Yes No IVDROLOGY Wetland Hydrology Indicators: Premary Indicators (minimum of one is required; check all that apply)	ipled Area ietland? Yes No
Hydric Soil Present? Yes No Is the Sar Wetland Hydrology Present? Yes No within a W Remarks: Wet/and OCCurs at tat of state of state of state Yes IVDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	etland? Yes No V
Hydric Soil Present? Yes No Is the Sar Wetland Hydrology Present? Yes No within a W Remarks: Wet/and OCCurs at tat of stat of stat. Present? #YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	etland? Yes No V
Wetland Hydrology Present? Yes No Market Remarks: Wetland Occurs at tae of slope. Up HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	
Remarks: Wetfand OCCURS at the of slope Up HYDROLOGY Wetfand Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	and point taken just up slope
Wet/and OCCurs af tax of skpc. VP HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	nd point taken just up slope
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1)	Secondary Indicators (minimum of two required)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Gincludes capillary fringe) No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	Surface Soil Cracks (B6)
Saturation (A3) Oxidized Rhizospheres on Living Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Generation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Cincludes capillary fringe) Depth (inches):	Sparsely Vegetated Concave Surface (B8)
Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Depth (inches): Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Generation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Cincludes capillary fringe) No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	Drainage Patterns (B10)
Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Depth (inches): Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	Roots (C3) Moss Trim Lines (B16) Dry-Season Water Table (C2)
Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	
Algal Mat or Crust (B4)Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? YesNoDepth (inches): Water Table Present? YesNoDepth (inches): Saturation Present? YesNoDepth (inches):	Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches)	Stunted or Stressed Plants (D1)
Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	Geomorphic Position (D2)
Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Gincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	Shallow Aquitard (D3)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Includes capillary fringe) No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective)	Microtopographic Relief (D4)
Surface Water Present? Yes No Depth (inches); Water Table Present? Yes No Depth (inches); Saturation Present? Yes No Depth (inches); Saturation Present? Yes No Depth (inches); Includes capillary fringe) No Depth (inches); Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective)	FAC-Neutral Test (D5)
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	
Saturation Present? Yes NoDepth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	1
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	
Remarks:	tions), if available:
Remarks:	

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Tree Stratum (Plpt size: _/0 m ²)		Dominant Species?		Dominance Test worksheet:
1. Linisdendron tulipitora	- 90		FACH	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
Pinus taeda	5	(/	FAC	Total Number of Dominant
a versus olba	5	<u></u>	FACH	Species Across All Strata: (B)
•				Percent of Dominant Species That Are OBL, FACW, or FAC:
		(<u> </u>		Prevalence Index worksheet:
	10.5		· · · · · ·	Total % Cover of: Multiply by:
mail (rest) (see)	100	= Total Cov		OBL species
50% of total cover:	the second secon	total cover	- 20	FACW species x 2 =
apling/Shrub Stratum (Plot size: 10 m ⁻²)		N	ENC	FAC species x 2 =
Quercus alba			FACH	FACU species x 4 =
Carpinus caroliniana		1_	FHC.	UPL species
			· — — ·	Column Totals: (A) (B)
				Prevalence Index = B/A =
<u>.</u>				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
		· · · · ·		3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	<u>55</u> 20% of	total cover	-1	data in Remarks or on a separate sheet)
erb Stratum (Plot size: 5m2)		<u>.</u>	DV.	Problematic Hydrophytic Vegetation ¹ (Explain)
Volistition acrostichoides	20	1_	11-6-14	
. Conicera japanca	_ 40	_Y	1-1-2	¹ Indicators of hydric soil and wetland hydrology must
·		And and a second		be present, unless disturbed or problematic.
	_	-	(Definitions of Four Vegetation Strata:
	_	-		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	-	_		height.
	- A			Sapling/Shrub - Woody plants, excluding vines, less
				Sapimu/Shilub - Woody Diants, excluding vines, less
		-		than 3 in. DBH and greater than or equal to 3.28 ft (1
		_		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
)				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
D		Total Cov	rer	than 3 in. DBH and greater than or equal to 3.28 ft (1
0 1 50% of total cover:	<u></u>	Total Cov		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>foody Vine Stratum</u> (Plot size:522)	<u></u>			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover:	<u>/_0</u> 20% of Z			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 1 1	<u>/_0</u> _ 0_ 20% of		12	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: /oody Vine Stratum (Plot size:) 	<u>/_0</u> 20% of Z		FAL	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: 1 1	<u>/_0</u> 20% of Z		FAL	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
0	<u>/_0</u> 20% of Z		FAL	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
0	20% of 20% of 20		FAL FAC	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

	Remarks
4-14 11, YR 5/6 10c 10YR 6/3 5 d M 5CL 14-15 10YR 5/6 55 d M 5CL 10	
IM-18 IO YR 5/6 SS IO YR 6/3 S d M SCL IO YR 5/6 IO YR 6/3 JO C M SCL IO IO YR 6/8 IO IO IO IO IO IO IO YR 6/8 IO IO IO IO IO IO IO IO YR 6/8 IO IO IO IO IO IO IO IO	
14-1\$ 10 YR 5/6 \$5 10 YR 6/3 5 1 M 5 5 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 1 5 1 <td></td>	
10 YR 6/8 10 C M 5CL	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pol	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pol Hydric Soil Indicators: Indicators	
	CONTRACT BUILDING
	e Lining, M=Matrix. for Problematic Hydric Soils ³ :
	luck (A10) (MLRA 147)
	Prairie Redox (A16)
	RA 147, 148)
	ont Floodplain Soils (F19) RA 136, 147)
	hallow Dark Surface (TF12)
	Explain in Remarks)
Thick Dark Surface (A12) Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136)	
	s of hydrophytic vegetation and
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland	hydrology must be present,
	listurbed or problematic.
Restrictive Layer (if observed):	
Type: Depth (inches): Hydric Soil Pres	ent? Yes No
Depth (inches): Hydric Soil Pres	

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

andform (hillslope, terrace, etc.): <u>Randofile</u> (ut Local re- Subregion (LRR or MLRA): <u>LRR -F</u> Lat: <u>35.160078</u> Soil Map Unit Name: <u>GFF-Gullied land</u> , <u>Friable material</u> are climatic / hydrologic conditions on the site typical for this time of year? are Vegetation <u>No</u> , Soil <u>ND</u> , or Hydrology <u>no</u> significantly distu- are Vegetation <u>No</u> , Soil <u>ND</u> , or Hydrology <u>no</u> naturally problem SUMMARY OF FINDINGS – Attach site map showing sai	nia (s., 10-357s Yes <u>No</u> urbed? Are "Normal natic? (If needed, e	.472/37 Datum: NAD 5 NVI classification: (If no, explain in Remarks.) I Circumstances" present? YesNo explain any answers in Remarks.)
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	is the Sampled Area within a Wetland?	Yes No
Water Marks (B1) Presence of Reduce	dor (C1) ares on Living Roots (C3) ed Iron (C4) ion in Tilled Soils (C6) (C7)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
 Rigar Mat of Crust (04) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) 		Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations: Surface Water Present? YesNoDepth (inches): Water Table Present? YesNoDepth (inches): Saturation Present? YesNoDepth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, principal stresses		Hydrology Present? Yes No
Remarks:		

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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 5×10 m)		Species?		
1. Acerrubrum	20	Y	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:
2. Liquidanbar styrarifly	20	7.	FAC	
3. Lingo dearon tulipiter.	20	+	FACH	Total Number of Dominant
A CHARLEN ON TO HIPPOCK			110-1	Species Across All Strata: (B)
*				Percent of Dominant Species 7157
5				That Are OBL, FACW, or FAC: (A/B
6				Prevalence Index worksheet:
7	12	-		Total % Cover of:Multiply by:
30		Total Cov		OBL species x 1 =
50% of total cover: <u>30</u>	20% of	total cover:	1 Com	
Sapling/Shrub Stratum (Plot size: 5 X 10 m)	ris.	V.	i. it	FACW species x 2 = FAC species x 3 =
1. Viburnum nudum			DEF	
2. Ligustrum sinese	10	1-	FALU	FACU species x 4 =
3. Vacunium fuscatum	5	N	FAC	UPL species x 5 =
A. Ace rubrum	5	N	FAC	Column Totals: (A) (B)
5			1.1.1	Desustance Index of DIA
6				Prevalence Index = B/A =
7			1922	Hydrophytic Vegetation Indicators:
B				Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
	40 -	Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 30		total cover:	1.0	4 - Morphological Adaptations' (Provide supporting
Herb Stratum (Plot size: 5×10 m)	_ 2078 01	iotal cover.		data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation ¹ (Explain)
1				
2				Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8			1	
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.	1			
		Tetal Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:		otal cover:	31	of size, and woody plants less than 5.20 it tall.
Noody Vine Stratum (Plot size: 5×10 m)		otal cover.		Woody vine - All woody vines greater than 3.28 ft in
	F	Y.	FAC	height.
	5		rnc.	
Smilax lauritalia		_!	<u>A124</u>	
3				
k,			· · · · · ·	Hydrophytic
				Vegetation
5	1.00	Total Cove	er	Present? Yes No
5		otal cover:		

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	ription: (Describe	to the dep	oth needed to docur	nent the i	ndicator	or confirm	the absenc	e of indicators.)
<u>.</u>	Matrix			x Features		Loc ²	Texture	Remarks
s)	Color (moist)		Color (moist)	%	Type'	LOC	l	
2	10 YR 3/2	100				PL		Few Line Mn concentra
\$_	10 YR 6/2	40	10YR 6/3	-5-		_	_66	
			INVA 16	2	_6_	PL		
12	10 YR 43	60	1042.6/1	25	D	M	_ CL	
			7.5 YR 5/6	5	6	PL		
-				_				
		_						
		_			C		-	
	-					_		
0.0		Intion DM	-Dadurad Matrix M	C-Macked	Sand Gr		² Location:	PL=Pore Lining, M=Matrix.
	oncentration, D=Dep Indicators:	letion, RM	=Reduced Matrix, Ma	5-IVIASKeu	Sanu Gi	ans.	Indi	cators for Problematic Hydric Soils ³ :
epleted nick Da andy M MLR/ andy C	uck (A10) (LRR N) d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1) (L A 147, 148) Gleyed Matrix (S4) Redox (S5)		Redox Dark Depleted Da Redox Depre Iron-Mangan MLRA 13 Umbric Surfa Piedmont Flo	rk Surface essions (Fi ese Mass 6) ace (F13) (: (F7) 8) es (F12) ((MLRA 13	6, 122)	(8)	Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present,
	Matrix (S6)	_	Red Parent I	Material (F	21) (MLR	A 127, 14	7) (unless disturbed or problematic.
ctive	Layer (if observed):	n) N						
ie:							12.50-2	1
oth (in	ches):						Hydric So	oil Present? Yes No

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Primary Indicators (minimum of one is required; check all that apply)	minimum of two required)		
HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required; check all that apply) Primary Indicators (minimum of one is required; check all that apply)	is (B6)		
Wetland Hydrology Indicators: Secondary Indicators (mi Primary Indicators (minimum of one is required; check all that apply)	is (B6)		
Primary Indicators (minimum of one is required; check all that apply)	is (B6)		
Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Pattems (B Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B1 Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water T Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible or	d Concave Surface (88)		
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (R Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B1) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water T Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible or	the second se		
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B4) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water T Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible or	(B10)		
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible or	Table (C2)		
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible or	C8)		
Algol Mot or Crust (P4) Other (Explain in Remarks) Stunted or Stressed	on Aerial Imagery (C9)		
	d Plants (D1)		
Iron Deposits (B5) Geomorphic Position			
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D	a manufacture of the second		
Water-Stained Leaves (B9)Microtopographic Re	the second se		
Aquatic Fauna (B13)	(D5)		
Field Observations:			
Surface Water Present? Yes No Depth (inches):			
Water Table Present? Yes No Depth (inches):			
Saturation Present? Yes No V Depth (inches): Wetland Hydrology Present? Yes			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Yes No/		
	Yes No/		
Remarks:	Yes No_ <u>/</u>		

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UPland

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

ree Stratum (Plot size: 10m2)	Absolute	Dominar	nt Indicator	Dominance Test worksheet:
			? Status	Number of Dominant Species
Pinus echino Ja	15	Y	_	That Are OBL, FACW, or FAC:(A)
Platane occidentalis	15	Y	FACW	
Querous alba	15.	V	FACY	Total Number of Dominant
				Species Across All Strata:(B)
Liquidambor styraciliua	40	1	FAE	Percent of Dominant Species
Lisidenduon tulipitera	10	N	FACU	Percent of Dominant Species 627 (A/E
		-		Prevalence Index worksheet:
	- 01			Total % Cover of:Multiply by:
500 - 54-5- 5- 5- 5- 5- 5- 5- 5- 5- 5- 5- 5- 5-	15	= Total Co	ver "A	OBL species x 1 =
50% of total cover:		total cove	er:	
ling/Shrub Stratum (Plot size: / () u Z)	and the	4		FACW species x 2 =
Overcus alba	10	1	- FACY	FAC species x 3 =
Pinus echinata	/0	4	-	FACU species x 4 =
Juniorius Virginiana	5	7	FACH	UPL species x 5 =
Janpas Jana			- 110-1	Column Totals: (A) (B
		-		
			· · · · · ·	Prevalence index = B/A =
				Hydrophytic Vegetation Indicators:
		÷		1 - Rapid Test for Hydrophytic Vegetation
	·	-		1/2 - Dominance Test is >50%
		-		3 - Prevalence Index is ≤3.0 ¹
		= Total Co		4 - Morphological Adaptations ¹ (Provide supportin
50% of total cover:	5_ 20% of	total cove	r. <u>5</u>	
b Stratum (Plot size:)				data in Remarks or on a separate sheet)
Loniceur Superita	10	Y	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
- Jupinius			- 1.1.5-	
				the second second second is and in some descent second second second second second second second second second
				Indicators of hydric soil and wetland hydrology must
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				be present, unless disturbed or problematic.
			=	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
				be present, unless disturbed or problematic.
				be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
				be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
				be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.
				be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
				be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.
				be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
				be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
		Total Co	-	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
50% of total cover: _5			-	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>5</u> dy Vine Stratum (Plot size: 5m ⁷)		Total Co	-	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody. vine – All woody vines greater than 3.28 ft in
50% of total cover: _5		Total Co	-	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>5</u> dy Vine Stratum (Plot size: <u>5</u> 2)		Total Co	r: <u>2</u>	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody. vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>5</u> dy Vine Stratum (Plot size: <u>5</u> m ⁷) Smiluz Nu: (Shre		Total Co	r: <u>2</u>	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody. vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>5</u> dy Vine Stratum (Plot size: <u>5</u> 2) Smilup: Autobar		Total Co	r: <u>2</u>	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody. vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>5</u> bdy Vine Stratum (Plot size: <u>5</u> m ²) Smiluz (Autor)		Total Co	r: <u>2</u>	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody. vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>5</u> bdy Vine Stratum (Plot size: <u>5m²)</u> Smilup: (Aut. (dira		Total Co	r: <u>2</u>	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody.vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover: <u>5</u> <u>ody Vine Stratum</u> (Plot size: <u>5m⁷</u>) Smilup: Aui, (dice	<u> </u>	Total Co	r: 2 <u> </u>	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody.vine – All woody vines greater than 3.28 ft in height. Hydrophytic
50% of total cover: <u>5</u> <u>soody Vine Stratum</u> (Plot size: <u>5</u> 2) Smilup (Aut. (blog		Total Co	r: <u>2</u>	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody. vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>5</u> ody Vine Stratum (Plot size: <u>5m⁷)</u> Smilup (Aui, take		Total Co total cove	r: <u>2</u> - <u>68L</u> - FAG	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. Woody.vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover: <u>5</u> ody Vine Stratum (Plot size: <u>5m⁷)</u> Smilup: (Aut. (Shice	<u> </u>	Total Co total cove	r: 2 <u> </u>	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody.vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

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(inches) Color (moist)	%	Color (moist)	Features %	Type ¹	Loc ²	Texture	Remarks
6-3 10 YR 4/4	100					SCL	
						SEL	
3-15 10VR 46	100					SEL -	
				_			
	<u> </u>			_			
			_				
			_				
	1.00		-				
		1.00					
	The Barrel		-				and the second
ype: C=Concentration, D=D	epletion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		ore Lining, M=Matrix. s for Problematic Hydric Soils ³ :
ydric Soil Indicators:			10.01				Muck (A10) (MLRA 147)
_ Histosol (A1)		Dark Surface Polyvalue Be			U PA 147	the second se	Prairie Redox (A16)
Histic Epipedon (A2) Black Histic (A3)		Thin Dark Su					LRA 147, 148)
Hydrogen Sulfide (A4)		Loamy Gleye					nont Floodplain Soils (F19)
Stratified Layers (A5)		Depleted Mat				(MI	LRA 136, 147)
2 cm Muck (A10) (LRR N)		Redox Dark					Shallow Dark Surface (TF12)
Depleted Below Dark Surfa	ace (A11)	Depleted Dar				Other	(Explain in Remarks)
_ Thick Dark Surface (A12)		Redox Depre			DO N		
Sandy Mucky Mineral (S1)	(LRR N,	Iron-Mangan MLRA 13		es (F12) (LKK N,		
MLRA 147, 148) Sandy Gleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ Indicate	ors of hydrophytic vegetation and
Sandy Redox (S5)		Piedmont Flo					d hydrology must be present,
Stripped Matrix (S6)		Red Parent M					disturbed or problematic.
Restrictive Layer (if observed	d):			1 · ·			
Туре:						1.0.00	weiter Arter
B		-				Hydric Soil Pre	sent? Yes No
Depth (inches):							
Depth (inches): Remarks:							
and the second sec							
and the second sec							
and the second sec							
and the second sec							
and the second sec							
and the second							
and the second							
and the second sec							
and the second sec							
and the second							
and the second sec							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region Project/Site: 6214 / 1 85 city/county: Cherokee. ____ Sampling Date: 12/03/2015 _ Sampling PointWF-11 We Applicant/Owner: SCDOT Section, Township, Range: GTOVET, NC Investigator(s): N. HALLAN H + 5. Roberts Landform (hillslope, terrace, etc.): dertession / hasin Local relief (concave, convex, none): (an (ave Slope (%): D Subregion (LRR or MLRA): LP.2 P Long: -81. 470785 Lat: 35, 159729 Datum: NAD - 83 Soil Map Unit Name: GFF - Gulled land, Ina Lie materials NAB-NASON very time NWI classification: No Are climatic / hydrologic conditions on the site typical for this time of year? Yes_ (If no, explain in Remarks.) Are Vegetation \underline{N} , Soil \underline{N} , or Hydrology \underline{N} significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil ____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Yes_V Hydrophytic Vegetation Present? No_ Is the Sampled Area No Hydric Soil Present? Yes No within a Wetland? Wetland Hydrology Present? Yes No Remarks: HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) V Sparsely Vegetated Concave Surface (88) Surface Water (A1) ____ True Aquatic Plants (B14) ___ Drainage Patterns (B10) High Water Table (A2) ____ Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) ____ Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Cravfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) Geomorphic Position (D2) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Microtopographic Relief (D4) FAC-Neutral Test (D5) _ Aquatic Fauna (B13) Field Observations: Surface Water Present? No Depth (inches): No _____ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes ____ No__ Depth (inches): Saturation Present? No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Id road bed restricts outflow of water 011 400c

NP

6214/I-85

EGETATION (Four Strata) – Use scientific n	ames of	pianto.		Sampling Point: WF-II (wet
Tree Stratum (Plot size: 10×10 m) 1. Acer rubrum	% Cover	Dominant Species?	<u>Status</u> FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
2. Liquidenba styrociflus 3.				Total Number of Dominant
5 5				Percent of Dominant Species That Are OBL, FACW, or FAC: (00 % (A/B)
1		= Total Cov		Prevalence Index worksheet: Total % Cover of:Multiply by:
50% of total cover:	20% of	total cover:	20	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 16 1 10 m.)		NI	1.1	FACW species x 2 =
Liburnin nudum	15_	1_	ARL'	
2. L. Styracitha	5	1	FAC	FACU species x 4 =
l	-			UPL species x 5 =
4				Column Totals: (A) (B)
5 5			\equiv	Prevalence Index = B/A =
l				Hydrophytic Vegetation Indicators:
3				1 - Rapid Test for Hydrophytic Vegetation
)	1000	-		2 - Dominance Test is >50%
	20.	= Total Cove		3 - Prevalence Index is ≤3.01
50% of total cover: 10	_ 20% of	total cover:	4	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 10 X 10 m)		Y		Problematic Hydrophytic Vegetation ¹ (Explain)
Arundinaria tecta	15		FACUS	
Liguitum lucidum	-15	N	_	¹ Indicators of hydric soil and wetland hydrology must
Junces offusus	5	1	FACUL	be present, unless disturbed or problematic.
			_	Definitions of Four Vegetation Strata:
h <u>e</u>			_	
		\equiv		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
۱ <u>ــــــــــــــــــــــــــــــــــــ</u>				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
0			-	m) tali.
	23 -	Total Cove	er , , ,	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tail.
50% of total cover: <u>パ.ち</u> Voody Vine Stratum (Plot size: <u>トゥ メトゥ ホ</u> _)	_ 20% of 1	total cover:_	7.6	Woody vine - All woody vines greater than 3.28 ft in
Lonice a japonica	5	Y	FAR	height.
Smiley St	E		100	
	-2-			
·				A 1997 A. C.
·			,	Hydrophytic
	13		2	Vegetation
	1.1	 Total Cove 	1	Present? Yes No
50% of total cover: 😏		total cover:	1	a second s

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and the second	the depth nee	ded to docume	ent the in	icator c	r confirm	the absenc	e of indicators.)
Matrix		Redox	Features				
s) Color (moist)	<u>%</u> Col	or (moist)	%	Type ¹	Loc ²	Texture	Remarks
10tR 3/1	160		_			1	
6 1048 6/3	65 7.	51R 578	10	C	PL	C	
		YR 4/6	10	6	m		
		1 R 6/2	1.0			-	· · · · · · · · · · · · · · · · · · ·
		1K 0/2	15		M		
			_		_		
····· ······							1°
						C	
					_		
C=Concentration, D=Deplet	tion, RM=Reduc	ed Matrix, MS=	Masked	Sand Gra	ins,		PL=Pore Lining, M=Matrix.
Soil Indicators:							cators for Problematic Hydric Soils ³ :
itosal (A1)		Dark Surface (2 cm Muck (A10) (MLRA 147)
tic Epipedon (A2)		Polyvalue Belo				148)	Coast Prairie Redox (A16)
ick Histic (A3) drogen Sulfide (A4)		Thin Dark Surf Loamy Gleyed			+/, 146)		(MLRA 147, 148) Piedmont Floodplain Soils (F19)
atified Layers (A5)	P	Depleted Matri		-/		1	(MLRA 136, 147)
m Muck (A10) (LRR N)	<u></u>	Redox Dark Su		5)			Very Shallow Dark Surface (TF12)
pleted Below Dark Surface ((A11)	Depleted Dark				2	Other (Explain in Remarks)
ck Dark Surface (A12)		Redox Depres					
ndy Mucky Mineral (S1) (LR	RN,	Iron-Manganes		s (F12) (L	.RR N,		
MLRA 147, 148)		MLRA 136) Umbric Surface		MI DA 430	1001	31	dicators of hydrophytic vegetation and
ndy Gleyed Matrix (S4) ndy Redox (S5)		Piedmont Floo					vetland hydrology must be present,
ipped Matrix (S6)		Red Parent Ma					nless disturbed or problematic.
tive Layer (if observed):		1102					
th (inches):						Hydric So	il Present? Yes No
(S:							
indicator. We depth on sc.	Aland 6	our dow-y	deli	sated	er i	hydric	andications (Lab-

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

NE

pplicant/Owner: <u>SCDOT</u>	City/County:	erokee Sampling Date: 12-3-15
ivestigator(s): J. Roberts ; N. Hevell	Section. Township	, Range: Grover, NC
andform (hillslope, terrace, etc.): bottom of old r		
		Long: -81. 470782 Datum: NAD 85
il Map Unit Name: GFF-Guilled lands, Fnable	molegais/ Nak-Nason	Very Fine NWI classification:
e climatic / hydrologic conditions on the site typical fo		No (If no, explain in Remarks.)
e Vegetation $\underline{\land 0}$, Soil $\underline{\land 0}$, or Hydrology $\underline{\land}$		Are "Normal Circumstances" present? Yes No
e Vegetation <u>10</u> , Soil <u>10</u> , or Hydrology <u>1</u>	<u>D</u> naturally problematic? ((If needed, explain any answers in Remarks.)
UMMARY OF FINDINGS – Attach site m	ap showing sampling poin	nt locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No Is the Sam No Within a We	
YDROLOGY		
Vetland Hydrology Indicators:	and seen	Secondary Indicators (minimum of two required)
rimary Indicators (minimum of one is required; check	all that apply)	Surface Soil Cracks (B6)
	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
	Oxidized Rhizospheres on Living F Presence of Reduced Iron (C4)	Roots (C3) Moss Trim Lines (B16) Dry-Season Water Table (C2)
	Recent Iron Reduction in Tilled So	
사람, 이렇지 않아 먹은 비지 않아 있었다. 같은 것이 같은 것이 같은 것이 같은 것이 같은 것이 같은 것이 없다.	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
_ Iron Deposits (B5)		Geomorphic Position (D2)
 Inundation Visible on Aerial Imagery (B7) 		Shallow Aquitard (D3)
_ Water-Stained Leaves (B9)		Microtopographic Relief (D4)
_ Aquatic Fauna (B13)	-	FAC-Neutral Test (D5)
ield Observations: urface Water Present? Yes No 🗸	Depth (inches):	
Vater Table Present? Yes No		1
	Depth (inches):	Wetland Hydrology Present? Yes No
ncludes capillary fringe)		
escribe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspect	ions), if available:
refrance of 6.21		
Remarks:	in the second se	
Canad o deale	rins 7454 few month	hs and deck
emarks: Unusually high rainfall du	rins Past few month	hs and days.
Canad o deale	rins 7457 few month	hs and days.
refrance of 6.21	ning 17457 few month	hs and days.
to Strength of Sale	nins 1745t few month	hs and days
refrance of 6.21	rins 7457 few month	hs and days.
Canad o deale	nins 7457 few month	hs and days.
to Strength of Sale	ning 17457 few month	hs and days.

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EGETATION (Four Strata) – Use scientific		Dominant	to Prostan	Sampling Point:
Tree Stratum (Plot size: 10 メ ら m_)		Species?		Dominance Test worksheet:
Liquidance sty raciflue	75	Y	FAC	Number of Dominant Species (A)
Acer ruprum	2.0	7	FAC	
				Total Number of Dominant 5 (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B
				That Are OBL, FACW, or FAC: (A/B
				Prevalence Index worksheet:
	95	= Total Cov		Total % Cover of: Multiply by:
50% of total cover:	2,5 20% of	total cover:	14	OBL species x 1 =
apling/Shrub Stratum (Plot size: 10 × 5 m)				FACW species x 2 =
Liguitrum sinese	10	Y-	FACY	FAC species x 3 =
				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	10	Total Car		3 - Prevalence Index is ≤3.01
50% of total cover:	5 20% of	total cover:	2	4 - Morphological Adaptations ¹ (Provide supportin
erb Stratum (Plot size: <u>\0 < 5 m</u>)				data in Remarks or on a separate sheet)
Rubus SP.	105	Y	-	Problematic Hydrophytic Vegetation ¹ (Explain)
			<u> </u>	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
			-	Definitions of Four Vegetation Strata:
			<u> </u>	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
			<u> </u>	more in diameter at breast height (DBH), regardless of
			-	height.
			-	Sapling/Shrub - Woody plants, excluding vines, less
		·	<u></u>	than 3 in. DBH and greater than or equal to 3.28 ft (1
·				m) tall.
			<u> </u>	Herb - All herbaceous (non-woody) plants, regardless
	-5-	Total Cove	er ,	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>2</u> ,	20% of	total cover:	_1	Woody vine - All woody vines greater than 3.28 ft in
body Vine Stratum (Plot size: 15 X 5 M)	-	N	ENA	height.
Smilex rotunditation	- 5-	1	FAC	
Lunice a japonica	15		FAC	
	-	_	<u> </u>	
				Hydrophytic
·	-			Vegetation
South as the second		Total Cove		Present? Yes No
50% of total cover: _/ (20% of 1	total cover:	7	
emarks: (Include photo numbers here or on a separate Humburice of generalist	A. M. Y. Y.	iterie	5.	

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UP

	cription: (Describe t	to the dep	th needed to docum	ent the in	dicator	or confirm	n the absenc	Sampling Point: <u>WF-/</u> e of indicators.)
Depth	Matrix	1.1.1.1	Redox	Features				
(inches)	Color (moist)	_%	Color (moist)	%	Type'	Loc ²	Texture	Remarks
0-4	10YR 3/1	100					<u> </u>	()
4-15	101R 13	70	57R 5/6	10	C	m	C	-
			10HR 416	10	C	P4		
_		استعما	1072 5/2	_10	۵	M		
			i		_			
						<u> </u>		
			á					
		<u></u>			_			
			·		_			
					_			And the second s
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked S	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil Histosol			Dark Surface	(\$7)				cators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Beli		e (S8) (N	LRA 147		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Sur			47, 148)		(MLRA 147, 148)
	en Sulfide (A4) d Layers (A5)		Loamy Gleyed Depleted Matr		2)			Piedmont Floodplain Soils (F19) (MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S	the second se)			Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark					Other (Explain in Remarks)
	ark Surface (A12) /ucky Mineral (S1) (L	DD N	Redox Depres Iron-Mangane			DDN		
Januy IV			MLRA 136		5 (1 1 2) (-0.0		
	4 147, 148)		MLKM 130					
MLRA Sandy G	A 147, 148) Gleyed Matrix (S4)		Umbric Surfac	e (F13) (N				dicators of hydrophytic vegetation and
MLRA Sandy G Sandy R	ileyed Matrix (S4) ledox (S5)		Umbric Surfac	e (F13) (N dplain Soi	is (F19)	(MLRA 14	48) w	etland hydrology must be present,
MLRA Sandy G Sandy R Stripped	ileyed Matrix (S4) tedox (S5) Matrix (S6)		Umbric Surfac	e (F13) (N dplain Soi	is (F19)	(MLRA 14	48) w	
MLRA Sandy G Sandy R Stripped	ileyed Matrix (S4) ledox (S5)		Umbric Surfac	e (F13) (N dplain Soi	is (F19)	(MLRA 14	48) w	etland hydrology must be present,
MLRA Sandy G Sandy R Stripped Restrictive I	Sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed):		Umbric Surfac	e (F13) (N dplain Soi	is (F19)	(MLRA 14	48) w 7) u	etland hydrology must be present,
MLRA Sandy G Sandy R Stripped Restrictive I Type:	Sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed):		Umbric Surfac	e (F13) (M odplain Soi aterial (F2	ils (F19) 1) (MLR	(MLRA 14 A 127, 14	48) w 7) u Hydric So	etland hydrology must be present, nless disturbed or problematic.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (inc	Sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed):	Very	Umbric Surfac	e (F13) (M odplain Soi aterial (F2	ils (F19) 1) (MLR	(MLRA 14	48) w 7) u	etland hydrology must be present, nless disturbed or problematic.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind	Sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): Ches): Uplancl Soils	Very	Umbric Surfac Piedmont Floc Red Parent M	e (F13) (W odplain Soi aterial (F2	lis (F19) 1) (MLR	(MLRA 14 A 127, 14	48) w 7) u Hydric So	ntess disturbed or problematic.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	Sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): Ches): Uplancl Soils	very indar-1 in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indar-1 in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLR/ Sandy G Sandy R Stripped Restrictive I Type: Depth (inc Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLR/ Sandy G Stripped Restrictive I Type: Depth (inc Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLR/ Sandy G Stripped Restrictive I Type: Depth (inc Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No Meet F8 indicator.
MLRA Sandy G Sandy R Stripped Restrictive I Type: Depth (ind Remarks:	sleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed): ches): Upluncl Soils Wetland boy	very indary in	Umbric Surfac Piedmont Floc Red Parent M 	e (F13) (M odplain Soi aterial (F2 b Lr4	lond	(MLRA 14 A 127, 14 Soils	48) w 7) u Hydric So Both	il Present? Yes No No Meet F8 indicator.

Landform (hillslope, terrace, etc.): Local relief (concave Subregion (LRR or MLRA): <u>LRE-P</u> Lat: <u>35-1406677</u> Soil Map Unit Name: <u>AFF-Gullied lands, Friable materials</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes	re "Normal Circumstances" present? Yes No f needed, explain any answers in Remarks.) t locations, transects, important features, etc led Area tland? Yes No No Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	(If no, explain in Remarks.) re "Normal Circumstances" present? Yes No f needed, explain any answers in Remarks.) t locations, transects, important features, etc. led Area tland? Yes No Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Are Vegetation	re "Normal Circumstances" present? Yes No f needed, explain any answers in Remarks.) t locations, transects, important features, etc. led Area tland? Yes No No Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Are Vegetation, Soil, or Hydrology naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling po Hydrophytic Vegetation Present? Yes No is the San Wydrology Present? Yes No is the San within a W Wetland Hydrology Present? Yes No within a W Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	f needed, explain any answers in Remarks.) t locations, transects, important features, etc led Area tland? Yes <u>No</u> No <u>Secondary Indicators (minimum of two required)</u> Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
SUMMARY OF FINDINGS – Attach site map showing sampling po Hydrophytic Vegetation Present? Yes No Is the Sam Hydric Soil Present? Yes No within a W Wetland Hydrology Present? Yes No within a W Remarks: No within a W within a W Hydrology Present? Yes No within a W Remarks: No within a W W Hydrology Indicators: Present? No within a W Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) True Aquatic Plants (B14) High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Orifi Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Yes No Depth (inches): M Surface Water Present? Yes	t locations, transects, important features, etc led Area tland? Yes <u>No</u> <u>Secondary Indicators (minimum of two required)</u> <u>Surface Soil Cracks (B6)</u> <u>Sparsely Vegetated Concave Surface (B8)</u> <u>Drainage Patterns (B10)</u>
Hydrophytic Vegetation Present? Yes No is the Sam Hydric Soil Present? Yes No within a W Wetland Hydrology Present? Yes No within a W Remarks: No No within a W Hydrophytic Vegetation Present? Yes No within a W Remarks: Yes No within a W Hydrophytic Vegetation Present? Yes No within a W Remarks: Presence of Reduced Iron Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Ied Area tland? Yes No
Hydric Soil Present? Yes No within a W Wetland Hydrology Present? Yes No within a W Remarks: Present? Yes No within a W Hydrology Present? Yes No within a W Remarks: Present? Yes No within a W Hydrology Present? Yes No within a W Remarks: Presence of Reduced Iteration (Statustic Plants (B14) Presence of Reduced Iteration (C1) Staturation (A3) Oxidized Rhizospheres on Living Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes No Depth (inches): Image: Surface Water Present? Water Table Present? Yes No Depth (inches): Image: Surface Water Present? Yes No Depth (inches): Image: Surface Water Present? Yes No	tland? Yes No Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Yes Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Gaturation Present? Yes No Depth (inches): Gaturation Present? Yes No Depth (inches):	Drainage Patterns (B10)
Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled S Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) V Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Depth (inches): Surface Water Present? YesNo Depth (inches): Saturation Present? YesNo Depth (inches): (includes capillary fringe) Yes No	oots (C3) Moss Trim Lines (B16)
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes No Depth (inches): Yes No Depth (inches): 9	
Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Dry-Season Water Table (C2)
Algal Mat or Crust (B4)Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? YesNo Depth (inches): Water Table Present? YesNo Depth (inches): Saturation Present? YesNo Depth (inches): (includes capillary fringe)	s (C6) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
	Stunted or Stressed Plants (D1)
Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Gincludes capillary fringe)	Geomorphic Position (D2)
Aquatic Fauna (B13) Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Shallow Aquitard (D3)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Yes No Depth (inches):	Microtopographic Relief (D4)
Surface Water Present? Yes No Depth (inches); Water Table Present? Yes No Depth (inches); Saturation Present? Yes No Depth (inches); (includes capillary fringe) Yes No Depth (inches);	FAC-Neutral Test (D5)
Water Table Present? Yes No Depth (inches): II Saturation Present? Yes No Depth (inches): II (includes capillary fringe) Yes No Depth (inches): II	
Saturation Present? Yes <u>No</u> Depth (inches): <u>9</u> (includes capillary fringe)	
(includes capillary fringe)	Wetland Hydrology Present? Yes Vo
Describe Recordeo Data (stream gauge, monitoring weil, aenai photos, previous inspe	ana) if susilable:
	una), il avallable.
Remarks:	

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Tree Stratum (Plot size: 5×5 m)	Absolute			Dominance Test worksheet:
Alerrubrum		Species?	FAC	Number of Dominant Species
Salixnigra		m	OBL	Total Number of Dominant
	1	<u> </u>		Species Across All Strata: (B) Percent of Dominant Species
				That Are OBL, FACW, or FAC: (AVB,
	1			Prevalence Index worksheet:
	40	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: _2C	20% of	total cover:	8	OBL species x 1 =
apling/Shrub Stratum (Plot size: 525m)				FACW species x 2 =
Alous seriulata	30	14	OBL	FAC species x 3 =
Liquidanbur styraciflug	10	1.	FAC	FACU species x 4 =
- igonaan poor y o a pog		3	<u></u>	UPL species x 5 =
N	·	<u> </u>		Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1_Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	40	= Total Cov		3 - Prevalence Index is ≤3.01
50% of total cover:C	20% of	total cover:	4	4 - Morphological Adaptations ¹ (Provide supporting
erb Stratum (Plot size: 3×5 m)		total corol.		data in Remarks or on a separate sheet)
Arundingrig tecta	13	11	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
		TA	FAC	
Viburnum nudum		<u> </u>	FAU	¹ Indicators of hydric soil and wetland hydrology must
· · · · · · · · · · · · · · · · · · ·		-		be present, unless disturbed or problematic.
· · · · · · · · · · · · · · · · · · ·				Definitions of Four Vegetation Strata:
				The Manda state and discusses 2 is (7.0 and a
			-	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of
				height.
				Carling/Church Minadu algebra musicalizations land
		_		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
0				m) tall.
1				Heads All book second from the add strate as a statistic
	10	= Total Cove	ar	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 5		total cover:		
loody Vine Stratum (Plot size: 3+5 m)	and the second second			Woody vine - All woody vines greater than 3.28 ft in
Lonicera jeponira	10	11	FAC	height.
Smilax 1 2+4nd, folic	- E	7.	FAC	
and the second se		-1-	THC.	
				The second se
				Hydrophytic
		-		Vegetation Present? Yes No
50% of total cover:7.5		= Total Cove		Present? Yes No
		total cover.		
emarks: (Include photo numbers here or on a separate s	meet.)			

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rofile Desc	ription: (Describe t	o the dep	th needed to docu	ment the i	ndicator	or confirm	n the absend	e of indicators.)	
Depth Matrix				x Features			-		ALCONTRACT.
inches)	Color (moist)	_%	Color (moist)) <u>% Type' Loc</u> 2		Loc	Texture		emarks
0-6	10 YR 2/2	80	7,5YR4/6	20	6	PL	CL	bisidized	Philosphere
- 12+	10YR 73	70	104R 5/6	30	6	m	Sh		
				_					
				Ξ			1		
		<u> </u>		_	-				
		-		=	-	=			
_		\equiv		22	-	_	1		
vpe: C=Cc	ncentration, D=Depl	etion. RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Lining, M	=Matrix.
Stratified 2 cm Mu Depleted Thick Da Sandy M MLRA Sandy G Sandy R Sandy R	n Sulfide (A4) Layers (A5) ck (A10) (LRR N) Below Dark Surface rk Surface (A12) ucky Mineral (S1) (L 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	RR N,	Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Iron-Mangar MLRA 13 Umbric Surfa Piedmont Fit Red Parent	ntrix (F3) Surface (F rk Surface essions (F4 nese Masso (6) ace (F13) (podplain S	6) (F7) 8) es (F12) ((MLRA 13 oils (F19)	6, 122) (MLRA 1	48) v	vetland hydrology i inless disturbed or	7) : Surface (TF12) Remarks) hytic vegetation and nust be present,

Project/Site: <u>6214</u> / <u>J</u> -85 Applicant/Owner: <u>SCD</u>	OT	_ City/County: _ Chero	State: SC Samp	g Date: <u> 2 69 201</u> 5 ling Point: <u>いん-ん(</u> の
	E. Morgan	Section, Township, Range:	Grover, NC	
		Local relief (concave, convex, n		Slope (%): D [D
Subregion (LRR or MLRA):	Lat: 35.100			_ Datum: <u>NAD83</u>
ioil Map Unit Name: <u>(Jullied Tane</u>	A STATE OF	In T. P. M	NWI classification:	
re climatic / hydrologic conditions on the		a state of the second		ان خست زر
re Vegetation \underline{n} , Soil \underline{n} , or H	10. 1 10. 10. 10. 10. 10. 10. 10. 10. 10	sector and the sector of the s	al Circumstances" present?	
re Vegetation $\underline{\wedge i}$, Soil $\underline{\wedge b}$, or H			explain any answers in Rem	
SUMMARY OF FINDINGS - At	tach site map showi	ing sampling point locat	ons, transects, impor	tant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes No	<u> </u>
Remarks:				
				.8
IYDROLOGY				
Wetland Hydrology Indicators:	and the second second		Secondary Indicators (mini	and allowing the state of the state
Primary Indicators (minimum of one is r			Surface Soil Cracks (E	
Surface Water (A1)		c Plants (B14)	Sparsely Vegetated C Drainage Patterns (B1	A CONTRACTOR OF A CONTRACT
High Water Table (A2) Saturation (A3)		ulfide Odor (C1) nizospheres on Living Roots (C3)		
Water Marks (B1)		Reduced Iron (C4)	Dry-Season Water Tal	
Sediment Deposits (B2)		Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)	
Drift Deposits (B3)	Thin Muck S	Surface (C7)	Saturation Visible on A	Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Expla	ain in Remarks)	Stunted or Stressed P	and the second sec
Iron Deposits (B5)			Geomorphic Position (
Inundation Visible on Aerial Imager Water Steined Leaves (R0)	у (В7)		Shallow Aquitard (D3) Microtopographic Relia	
Water-Stained Leaves (B9) Aquatic Fauna (B13)			FAC-Neutral Test (D5)	
Field Observations:				×
Surface Water Present? Yes	No Depth (inch	nes):		1
Water Table Present? Yes	No Depth (inch	nes):		
Saturation Present? Yes	NoDepth (inch	nes): Wetland	Hydrology Present? Yes	No
(includes capillary fringe) Describe Recorded Data (stream gauge	e, monitoring well, aerial pl	notos, previous inspections), if av	ailable:	
Remarks:				

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Free Stratum (Plot size: 5 × 5m))		Dominant Species?		Dominance Test works Number of Dominant Sp		E
Acer rubrum	50	4	FAC	That Are OBL, FACW, o		5 (A)
Liquidonber styraciflus Quereus spi		-g_	FAC	Total Number of Domina Species Across All Strata		5 _(B)
			=	Percent of Dominant Spe	cies	105
		<u> </u>		That Are OBL, FACW, o	FAC:	100 (A
				Prevalence Index work	sheet:	
	100	= Total Cov		Total % Cover of:	ML	ultiply by:
50% of total cover: 5	O 20% of	total cover:	20	OBL species		
apling/Shrub Stratum (Plot size: 5K5m)				FACW species		
Acerrubrum	10	_4_	FAC	FAC species		
Vaccinium sp.	-	1 de	~	FACU species		
				UPL species		
				Column Totals:	(A)	(i
				Prevalence Index	= B/A =	
				Hydrophytic Vegetation		
	_	<u> </u>		1 - Rapid Test for H		
				2 - Dominance Test		
0				3 - Prevalence Index	the state of the second	
		= Total Cove		4 - Morphological Ad		Provide support
50% of total cover:	5 20% of	total cover:	a	data in Remarks		
erb Stratum (Plot size: <u>5X5m</u>)			- 10 0	Problematic Hydrop		
Arundinoria tecta		<u> </u>	FAC	-		
asplenium platy neuron		<u>_r</u>]_	FACU	¹ Indicators of hydric soil	and wetland	hydrology must
) 		be present, unless distur		
) (Definitions of Four Veg	etation Stra	ta:
· · · · · · · · · · · · · · · · · · ·				Tree - Woody plants, ex	cluding vines	3 in (7.6 cm)
		, <u></u>		more in diameter at brea		
				height.		
		(Sapling/Shrub - Woody		
h	-			than 3 in. DBH and great	er than or ec	ual to 3.28 ft (1
)				m) tall.		
l				Herb - All herbaceous (r		
50% of total cover: 7		= Total Cove		of size, and woody plants	s less than 3.	.28 ft tall.
loody Vine Stratum (Plot size: <u>うなう m</u>)	20% 01	total cover.	2_	Woody vine - All woody	vines greate	er than 3.28 ft in
	10	10	The	height.		
Lonicera japonica	- 10	-3-	FAC	1		
				Hydrophytic		
· · · · · · · · · · · · · · · · · · ·	10			Vegetation Present? Yes	V No	
50% of total cover:		 Total Covertotal Covertotal Covertotal 	10			
emarks: (Include photo numbers here or on a separate		total cover.	-64			
Abundance of FAC, gener		ecies.				

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Profile Des	cription: (C	Describe	to the de	pth need	ed to docu	ment the	indicator	or confirm	n the absence	of indicato	ns.)		
Depth		Matrix	<u> </u>			ox Featur	es		-				
(inches)	Color (Colo	r (moist)	%_	Type'	Loc ²	Texture SCL	4	Remar	KS	
0-4	10 YR.	5/3	100	1-				4.7		-			
4-12	TOYR	7/5	70	10 YR	5(3		<u> </u>	M	_5L				
								_					
· · · · ·								_		-			
	_		_	_									
		_		-	_		-	-					
Type: C=C	oncentration	n, D=Dep	letion, RM	I=Reduce	ed Matrix, N	/S=Maske	ed Sand Gr	ains.	² Location: P				
Hydric Soll	Indicators:	Sec. 17								ators for Pr cm Muck (/			Soils':
Hydroge Stratifie 2 cm Mi Deplete Thick D Sandy M	istic (A3) en Sulfide (A d Layers (A uck (A10) (L d Below Da ark Surface Mucky Miner A 147, 148)	5) . RR N) rk Surfac (A12) ral (S1) (I			Thin Dark S oamy Gley Depleted M Redox Darl Depleted D Redox Dep ron-Manga MLRA 1 Jmbric Sur	yed Matrix (F3) c Surface ark Surfac ressions (nese Mas 36)	(F2) (F6) :e (F7) F8) ses (F12) (MLRA 1:	LRR N,	`	(MLRA 14 Piedmont Flo (MLRA 13 Very Shallow Other (Expla	odplain S 6, 147) / Dark Sur in in Rema ydrophytic	face (TF1 irks) vegetatio	2) n and
Sandy (Sandy F Stripped	Gleyed Matr Redox (S5) d Matrix (S6)		F	Piedmont F Red Parent	· · · · · · · · · · · · · · · · · · ·		and the second second	- A	etland hydro Iless disturb		and the second sec	
Sandy (Sandy F Stripped Restrictive	Gleyed Matr Redox (S5) d Matrix (S6)		F	Piedmont F	· · · · · · · · · · · · · · · · · · ·		and the second second	- A			and the second sec	
Sandy (Sandy F Stripped	Gleyed Matr Redox (S5) d Matrix (S6 Layer (if ot)		F	Piedmont F	· · · · · · · · · · · · · · · · · · ·		and the second second	7) ur		ed or prob	and the second sec	

WETLAND DETERMINATION DA	TA FORM – Eastern Mountains and	
Project/Site: 6214 / T - 85	City/County: Cherolice	Sampling Date: 12/09/2019
Applicant/Owner: SCDOT		a: SC Sampling Point: WH- 18 (W
nvestigator(s): N. 11000 N + F Morgan	Section, Township, Range:	er, NC
andform (hillslope, terrace, etc.): depression	Local relief (concave, convex, none):(
ubregion (LRR or MLRA): P ' Lat: 35	160675 Long: -81.47	3307 Datum: NAD 83
oil Map Unit Name: GFT- Guillico lands, fra	able materials N	WI classification:
re climatic / hydrologic conditions on the site typical for this t	and a reaction of the statement of the s	explain in Remarks.)
and in the first of the state of the	and the second	nstances" present? Yes No
re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> nai	생각 이 아이는 것 같은 것 같이 없는 것이 가지 않는 것 같아요. ????????????????????????????????????	any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map si		
	ioning camping point receivery a	
Hydrophytic Vegetation Present? Yes Vegetation Present?	Is the Sampled Area	
Hydric Soil Present? YesNo		Yes No
Wetland Hydrology Present? Yes <u>Ves</u> No. Remarks:		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all the	at apply) S	idary Indicators (minimum of two required) urface Soil Cracks (B6)
IYDROLOGY		denotes the transfer interest of the second second
	s Vissala	
		parsely Vegetated Concave Surface (B8)
		rainage Patterns (B10)
		loss Trim Lines (B16)
		ry-Season Water Table (C2)
		rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
		tunted or Stressed Plants (D1)
Iron Deposits (B5)	Production of stream and	eomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	s	hallow Aquitard (D3)
Vater-Stained Leaves (B9)		licrotopographic Relief (D4)
Aquatic Fauna (B13)	¥ F.	AC-Neutral Test (D5)
Field Observations:	(a) 4.00	
	n (inches):	
	n (inches): Wetland Hydrold	ogy Present? Yes No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, ac	rial photos, previous inspections), if available:	
Remarks:		
Ciriano.		

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	Dominant		Dominance Test worksheet:
	Species?		Number of Dominant Species
	-4		That Are OBL, FACW, or FAC: (A)
	4	FAW	Total Number of Dominant
	ň	FAC	Species Across All Strata: (B)
	_	_	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
			Prevalence Index worksheet:
			Total % Cover of:Multiply by:
5 20% of	total cover:	19	OBL species x 1 =
22.54			FACW species x 2 =
30	_4_	FAC	FAC species x 3 =
-	1		FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
		1.1	
		· · · · · ·	1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
30 .	= Total Cove	er	3 - Prevalence Index is ≤3.0 ¹
20% of	total cover:	6	4 - Morphological Adaptations ¹ (Provide supporting
			data in Remarks or on a separate sheet)
in	- 01	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
	7		And the state of the second state of the second state.
		1000	¹ Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
			Definitions of Four Vegetation Strata:
			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of
			height.
			Sapling/Shrub - Woody plants, excluding vines, less
			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
			inj tali.
10			Herb - All herbaceous (non-woody) plants, regardless
20% of	= Total Cove	er T	of size, and woody plants less than 3.28 ft tall.
_ 20% 01	total cover.	<u>a</u>	Woody vine – All woody vines greater than 3.28 ft in height.
1D	<u> </u>	FAC	
	1		
-			
_	_		Undraskudia
			Hydrophytic Vegetation
10 -	Total Cove		Hydrophytic Vegetation Present? Yes <u>No</u>
	<u>60</u> <u>25</u> <u>10</u> <u>96</u> <u>5</u> 20% of <u>30</u> <u>30</u> <u>30</u> <u>30</u> <u>10</u>	$\frac{60}{25} = \frac{9}{10}$ $\frac{9}{10} = \frac{9}{10}$	$\frac{60}{25} y FAC}{FAC}$ $\frac{10}{10} x FAC}{75} y FAC}{75}$ $\frac{95}{20\% \text{ of total cover}} 19}{75}$ $\frac{30}{20\% \text{ of total cover}} y FAC}{75}$ $\frac{30}{20\% \text{ of total cover}} y FAC}{75}$ $\frac{30}{20\% \text{ of total cover}} y FAC}{75}$

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Denth	cription: (Describe	to the de	oth needed to docum	nent the in	dicator o	or confirm	n the absence of indi	cators.)	
Depth	Matrix	67	Redox	K Features	Tunel	Loc ²	Texture	Remarks	
(inches)	Color (moist)	%	Color (moist)		Type'	LOC		Remarks	
0-3	104R 9/4	100					sthe		_
3-12	10VR 5/1	40	7.5 YR 5/6	30	_C_	M	SCL _		
						<u> </u>	·		
		(_			
			1						
				_					
	/								
	·				_				
		<u> </u>							-
-									
					_				_
		pletion, RM	Reduced Matrix, MS	S=Masked S	Sand Gra	ains.	² Location: PL=Pore		
lydric Soil	Indicators:							or Problematic Hy	
Histoso			Dark Surface					ck (A10) (MLRA 1	
	pipedon (A2)		Polyvalue Be Thin Dark Su					airie Redox (A16) A 147, 148)	
	listic (A3) en Sulfide (A4)		Loamy Gleye			47, 140)		t Floodplain Soils	(F19)
	d Layers (A5)		Depleted Mat		-			A 136, 147)	
	uck (A10) (LRR N)		Redox Dark S					allow Dark Surface	
	d Below Dark Surfac	ce (A11)	Depleted Dar				Other (E	xplain in Remarks)
	ark Surface (A12)		Redox Depre			DDN			
	Mucky Mineral (S1) (A 147, 148)	LKK N,	MLRA 130		5 (F 12) (
	Gleyed Matrix (S4)		Umbric Surfa	the second second second	ILRA 13	6, 122)	³ Indicators	of hydrophytic veg	etation and
and the second se	Redox (S5)		Piedmont Flo					ydrology must be	
	d Matrix (S6)		Red Parent M	Aaterial (F2	1) (MLR	A 127, 14	7) unless dis	turbed or problem	atic.
	Layer (if observed)								
Type:	81-15						and a second		
Depth (in	iches):						Hydric Soil Prese	nt? Yes	No
emarks:									

Landform (hillslope, terrace, etc.): Subregion (LRR or MLRA): Soil Map Unit Name:	P P	Local Lat: <u>35.160675</u> Is, frie.de mic		one): <u>(on Ue)</u> <u>71,473307</u> NWI classifica	Datum: MAD 85
Are climatic / hydrologic conditions				(If no, explain in Re	
Are Vegetation <u>NO</u> , Soil <u>NO</u>			-	al Circumstances" p	\cap
Are Vegetation <u>ND</u> , Soil <u>ND</u>				, explain any answer	
SUMMARY OF FINDINGS	- Attach si	te map showing sa	impling point locat	ions, transects,	important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _ Yes		is the Sampled Area within a Wetland?	Yes	_ No
Remarks:	169				
HYDROLOGY Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of o		check all that apply)		Surface Soil	a party community of the same same shared and
Surface Water (A1)	ne le regaleat	True Aquatic Plant	s (B14)	the second	etated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide (Drainage Pat	
Saturation (A3)		Oxidized Rhizosph	eres on Living Roots (C3		The second se
Water Marks (B1)		Presence of Reduc			Water Table (C2)
Sediment Deposits (B2)			tion in Tilled Soils (C6)	Crayfish Burr	A second s
Drift Deposits (B3)		Thin Muck Surface	Salt Drobbing	the second	sible on Aerial Imagery (C9) ressed Plants (D1)
Algal Mat or Crust (B4) Iron Deposits (B5)		Other (Explain in R	enarks)		Position (D2)
Inundation Visible on Aerial	magery (B7)			Shallow Aqui	
Water-Stained Leaves (B9)					phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:	A DOAT	~ ~ · · · · · · ·			
	es No _	Depth (inches):			
	es No	Depth (inches):			10 Mar 11-1
Saturation Present? Y (includes capillary fringe)	es No_	Depth (inches):	vvetiand	Hydrology Presen	t? Yes No
Describe Recorded Data (stream	gauge, monito	ring well, aerial photos, p	previous inspections), if a	vailable:	
Demarka					
Remarks:					

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In CinAn.	Absolute	Dominant		Dominance Test worksheet:
ree Stratum (Plot size: <u>10 だいかか</u>)	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:3_ (A)
				Total Number of Dominant
				Species Across All Strata:3(B)
	_	1		
			-	Percent of Dominant Species That Are OBL, FACW, or FAC:(OO(A/B)
/				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
50% of total cover:	-			OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10 × 10 M)		1.000 55 15.0		FACW species x 2 =
QUECUS NIGIA	70	15	TAC.	FAC species x 3 =
Tlex opaca	5	at	EHU	FACU species x 4 =
linus taeda		-4-	The	UPL species x 5 =
PINUS TREAD		<u></u>	EAC	Column Totals: (A) (B)
Liquidamba styraciflua	_10_	-5-	FAC	
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
		·		2 - Dominance Test is >50%
	28		_	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: _ /9	200% -	= Total Cove	7.6	4 - Morphological Adaptations ¹ (Provide supporting
	_ 20% 0	total cover:_	11.4	data in Remarks or on a separate sheet)
ferb Stratum (Plot size: <u>しんべいの</u>)				Problematic Hydrophytic Vegetation ¹ (Explain)
·				¹ Indicators of hydric soil and wetland hydrology must
			-	be present, unless disturbed or problematic.
·			<u></u>	Definitions of Four Vegetation Strata:
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
	1			more in diameter at breast height (DBH), regardless of height.
			-	
				Sapling/Shrub - Woody plants, excluding vines, less
0.				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
1		121.30-20 A	-	Herb - All herbaceous (non-woody) plants, regardless
The second s		= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:	_ 20% of	total cover:_		Woody vine - All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot size: 16 XIDM)	-		The	height.
LODICPLE isponica	9	-4-	FAC	
LUNICH A POOL -		J		
51		-		
51	_		_	10 m m m
J1	=	\equiv		Hydrophytic Vegetation
J1	5		_	Hydrophytic Vegetation Present? Yes No
50% of total cover: 2,5		Total Cove		Vegetation

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Depth	cription: (Describe	to the der	oth needed to de	ocument the	indicator	or confirm	n the absence of ir	ndicators.)	
	Matrix			ledox Feature					
(inches)	Color (moist)	%	Color (moist		s Type'	Loc ²	Texture	Remarks	5
D - 6	IOYR 5/4	100					SEL	di serela	
	1.10 11	100			-				
12	DY2 7/4	80	10KR 6/5	20	_C.	M	5		
	2		e						
		·							
1.			-	_					
		·							
					-				
			9		-	-			
T		lation DM		MC-Mooko	- Cond Cr		² Lacation: PL-Pr	ore Lining, M=Matri	~
Type: C=Co Tydric Soil	oncentration, D=Dep	euon, Rivi	-Reduced Math	C, INIO-IVIASKEC	a Sand Gr	anis.	Indicators	for Problematic I	A. Hydric Soils ³
12.1.1.2.2.2.2.2			Dark C.	faco (97)				Muck (A10) (MLRA	
Histosol	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			face (S7) Relow Surfa				Prairie Redox (A16	
and the second se	pipedon (A2)			e Below Surfa k Surface (S9				RA 147, 148)	0)
	istic (A3) en Sulfide (A4)			R Surface (S9 Sleyed Matrix)		(47, 140)		nont Floodplain Soil	(F19)
	d Layers (A5)			Matrix (F3)	(14)			RA 136, 147)	
the second se	ick (A10) (LRR N)			ark Surface (I	-6)			Shallow Dark Surfa	ce (TF12)
	d Below Dark Surface	e (A11)		Dark Surface				(Explain in Remark	and the second sec
	ark Surface (A12)		and the second s	epressions (F				Contract di contratto	
	Aucky Mineral (S1) (L	RR N.	and the second se	iganese Mass	and the second second	LRR N.			
	A 147, 148)			A 136)		and the			
	Bleyed Matrix (S4)			Surface (F13)	(MLRA 1	36, 122)	³ Indicato	ors of hydrophytic vi	egetation and
	Redox (S5)			t Floodplain S				d hydrology must be	
	Matrix (S6)			ent Material (F				disturbed or proble	matic.
	Layer (if observed):	Are and							
Type:									
Depth (in	ches) [,]						Hydric Soil Pre	sent? Yes	No L
Remarks:	uncoy						1.1.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	77070 - 977	- xc

Project/Site: 1 85	City/County:	nenoluco	Sampling Date: 13-11/15
Project/Site: 175 Applicant/Owner: SCDOT	City/County,	State:	
	UCTOR Section Towns		the second s
Investigator(s): <u>A.Fracer, E. Morgan</u> , <u>SIB</u> Landform (hillslope, terrace, etc.): <u>AL pression</u> Subregion (LRR or MLRA): <u>LRR - P</u> Lat: <u>3</u> Soil Map Unit Name: <u>BC - Buncombe</u> Lut Are climatic / hydrologic conditions on the site typical for th Are Vegetation <u>YCS</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> Are Vegetation <u>ND</u> , Soil <u>ND</u> , or Hydrology <u>NO</u> SUMMARY OF FINDINGS – Attach site map Hydrophytic Vegetation Present? Yes <u>Ves</u>	Local relief (conca S.115634 Umy Sand is time of year? Yes significantly disturbed? naturally problematic? ^{No} showing sampling p	ve, convex, none): <u></u>	Cave Slope (%): O 729 Datum: WAD83 Jassification:
	lo within a	Wetland? Yes	No
Vegetation recently cl	eared		
HYDROLOGY			
Wetland Hydrology Indicators:	muñ.		/ Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all			ce Soil Cracks (B6)
	e Aquatic Plants (B14)		ely Vegetated Concave Surface (B8)
	Irogen Sulfide Odor (C1)		age Patterns (B10) Trim Lines (B16)
	dized Rhizospheres on Livi sence of Reduced Iron (C4		eason Water Table (C2)
	cent Iron Reduction in Tilled		sh Burrows (C8)
	n Muck Surface (C7)		ation Visible on Aerial Imagery (C9)
	er (Explain in Remarks)		ed or Stressed Plants (D1)
Iron Deposits (B5)		Geom	orphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallo	ow Aquitard (D3)
🗶 Water-Stained Leaves (B9)			topographic Relief (D4)
Aquatic Fauna (B13)		V FAC-I	Neutral Test (D5)
Field Observations:			
	epth (inches): 6-12		
	epth (inches): 0	in the interior	
Saturation Present? Yes Ves No De (includes capillary fringe)	epth (inches):	Wetland Hydrology	Presentr res No
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous insp	pections), if available:	
Remarks:			
Remains.			
			1
			· · · · · · · · · · · · · · · · · · ·

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

Sampling Point: WDD-2 Wet

	Absolute	Dominant		Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size:) 1)	<u>% Cover</u>	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC		/ (A)
2	-			Total Number of Dominant Species Across All Strata:	4	(B)
4 5	·			Percent of Dominant Species That Are OBL, FACW, or FAC	: 100) (A/B)
6	·			Prevalence Index worksheet		
7				Total % Cover of:		. hu
		= Total Cov		OBL species		
50% of total cover:	20% of	total cover:				
Sapling/Shrub Stratum (Plot size: 10110m)	100	1. ·		FACW species		
1. <u>Salix nigra</u>	10	9	OBL			
2. Populus neteropnylla	10	4-	OBL	FACU species		
3		<u> </u>	_	UPL species		
4				Column Totals:	(A)	(B)
5				Prevalence Index = B/A	-	
3				Hydrophytic Vegetation Indi		
7				1 - Rapid Test for Hydroph		ation
В			_	X 2 - Dominance Test is >50		duon
9	· · · · ·			3 - Prevalence Index is ≤3	and the second sec	
		= Total Cov		4 - Morphological Adaptat		ido cuppodina
50% of total cover: 7, 5	20% of	total cover:	3			
Herb Stratum (Plot size: <u>SySm</u>)				data in Remarks or on		
1. Jonas effusus	20	11	FACW	Problematic Hydrophytic V	/egetation'	(Explain)
2. Anndinance gigantia	10	U	FACW	And a second second second	in and a second	
3.		5		¹ Indicators of hydric soil and w be present, unless disturbed o		
4					11 12 12 12 12 12	lic.
5				Definitions of Four Vegetation	on Strata:	
6		_		Tree - Woody plants, excludin		
-	·			more in diameter at breast hei	ght (DBH),	regardless of
				height.		
8			<u> </u>	Sapling/Shrub - Woody plant		
9			·	than 3 in. DBH and greater tha m) tall.	in or equal	to 3.28 ft (1
10		·	$ \rightarrow $	111/ 180.		
11			<u> </u>	Herb - All herbaceous (non-w	oody) plant	s, regardless
50% of total cover: 15	_30_	= Total Cover:		of size, and woody plants less	than 3.28 f	t tall.
	20% of	total cover:	10	Woody vine - All woody vines	greater th	an 3.28 ft in
Woody Vine Stratum (Plot size:)	/	-		height.	10140-010	
	-					
2						
3						
				Hydrophytic		
1,				Vegetation		
4			2 March 10		5	
45		= Total Cove	er	Present? Yes	No	

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Depth (inches) ()- 4		to the dep	pth needed to docur			or confirm	n the absence of li	naicators.)		
West of the second s	Color (moist)	%	Color (moist)	x Features %	Type ¹	Loc ²	Texture	Re	marks	
	10 YR 3/1	100					5	2.57		
4-12+	10 YR 4/4	80	10 YIR 5/8	20	C	m	5			
1.000										
					(
				_	-					
					-				_	
		_								
					-					
	oncentration, D=Dep Indicators:	letion, RM	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: PL=P	ore Lining, Ma s for Problem		dric Soils
Histosol			Dark Surface	e (S7)				Muck (A10) (
	pipedon (A2)		Polyvalue Be	low Surfac			148) Coasi	t Prairie Redo	ox (A16)	
	istic (A3) en Sulfide (A4)		Thin Dark Su Loamy Gleye			147, 148)		LRA 147, 148 nont Floodpla		(F19)
	d Layers (A5)		Z Depleted Ma		(2)			LRA 136, 147		(1.10)
_ 2 cm Mu	uck (A10) (LRR N)		Redox Dark	and the second s				Shallow Dark		
and the second se	d Below Dark Surfact ark Surface (A12)	e (A11)	Depleted Da Redox Depresentation				Other	(Explain in F	(emarks)	
	Aucky Mineral (S1) (L	.RR N,	Iron-Mangan			LRR N,				
	A 147, 148)		MLRA 13				31-41-44	and builden	inte une	station on
	Sleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo					ors of hydropi d hydrology n		
_ Stripped	Matrix (S6)		Red Parent N				and the second sec	disturbed or		
	Layer (if observed):									
Type:	alian'i						Hudric Soil Pre	eant? Ves	x	No
and the second sec	ches):		_	_			Hydric Soli Pre	sentr res	~	NO
Depth (in Remarks:	ches):						Hydric Soil Pre	esent? Yes	<u>×</u>	No

	WETLAN	ID DETER	RMINA	TION DATA		1. The second			Piedmo	nt Region		i.e.
Project/Site:	185				City/C	County: CV	evoker			Sampling Dat		
Applicant/Owner:										_ Sampling F	Point: W	DD-2
nvestigator(s): 1	M. Frazer	E. Mo	raali,	SiBurton	Secti	on, Townsh	ip, Range:_	BLACK	sbutc	4	_	
andform (hillslop	pe, terrace, el	tc.): bobe	mala	had	_ Local rel	ief (concave	e, convex, n	one): Con	Vex		Slope (%)	3%
Subregion (LRR o				Lat: 35.1	15094		Long:	81. 578	642	Da	tum: <u>NR</u>	1D23
Soil Map Unit Nar									classifica	tion:	-	
Are climatic / hyd	1 M 1			1		es	No	(If no, exp	lain in Re	marks.)		
Are Vegetation					11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	~	Are "Norm			esent? Yes	> .	No
Are Vegetation			 1.1.2 A 27 12 							s in Remarks.		
SUMMARY C												es. etc.
Hydrophytic Veg Hydric Soil Pres Wetland Hydrold Remarks:	getation Pres sent? ogy Present?	ent?	Yes Yes Yes	× No No No	x x	Is the Sa within a V	mpled Area			No	X	
IYDROLOGY	r		ece	tly cl	Lurec	/						
Wetland Hydro	20 TT 10 C		ne ola lu		en til					ors (minimum	of two re	quired)
Primary Indicato Surface Wa		of one is req	uired; c	and the second s	atic Plants ((B14)				Cracks (B6) etated Conca	vo Surfac	e (88)
High Water	and and the second second				Sulfide Od			1		ems (B10)		e (00)
Saturation (2 C C C C C C C C C C C C C C C C C C C						Roots (C3)			ies (B16)		
Water Mark	(B1)				of Reduce					Vater Table (C	22)	
the second se	Deposits (B2)					on in Tilled \$	Soils (C6)		fish Burro	and the stand of the stand of		100
Drift Deposi Algal Mat or	r Crust (B4)				k Surface (plain in Rei					ible on Aerial essed Plants	1	(Ca)
Iron Deposi					plantin i co	nanco,				Position (D2)	(,	
	Visible on Ae	rial Imagery	(B7)					Shal	low Aquit	ard (D3)		
	ned Leaves (E	39)							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ohic Relief (D	4)	
Aquatic Fau								✓ FAC	-Neutral 1	Fest (D5)		
Field Observati		Var	No. 1	/ Death de	chool:							-
Surface Water F Water Table Pre		Yes Yes	_ No _	Depth (in Depth (ir								5.4
Saturation Prese		Yes	No	Depth (ir			Wetland	Hydrology	Present	? Yes_	No	X
(includes capilla	ary fringe)					olderer beer			10.2	0.000	-130	
Describe Record	bed Data (str	eam gauge, i	monitori	ng well, aerial	photos, pre	avious inspe	ections), ir av	allable.				
Remarks:												

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	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
			Total Number of Dominant 4 Species Across All Strata: 4
		=	Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)
			Prevalence Index worksheet:
	3.712		Total % Cover of: Multiply by:
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		OBL species x 1 =
	total cover.	·	FACW species x 2 =
5	Ц	FAC	FAC species x 3 =
10	Ú.		FACU species x 4 =
	2		UPL species x 5 =
			Column Totals: (A) (B)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
	——————————————————————————————————————		∠ 2 - Dominance Test is >50%
15			3 - Prevalence Index is ≤3.0 ¹
	total cover:	er 3	4 - Morphological Adaptations ¹ (Provide supporting
_ 20/0 01	total cover.		data in Remarks or on a separate sheet)
20	U	FAC.	Problematic Hydrophytic Vegetation ¹ (Explain)
50	- U		
10.00	3		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	1		Definitions of Four Vegetation Strata:
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
			height.
·	÷	\longrightarrow	Sapling/Shrub - Woody plants, excluding vines, less
		(,	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
70	= Total Cove	er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
_ 20% of	total cover:	14	Woody vine - All woody vines greater than 3.28 ft in
	-		height.
	_	-	
	=	_	Hydrophytic Vegetation
_	= Total Cove		Hydrophytic Vegetation Present? Yes No
	 	= Total Cover; $= Total Cover;$ $= Total Cover;$ $= 5$	= Total Cover $= Total Cover$ $= 20% of total cover:$ $= 5$ $= 4C$ $= 10$

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	cription: (Describe	to the dep	oth needed to docun	nent the indicato	r or confirm	the absence of	indicators.)	
Depth	Matrix			Features	an Perman	and exception of		
(inches)	Color (moist)	%	Color (moist)	% Type	Loc ²	Texture	Remar	ks
0-12	11) YR 10/6	40	7.51R518	20 C	m	sand		
0.10	<u></u>		Transier					
	· · · · · · · · · · · · · · · · · · ·			·				
						ية يُستحج		
		_						
				· · · · · · · · · · · · · · · · · · ·		<u> </u>		
Type: C=C	Concentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Masked Sand (Grains.		Pore Lining, M=Mat	
	Indicators:					Indicato	rs for Problematic	: Hydric Soils ³ :
Histoso			Dark Surface	(S7)		2 cn	Muck (A10) (MLR	A 147)
	pipedon (A2)			low Surface (S8)	MLRA 147.		st Prairie Redox (A	
	listic (A3)		the second s	rface (S9) (MLRA	And the second second second		ALRA 147, 148)	
	en Sulfide (A4)			d Matrix (F2)	CONTRACTOR OF		mont Floodplain So	oils (F19)
	d Layers (A5)		Depleted Mat			()	ALRA 136, 147)	
	uck (A10) (LRR N)		Redox Dark S			Ven	Shallow Dark Surf	
	ed Below Dark Surfac	e (A11)	Depleted Dar	k Surface (F7)		Othe	er (Explain in Rema	arks)
_ Thick D	ark Surface (A12)		Redox Depre	ssions (F8)				
_ Sandy	Mucky Mineral (S1) (I	RR N,	Iron-Mangan	ese Masses (F12	(LRR N,			
	A 147, 148)		MLRA 13					a dia dia dia dia dia dia dia dia dia di
	Gleyed Matrix (S4)			ce (F13) (MLRA			tors of hydrophytic	
	Redox (S5)			odplain Soils (F1		1.4	nd hydrology must	
	d Matrix (S6)		Red Parent M	Material (F21) (ML	RA 127, 14	7) unles	s disturbed or prob	lematic.
	Layer (if observed):							
lestrictive		_				1		X
Restrictive Type:						Hydric Soil P	resent? Yes	No_/
Type:	nches):							
Type: Depth (ir	1ches):	_						
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type:	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (ir	nches):							
Type: Depth (in	nches):							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region City/County: Cherokee I-35 Sampling Date: 12 Project/Site: SCDOT Sampling Point: WEE Applicant/Owner: State: Investigator(s): M. Frazer _ Section, Township, Range: BI4(125burg Landform (hillslope, terrace, etc.): deoression Local relief (concave, convex, none): CONCAVE Slope (%): Lat: 35.1159/7 Long: -81 Datum: NADS Subregion (LRR or MLRA): - 779 Soil Map Unit Name: Mixed allivial land NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) No Are Vegetation No_, Soil No, or Hydrology No_ significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation No , Soil <u>No</u> , or Hydrology <u>No</u> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No is the Sampled Area Hydric Soil Present? Yes X No within a Wetland? Yes Wetland Hydrology Present? No Remarks, Isslated pocket is flood plain forcet. photo @ WEE I pointing E HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) ____ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ____ Sparsely Vegetated Concave Surface (B8) Surface Water (A1) True Aquatic Plants (B14) ____ Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) × High Water Table (A2) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) X Saturation (A3) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Thin Muck Surface (C7) ___ Drift Deposits (B3) Stunted or Stressed Plants (D1) Other (Explain in Remarks) Algal Mat or Crust (B4) Geomorphic Position (D2) Iron Deposits (B5) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Microtopographic Relief (D4) Water-Stained Leaves (B9) X FAC-Neutral Test (D5) Aquatic Fauna (B13) Field Observations: Yes X No Depth (inches): Surface Water Present? Yes X No Depth (inches): 5urface Water Table Present? No Depth (inches): Sarface Wetland Hydrology Present? Yes K Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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ree Stratum (Plot size: //) XIOM)		Dominant Species?		Dominance Test worksheet:
Acer regindo	25	-4-	FAC	Number of Dominant Species (A)
J	5		FACW	Total Number of Dominant Species Across All Strata:(B)
		_		Percent of Dominant Species 75 That Are OBL, FACW, or FAC: 75 (A/B
				Prevalence Index worksheet:
	30	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:	6	OBL species x 1 =
pling/Shrub Stratum (Plot size: 10x 0m)	10	1.1.1	me	FACW species x 2 = FAC species x 3 =
ullings a styracifua	15	-9-	TAL	FACU species x 3 =
		4-	THU	UPL species x 5 =
		<u> </u>		Column Totals: (A) (B)
			-	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
		<u> </u>		1 - Rapid Test for Hydrophytic Vegetation
	_			2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supportin
_50% of total cover: _/O	20% of	total cover:	4	data in Remarks or on a separate sheet)
rb Stratum (Plot size:5x.5m_)			100	Problematic Hydrophytic Vegetation ¹ (Explain)
Carte Intomescens?!				replemate riverophytic vegetation (Explain)
Dulichium annohum sin		4_	OBL	¹ Indicators of hydric soil and wetland hydrology must
		1		be present, unless disturbed or problematic.
			÷	Definitions of Four Vegetation Strata:
	·			Tree Meedy starts evolution visco 2 is (7.0 am) a
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
				height.
	· · · · · · · · · · · · · · · · · · ·			Sapling/Shrub - Woody plants, excluding vines, less
		÷		than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
	-16			Herb - All herbaceous (non-woody) plants, regardless
	15	= Total Cove	er 3	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 7.4	20% of	total cover:		Woody vine - All woody vines greater than 3.28 ft in
(Plot size:)				height.
	·			
				Z
/				Hydrophytic
		= Total Cove		Vegetation Present? Yes <u>+</u> No
		total cover:	- Ann	
50% of total cover:	20% of			

SOIL

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Sampling Point: WEE use

	cription: (Describe to	o the depl				or contirm	n the absence	or indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Features	Type ¹	Loc ²	Texture	Rema	arks
0-6	10418 5/2	80	104R5/8	20	(M	CL		
6-12	104R 512	60	1048518	20	Č	M	CL	7.54R -	5/8 20%
¹ Type: C=Co Hydric Soil	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.		L=Pore Lining, M=M ators for Problemat	
Black Hi Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy M MLRA Sandy R Sandy R	(A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) (LRR N) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) (LI A 147, 148) Bleyed Matrix (S4) Redox (S5) Matrix (S6)		Dark Surface Polyvalue Bel Thin Dark Sur Loamy Gleyed Depleted Matu Redox Dark S Depleted Darl Redox Depres Iron-Mangane MLRA 136 Diedemont Floe Red Parent M	ow Surface (S9) d Matrix (I rix (F3) Surface (F4 k Surface ssions (F8 ese Masse 5) ce (F13) (I odplain So	(MLRA 1 F2) 6) (F7) 3) es (F12) (MLRA 13 pils (F19)	47, 148) LRR N, 6, 122) (MLRA 14	148) (F \ ())))))))))	2 cm Muck (A10) (ML Coast Prairie Redox ((MLRA 147, 148) Piedmont Floodplain : (MLRA 136, 147) /ery Shallow Dark Su Other (Explain in Rem dicators of hydrophyti etland hydrology mus nless disturbed or pro	A16) Soils (F19) Inface (TF12) harks) Ic vegetation and it be present,
	Layer (if observed):						1		
Depth (in	ches):	_					Hydric Soi	l Present? Yes 🖉	No

Project/Site:	City/County: Cherokee Sampling Date: 131115
Applicant/Owner: SCDOT	State: SC Sampling Point: JUEE 1
A.L. Charles and a second se	UTZ/Section, Township, Range: BlackSburg
charge	Local relief (concave, convex, none): <u>(ONVCX</u> Slope (%): <u>5</u>
Soil Map Unit Name: Mixed alluvial Jeuhols	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes No (If no, explain in Remarks.)
Are Vegetation $N_{\mathcal{C}}$, Soil $N_{\mathcal{O}}$, or Hydrology $N_{\mathcal{O}}$ signific	antly disturbed? Are "Normal Circumstances" present? Ves No
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> natural	lly problematic? (If needed, explain any answers in Remarks.)
	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that an	
	atic Plants (B14) Sparsely Vegetated Concave Surface (B8)
	Sulfide Odor (C1) Drainage Patterns (B10)
	Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
	of Reduced Iron (C4) Dry-Season Water Table (C2)
	on Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck	CSurface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Ex	plain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Aquatic Fauna (B13) Field Observations:	
	ichee).
	chas).
Water Table Present? Yes No Depth (in	
Water Table Present? Yes No Depth (in Saturation Present? Yes No Depth (in (includes capillary fringe)	iches): Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (in	iches): Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (in Saturation Present? Yes No Depth (in (includes capillary fringe)	iches): Wetland Hydrology Present? Yes No

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<u>Tree Stratum</u> (Plot size: <u>10x10m</u>) 1. <u>Querces Nigra</u> 2. <u>Betula nigra</u> 3. <u>Liquidanting Styracitula</u> 4. <u>5.</u>	<u>% Cover</u> 40 20	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: The second se
6	_	_		
7				Prevalence Index worksheet:
10		= Total Cov		<u>Total % Cover of:</u> <u>Multiply by:</u> OBL species x 1 =
50% of total cover: <u>40</u>	20% of	total cover:	16	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 0000)	103	n.	Their	FAC species X 2 =
	10	-9-	THEO	FACU species x 4 =
LIQUSTON SINELISC	10	-9-	THE	
. Franklindnic sp.	40	<u> </u>	FAGN	
<u> </u>			(Column Totals: (A) (B)
· · · · · · · · · · · · · · · · · · ·	10			Prevalence Index = B/A =
L				Hydrophytic Vegetation Indicators:
<u></u>	-			1 - Rapid Test for Hydrophytic Vegetation
				V 2 - Dominance Test is >50%
<u> </u>	-72			 3 - Prevalence Index is ≤3.0 ¹
· · · · · · · · · · · · · · · · · · ·		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 17,3	2_ 20% of	total cover:	<u>+</u>	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5x5m)			The	Problematic Hydrophytic Vegetation ¹ (Explain)
L'herrostranon manieur		_4_	<u>+H(</u>	
2. L'anneva' japanica	-let	4	FAC	¹ Indicators of hydric soil and wetland hydrology must
3		2	_	be present, unless disturbed or problematic.
h				Definitions of Four Vegetation Strata:
5				이 같은 것이 같은 것이 같은 해외에서 있는 것이다.
h	<u></u>			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
·				height.
Q				
)				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
0.		_		m) tall.
1				Harb All berbanasia (ann siandis) alanta sanadisa
	45	= Total Cove	r	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 22.	5 20% of	total cover:	9	
Voody Vine Stratum (Plot size:)			1.1	Woody vine – All woody vines greater than 3.28 ft in height.
Sunta under de	150	И	FAC	ineight.
		2.		
			S	
			<u> </u>	1. The starts
<u>.</u>	_	=	=	Hydrophytic
	10			Hydrophytic Vegetation Present? Yes No
50% of total cover: _7, <	· · · · · · · · · · · · · · · · · · ·	Total Cover:		Vegetation

6214/I-35

Profile Des	cription: (Describe to	o the depti	n needed to docum	ent the in	ndicator	or confirm	n the absence	of indicato	rs.)		
Depth	Matrix		Redox	Features							
(inches)	Color (moist)		Color (moist)		Type'	Loc ²	Texture		Remark	s	
0-4	104R 414	100	the second secon				CL			_	
1-12	7.5 YR 16/16	55	104R414	45	1	M	CL				
				_							
_	·			_							
-					_		÷		_		_
			-	_				_			
							6				
100				_							
-		<u> </u>		-	-						
					-	<u> </u>		-			_
								÷		_	
1000						_					_
Type: C=C	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	=Masked	Sand Gra	ains.	² Location: Pl				
lydric Soil	Indicators:								oblematic	130-1-1-1-1	ils":
_ Histoso	a thread a second se		Dark Surface		1. Alerta				10) (MLRA	· · · · · · · · · · · · · · · · · · ·	
	pipedon (A2)		Polyvalue Bel				148) C		Redox (A1	6)	
	listic (A3)		Thin Dark Sur			47, 148)		(MLRA 14			
	en Sulfide (A4)		Loamy Gleyed		-2)		P	(MLRA 13	odplain Soi	15 (F 19)	
	d Layers (A5) uck (A10) (LRR N)		Depleted Mate		6)		V		Dark Surfa	ce (TF12)	
	d Below Dark Surface	(A11)	Depleted Dark						n in Remark		
	ark Surface (A12)	6 y	Redox Depres							30.1	
	Mucky Mineral (S1) (LI	RR N,	Iron-Mangane			LRR N,					
MLR	A 147, 148)		MLRA 136				100				
Sandy (Gleyed Matrix (S4)		Umbric Surfac						drophytic v		and
and the second s	Redox (S5)		Piedmont Floo					and the second sec	logy must b	a line was a set of the	
	d Matrix (S6)	_	Red Parent M	aterial (F:	21) (MLR	A 127, 14	7) un	ess disturb	ed or proble	ematic.	_
	Layer (if observed):										
Type:	an ch									162	+
Depth (in	iches):						Hydric Soil	Present?	Yes	No	_

oject/Site: I-05		City/County:/	revokee	Sampling Date: 12 1	115
	DOT	- 04 (CLA) - 2	State: State:	Sampling Point: WF	F GA
vestigator(s): M. Praz	rer + S. Burton + Fora	an Section, Township	Range: Blacks	burg-	
ndform (hillslope, terrace, etc	- A.)	Local relief (concave,		on cave Slope (%):	0
bregion (LRR or MLRA):	A	and a construction of a second	Long: - 81.578	the second se	
il Map Unit Name:BUnc					
				assification:	
	ons on the site typical for this time of			n in Remarks.)	
	Hes, or Hydrology No significan		Are "Normal Circumstan		
e Vegetation <u></u> , Soil	Va. or Hydrology <u>Ne</u> naturally	problematic? (If needed, explain any a	inswers in Remarks.)	
UMMARY OF FINDING	GS – Attach site map showi	ng sampling poin	nt locations, trans	ects, important features	, etc.
udranhutia Maastalian Drans	ent? Yes 🗹 No				
lydrophytic Vegetation Prese lydric Soil Present?	Yes X No	- Is the Sam	A CONTRACTOR OF	N	
Vetland Hydrology Present?	Yes < No	— within a We	etland? Yes_	No	
	water from culvert u	- In T-OC	A		3 - 1
		1	Awix & hydri	La von hydric soil	2
Some wet 100	king areas had bright	t saudy soil	S. Drains in	to floodplini, no	
direct conver	ction to viver.	Possibly ave o	11 isorrow pi	1	
	C IL I	10-2-0 1 - 0	a - 1		
DROLOGY					1.1.1
etland Hydrology Indicato)rs:		Secondary	Indicators (minimum of two requ	ired)
rimary Indicators (minimum	of one is required; check all that app	IV)	Surface	e Soil Cracks (B6)	
Surface Water (A1)		c Plants (B14)		ly Vegetated Concave Surface (B8)
High Water Table (A2)		ulfide Odor (C1)		ge Patterns (B10)	
K Saturation (A3)		nizospheres on Living I		rim Lines (B16)	
_ Water Marks (B1)		FReduced Iron (C4)		ason Water Table (C2)	
_ Sediment Deposits (B2)		Reduction in Tilled So		h Burrows (C8)	0
_ Drift Deposits (B3)		Surface (C7)		tion Visible on Aerial Imagery (C	9)
_ Algal Mat or Crust (B4)	Other (Expl	ain in Remarks)	A CONTRACT OF A CONTRACT OF	d or Stressed Plants (D1) orphic Position (D2)	
Iron Deposits (B5) Inundation Visible on Aer	ial Imagen((B7)			v Aquitard (D3)	
Water-Stained Leaves (B	NE - 2012/06-12-06-70 - 2012 - 2012 - 10-2012 - 20		- /	opographic Relief (D4)	
Andrei-Orginen reases (D	5)			eutral Test (D5)	
Aquatic Fauna (B13)					
_ Aquatic Fauna (B13)					
ield Observations:	Yes X No Depth (incl	nes): 0-6"	1		
eld Observations: urface Water Present?					
leid Observations: urface Water Present? /ater Table Present?	Yes X No Depth (incl	nes): <u>Surfal</u>	Wetland Hydrology F	resent? Yes 🔨 No_	
leid Observations: urface Water Present? /ater Table Present? aturation Present? ncludes capillary fringe)	Yes X No Depth (incl Yes X No Depth (incl	nes): <u>Jurfal</u> e nes): <u>Jurfal</u> e	Wetland Hydrology F	resent? Yes <u> </u>	
eld Observations: urface Water Present? /ater Table Present? aturation Present? ncludes capillary fringe)	Yes X No Depth (incl	nes): <u>Jurfal</u> e nes): <u>Jurfal</u> e	and the second second	resent? Yes <u>X</u> No	_
leid Observations: urface Water Present? /ater Table Present? aturation Present? ncludes capillary fringe)	Yes X No Depth (incl Yes X No Depth (incl	nes): <u>Jurfal</u> e nes): <u>Jurfal</u> e	and the second second	resent? Yes <u>K</u> No	_

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r Species? N N Total Cove of total cover: Total Cove Total Cove Total Cove		Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet:	(B (B
of total cover:	EACH	Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet:	<u>3</u> (8) <u>/00</u> (A/E <u>lultiply by:</u> (B)
of total cover:	EAC	Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: M OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A =	(8) (A/E
of total cover:	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:	(8) (A/E
of total cover:	FACM	That Are OBL, FACW, or FAC: Prevalence Index worksheet:	luitiply by:
of total cover:	12 FACM	That Are OBL, FACW, or FAC: Prevalence Index worksheet:	luitiply by:
of total cover:	12 FACM	Total % Cover of: M OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A =	(B,
of total cover:	12 FACM	Total % Cover of: M OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A =	(B,
of total cover:	12 FACM	OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A =	(B,
		FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A =	(B (B
		FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A =	(B,
		FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A =	(B
 _ = Total Cove	·	UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic V 2 - Dominance Test is >50%	
 _ = Total Cove	·	Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic V 2 - Dominance Test is >50%	
 _ = Total Cove		Prevalence Index = B/A = Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic V 2 - Dominance Test is >50%	s:
 _ = Total Cove		Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic V 2 - Dominance Test is >50%	5:
	,	1 - Rapid Test for Hydrophytic ∨ 2 - Dominance Test is >50%	
= Total Cove		2 - Dominance Test is >50%	/egetation
= Total Cove		2 - Dominance Test is >50%	
= Total Cove		3 - Prevalence Index is ≤3.0 ¹	
_ = Total Cove of total cover:_	r		
of total cover:		4 - Morphological Adaptations ¹ ((Provide supportin
	x	data in Remarks or on a sepa	and the second second second
		Problematic Hydrophytic Vegeta	
			Contraction of the second s
		¹ Indicators of hydric soil and wetland	i hydrology must
		be present, unless disturbed or prob	lematic.
	<u> </u>	Definitions of Four Vegetation Stra	ata:
	÷	Tree - Woody plants, excluding vine	as 3 in (7.6 cm) (
		more in diameter at breast height (D	
		height.	
		Sapling/Shrub - Woody plants, exc	luding vines, less
-		than 3 in. DBH and greater than or e	
$\rightarrow \rightarrow$		m) tall.	
-		Herb - All herbaceous (non-woody)	
	r	of size, and woody plants less than 3	3.28 ft tall.
of total cover:_		Woody vine - All woody vines great	ter than 3.28 ft in
	-	height.	ell fiel and some
		Contraction of the Contraction o	
		Hydrophytic	
			ło
 A start of the sta	r	Fresentr Tes N	<u> </u>
or total cover:_			
	of total cover:		Definitions of Four Vegetation Str Tree – Woody plants, excluding vine more in diameter at breast height (D height. Sapling/Shrub – Woody plants, excluding vine more in diameter at breast height (D height. Sapling/Shrub – Woody plants, excluding vine more in diameter at breast height (D height. Tree – Woody plants, excluding vine more in diameter at breast height. Herb – All herbaceous (non-woody) of size, and woody plants less than 3 woody plants less than 3 height. Woody vine – All woody vines great height. Hydrophytic Yegetation Present? Yes X N

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Sampling Point: WFF wet

6A

		- A							oling Point: <u></u>
Profile Desc	ription: (Describe to	o the depth				or confirm	the absence	of indicators.)	
Depth	Matrix			Features		Loc ²	Texture		emarks
inches)	Color (moist)		Color (moist)		_Type'	LOC	the second se		endiks
2-4	104R 4/2	100%					-SL		1
4-12+	104K714	10%	7.54R5/3	30	C	M		soils	disturbed
-				-					
					-				
	· · · · · · · · · · · · · · · · · · ·								
		·		-				10.00	
		, ,					200		
		,) ;							
	·								
					-		<u> </u>	*	
		-			-				
	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	=Masked	Sand Gr	ains.		-Pore Lining, N	
lydric Soll I									matic Hydric Soils ³ :
Histosol	the second se		Dark Surface					cm Muck (A10)	
	lipedon (A2)		Polyvalue Bel				148) <u> </u>	oast Prairie Rec (MLRA 147, 14	
Black His Hydrogram	stic (A3) n Sulfide (A4)		Thin Dark Sur Loamy Gleyer			47, 140)	P	iedmont Floodpl	
	Layers (A5)		Z Depleted Mat		-/			(MLRA 136, 14	
	ck (A10) (LRR N)		Redox Dark S		6)		V		k Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dar				_ 0	ther (Explain in	Remarks)
	irk Surface (A12)		Redox Depres						
	lucky Mineral (S1) (Ll	RR N,	Iron-Mangane	the second second	es (F12) (LRR N,			
	147, 148)		MLRA 136				31-1		to all a compatibilities and
and the second sec	leyed Matrix (S4)		Umbric Surface Piedmont Flo						phytic vegetation and must be present,
	edox (S5)		Red Parent M	and the second second second				less disturbed of	
Stripped	Matrix (S6)			Contract Cont. C.	any frame.			- 4.5 - 0.4 - 410-7 - 4 - 5 - 5	P. S.
	Matrix (S6) ayer (if observed):						7		
estrictive L	Matrix (S6) .ayer (if observed):		Neu Parent W						
testrictive L Type:	ayer (if observed):						Hydric Soil	Present? Ye	s_K_ No
Restrictive L Type: Depth (ind	ayer (if observed):						Hydric Soil	Present? Ye	s_K_ No
Restrictive L Type: Depth (ind	ayer (if observed):		-				1.		s_K_ No
Restrictive L Type:	ayer (if observed):	5 6 1	-	2	N.C.		1.		s_K_ No
testrictive L Type: Depth (ind	ayer (if observed): thes): Contains	5 6 1	- nosaic of	2 hz	de'ic .	t nor	hydric	soils.	
testrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	2 hz	deic .	+ nor	hydric	soils.	
testrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	-	2 ho	deir.	t nor	hydric	soils.	
Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	hy al j	deir.	t nor	hydric	soils.	
Type: Depth (ind	ayer (if observed): thes): Contains	s a j best	- nosaic of	al j	de'ic. vdqc.	t nor	hydric	soils.	
estrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	ی ام ن اله	de'ic . vdgc.	+ nor	hydric	soils.	
estrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a i	- nosaic of	a hy	deic. udge.	t nor met	hydric	soils.	
estrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	a ho	de'ic. udge	t nor	hydric	soils.	
estrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	al j	de'ic. vdgci	t nor	hydric	soils.	
estrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	al j	de'ic. Vdqc.	t nor	hydric	soils.	
estrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	ی ام ز اله	de'ic. vdgc.	t nor	hydric	soils.	
estrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a i	- nosaic of	al j	de'ic - udge.	t nor	hydric	soils.	
Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	al j	de'ic. vdgci	t nor	hydric	soils.	
Restrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	al j	de'ic.	t nor	hydric	soils.	
testrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	al j	de'ic.	t nor	hydric	soils.	
Restrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	al is	de'ic vd q c	t nor	hydric	soils.	
Type: Depth (ind	ayer (if observed): thes): Contains	s a i	- nosaic of	ی ام ن	de'ic vdgc	t nor	hydric	soils.	
estrictive L Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	al j	de'ic vdgc	t nor	hydric	soils.	
Type: Depth (ind	ayer (if observed): thes): Contains	s a j	- nosaic of	al j	de'ic. Vdgc.	t nor	hydric	soils.	

Project/Site: <u>185</u> Applicant/Owner: <u>SCDOT</u> nvestigator(s): <u>N Frazer</u> andform (hillslope, terrace, etc.): Subregion (LRR or MLRA): <u>CRA-P</u> Soil Map Unit Name: <u>Buncom</u> Are climatic / hydrologic conditions or Are Vegetation <u>No</u> , Soil <u>V6</u> , Are Vegetation <u>No</u> , Soil <u>No</u> ,	City <u>A S. Burton</u> sec <u>Slape</u> Lat: <u>35,117,047</u> Lat: <u>35,117,047</u> Lat: <u>35,117,047</u> Local re Local	NWI classification: Yes No (If no, explain in Remarks.) turbed? Are "Normal Circumstances" present? Yes No
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes <u>X</u> No Yes No <u>X</u> Yes No <u>X</u>	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one	True Aquatic Plants Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduce Recent Iron Reduce Thin Muck Surface Other (Explain in Reduce)	Odor (C1) Drainage Patterns (B10) heres on Living Roots (C3) Moss Trim Lines (B16) ccd Iron (C4) Dry-Season Water Table (C2) ction in Tilled Soils (C6) Crayfish Burrows (C8) e (C7) Saturation Visible on Aerial Imagery (C9)
Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland Hydrology Present? Yes <u>No X</u>
Remarks:		

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(AVID M	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size: <u>(DX 10 M)</u>) 1Quercus Array	30	Species?	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:(0) (A)
2. Retala nigra	20	y	FACW	Total Number of Dominant Species Across All Strata:() (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC:() (A/B
·			<u> </u>	Prevalence Index worksheet:
	60		-	Total % Cover of: Multiply by:
50% of total cover: _2		= Total Cov		OBL species x 1 =
apling/Shrub Stratum (Plot size: 1/ X10 M)	2070 01	total cover.	10	FACW species x 2 =
Platanus occidentalis	<	14.	FACIN	FAC species x 3 =
Querris nor r	5	-9	FAC:	FACU species x 4 =
		-9-	1.102	UPL species x 5 =
				Column Totals: (A) (B
				Prevalence Index = B/A =
		1000		Hydrophytic Vegetation Indicators:
				 1 - Rapid Test for Hydrophytic Vegetation
				1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 2 - Dominance Test is >50%
	16			3 - Prevalence Index is ≤3.0 ¹
50% of total cover:		= Total Cover		4 - Morphological Adaptations ¹ (Provide supportin
erb Stratum (Plot size:	20%01	total cover.	~~~	data in Remarks or on a separate sheet)
Micro stearion Vimineum	60	(1):	Fhe	Problematic Hydrophytic Vegetation ¹ (Explain)
	10		Ehr	
	- <u>-'v</u>	_ <u></u>	FAC	¹ Indicators of hydric soil and wetland hydrology must
			;	be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
			<u> </u>	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
	<u> </u>			more in diameter at breast height (DBH), regardless o
		-		height.
				Sapling/Shrub - Woody plants, excluding vines, less
1			<u> </u>	than 3 in. DBH and greater than or equal to 3.28 ft (1
)				m) tall.
ý				Herb - All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3	20% of	total cover:	14_	Woody vine - All woody vines greater than 3.28 ft in
oody Vine Stratum (Plot size:)	1 G		-	height.
Lonicera jupomica	5	14	FAC	
~		1		
		1		
				Hydrophytic
				Vegetation
	5 .	Total Cove	er	Present? Yes No
50% of total cover: 2.	5_ 20% of	total cover:	4	
emarks: (Include photo numbers here or on a separate	sheet.)			
an a	1. 10 L 10 V			

SOIL

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Depth	cription: (Describe t Matrix	to the cop		x Features		or commune			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture	Remarks	
0-12	104R7/4	80	10487/2	20	D	M	<u>st</u>	disturbed	ł.
	oncentration, D=Depl	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains, 3	² Location: PL=P	ore Lining, M=Matrix. s for Problematic Hydri	ic Soils ¹ :
Histosol Histic E Black H Hydroge Stratifie 2 cm Mi Deplete Thick D Sandy M MLRJ Sandy F Sandy F			 Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depredimentation Iron-Mangan MLRA 13 Umbric Surfa Piedmont Flue Red Parent I 	elow Surfa urface (S9) ed Matrix (trix (F3) Surface (F rk Surface essions (Fi esse Massi (6) ace (F13) (oodplain S	(MLRA * F2) (6) (F7) 8) es (F12) ((MLRA 1: oils (F19)	LRR N, 16, 122) (MLRA 148	48) 2 cm (M) Piedn (M) Very Other ³ Indicate) wetlan	Muck (A10) (MLRA 147) t Prairie Redox (A16) LRA 147, 148) nont Floodplain Soils (F1 LRA 136, 147) Shallow Dark Surface (T (Explain in Remarks) ors of hydrophytic vegeta d hydrology must be pre disturbed or problematic) F12) ation and sent,
Restrictive Type:	Layer (if observed):		-				Hydric Soil Pre	sent? Yes	No K
Remarks:									

Project/Site: 18		City	//County:	uroku		ampling Date: 13/61/15	2.11
pplicant/Owner:		. ata				Sampling Point: WGG -	d
nvestigator(s): <u>E. Margan</u>			ction, Township		Slacks burg		-
andform (hillslope, terrace, etc.		and the second se	elief (concave,	convex, nor			
Subregion (LRR or MLRA):	K-P	Lat: 35.115.483		Long:	11. 580303	Datum: //AD8	53
Soil Map Unit Name: Bun (combe loa	my sand			NWI classificati	on:	
re climatic / hydrologic conditi	ons on the site typi	cal for this time of year?	Ves_1	No 1	(If no, explain in Ren	narks.)	
re Vegetation No., Soil /	JO, or Hydrology	NO significantly dist	turbed?	Are "Normal	Circumstances" pre	sent? (Yes No	-
re Vegetation NO, Soil N				(If needed, e	explain any answers	in Remarks.)	
SUMMARY OF FINDING				nt locatio	ons, transects, i	mportant features, et	tc.
Hydrophytic Vegetation Prese Hydric Soil Present? Wetland Hydrology Present?	ent? Yes _ Yes _ Yes _	X No X No X No	ls the Sam within a W	A 10 Mar 20 1 1 1	Yes 📉	No	
IYDROLOGY							
Wetland Hydrology Indicato	ins:				Secondary Indicato	rs (minimum of two required	<u>1)</u>
Primary Indicators (minimum	of one is required;	check all that apply)			Surface Soil Cr		
X Surface Water (A1)		True Aquatic Plant				ated Concave Surface (B8)	
High Water Table (A2)		Hydrogen Sulfide (Dente (C2)	Drainage Patte		
$\frac{\times}{\Delta}$ Saturation (A3) $\frac{\times}{\Delta}$ Water Marks (B1)		Oxidized Rhizosph Presence of Reduct	and the second sec	Roots (C3)	Moss Trim Line Dry-Season With the season withe season with the season with the season with the season with	1.2 South State Sta State State S	
Sediment Deposits (B2)		Recent Iron Reduc		oils (C6)	Crayfish Burrow		
Drift Deposits (B3)		Thin Muck Surface			Saturation Visit	ole on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Other (Explain in R	Remarks)		Contraction of the second s	ssed Plants (D1)	
Iron Deposits (B5)					Geomorphic Po		
Inundation Visible on Aer					Shallow Aquita Microtopograp		
Aquatic Fauna (B13)	9)				FAC-Neutral To	and the second	
Field Observations:							-
Surface Water Present?	Yes X No	Depth (inches):(0-12	10.			
Vater Table Present?	Yes X No					x	
Saturation Present?	Yes X No	Depth (inches):	Jrfaco	Wetland I	lydrology Present?	Yes <u>No</u>	-
includes capillary fringe) Describe Recorded Data (stre	am gauge, monito	ring well, aerial photos, p	previous inspec	tions), if ava	ailable:		
Remarks:							-
Nemarka.							14

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

Sampling Point: WGG-2 WCf

	Dominant		Dominance Test worksheet:
<u>% Cover</u> 40	Species?	FAC	Number of Dominant Species (A)
	g	FAC	Total Number of Dominant Species Across All Strata:(B)
	=	_	Percent of Dominant Species That Are OBL, FACW, or FAC:()() (A/B)
			Prevalence Index worksheet:
50	Total Cour		Total % Cover of:Multiply by:
20% of		1.45	OBL species x 1 =
		-	FACW species x 2 =
30	14	FAC	FAC species x 3 =
20	1		FACU species x 4 =
	3	1000	UPL species x 5 =
			Column Totals: (A) (B)
			(b)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			✓2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 ¹
=	Total Cove	er in	4 - Morphological Adaptations ¹ (Provide supporting
20% of t	otal cover:	10	data in Remarks or on a separate sheet)
10		-	Problematic Hydrophytic Vegetation ¹ (Explain)
12	_4_	FHC	
			for the second s
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Definitions of Four Vegetation Strata:
			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of
			height.
			Sapling/Shrub - Woody plants, excluding vines, less
		<u> </u>	than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
			Herb - All herbaceous (non-woody) plants, regardless
15 =	Total Cove	er ->	of size, and woody plants less than 3.28 ft tall.
20% of t	otal cover:	3	Woody vine - All woody vines greater than 3.28 ft in
	~		height.
5.00.0	-	£	
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			Hydrophytic Vegetation
=	Total Cove	»r	Vegetation
	Total Cove		Vegetation V
	$\frac{\frac{6}{20}}{\frac{16}{20}}$	$\frac{\frac{40}{16}}{\frac{4}{3}}$	$\frac{\% \text{ Cover Species? Status}}{\frac{40}{16} + \frac{7}{FAC}}$ $\frac{50}{76} = \text{Total Cover}}{20\% \text{ of total cover}} \frac{10}{70}$ $\frac{30}{200} + \frac{7}{70}$ $\frac{15}{200} + \frac{7}{70}$

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C	2	t	11
э	v		ы.

Sampling Point: WGG-2 wet

(inches)	Matrix Color (moist)	%	Color (moist)	x Features %	Type ¹	Loc ²	Texture		Remarks
0-4	104r 4/2	80	1045 616	20	1	m		00.11	(Winding)
1.			1.42	20	-6-		11 11	2 11	
4-12	1048612	70	ITyr6/6	20	_6_	m			
						2			
						·			
		_			1000				
	8			_					
	-	-		3 				-	
					-				
					_				
Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.			ining, M=Matrix.
lydric Soil	Indicators:						Indic	ators for	Problematic Hydric Soils ³ :
Histoso	I (A1)		Dark Surface	(S7)				2 cm Muc	k (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				, 148)		irie Redox (A16)
	listic (A3)		Thin Dark Su			47, 148)			147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)		_		Floodplain Soils (F19)
	d Layers (A5)		Z Depleted Ma		201				136, 147) low Dark Surface (TF12)
	uck (A10) (LRR N) d Below Dark Surfac	0 (011)	Redox Dark Depleted Da	and the second sec					plain in Remarks)
	ark Surface (A12)	e (A11)	Redox Depre				-		plain in recinance,
	Mucky Mineral (S1) (I	RR N.	Iron-Mangan			LRR N,			
	A 147, 148)		MLRA 13						
Sandy (Gleyed Matrix (S4)		Umbric Surfa						f hydrophytic vegetation and
	Redox (S5)		Piedmont Flo						drology must be present,
	d Matrix (S6)		Red Parent I	Material (F	21) (MLR	A 127, 14	7) u	nless dist	urbed or problematic.
	Layer (if observed):								
Type:	12102 - C								
Depth (in	iches):						Hydric Sol	I Present	? Yes X No
Remarks:									

Project/Site: 85	City/County: Cherokee Sampling Date: 12/01/15
Applicant/Owner: SCDOT	State: SC Sampling Point: WGG-2 VP
Investigator(s): E. Malgan + S. Burton	Section, Township, Range: BlackSburg
Landform (hillslope, terrace, etc.): $\underline{\leq /_{0} P E}$ Subregion (LRR or MLRA): $\underline{RR - P}$ Lat: $\underline{3S}$.	Local relief (concave, convex, none): NONE Slope (%): 2% 115483 Long: -81.560303 Datum: NAD 83 4 Jand NWI classification:
	이 가지 않는 것 같은 것 같
Are Vegetation No, Soil No, or Hydrology No signi	
Are Vegetation <u>ND</u> , Soil <u>ND</u> , or Hydrology <u>ND</u> natu	
SUMMARY OF FINDINGS – Attach site map sho	owing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area X Is the Sampled Area Is the Sample Area <
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	
High Water Table (A2) Hydroge Saturation (A3) Oxidized Water Marks (B1) Presend Sediment Deposits (B2) Recent Drift Deposits (B3) Thin Mud Algal Mat or Crust (B4) Other (B) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)	apply)
Field Observations:	
	(inches): (inches): \
	(inches): Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aeria	ai photos, previous inspections), il available:
Remarks:	

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Tree Stratum (Plot size:)		Dominant		Dominance Test worksheet:
1. (VERLUS DALIOS	30	Species?	in the second se	Number of Dominant Species 5
2. Quercus nigra		-3-	FAC	That Are OBL, FACW, or FAC: (A)
	-10	-y-	THU	Total Number of Dominant
		- <u></u>	<u> </u>	Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 71 (A)
5				That Are OBL, FACW, or FAC: (A/
6		Č er s		Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10/10 m)		total ouver.		FACW species x 2 =
1 Liquidambar Styracifilia	30	W .	FAC	FAC species x 3 =
2. Querius nigra	15	-u-	FAC	FACU species x 4 =
3.		9		UPL species x 5 =
4				Column Totals: (A) (E
5				
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
•	45	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 22 . S	20% of	total cover:	9	4 - Morphological Adaptations ¹ (Provide supporti
Herb Stratum (Plot size: 5×5 m)				data in Remarks or on a separate sheet)
1. Lonicera aponica	10	il	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
			TIL	
2. HEX JONES	5	-10		
2. HEX JONSY	5	- <u>-</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
2. Hex space ' 3. Linstrum switcher	5	- <u>5</u>		be present, unless disturbed or problematic.
2. Hex ganese 1 3. Ligestrum swichse 4.	5	- <u>70</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
2. Hex spaces 1 3. Ligestrum swickige 4. 5.	5	<u></u>	FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm)
2. <u>Hex ganese</u> 3. <u>Ligestrum sindnige</u> 4. 5 6.	5		FACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of
2. <u>//ex clarest /</u> 3. <u>Licestrum switne</u> 4. 5. 6. 7.	5 5	_	EACU EACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height.
2. <u>//ex clarest /</u> 3. <u>//or strum sindnige</u> 4 5 6 8	5	=	EACU EACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
2. <u>//ex consect /</u> 3. <u>Linesthum switchse</u> 4. 5. 6. 7. 8. 9.	5	=	EACU EACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height.
2. <u>//ex cranese /</u> 3. <u>/enerstrum sindnise</u> 4 5 6 7 8 9	5	=	EACU EACU	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
2. <u>//ex consect /</u> 3. <u>Linesthum switchse</u> 4. 5. 6. 7. 8. 9.	5			be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardles
2. <u>//ex cranese /</u> 3. <u>/enerstrum sindnise</u> 4 5 6 7 8 9	5	Total Cov		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2. <u>//ex.consec</u> / 3. <u>//ex.consec</u> / 4	5			be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
2. <u>//ex.conset /</u> 3. <u>Linestrum swithse</u> 4 5 6 7 8 9 10 11 50% of total cover: <u>//</u> <u>Woody Vine Stratum</u> (Plot size:)	5	Total Cov		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2. // EX CONSE / 3. // EX CONSE / 4	5	Total Cov		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
2. // Ex. Consect // 3. // Ex. Strum Structures 4.	5	Total Cov		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
2. // EX CONSE / 3. // EX CONSE / 4	5	Total Cov		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. // Ex. Consect	5	Total Cov		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. // Ex. Consect // 3. // Ex. Strum Structures 4.	<u>5</u> <u>5</u> <u>20% of</u>	Total Covi		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. // Ex. Consect	<u>5</u> <u>5</u> <u>20% of</u>	Total Cov		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

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	cription: (Describe to	o the dep	th needed to	docume	nt the ir	dicator	or confirm	n the at	sence o	of indicate	ors.)	
Depth	Matrix	0/	Color (moi		eatures %	Type ¹	Loc2	Tau	ture		Remarks	
(inches)	J.SYR 44	* 10	2.5 YR	2/2	30	Type	m		loam		Kemarka	
1-14	2.011 414	10	and th	2/2	20_	4	111	Sa	locum			
							نے ا					
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						_		-	_			
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					-		<u> </u>	-	_	Če		
						-	<u></u>					
							-					
			-		_			-				
Type: C=C	oncentration, D=Deple	tion RM	Reduced Mat	rix MS=	Masked	Sand Gr	ins	2) 002	tion: PL	=Pore Lini	ng, M=Matrix.	
Hydric Soll		aon, min	inconce wa	10-	Hadrou	ound On		Luud			oblematic Hy	dric Soils ³ :
Histosol			Dark S	Surface (S	57)						A10) (MLRA 1	
	pipedon (A2)					e (S8) (M	LRA 147,	148)	Co	ast Prairie	Redox (A16)	
	istic (A3)						47, 148)			(MLRA 14		Sec.
	en Sulfide (A4)			Gleyed	and the second second	-2)					odplain Soils	(F19)
	d Layers (A5)			ed Matrix	2 TO 1 TO	-				(MLRA 13	o, 147) / Dark Surface	/TE191
	uck (A10) (LRR N) d Below Dark Surface	(411)	and the second sec	Dark Su							in in Remarks	
and the second s	ark Surface (A12)	(0.1)		Depress						nei (Explo	in in remarks	,
	Aucky Mineral (S1) (LF	RR N.	and the second se	anganes			LRR N,					
	A 147, 148)	meest.		RA 136)					39-0			
	Gleyed Matrix (S4)			c Surface							ydrophytic veg	
	Redox (S5)						(MLRA 14				logy must be	
	Matrix (S6)		Red P	arent Ma	terial (F2	21) (MLR	A 127, 14	<u>//</u>	unie	ess disturb	ed or problem	auc.
	Layer (if observed):											×-
Type:	and a second		-					11.4			View	No X
10000000	ches)'	_			-			нуа	nc Soll I	Present?	Yes	No
Depth (in Remarks:												

Applicant/Owner: <u>SCDOT</u> nvestigator(s): <u>M. Frazer</u> , H	E Mean	Section, Townshi			ppling Point: WIT2
nvestigator(s): <u>Print of Char i I</u>	do objection				DI 1911 D
andform (hillslope, terrace, etc.):	P 26 IN	Local relief (concave			Slope (%):
Subregion (LRR or MLRA): LRR -			Long: <u>-771, 5</u>	the state of the second	Datum: MAD 83
Soil Map Unit Name: <u>MV - M</u>		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		NWI classification: _	
Are climatic / hydrologic conditions	 A state of the sta			explain in Remarks	See States and Second
Are Vegetation <u>Mp</u> , Soil <u>No</u>			Are "Normal Circl	umstances" present?	Yes No
Are Vegetation <u>Mo</u> , Soil <u>Mo</u>	, or Hydrology <u>///a</u> naturally	problematic?	(If needed, explai	n any answers in Re	marks.)
SUMMARY OF FINDINGS	- Attach site map showi	ng sampling po	int locations,	transects, impo	ortant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the San within a W	npled Area Vetland?	Yes No	
ive Phot	ter from multiplet d			SBR.	ALC PL
HYDROLOGY	2				
Wetland Hydrology Indicators:		8	Sec	ondary Indicators (m	inimum of two required)
Primary Indicators (minimum of on				Surface Soil Cracks	1
_ ≤ Surface Water (A1)		c Plants (B14)	and the second se		Concave Surface (B8)
K High Water Table (A2)		ulfide Odor (C1)		Drainage Patterns (I	
 Saturation (A3) Water Marks (B1) 		izospheres on Living Reduced Iron (C4)		Moss Trim Lines (B1 Dry-Season Water 1	and the second s
Sediment Deposits (B2)		Reduction in Tilled S		Crayfish Burrows (C	
Drift Deposits (B3)	Thin Muck S				Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Expla	ain in Remarks)	<u></u>	Stunted or Stressed	Plants (D1)
Iron Deposits (B5)				Geomorphic Position	
Inundation Visible on Aerial In	nagery (B7)			Shallow Aquitard (D	
Water-Stained Leaves (B9) Aquatic Fauna (B13)				Microtopographic Re FAC-Neutral Test (D	
Field Observations:				NO-Neutral Test (E	
	s 📈 No Depth (inch	ies):			
		ies): Surface			
	s 🗡 No Depth (inch	ies): Surface	Wetland Hydro	logy Present? Ye	s <u>X</u> No
(includes capillary fringe) Describe Recorded Data (stream g	nauge monitoring well aerial of	otos previous inspec	(ctions), if available		
	, , , , , , , , , , , , , , , , , , , ,			-	
Remarks:	the Kin				
	THAN THAN.				
hoir					
10.2					
Nois					
Kois					
Nois					-30
Nois					- (C)

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Tree Stratum (Plot size: 10x10 m)		Dominant		Dominance Test worksheet:
1. Ulmes Spp.		Species?		Number of Dominant Species (A)
2				Total Number of Dominant
4				Species Across All Strata: (B)
5				Percent of Dominant Species 769
5. <u></u>		9 - C.		That Are OBL, FACW, or FAC:(A/B)
7		-		Prevalence Index worksheet:
	25	= Total Cov		Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10x10 m)	- 10 B 1 C B.			FACW species x 2 =
Frank 1. 3 DENMAN 'MAN PA	5	4 -	FACW	FAC species x 3 =
		9		FACU species x 4 =
l		1.1		UPL species x 5 =
		_		Column Totals: (A) (B)
·				
				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
			<u> </u>	1 - Rapid Test for Hydrophytic Vegetation
3				2 - Dominance Test is >50%
)	5			3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 2.5		Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 515 m)	_ 20% 01	total cover.		data in Remarks or on a separate sheet)
. Awaduaria gidantea	-	Y	Eliziu	Problematic Hydrophytic Vegetation ¹ (Explain)
2. 1 : stown Sinense	2	-5-	FACU	
			FALV	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
·				height.
·				Sapling/Shrub - Woody plants, excluding vines, less
·	-	-		than 3 in. DBH and greater than or equal to 3.28 ft (1
0				m) tall.
1				Herb - All herbaceous (non-woody) plants, regardless
2	=	Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>3,5</u>	_ 20% of	total cover:	1.4	Woody vine - All woody vines greater than 3.28 ft in
Noody Vine Stratum (Plot size: SAS M)	-		Tian	height.
· Louicenz japonica	2	- <u>4</u> -	FAC	
0	-			
s		<u> </u>		
h				Hydrophytic
				Vegetation
		Total Cove	7	Present? Yes A No
50% of total cover: <u>ス.</u> 5	_ 20% of I	total cover:_	1	
Remarks: (Include photo numbers here or on a separate sh	leet.)			

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US Army Corps of Engineers

Sampling Point: WI-SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix **Redox Features** Loc² Texture Remarks (inches) Color (moist) % Color (moist) % Type 2.1.1 10 14 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils³: Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histosol (A1) Polyvalue Below Surface (S8) (MLRA 147, 148) Histic Epipedon (A2) Coast Prairie Redox (A16) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Black Histic (A3) Piedmont Floodplain Soils (F19) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) ✓ Depleted Matrix (F3) (MLRA 136, 147) Stratified Layers (A5) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Sandy Redox (S5) unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: upper end of ditch (WII.S) under 12 in by mpenetic (concret?) lager Depth (inches): Remarks:

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WETLAND DETERMIN	NATION DATA FORM - E	astern Mountain	s and Piedmo	nt Region	
Project/Site:	City/Cour	ity: Chevoke	e s	Sampling Date: 12	12/15
Applicant/Owner: SCDOT			State: SC	Sampling Point: W	FFU
	razer Section,	Township, Range:	3 lacks bur		
Landform (hillslope, terrace, etc.):510		concave, convex, none	: Convex	Slope (%):	5%
Subregion (LRR or MLRA):	Lat: 35. 19451		573427	Datum: MA	- C. 20 10 1
	alluvial land		NWI classifical		
Are climatic / hydrologic conditions on the site ty) No (I	f no, explain in Rei	and the second se	
Are Vegetation No_, Soil No_, or Hydrolog			Circumstances" pre		-
Are Vegetation No., Soil No., or Hydrolog			plain any answers		
SUMMARY OF FINDINGS - Attach					etc.
	¥				1
Hydrophytic Vegetation Present? Yes	No Is	the Sampled Area			
Hydric Soil Present? Yes		thin a Wetland?	Yes	No X	
Wetland Hydrology Present? Yes Remarks:	No_X				
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two requ	uired)
Primary Indicators (minimum of one is required	t check all that apply	3	Secondary Indicato	The P. P. M. Charles in States, March 44	lired)
Surface Water (A1)	True Aquatic Plants (B14	1 · · · ·	and the second second second	tated Concave Surface ((88)
High Water Table (A2)	Hydrogen Sulfide Odor (0		Drainage Patte		.00)
Saturation (A3)	Oxidized Rhizospheres o	the state of the set of the set	Moss Trim Line		
Water Marks (B1)	Presence of Reduced Iro			ater Table (C2)	
Sediment Deposits (B2)	Recent Iron Reduction in	Tilled Soils (C6)	Crayfish Burro	and the second sec	
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (C7) Other (Explain in Remark	-		ble on Aerial Imagery (C essed Plants (D1)	9)
Iron Deposits (B5)		-	Geomorphic P		
Inundation Visible on Aerial Imagery (B7)			Shallow Aquita		
Water-Stained Leaves (B9)			Microtopograp		
Aquatic Fauna (B13)			FAC-Neutral T	est (D5)	
Field Observations:	Death (inches):	- 11 · · · ·			_
Surface Water Present? Yes No Water Table Present? Yes No	Depth (inches):	54 H			. U II
	Depth (inches):		drology Present?	Yes No	<
(includes capillary fringe) Describe Recorded Data (stream gauge, monit		10,000		···· ··	<u>></u>
Describe Recorded Data (sitean gauge, moni	toning went aenar priotos, previou	a mapeciona ₂ , il avai	abie.		
Remarks:					
					- 10
*					

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1/1 viting	Absolute			Dominance Test works	heet:		
Tree Stratum (Plot size: 10/10m)	30		FAC	Number of Dominant Sp That Are OBL, FACW, o		5	(A)
Prolis Lodda		J	FAC	Total Number of Domina Species Across All Strat		5	(B)
			=	Percent of Dominant Sp That Are OBL, FACW, o		100.75,	(A/E
	_		\equiv	Prevalence Index work			
	45	= Total Cov	er	Total % Cover of:		and the second sec	
50% of total cover: 22	5 20% of	total cover:	7_	OBL species			
apling/Shrub Stratum (Plot size: 10 x10 m)				FACW species			
Acer regulado	20	14	FAC.	FAC species	x 3 =		-
	10			FACU species	x 4 =		1
		-9-	·	UPL species			
				Column Totals:			
				Prevalence Index	= B/A =		
· · · · · · · · · · · · · · · · · · ·				Hydrophytic Vegetation	and the second s		-
	<u>. </u>			1 - Rapid Test for H			
				2 - Dominance Test		vegetation	
	30	= Total Cov	er	3 - Prevalence Inde:			
50% of total cover:5	20% of	total cover:	10	4 - Morphological Ad	daptations	(Provide sup	oportir
lerb Stratum (Plot size: 5x5m_)		total option		data in Remarks	or on a sep	parate sheet)	C.
			e deux	Problematic Hydrop	hytic Veget	ation ¹ (Expla	nin)
Annalitaria algaritza	20	_4_	PACIN				
				Indicators of hudric soil	and wallow	a Grandeni	
· · · · · · · · · · · · · · · · · · ·		-		¹ Indicators of hydric soil be present, unless distur	hed or prol	a nyarology i hlematic	must
· · · · · · · · · · · · · · · · · · ·		· · · · ·					-
				Definitions of Four Veg	etation St	rata:	
				Tree - Woody plants, ex	cluding vin	es, 3 in. (7.6	cm) o
· · · · · · · · · · · · · · · · · · ·				more in diameter at brea	st height (D	BH), regard	less o
·				height.			
×				Sanling/Shauh Mand	ninnin au	مريحة والمراجع	S.C.
	1		1	Sapling/Shrub – Woody than 3 in. DBH and great	fer than or	equal to 3.28	6, Iess 8 ft /1
0.				m) tall.		equal to 0.20	2 11 (1
1.					The Tree S		
	20			Herb - All herbaceous (rdless
FOR stated sources //		= Total Cov		of size, and woody plant	s less than	3.28 ft tall.	
50% of total cover: //	20% of	total cover:	4	Woody vine - All woody	vines area	ter than 3.28	B ft in
Voody Vine Stratum (Plot size: 515m)	1200			height.			
Consider applica	20	_11	FAC				
N 1		1					
		-	C				
				and the second second			
	· · · · · · · · · · · · · · · · · · ·			Hydrophytic			
·				Vegetation	V.		
		= Total Cov		Present? Yes	<u> </u>	No	
50% of total cover:	20% of	total cover:	4				
Remarks: (Include photo numbers here or on a separate s	heet.)						
contante, finalidad priore numbero nere or on a separate a							

4

62H/I-85

rofile Desc	ription: (Describe to	o the dept	th needed to docu	ment the	indicator	or confirm	the abs	ence of indicat	ors.)	
Depth	Matrix			x Feature			204		20.00	65-
(inches)	Color (moist)	%	Color (moist)	%	Type'	_Loc ²	Textu		Remar	ks
5 - 0	7.5424/4	100	La				20			-
2 12 -	7.54 4/s	95	10484/3		<u> </u>	- 14	_50	L		
							G			
							-			
				-						
					-		-			
			-			<u> </u>	-		-	
				-						
								<u> </u>		
	Constant series		Lanna a morta a morta a morta				2			25
	ncentration, D=Deple	etion, RM=	Reduced Matrix, M	S=Masked	d Sand Gra	ains.		n: PL=Pore Lir		rix. Hydric Soils ³ :
Hydric Soil I Histosol			Dark Surface	e (S7)				2 cm Muck		
and the second se	ipedon (A2)		Polyvalue Br		ce (S8) (N	LRA 147,	148)	Coast Prairi		
Black Hi	stic (A3)		Thin Dark Si	urface (S9) (MLRA 1			(MLRA 1	47, 148)	
	n Sulfide (A4)		Loamy Gley		(F2)		-	Piedmont F	and the state of the second second	oils (F19)
	Layers (A5)		Depleted Ma Redox Dark		-6)			(MLRA 1 Very Shallo		200 (TE12)
	ck (A10) (LRR N)	(411)	Depleted Da				-	Other (Expl		
Depleted	Below Dark Surface									10 T.
and the second se	Below Dark Surface rk Surface (A12)	(ALI)	Redox Depr							
Thick Da Sandy M	rk Surface (A12) lucky Mineral (S1) (LI		Redox Depr Iron-Mangar	essions (F nese Mass	8)	LRR N,				
Thick Da Sandy M MLRA	rk Surface (A12) lucky Mineral (S1) (LI 147, 148)		Redox Depri Iron-Mangar MLRA 13	essions (F nese Mass 36)	8) es (F12) (3 Indiantam of 1	udenskudir -	and all an end
Thick Da Sandy M MLRA Sandy G	rk Surface (A12) lucky Mineral (S1) (LI 147, 148) leyed Matrix (S4)		Redox Depro Iron-Mangar MLRA 13 Umbric Surfa	essions (F nese Mass 36) ace (F13)	8) es (F12) ((MLRA 13	6, 122)	.8)			vegetation and
Thick Da Sandy M Sandy G Sandy R	rk Surface (A12) lucky Mineral (S1) (LI 147, 148)		Redox Depri Iron-Mangar MLRA 13	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14		³ Indicators of I wetland hydr unless disturi	ology must l	be present,
Thick Da Sandy M Sandy G Sandy R Stripped	rk Surface (A12) ucky Mineral (S1) (LI . 147, 148) leyed Matrix (S4) edox (S5)		Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14		wetland hydr	ology must l	be present,
Thick Da Sandy M Sandy G Sandy R Stripped	rk Surface (A12) ucky Mineral (S1) (LI 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6)		Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) .ayer (if observed):		Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) .ayer (if observed):		Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) .ayer (if observed):		Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) .ayer (if observed):		Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):		Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M MLRA Sandy G Sandy R Stripped estrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M MLRA Sandy G Sandy R Stripped testrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M MLRA Sandy G Sandy R Stripped testrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M MLRA Sandy G Sandy R Stripped testrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M MLRA Sandy G Sandy R Stripped testrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M MLRA Sandy G Sandy R Stripped Restrictive L Type:	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M Sandy G Sandy R Stripped Restrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,
Thick Da Sandy M MLRA Sandy G Sandy R Stripped testrictive L Type: Depth (inc	rk Surface (A12) lucky Mineral (S1) (Li 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed):	R N,	Redox Deprimentation Iron-Mangar MLRA 13 Umbric Surfa Piedmont Flag	essions (F nese Mass 8 6) ace (F13) oodplain S	8) es (F12) ((MLRA 13 Goils (F19)	6, 122) (MLRA 14	r)	wetland hydr unless disturi	ology must t bed or probl	be present,

	roke Sampling Date: IZ I3/15 State: SC Sampling Point:
pplicant/Owner: <u>SCDOT</u> nvestigator(s): M, Frazer Section, Township, F	01 1 1
	onvex, none):
	ong: <u>- 81. 5508 76</u> Datum: <u>NHDY3</u>
ioil Map Unit Name: 1111- mixed alluvial land	NWI classification:
re climatic / hydrologic conditions on the site typical for this time of year? Yes No	(If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology significantly disturbed? Are	e "Normal Circumstances" present? (Yes) No
re Vegetation, Soil, or Hydrology naturally problematic? (If	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sample within a Weth Hydric Soil Present? Yes No Is the Sample within a Weth Wetland Hydrology Present? Yes No No	
Remarks: Small depression - Flood planny Ponded, L' fortist. Vegetation doesn't meet criteria, honorer believe it is	the veg. Recent rein. due to location in Button's Creen Flood
IYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
X Surface Water (A1) True Aquatic Plants (B14)	A Sparsely Vegetated Concave Surface (B8)
X High Water Table (A2) Hydrogen Sulfide Odor (C1) xx Saturation (A3) Oxidized Rhizospheres on Living Ro	Drainage Patterns (B10) Dots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils	s (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes X No Depth (inches): 14	
Water Table Present? Yes X No Depth (inches): OII	the set of the state of the set of
	Wetland Hydrology Present? Yes K No
	1.00.0011
Saturation Present? Yes X No Depth (inches): V (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspectio	ns), if available:
(includes capillary fringe)	ns), if available:

I-85 when mmal-106

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

Sampling Point: MCIC 1. her

Tree Stratum (Plot size: 10×10m) 1. Acer regunelo 2 3	70	Species?	Status FIAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata:
4 5			\equiv	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
6 7			\equiv	Prevalence Index worksheet: Total % Cover of:Multiply by:
50% of total cover:	5 20% of	= Total Cover:		OBL species x1 =
Sapling/Shrub Stratum (Plot size: 10 X 10m)		1262.62545		FACW species x 2 =
1. Ligistrum sinense	35	- U_	FACH	FAC species $\underline{75}$ x 3 = $\underline{235}$
2. Accorreguido	5	N	FAC	FACU species 45 x 4 = 180
3			_	UPL species x 5 = Column Totals: 120 (A) 405 (B)
4				
5				Prevalence Index = B/A = 3.37
6				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
8	(2 - Dominance Test is >50%
	40	= Total Cove		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:C	2 20% of	total cover:	T.	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: <u>5x5m</u>)				data in Remarks or on a separate sheet)
1. Ingustrum SINENSE	10	11	FACM	Problematic Hydrophytic Vegetation ¹ (Explain)
2		1		The attraction of the address of the
3	_			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6 7		_	_	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
11	_			Herb - All herbaceous (non-woody) plants, regardless
5		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>5</u> Woody Vine Stratum (Plot size:)	20% of	total cover:		Woody vine – All woody vines greater than 3.28 ft in height.
2		-		
3			-	
4.				
5.				Hydrophytic Vegetation
	(= Total Cove	er	Present? Yes No
50% of total cover:		total cover:		
Remarks: (Include photo numbers here or on a separate s		4.75		
Vegetation doconit recet une	land Crit	terio, hai	never	due to density of Lyostrum,
venueve that the ulgela	tim 15	Not the	lost	indirctor for this netlend.

SOIL

I-85 Widening MM96-106

Sampling Point: WKK1wrt

Depth	Matrix		Reda	x Features	5		-	
(inches)	Color (moist)	%	Color (moist)		Type'	Loc ²	Texture	Remarks
0-5-	10418 512	60	SYR 614	40	<u>_</u>	M	-CL	
5-12+	SYR 5/4		1048613	25	_0_	_ <u>M</u>		
`		=		_	_			
		-				\Rightarrow		
		_	_		=	Ē	_	
Type: C=Co	ncentration, D=Dep	letion. RM=	Reduced Matrix, M	S=Masked	Sand Gra	ins.	² Location: PL	-=Pore Lining, M=Matrix.
lydric Soll In		iddori, Fait	noucou mana, m	o maonea	Cana On			tors for Problematic Hydric Soils ³ :
Depleted Thick Dar Sandy Mu MLRA Sandy Gl Sandy Re			Redox Dark Depleted Da Redox Depre Iron-Mangan MLRA 13 Umbric Surfa Piedmont Flo	rk Surface essions (F8 ese Masse 6) ace (F13) (I podplain So	(F7) 3) 25 (F12) (I MLRA 13 pils (F19)	6, 122) (MLRA 14	Ol ³ India 8) wet	ery Shallow Dark Surface (TF12) ther (Explain in Remarks) cators of hydrophytic vegetation and land hydrology must be present,
	Matrix (S6) ayer (if observed):	-	Red Parent N	Material (F2	21) (MLR.	A 127, 147	') unk	ess disturbed or problematic.
Type:	ayer (il observed).						1000	
Depth (incl	hes):		-				Hydric Soil	Present? Yes <u>X</u> No
emarks:						_	1	

1

Applicant/Owner: <u>SCE</u> nvestigator(s): <u>M · Prazer</u>		ction, Township, Range:	_ State: <u>SC</u> Sampling Point: <u>WKE 1</u> Blackslourg, SC
andform (hillslope, terrace, etc.):		relief (concave, convex, no	one): NOLC Slope (%):
Subregion (LRR or MLRA): LRP			
Soil Map Unit Name: MV- m1X			NWI classification:
Are climatic / hydrologic conditions on		Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil, o		The second second second second	
Are Vegetation, Soil, o			
			ons, transects, important features, etc.
	15		
Hydrophytic Vegetation Present?	Yes No	Is the Sampled Area	
Hydric Soil Present?	Yes No Yes	within a Wetland?	Yes No
Wetland Hydrology Present? Remarks:	Yes No		
HYDROLOGY			
Wetland Hydrology Indicators:	is essentiable sharely all that early?		Surface Seil Creaks (RS)
Primary Indicators (minimum of one i 	True Aquatic Plant	ts (B14)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide (Drainage Patterns (B10)
Saturation (A3)		neres on Living Roots (C3)	
Water Marks (B1)	Presence of Redu	ced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		ction in Tilled Soils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface	- C.(.) (C)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in F	Remarks)	Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Iron Deposits (B5) Inundation Visible on Aerial Imag	nerv (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9)	30.7 (2.7)		Microtopographic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral Test (D5)
Field Observations:	7. 5. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.		
Surface Water Present? Yes_	No Depth (inches):		
Water Table Present? Yes_			
Saturation Present? Yes _ (includes capillary fringe)	No <u>/</u> Depth (inches):	Wetland	Hydrology Present? Yes No
Describe Recorded Data (stream gau	uge, monitoring well, aerial photos, p	previous inspections), if av	ailable:
Remarks:			

I-85 wide	ning MM	96-	106

VEGETATION (Four Strata) - Use scientific names of plants

Dominant Species?	Status FAC Image: Status Image: Status	Dominance Test worksheet: Number of Dominant Species Total Number of Dominant Species Across All Strata:
Total Cover:	FAC	Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: (A/B) Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 5 = Column Totals: (A) Prevalence Index = B/A = (B) Prevalence Index = B/A = (B) Prevalence Index is >50% 3 - Prevalence Index is >3.01 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Total Cover:	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B) Prevalence Index worksheet:
Total Cover otal cover:	18. FAC FAC FAC FACU FACU VEL	That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet:
Total Cover otal cover:	18. FAC FAC FAC FACU FACU VEL	
otal cover:	18. FAC FAC FAC FACU FACU VEL	OBL species x 1 =
otal cover:	18. FAC FAC FAC FACU FACU VEL	FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = (B) Prevalence Index = B/A = (B) Yerevalence Index = B/A = (B) Yerevalence Index = B/A = (B) Yerevalence Index is >50% 3 - Prevalence Index is >50% Yerevalence Index is >50% 3 - Prevalence Index is \$3.01 Yerevalence Index is \$3.01 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation1 (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Total Cover	FAC	FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = (B) Prevalence Index = B/A = (B) Prevalence Index = B/A = (C) Hydrophytic Vegetation Indicators: (C) 1 - Rapid Test for Hydrophytic Vegetation (C) 2 - Dominance Test is >50% (C) 3 - Prevalence Index is ≤3.01 (C) 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) (C) Problematic Hydrophytic Vegetation1 (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 1 Definitions of Four Vegetation Strata: 1 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Total Cover:	4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = (B) Prevalence Index = B/A = (B) Prevalence Index = B/A = (C) Hydrophytic Vegetation Indicators: (C) 1 - Rapid Test for Hydrophytic Vegetation (C) 2 - Dominance Test is >50% (C) 3 - Prevalence Index is ≤3.01 (C) 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) (C) Problematic Hydrophytic Vegetation1 (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 1 Definitions of Four Vegetation Strata: 1 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Total Cover:	4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = (B) Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Total Cove otal cover:	FACU VPL	UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = (B) Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of Present
Total Cove otal cover:	FACU VPL	Column Totals:
Total Cove otal cover:	FACU VPL	Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Total Cover:	FACU DEL	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation1 (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Total Cove otal cover:	FACU TACU VEL	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Total Cove otal cover:	FACU TACU VEL	 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	H FACU UPL	 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	H FACU UPL	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	H FACU UPL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
4 	UPL	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	UPL	¹ Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	UPL	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
_		be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
_		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
_		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
_		more in diameter at breast height (DBH), regardless of
_	A	height.
		Sapling/Shrub - Woody plants, excluding vines, less
		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
		Herb - All herbaceous (non-woody) plants, regardless
Total Cove	171	of size, and woody plants less than 3.28 ft tall.
otal cover:_	1-1-	Woody vine - All woody vines greater than 3.28 ft in
	· · · ·	height.
	THE	
	·	
		Hydrophytic Vegetation
Total Covo		Present? Yes No
	4	
otar correr		()) / /
	Total Cove	Total Cover Total Cover

SOIL

I-85 Widening MM 96-106 Sampling Point: WHOLY

olor (moist) 1 4 <t< th=""><th>e (A11) _RR N,</th><th>Color (moist)</th><th>e (S7) elow Surface urface (S9) ed Matrix (F trix (F3) Surface (F6 rk Surface (essions (F8 ese Masse 6) uce (F13) (M podplain So</th><th>ce (S8) (M (MLRA 14 F2) 6) (F7) 8) es (F12) (L MLRA 136 pils (F19) (</th><th>ILRA 147, 47, 148) LRR N, 6, 122) (MLRA 14</th><th>Indicato 2 cm 148) Coas (N Pied (N Very Othe ³Indical</th><th>Pore Lining, M=Matrix. rs for Problematic Hydric Solls³: n Muck (A10) (MLRA 147) st Prairie Redox (A16) MLRA 147, 148) Imont Floodplain Solls (F19) MLRA 136, 147) / Shallow Dark Surface (TF12) ar (Explain in Remarks) tors of hydrophytic vegetation and nd hydrology must be present.</th></t<>	e (A11) _RR N,	Color (moist)	e (S7) elow Surface urface (S9) ed Matrix (F trix (F3) Surface (F6 rk Surface (essions (F8 ese Masse 6) uce (F13) (M podplain So	ce (S8) (M (MLRA 14 F2) 6) (F7) 8) es (F12) (L MLRA 136 pils (F19) (ILRA 147, 47, 148) LRR N, 6, 122) (MLRA 14	Indicato 2 cm 148) Coas (N Pied (N Very Othe ³ Indical	Pore Lining, M=Matrix. rs for Problematic Hydric Solls ³ : n Muck (A10) (MLRA 147) st Prairie Redox (A16) MLRA 147, 148) Imont Floodplain Solls (F19) MLRA 136, 147) / Shallow Dark Surface (TF12) ar (Explain in Remarks) tors of hydrophytic vegetation and nd hydrology must be present.
<u>YIZ 6/4</u> <u>Interview of the second s</u>	<u>30</u>	Reduced Matrix, MS Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 134 Umbric Surfa Piedmont Flo	S=Masked (S7) elow Surfac inface (S9) ed Matrix (F trix (F3) Surface (F6) rk Surface (F6 rk Surface (F8) ese Masse 6) ince (F13) (M boodplain So	ce (S8) (M (MLRA 14 F2) 6) (F7) 8) es (F12) (L MLRA 136 pils (F19) (ILRA 147, 47, 148) LRR N, 6, 122) (MLRA 14	<u> SCL</u> ² Location: PL=F Indicator Indicator (N 2 cma (N) cma (N	rs for Problematic Hydric Solls ³ : n Muck (A10) (MLRA 147) st Prairie Redox (A16) MLRA 147, 148) Imont Floodplain Soils (F19) MLRA 136, 147) v Shallow Dark Surface (TF12) ar (Explain in Remarks) tors of hydrophytic vegetation and
ration, D=Depl tors: n (A2) 3) ide (A4) rs (A5) 10) (LRR N) w Dark Surface fface (A12) Mineral (S1) (L 148) Matrix (S4) (S5) < (S6)	e (A11)	Reduced Matrix, MS Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 134 Umbric Surfa Piedmont Flo	S=Masked (S7) elow Surfac inface (S9) ed Matrix (F trix (F3) Surface (F6) rk Surface (F6 rk Surface (F8) ese Masse 6) ince (F13) (M bodplain So	ce (S8) (M (MLRA 14 F2) 6) (F7) 8) es (F12) (L MLRA 136 pils (F19) (ILRA 147, 47, 148) LRR N, 6, 122) (MLRA 14	² Location: PL=F Indicator 148)	rs for Problematic Hydric Solls ³ : n Muck (A10) (MLRA 147) st Prairie Redox (A16) MLRA 147, 148) Imont Floodplain Soils (F19) MLRA 136, 147) v Shallow Dark Surface (TF12) ar (Explain in Remarks) tors of hydrophytic vegetation and
tors: n (A2) 3) ide (A4) rs (A5) (0) (LRR N) w Dark Surface rface (A12) Mineral (S1) (L 148) Matrix (S4) (S5) < (S6)	e (A11) _RR N,	Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 136 Umbric Surfa Piedmont Flo	e (S7) elow Surface urface (S9) ed Matrix (F trix (F3) Surface (F6 rk Surface (essions (F8 ese Masse 6) uce (F13) (M podplain So	ce (S8) (M (MLRA 14 F2) 6) (F7) 8) es (F12) (L MLRA 136 pils (F19) (ILRA 147, 47, 148) LRR N, 6, 122) (MLRA 14	Indicato 2 cm 148) Coas (N Pied (N Very Othe ³ Indical	rs for Problematic Hydric Solls ³ : n Muck (A10) (MLRA 147) st Prairie Redox (A16) MLRA 147, 148) Imont Floodplain Soils (F19) MLRA 136, 147) v Shallow Dark Surface (TF12) ar (Explain in Remarks) tors of hydrophytic vegetation and
tors: n (A2) 3) ide (A4) rs (A5) (0) (LRR N) w Dark Surface rface (A12) Mineral (S1) (L 148) Matrix (S4) (S5) < (S6)	e (A11) _RR N,	Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 136 Umbric Surfa Piedmont Flo	e (S7) elow Surface urface (S9) ed Matrix (F trix (F3) Surface (F6 rk Surface (essions (F8 ese Masse 6) uce (F13) (M podplain So	ce (S8) (M (MLRA 14 F2) 6) (F7) 8) es (F12) (L MLRA 136 pils (F19) (ILRA 147, 47, 148) LRR N, 6, 122) (MLRA 14	Indicato 2 cm 148) Coas (N Pied (N Very Othe ³ Indical	rs for Problematic Hydric Solls ³ : n Muck (A10) (MLRA 147) st Prairie Redox (A16) MLRA 147, 148) Imont Floodplain Soils (F19) MLRA 136, 147) v Shallow Dark Surface (TF12) ar (Explain in Remarks) tors of hydrophytic vegetation and
tors: n (A2) 3) ide (A4) rs (A5) (0) (LRR N) w Dark Surface rface (A12) Mineral (S1) (L 148) Matrix (S4) (S5) < (S6)	e (A11) _RR N,	Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 136 Umbric Surfa Piedmont Flo	e (S7) elow Surface urface (S9) ed Matrix (F trix (F3) Surface (F6 rk Surface (essions (F8 ese Masse 6) uce (F13) (M podplain So	ce (S8) (M (MLRA 14 F2) 6) (F7) 8) es (F12) (L MLRA 136 pills (F19) (ILRA 147, 47, 148) LRR N, 6, 122) (MLRA 14	Indicator 2 cm 148) Coas (N Pied (N Very Othe ³ Indical	rs for Problematic Hydric Solls ³ : n Muck (A10) (MLRA 147) st Prairie Redox (A16) MLRA 147, 148) Imont Floodplain Soils (F19) MLRA 136, 147) v Shallow Dark Surface (TF12) ar (Explain in Remarks) tors of hydrophytic vegetation and
3) ide (A4) rs (A5) (0) (LRR N) w Dark Surface rface (A12) Mineral (S1) (L 148) Matrix (S4) (S5) × (S6)	.RR N,	Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 136 Umbric Surfa Piedmont Flo	elow Surface Inface (S9) ad Matrix (F trix (F3) Surface (F6 rk Surface (F6 rk Surface (F8 ese Masse 6) ace (F13) (M podplain So	(MLRA 14 F2) 6) (F7) 3) es (F12) (L MLRA 136 pils (F19) (47, 148) LRR N, 6, 122) (MLRA 14	148) Coae (N Pied (N Very Othe ³ Indical	st Prairie Redox (A16) MLRA 147, 148) Imont Floodplain Soils (F19) MLRA 136, 147) IN Shallow Dark Surface (TF12) ar (Explain in Remarks) tors of hydrophytic vegetation and
			Aaterial (F2	21) (MLR/	A 127, 147		s disturbed or problematic.
and the state of the second second						1	Construction of the second
						the second	
						Hydric Soil Pr	esent? Yes No X

Eastern Mountains and Piedmont - Version 2.0

4

Project/Site: 1-85 Willening MM	106 - 106 City/County: Cherokee Sampling Date: D	03/15
Applicant/Owner: <u>SCDOT</u>	State: 🔀Sampling Point: M	IL-2W
Investigator(s): 111. FVAZCV	Section, Township, Range: Blacksburg, SC	
Landform (hillstope, terrace, etc.): <u>depression</u> Subregion (LRR or MLRA): <u>LRR-P</u> Lat: Soil Map Unit Name: <u>MV- mixed allovia</u> d [Local relief (concave, convex, none): <u>CONCAVE</u> Slope (% <u>35.1270</u> 2 Long: <u>71.551173</u> Datum: A	
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes No (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology	significantly disturbed? Mo Are "Normal Circumstances" present?	No
Are Vegetation, Soil, or Hydrology		
	ap showing sampling point locations, transects, important featu	res, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No Is the Sampled Area No within a Wetland? YesX No	
Remarks: Location in Buffelo Crk lead us to balioue it i regetation crite	e floodplain, hydrology, fsoils is a wetland despite lacking hydropi	nytic
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two	required)
High Water Table (A2) H Saturation (A3) O Water Marks (B1) P Sediment Deposits (B2) R Drift Deposits (B3) T	all that apply)	
Surface Water Present? Yes X No I	Depth (inches): $\frac{ \mathcal{U} ^{\prime\prime}}{O}$	1
Saturation Present? Yes X No I	Depth (inches): ① Wetland Hydrology Present? Yes 🗡 No	00
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we Remarks:	aerial photos, previous inspections), if available:	

I-85 Widening MM96-106

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

Sampling Point: WLL-2 WEF

Number of Dominant es Across All Strata: \mathcal{J} (B)ent of Dominant Species Are OBL, FACW, or FAC: 50 (A/B)alence Index worksheet: total % Cover of:Multiply by: x 1 =(A/B)vspecies $-$ x 2 = $-$ x 2 =vspecies $-$ x 3 = $2 z 5$ $2 z 5$ vspecies $-$ x 5 = $-$ x 5 =un Totals:110(A) 365 Prevalence Index = $B/A = 3, 32$ $ 3, 32$
Are OBL, FACW, or FAC: 50 (A/B) alence Index worksheet: total % Cover of: Multiply by: species 75 x 1 = y species 75 x 3 = 225 y species 35 x 4 = 140 species 35 x 4 = 140 species 35 x 5 = nn Totals: 110 (A) 365 (B) Prevalence Index = $B/A = 3, 32$
total % Cover of:Multiply by:species $x 1 =$ V species $x 2 =$ species $7 - 5$ x 3 = $2 2 5$ J species $3 5$ x 4 = $14 0$ species $x 5 =$ ann Totals: 110 (A) 365 (B)Prevalence Index = $B/A =$ $3, 32$
species $x_1 = $ $x_2 = $ $x_3 = $
V species $\begin{array}{c}$
species $\frac{7\cdot5}{35}$ x 3 = $\frac{225}{140}$ species $\frac{35}{x5}$ x 4 = $\frac{140}{365}$ nn Totals: $\frac{110}{A}$ (A) $\frac{365}{365}$ (B) Prevalence Index = B/A = 3.32
Uspecies $35 \times 4 = 140$ species $5 =$
species x 5 = nn Totals: 110 (A) 365 (B) Prevalence Index = B/A = 3,32
nn Totals: <u>110</u> (A) <u>365</u> (B) Prevalence Index = $B/A = 3.32$
Prevalence Index = B/A = 3,32
ophytic Vegetation Indicators:
 Rapid Test for Hydrophytic Vegetation
- Dominance Test is >50%
 Prevalence Index is ≤3.0¹
- Morphological Adaptations ¹ (Provide supporting
data in Remarks or on a separate sheet)
roblematic Hydrophytic Vegetation ¹ (Explain)
ators of hydric soil and wetland hydrology must
esent, unless disturbed or problematic.
itions of Four Vegetation Strata:
 Woody plants, excluding vines, 3 in. (7.6 cm) or in diameter at breast height (DBH), regardless of
t.
ng/Shrub – Woody plants, excluding vines, less 3 in. DBH and greater than or equal to 3.28 ft (1
l.
All be designed from the edit of the boundary
 All herbaceous (non-woody) plants, regardless and woody plants less than 3.28 ft tall.
ly vine – All woody vines greater than 3.28 ft in
phytic
nt? Yes No X
nt? Yes No //
1

SOIL

Depth	Matrix		Redox	Features				
inches)	Color (moist)	_%	Color (moist)	_%	Type ¹	Loc ²		Remarks
0-3	104r 512	<u>(e0</u>	Syr 6/4	40	_ C	M	_06	
5-12+	<u>Sýr 514</u>	<u> 75</u>	10 yr 613	<u>_</u> 25	D	<u></u>		
		= =				\equiv		
	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.	² Location: PL=I	^p ore Lining, M=Matrix. rs for Problematic Hydric Soils ³ ;
Black His Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy M MLRA Sandy G	iipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) ck (A10) (LRR N) I Below Dark Surface Ink Surface (A12) Iucky Mineral (S1) (L A 147, 148) Illeyed Matrix (S4) edox (S5)		Polyvalue Bel Thin Dark Sur Loamy Gleyed Depleted Matu Redox Dark S Depleted Dark Redox Depres Iron-Mangane MLRA 136 Piedmont Floo	face (S9) d Matrix (F rix (F3) Surface (F6 k Surface ssions (F8 ese Masse 5) ce (F13) (1	(MLRA 1 2) 3) (F7)) s (F12) (I VILRA 13	47, 148) LRR N, 6, 122)	(M Pied (M Very Othe ³ Indica	st Prairie Redox (A16) ILRA 147, 148) mont Floodplain Soils (F19) ILRA 136, 147) Shallow Dark Surface (TF12) er (Explain in Remarks) tors of hydrophytic vegetation and nd hydrology must be present,
	Matrix (S6) .ayer (if observed):	-	Red Parent M	laterial (F2	(MLR	A 127, 14	7) unles	s disturbed or problematic.
Type: Depth (inc	ches):		2				Hydric Soil Pr	esent? Yes X No

	City	County: Charoke	ĉ.	Sampling Date: 12 03/15
IT			state: SC	Sampling Point: WLL - 2 U
er	Sec	tion, Township, Range:		Blacksburg, SC
R-P Lat Mixed alluvi	: 35,1270 al land	Long:	81.551173 NWI classif	ication:
			(If no, explain in	
		the second s		~
		MU		
SS – Attach site n	nap showing sa	mpling point locati	ons, transect	s, important features, etc.
nt? Yes X Yes Yes Yes	No X No X	Is the Sampled Area within a Wetland?	Yes	_ No_X
				cators (minimum of two required)
 al Imagery (87)	True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reduct Thin Muck Surface	odor (C1) eres on Living Roots (C3) ed Iron (C4) tion in Tilled Soils (C6) (C7)	 Sparsely Va Drainage P Moss Trim Dry-Seasor Crayfish Bu Saturation 1 Stunted or Geomorphi Shallow Aq Microtopog 	egetated Concave Surface (B8) latterns (B10) Lines (B16) n Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) c Position (D2)
Yes No Yes No Yes No	Depth (inches): Depth (inches): Depth (inches):	Wetland	Hydrology Prese	ent? Yes No +
am gauge, monitoring	well, aerial photos, p	revious inspections), if av	ailable:	
	er bottom land R-P Lat Mixed alluvit ons on the site typical for , or Hydrology GS - Attach site n nt? Yes Yes Yes al Imagery (B7) 9) Yes No Yes Yes No Yes Yes No	er Sec s): bottom land Local n R-P Lat: 35.13701 mixed alluvial land ons on the site typical for this time of year?	er Section, Township, Range:	er Section, Township, Range: i; bottom land Local relief (concave, convex, none): Rr Lat: 35, 1310/ mixed alloyial land NWI classif ons on the site typical for this time of year? Yes No

I-85 Widening MM96-106

	-	
Sampling Point:	WILL -	2

Hand	Absolute	Dominant	Indicator	Dominance Test worksheet:
	<u>% Cover</u> 90	<u>Species?</u>	Status FAC	Number of Dominant Species3 (A)
3			=	Total Number of Dominant Species Across All Strata: (B)
5			=	Percent of Dominant Species That Are OBL, FACW, or FAC: (40) (AVE
) /	1000	_	\equiv	Prevalence Index worksheet: Total % Cover of:Multiply by:
113	90	= Total Cov	er	
50% of total cover: 43 Saoling/Shrub Stratum (Plot size: 10 X10 M)	20% of	total cover:	10	FACW species x 2 =
	10.	in in	The	FAC species x 3 =
. Acer regundo	au	-9-	FAC	FACU species x 4 =
·			·	
·				UPL species x 5 =
		-		Column Totals: (A) (B
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	-	-		1 - Rapid Test for Hydrophytic Vegetation
	1			X2 - Dominance Test is >50%
	26	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: _/C	20% of	total cover	4	4 - Morphological Adaptations' (Provide supportin
lerb Stratum (Plot size:)	2070 01			data in Remarks or on a separate sheet)
alchoma hederacea	56	11	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Stellaria media	20	-	NPL	Francisco Construction of the second second
		-1	<u>wis</u>	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
			(<u> </u>	Definitions of Four Vegetation Strata:
·				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
				more in diameter at breast height (DBH), regardless of
<u></u>				height.
·				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
0				m) tall.
1				Herb - All herbaceous (non-woody) plants, regardless
7.	10 :	= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 35	20% of	total cover:	14	Woody vine - All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot size: 5x5m)			Sec. 6	height.
Loniera japonica		- 11-	FAC	
Ş (1		
				Hydrophytic
				Vegetation
	20 -	Total Cov	er	Present? Yes No
50% of total cover: 10				
	heet.)	1000 (2000)	-	
50% of total cover: 10		total cover:	4	

I-85 Willowing MM96-106

SOIL

Sampling Point: WLL-2 UP

Depth Matrix Redox Features Texture Remarks C - J [0 yr 4/4] [0 yr 6/4]	or (moist) ← 4/4 ✓ (a/4/4) ✓ (a/4/4) ✓ (a/4/4) ✓ (a/4/4) ✓ (a/4/4) ✓ (a/4/4) ✓ (a/4/4) ✓ (a/4/4) ✓ (a/4/4) ✓ (a/2) ✓ (a/2)	 	I=Reduced Mate Dark S Polyva Thin D Loamy Deplet Redox Deplet Redox Unprio	ist) %	Type 0 2 0 3 0 4 0 3 13 (MLRA)	Grains. (MLRA 147) (MLRA 147) (A 147, 148) 2) (LRR N, 136, 122)	<u>SCL</u> <u>SCL</u> <u></u>	PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
2.1.2 + 10 yr (a/H) 80 10 yr 5/3 20 C M Sct	ation, D=Dep prs: (A2)) e (A4) 5 (A5))) (LRR N) Dark Surfac ace (A12) ineral (S1) (48) Aatrix (S4) 35)		I=Reduced Mate Dark S Dark S Polyva Thin D Loamy Deplet Redox Deplet Redox Iron-M ML Umbric	trix, MS=Mas Surface (S7) alue Below S Dark Surface (Gleyed Mat led Matrix (F Gark Surface (Dark Surface (Dark Surface ted Dark Surface (Depression langanese M RA 136) c Surface (F	urface (S8 (S9) (MLR rix (F2) 3) se (F6) face (F7) s (F8) asses (F1: 13) (MLRA	Grains.) (MLRA 147 A 147, 148) 2) (LRR N, 136, 122)	² Location: Ind 7, 148)	icators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ . Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Pledmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 147, 148) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Other (Explain in Remarks) 2 m Muck (A10) (LRR N) Redox Dark Surface (F7) Other (Explain in Remarks) 3 mdicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S8) Red Parent Material (F21) (MLRA 147, 147) *Indicators of problematic. Expression: Hiedmont Floodplain Soils (F19) (MLRA 148) Wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S8) Red Parent Material (F21) (MLRA 147, 147) Hedmatrix. Depth (inches):	ation, D=Dep ors: (A2)) e (A4) s (A5))) (LRR N) Dark Surfac ace (A12) ineral (S1) (48) Aatrix (S4) 35)		I=Reduced Mate Dark S Dark S Polyva Thin D Loamy Deplet Redox Deplet Redox Iron-M ML Umbric	trix, MS=Mas Surface (S7) alue Below S Dark Surface (Gleyed Mat led Matrix (F Gark Surface (Dark Surface (Dark Surface ted Dark Surface (Depression langanese M RA 136) c Surface (F	urface (S8 (S9) (MLR rix (F2) 3) se (F6) face (F7) s (F8) asses (F1: 13) (MLRA	Grains.) (MLRA 147 A 147, 148) 2) (LRR N, 136, 122)	² Location: Ind 7, 148)	icators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type:	(A2)) e (A4) s (A5))) (LRR N) Dark Surfac ace (A12) ineral (S1) (48) Aatrix (S4) S5)	ce (A11)	Dark S Polyva Thin D Loamy Deplet Redox Deplet Redox Iron-M Umbrid	Surface (S7) alue Below S Dark Surface y Gleyed Mal ted Matrix (F c Dark Surface ted Dark Surface (Depression langanese M RA 136) c Surface (F	urface (S8 (S9) (MLR rix (F2) 3) re (F6) face (F7) s (F8) asses (F1) asses (F1)) (MLRA 147 A 147, 148) 2) (LRR N, 136, 122)	Ind 7, 148) 3 ₁₎	icators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and Sandy Redox (S6) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type:	(A2)) e (A4) s (A5))) (LRR N) Dark Surfac ace (A12) ineral (S1) (48) Aatrix (S4) S5)	ce (A11)	Dark S Polyva Thin D Loamy Deplet Redox Deplet Redox Iron-M Umbrid	Surface (S7) alue Below S Dark Surface y Gleyed Mal ted Matrix (F c Dark Surface ted Dark Surface (Depression langanese M RA 136) c Surface (F	urface (S8 (S9) (MLR rix (F2) 3) re (F6) face (F7) s (F8) asses (F1) asses (F1)) (MLRA 147 A 147, 148) 2) (LRR N, 136, 122)	Ind 7, 148) 3 ₁₎	icators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
ydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)	(A2)) e (A4) s (A5))) (LRR N) Dark Surfac ace (A12) ineral (S1) (48) Aatrix (S4) S5)	ce (A11)	Dark S Polyva Thin D Loamy Deplet Redox Deplet Redox Iron-M Umbrid	Surface (S7) alue Below S Dark Surface y Gleyed Mal ted Matrix (F c Dark Surface ted Dark Surface (Depression langanese M RA 136) c Surface (F	urface (S8 (S9) (MLR rix (F2) 3) re (F6) face (F7) s (F8) asses (F1) asses (F1)) (MLRA 147 A 147, 148) 2) (LRR N, 136, 122)	Ind 7, 148) 3 ₁₎	icators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Iron-Manganese Masses (F12) (LRR N, Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 136, 122) Indicators of hydrophytic vegetation and wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Inless disturbed or problematic. Type:	(A2)) e (A4) s (A5))) (LRR N) Dark Surfac ace (A12) ineral (S1) (48) Aatrix (S4) 35)		Polyva Thin D Loamy Deplet Redox Redox Iron-M ML Umbrid	alue Below S Dark Surface / Gleyed Mail ted Matrix (F c Dark Surfac ted Dark Sur c Depression langanese M RA 136) c Surface (F	(S9) (MLR rix (F2) 3) e (F6) face (F7) s (F8) asses (F1) 13) (MLRA	A 147, 148) 2) (LRR N, 136, 122)	7, 148) 	2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
astrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes	(CC)							wetland hydrology must be present,
Type:):	Neu Pi	arent Materi	ar (r 21) (m	LIVA 127, 1-		
Depth (inches): No		č	_				1.1.1	
			_				Hydric Se	oil Present? Yes No 🦯

Soil Map Unit Name: <u>My - mysed allo</u> Are climatic / hydrologic conditions on the site typic Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology	And Local relief (con Lat: <u>35. 137057</u> Viel Land al for this time of year? <u>Yes</u> significantly disturbed? / naturally problematic? //	Long: <u>- 81, 556</u> NWI d No (If no, expla V ^o Are "Normal Circumstar	In the second state of the
SUMMARY OF FINDINGS – Attach site Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks: Yes	No Is the	Sampled Area	sects, important features, etc.
HYDROLOGY			
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13).	heck all that apply) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on I Presence of Reduced Iron (Recent Iron Reduction in Til Thin Muck Surface (C7) Other (Explain in Remarks)	Surfac Spars Draina .iving Roots (C3) Moss C4) Dry-So led Soils (C6) Crayfi Satura Sturte Sturte Geom Shallo Microt	e Indicators (minimum of two required) ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) Trim Lines (B16) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) w Aquitard (D3) ropographic Relief (D4) Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No (includes capillary fringe) Yes No	X Depth (inches): X Depth (inches): X Depth (inches):	Wetland Hydrology I	Present? Yes <u>+</u> No
Remarks: Avestionable, prov Nyelfology.		nspections), if available:	in and

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

I-85 Widowny MM96-106 Sampling Point: WMM 2- Wet

<u>Tree Stratum</u> (Plot size:)	Absolute % Cover	Dominant Species?		Dominance Test worksheet: Number of Dominant Species 4 That Are OBL, FACW, or FAC: 4
2			=	Total Number of Dominant 4 (B)
4 5	<u></u>	=	Ξ	Percent of Dominant Species That Are OBL, FACW, or FAC:(DD(A/B)
6				Prevalence Index worksheet:
7	-			Total % Cover of: Multiply by:
50% of table annual		= Total Cov		OBL species
50% of total cover:	20% of	total cover:		FACW species x 2 =
1. Fraxinus pennisylvanica	21 m	117	THEM	FAC species x 3 =
2. Parchavus SD	- 10	-9-	EACW	FACU species x 4 =
	-10-	-11	EN	UPL species x 5 =
3. Populus deltoides	- 10	<u></u>	FAC	And the state of t
4. Chillese privet		n	FACU	Column Totals: (A) (B)
5. Reer allowing		<u>n</u>	FAC	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8		-		2 - Dominance Test is >50%
9.				
	75	= Total Cov	er	3 - Prevalence Index is ≤3.01
50% of total cover: <u>37</u>	5 20% of	total cover:	15	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: <u>SXSM</u>)		1010.00.00.0		data in Remarks or on a separate sheet)
1. Microstiazon + Virnincon 1	10	11	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. LINE OF ISSURE		-9-	FAC	
Z. C. MILLING INC.	1 - 1	74	THE	¹ Indicators of hydric soil and wetland hydrology must
3			فسننت	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5		-	;	
6	1			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7			-	height.
8			_	
9				Sapling/Shrub - Woody plants, excluding vines, less
10.		_		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
		1		
11	20	= Total Cov		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	0 20% of	total cover:	7	Woody vine - All woody vines greater than 3.28 ft in
Noody Vine Stratum (Plot size: <u>5x5M</u>) 1. Rhubrus Sp.	5	-		height.
. NIGHTUS JF.			And the second	
	7/7	1.1	TOC	
. Inner Japanica	20	-y-	FAC	
2. Januar Japanica	20	<u>y</u> -	FAC	
2. Januar Japanica	20	<u>y</u> .	PAC	Hydrophytic
	20	<u>y</u> .		Hydrophytic Vegetation
2. Januar Japanica 3.	20	Total Cove		

SOIL

Depth (inches)	Matrix		Redo	x Features	5			
	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks
6-2	INVR 512	70	7.5YR 5/6	10	C	(VY)	Sac loan	
2-12+	7.5YR 516	75	10.YR SID	85	- C	m	u u	
<u>x 15</u>			14-16-515			-12-1		
				-			·	
				_			(
					_			
					<u> </u>			
				_				
Type: C=Cc	ncentration, D=Depl	etion, RM	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: PL=Pore l	Lining, M=Matrix.
lydric Soil I				-			Indicators for	Problematic Hydric Soils ³
Histosol	(A1)		Dark Surface					k (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Be					iirie Redox (A16)
Black His			Thin Dark Su			47, 148)		147, 148)
	n Sulfide (A4)		Loamy Gleye		F2)			Floodplain Soils (F19)
	Layers (A5)		Depleted Mai Redox Dark S		(6)			136, 147) Ilow Dark Surface (TF12)
	ck (A10) (L RR N) Below Dark Surface	(411)	Depleted Dar					plain in Remarks)
	rk Surface (A12)	. VIIII	Redox Depre					
	ucky Mineral (S1) (L	RR N,	Iron-Mangan			LRR N,		
	147, 148)		MLRA 13	6)				
Sandy G	leyed Matrix (S4)		Umbric Surfa					of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					drology must be present,
	Matrix (S6)		Red Parent N	Naterial (F	21) (MLR	A 127, 14	7) unless dist	urbed or problematic.
Stripped								
Restrictive L	ayer (if observed):							
Restrictive L Type:	ayer (if observed):						0.000000000000	
Restrictive L Type: Depth (inc	ayer (if observed):		<u>-</u>				Hydric Soil Presen	17 Yes <u>X</u> No
Restrictive L Type:	ayer (if observed):		=				Hydric Soll Presen	17 Yes <u>+</u> No
Restrictive L Type: Depth (inc	ayer (if observed):		-	_			Hydric Soll Presen	17 Yes <u>+</u> No
testrictive L Type: Depth (inc	ayer (if observed):		=				Hydric Soll Presen	17 Yes <u>*</u> No
testrictive L Type: Depth (inc	ayer (if observed):		-				Hydric Soll Presen	17 Yes <u>*</u> No
testrictive L Type: Depth (inc	ayer (if observed):		<u> </u>				Hydric Soll Presen	17 Yes <u>+</u> No
testrictive L Type: Depth (inc	ayer (if observed):		_				Hydric Soll Presen	17 Yes <u>*</u> No
testrictive L Type: Depth (inc	ayer (if observed):		_				Hydric Soll Presen	17 Yes <u>*</u> No
testrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
testrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
testrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
testrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
testrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No
testrictive L Type: Depth (inc	ayer (if observed):						Hydric Soll Presen	17 Yes <u>X</u> No

Project/Site:	85	City/County: Cherok	ee	Sampling Date: 12 0315
Applicant/Owner:	SCOOT	ongrooding.	State: SC	_ Sampling Point: WMM 2-
nvestigator(s): M. Frazer		Section Townshin Range		
Landform (hillslope, terrace, etc.): Subregion (LRR or MLRA): LR-	slope L	ocal relief (concave, convex, 57 Long:	none): none(
Soil Map Unit Name: MV- M			NWI classifica	ation:
Are climatic / hydrologic conditions		vear? Yes No	The second second	
Are Vegetation, Soil				-
		and the second	d, explain any answers	
Are Vegetation, Soil				
SUMMARY OF FINDINGS	 Attach site map showin 	g sampling point loca	tions, transects,	important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>X</u> No Yes <u>No X</u> Yes <u>No X</u>	 Is the Sampled Are within a Wetland? 	ea Yes	No <u>4</u>
HYDROLOGY				
Wetland Hydrology Indicators:				tors (minimum of two required)
LUMA RULA AL CONTRACTOR	ne is required; check all that apply		Surface Soil C	CONFIDENCE AND ADDRESS OF
Surface Water (A1)	True Aquatic	Plants (B14) Ifide Odor (C1)	Sparsely Veg Drainage Patt	etated Concave Surface (B8)
High Water Table (A2) Saturation (A3)	the second se	cospheres on Living Roots (C	the second se	
Water Marks (B1)		Reduced Iron (C4)		Vater Table (C2)
Sediment Deposits (B2)	Recent Iron F	Reduction in Tilled Soils (C6)		
Drift Deposits (B3)	Thin Muck St			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explai	n in Remarks)	Geomorphic F	ressed Plants (D1) Position (D2)
Iron Deposits (B5) Inundation Visible on Aerial I	magery (B7)		Shallow Aquit	the share of the second s
Water-Stained Leaves (B9)				phic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)
Field Observations:	~			
Surface Water Present? Y	es No X Depth (inche			
	es No X Depth (inche		tere an ett de mout	x x
Saturation Present? Y (includes capillary fringe)	es NoX_ Depth (inche	es): Wetlan	d Hydrology Present	t? Yes No Z
Describe Recorded Data (stream	gauge, monitoring well, aerial pho	otos, previous inspections), if	available:	
Benefit				
Remarks:				

τ.,

I-85 Widening MM96-106

VEGETATION (Four Stra	ta) – Use scientific n	ames of plants
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Sampling Point: WMM 2-up

<u>Tree Stratum</u> (Plot size: <u>IDXIOM</u>) 1. Plotantus occidenta IIS 2.		Species?	(D) (d)	
3				Total Number of Dominant Species Across All Strata:
4				Percent of Dominant Species
5 6				That Are OBL, FACW, or FAC: (A/B)
7.				Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 7.	<u>5</u> 20% of	total cover:	3	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10 X10 M)		28.1	-	FACW species x 2 =
1. Liquistición Sinense	- 15	- <u>y-</u> -	EACU	FAC species x 3 = FACU species x 4 =
2. Liquidambor styraciflua	- 10-	-9-	FAC	UPL species x 5 =
3. Priduius deltaides 4.		-4-	FAC	Column Totals: (A) (B)
4 5				
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 25	≥ 20% of	total cover:	10	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5x5m)	1.00		en.	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Ligustium sinense	- 10-	<u>y</u> -	THEU	(isbeinane () arophyne vegenation (Explain)
2. MICH Stochung HIMICE		<u> </u>	HHL.	¹ Indicators of hydric soil and wetland hydrology must
3			<u> </u>	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
3				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11	20	Total Cov		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tail.
50% of total cover:	5 20% of	total cover:	"(e	
Woody Vine Stratum (Plot size: 5,5m)	and the second			Woody vine – All woody vines greater than 3.28 ft in height.
Smilax votund follow	5	- (A	FAC	neight.
2. Lonicera ja sonica	10	-li	FAC	
3.		2		
1		(E		
5.				Hydrophytic Vegetation
	15 -	Total Cove	ar	Present? Yes X No
50% of total cover: 7.		total cover:		· · · · · · · · · · · · · · · · · · ·
Remarks: (Include photo numbers here or on a separate	sheet.)			

	-		
21		ч	L
	3	SC	SOI

ISS Widening MM96-106 Sampling Point: <u>WMM</u>-21P

Depth	Matrix		pth needed to docu	ox Feature						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Rema	rks
0-2	10 VR 514	100					Sach	am		
2-10	10YR SIU	100				1	Scal			
6-12+	7.5YR 510	80	INYR SI3	20	Y	in	lau	-611		
<u>6 101</u>	Troube with		10 112 010				J			
				-						
					4	<u> </u>				
			-	_						
				_	_					
				1			· · · · · ·			
		_				_		-		
Evoe: C=C	oncentration, D=Depl	etion, RM	Reduced Matrix, M	S=Masker	Sand Gr	ains.	² Location:	PL=Pore	ining, M=Ma	trix.
lydric Soil I										c Hydric Soils ³ :
Histosol	(A1)		Dark Surfac	e (S7)			5.7 i <u>-</u>	2 cm Muc	k (A10) (ML	RA 147)
Histic Ep	nipedon (A2)		Polyvalue B				, 148)		irie Redox (A	16)
Black Hi			Thin Dark S			47, 148)			147, 148)	
	n Sulfide (A4) I Layers (A5)		Loamy Gley Depleted Matrix		(F2)		-		Floodplain S 136, 147)	ons (F19)
and the second s	ick (A10) (LRR N)		Redox Dark		-6)					face (TF12)
	Below Dark Surface	(A11)	Depleted Da						plain in Rem	
and the second second	ark Surface (A12)		Redox Depr	essions (F	8)					
	lucky Mineral (S1) (L	RR N,	Iron-Mangai		es (F12) (LRR N,				
	147, 148)		MLRA 1			c 4001	3,	odioctoro /	fhudronhutic	vegetation and
	edox (S5)		Umbric Surf Piedmont Fl						drology must	
	Matrix (S6)		Red Parent						urbed or prot	
							1			
	ayer (if observed):									
	Layer (if observed):	1	_				The spectrum			
Restrictive I			_				Hydric S	oil Presen	t? Yes	No
Restrictive I Type:			=				Hydric S	oil Presen	t? Yes	No
Restrictive I Type: Depth (inc			=				Hydric S	oil Presen	t? Yes	No
Restrictive I Type: Depth (inc			_				Hydric S	oil Presen	t? Yes	<u> </u>
Restrictive I Type: Depth (inc			_				Hydric S	oil Presen	t? Yes	No
Restrictive I Type: Depth (inc			_				Hydric S	oil Presen	t? Yes	<u>No </u>
Restrictive I Type: Depth (inc			=				Hydric S	oil Presen	t? Yes	<u>No</u>
testrictive I Type: Depth (inc			_				Hydric S	oil Presen	t? Yes	<u> </u>
testrictive I Type: Depth (inc			_				Hydric S	oil Presen	t? Yes	<u> </u>
testrictive I Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u> </u>
Restrictive I Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No</u>
Restrictive I Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No </u>
Restrictive I Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No </u>
Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No</u>
Restrictive I Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No </u>
Restrictive I Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No </u>
Restrictive I Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No </u>
Restrictive I Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No </u>
Restrictive I Type: Depth (inc							Hydric S	oll Presen	t? Yes	<u>No </u>
Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No </u>
estrictive I Type: Depth (inc							Hydric S	oil Presen	t? Yes	<u>No </u>

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region _ City/County: Cherokee 1-95 Sampling Date: 12 3 Project/Site: State: S SCDO Sampling Point: 1 Applicant/Owner: _ Section, Township, Range: Blacksburg Investigator(s): M. Frazer Local relief (concave, convex, none): Flat Landform (hillslope, terrace, etc.): bottom land Slope (%): Lat: 35. 129574 Long: -81.554357 Datum: WAD Subregion (LRR or MLRA): LILE P Soil Map Unit Name: My - mixed allyvial land NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) No Are Vegetation _____, Soil _____, or Hydrology ______ significantly disturbed? 1/0 Are "Normal Circumstances" present? Yes ____ _ No Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes × ____No_____ Is the Sampled Area

Hydric Soil Wetland Hy	Present? drology Present?	Yes <u>K</u> No Yes <u>K</u> No	within a Wetland? Yes <u>X</u> No	
Remarks:	Flad over	piddles.	that collects water in a few shallow	
	مل . الم	INTER & R WANT	Parat	

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1) True Aquatic Plants (B14) ✓ High Water Table (A2) Hydrogen Sulfide Odor (C1) ✓ Saturation (A3) Oxidized Rhizospheres on Living Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled Sc Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)	Dry-Season Water Table (C2)
Field Observations:	Tes .
Surface Water Present? Yes X No Depth (inches):	
Water Table Present? Yes X No Depth (inches): 2"-5-1 face	Same of the second s
Saturation Present? Yes X No Depth (inches): <u>6.1 A Are</u> (includes capillary fringe)	Wetland Hydrology Present? Yes K No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

6214 / I-85

	Dominant Species?		Dominance Test worksheet:
80	4	EAC	Number of Dominant Species (A)
and the second second		FAC	Total Number of Dominant 4 (B)
		2	
			Percent of Dominant Species That Are OBL, FACW, or FAC:
			That Are OBL, FACW, or FAC:
			Prevalence Index worksheet:
95	- Total Cou		Total % Cover of:Multiply by:
5 20% of	total cover:	19	OBL species x 1 =
2			FACW species x 2 =
50	11.	TAC	FAC species x 3 =
		TAC	FACU species x 4 =
		THY	UPL species x 5 =
		-	Column Totals: (A) (B
		-	Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
	÷		★ 2 - Dominance Test is >50%
-76			3 - Prevalence Index is ≤3.0 ¹
_ <u>(00</u> =	= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supportin
) 20% of	total cover:	12	data in Remarks or on a separate sheet)
			Problematic Hydrophytic Vegetation ¹ (Explain)
2	_11_	FALL	
	1	_	Te available to the second
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Definitions of Four Vegetation Strata:
			Demittons of Four Vegetation Strata.
			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
			more in diameter at breast height (DBH), regardless o height.
			Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
			man 3 m. DBH and greater than of equal to 3.26 m (1 m) tall.
	(<u> </u>	·	
2	Total Cau		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
			of size, and woody plants less than 5.20 it tail.
	total obvol.	110	Woody vine - All woody vines greater than 3.28 ft in
10	71 .	The	height.
10	-4-	4/11	
(<u> </u>			And the second se
		á <u></u>)	Hydrophytic
			Vegetation
	 Total Cove total cover:_ 		Present? Yes <u>No</u>
	<u>80</u> <u>15</u> <u>15</u> <u>20% of</u> <u>10</u> <u>10</u> <u>10</u> <u>10</u> <u>10</u> <u>10</u> <u>10</u> <u>10</u>	$\frac{80}{15} = \frac{9}{7}$ $\frac{95}{5} = Total Cover;$ $\frac{50}{10} = \frac{9}{7}$ $\frac{10}{10} = \frac{9}{7}$	$\frac{15}{95} = \text{Total Cover} = \frac{95}{20\% \text{ of total cover}} = \frac{95}{10} = \frac{74C}{10} = \frac{74C}{1$

SOIL

6214/J-85

Sampling Point: WNN wet

0-2 1046 2-12+ 51041 	rs: (A2) (A5)) (LRR N) Dark Surfac Ince (A12) neral (S1) (I 48) latrix (S4) 5) S6)	xe (A11) L RR N,	Color (moist) 7.5 YR 5/4 7.5 YR 5/4 Solution Dark Surface Polyvalue Bel Thin Dark Surface Polyvalue Bel Thin Dark Surface Nedox Dark S Depleted Dark Surface Redox Depree Iron-Mangano MLRA 136 Umbric Surfa Piedmont Flo Red Parent M	e (S7) Inface (S9 ed Matrix (trix (F3) Surface (F rk Surface essions (F ese Mass 6) ace (F13) bodplain S	ace (S8) (N a) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	VILRA 147, 147, 148) (LRR N, 36, 122)) (MLRA 14	Indica 2 _148) C P V 0 0 3 ¹ Ind 48) we	T-SYK L=Pore Lining. ators for Probl cm Muck (A10) roast Prairie Re (MLRA 147, 1 iedmont Floodp (MLRA 136, 1 ery Shallow Da ther (Explain in icators of hydro	lematic Hydric Soils ³ : (MLRA 147) edox (A16) 148) plain Soils (F19) 147) ark Surface (TF12) in Remarks) ophytic vegetation and y must be present,
2 -12 + Gley 1	tion, D=Dep rs: (A2) e (A4) (A5)) (LRR N) Dark Surfac rce (A12) neral (S1) (I 18) atrix (S4) 5) S6)	20	7.5 12 514	ES=Masked (S7) elow Surfa arface (S9) ed Matrix (trix (F3) Surface (F rk Surface essions (F ese Mass 6) ace (F13) boodplain S	ace (S8) (N a) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	<u>MLRA 147, 148)</u> (LRR N, 36, 122)) (MLRA 14	<u>SCL</u> <u>SCL</u> <u>P</u> <u>2Location: PI</u> Indica <u>2</u> 148) <u>C</u> <u>2</u> V <u>0</u> 3 Ind 48) we	L=Pore Lining, ators for Probl cm Muck (A10, ioast Prairie Re (MLRA 147, 1 iedmont Floodp (MLRA 136, 1 'ery Shallow Da ther (Explain in icators of hydro	M=Matrix. lematic Hydric Soils ³ :) (MLRA 147) dox (A16) 148) plain Soils (F19) 147) ark Surface (TF12) in Remarks) ophytic vegetation and y must be present,
Type: C=Concentral Aydric Soil Indicator Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below I Thick Dark Surfa Sandy Mucky Mil MLRA 147, 14 Sandy Gleyed M Sandy Redox (St Stripped Matrix (St Restrictive Layer (If Type: Depth (inches):	tion, D=Dep rs: (A2) (A2) (A5)) (LRR N) Dark Surfac rce (A12) neral (S1) (1 18) latrix (S4) 5) S6)	ce (A11)	I=Reduced Matrix, MS Dark Surface Polyvalue Bei Thin Dark Sui Loamy Gleye C Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangano MLRA 136 Umbric Surfa Piedmont Flo	6=Masked (S7) How Surfa Inface (S9 ed Matrix (trix (F3) Surface (F3) Surface (F13) bodplain S	ace (S8) (N a) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	ains. (LRR N, 36, 122)) (MLRA 147,	² Location: Pl ² Location: Pl Indica 	L=Pore Lining, ators for Probl cm Muck (A10, ioast Prairie Re (MLRA 147, 1 iedmont Floodp (MLRA 136, 1 'ery Shallow Da ther (Explain in icators of hydro	M=Matrix. lematic Hydric Soils ³ :) (MLRA 147) dox (A16) 148) plain Soils (F19) 147) ark Surface (TF12) in Remarks) ophytic vegetation and y must be present,
tydric Soil Indicato Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below I Thick Dark Surfa Sandy Mucky Min MLRA 147, 14 Sandy Gleyed M Sandy Redox (St Stripped Matrix (Restrictive Layer (If Type: Depth (inches):	rs: (A2) (A5)) (LRR N) Dark Surfac Ince (A12) neral (S1) (I 48) latrix (S4) 5) S6)	xe (A11) L RR N,	Dark Surface Polyvalue Bei Thin Dark Sur X Loamy Gleye X Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangand MLRA 136 Umbric Surfa Piedmont Flo	e (S7) Inface (S9 ed Matrix (trix (F3) Surface (F rk Surface essions (F ese Mass 6) ace (F13) bodplain S	ace (S8) (N a) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	VILRA 147, 147, 148) (LRR N, 36, 122)) (MLRA 14	Indica 2 _148) C P V 0 0 3 ¹ Ind 48) we	ators for Probl cm Muck (A10, coast Prairie Re (MLRA 147, 1 iedmont Floodp (MLRA 136, 1 ery Shallow Da Other (Explain ir icators of hydro etland hydrology	lematic Hydric Soils ³ : (MLRA 147) edox (A16) 148) plain Soils (F19) 147) ark Surface (TF12) in Remarks) ophytic vegetation and y must be present,
Iydric Soil Indicato Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below I Thick Dark Surfa Sandy Mucky Min MLRA 147, 14 Sandy Gleyed M Sandy Redox (St Stripped Matrix (Restrictive Layer (If Type: Depth (inches):	rs: (A2) (A5)) (LRR N) Dark Surfac Ince (A12) neral (S1) (I 48) latrix (S4) 5) S6)	xe (A11) L RR N,	Dark Surface Polyvalue Bei Thin Dark Sur X Loamy Gleye X Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangand MLRA 136 Umbric Surfa Piedmont Flo	e (S7) Inface (S9 ed Matrix (trix (F3) Surface (F rk Surface essions (F ese Mass 6) ace (F13) bodplain S	ace (S8) (N a) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	VILRA 147, 147, 148) (LRR N, 36, 122)) (MLRA 14	Indica 2 _148) C P V 0 0 3 ¹ Ind 48) we	ators for Probl cm Muck (A10, coast Prairie Re (MLRA 147, 1 iedmont Floodp (MLRA 136, 1 ery Shallow Da Other (Explain ir icators of hydro etland hydrology	lematic Hydric Soils ³ : (MLRA 147) edox (A16) 148) plain Soils (F19) 147) ark Surface (TF12) in Remarks) ophytic vegetation and y must be present,
ydric Soil Indicato Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below I Thick Dark Surfa Sandy Mucky Min MLRA 147, 14 Sandy Gleyed M Sandy Redox (S! Stripped Matrix (Restrictive Layer (If Type: Depth (inches):	rs: (A2) (A5)) (LRR N) Dark Surfac Ince (A12) neral (S1) (I 48) latrix (S4) 5) S6)	xe (A11) L RR N,	Dark Surface Polyvalue Bei Thin Dark Sur X Loamy Gleye X Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangand MLRA 136 Umbric Surfa Piedmont Flo	e (S7) Inface (S9 ed Matrix (trix (F3) Surface (F rk Surface essions (F ese Mass 6) ace (F13) bodplain S	ace (S8) (N a) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	VILRA 147, 147, 148) (LRR N, 36, 122)) (MLRA 14	Indica 2 _148) C P V 0 0 3 ¹ Ind 48) we	ators for Probl cm Muck (A10, coast Prairie Re (MLRA 147, 1 iedmont Floodp (MLRA 136, 1 ery Shallow Da Other (Explain ir icators of hydro etland hydrology	lematic Hydric Soils ³ : (MLRA 147) edox (A16) 148) plain Soils (F19) 147) ark Surface (TF12) in Remarks) ophytic vegetation and y must be present,
Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers 2 cm Muck (A10) Depleted Below I Thick Dark Surfa Sandy Mucky Min MLRA 147, 14 Sandy Gleyed M Sandy Redox (S! Stripped Matrix (Restrictive Layer (If Type: Depth (inches):	(A2) (A5)) (LRR N) Dark Surfac Irce (A12) neral (S1) (I 18) latrix (S4) 5) S6)	LRR N,	Polyvalue Bei Thin Dark Sur Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangand MLRA 136 Umbric Surfa Piedmont Flo	elow Surfa arface (S9 ed Matrix (trix (F3) Surface (F rk Surface (F rk Surface essions (F esse Mass 6) ace (F13) boodplain S	a) (MLRA 1 (F2) F6) e (F7) F8) ses (F12) ((MLRA 13 Soils (F19)	147, 148) (LRR N, 36, 122)) (MLRA 14	.148)2 P V 0 48) we	cm Muck (A10, coast Prairie Re (MLRA 147, 1 iedmont Floodp (MLRA 136, 1 ery Shallow Da ther (Explain ir icators of hydro thand hydrology	(MLRA 147) edox (A16) (48) plain Soils (F19) (47) ark Surface (TF12) in Remarks) ophytic vegetation and y must be present,
estrictive Layer (if Type: Depth (inches):	and the second sec			and the c			7) un	less disturbed of	or problematic.
Depth (inches):							1		
a state of the second second									M
Remarks:		-					Hydric Soll	Present? Y	es No No

Project/Site: <u>I-85</u>	<u> </u>	
Applicant/Owner: <u>5CDOT</u>		State: Sc Sampling Point: U/N/V 2
Investigator(s): MiFrazer	Section, Township, Range:	
Landform (hillslope, terrace, etc.):bottornland		
Subregion (LRR or MLRA): Lat: 39	.129574 Long: -5	81. 554357 Datum: NAD83
Soil Map Unit Name: MIXEd alluvial land -	and the set of the set	NWI classification:
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology si	and the second se	al Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology n	한 이야지 않아? 아이는 것이야지 않는 것이다. 것이 같은 것이 없는 것이 없는 것이 없다. 것이 많이 없다. 것이 없는 것이 없는 것이 없	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map		이 같은 것은 것은 것은 것을 것을 수 있는 것을 다 가지 않는 것이다.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No No Wetland Hydrology Present? Yes X No	within a Wetland?	Yes No _X
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all the	hat apply)	Surface Soil Cracks (B6)
	Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
	ogen Sulfide Odor (C1)	Drainage Patterns (B10) Moss Trim Lines (B16)
	ized Rhizospheres on Living Roots (C3) ence of Reduced Iron (C4)	Indes Thin Lines (510) Dry-Season Water Table (C2)
	ent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
	Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
	r (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)		Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9)		Microtopographic Relief (D4) FAC-Neutral Test (D5)
Aquatic Fauna (B13) Field Observations:		
	oth (inches):	
Water Table Present? Yes X No Dep	An of the second s	
		Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a		vailable:
Remarks:	and press of press of the second	
upland Plot located just outsid	le of wetland Hudeelan	is Present who to recent
Tain events, soils are int his		Ta fiction of a field of
	2005-20	

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Tree Stratum (Plot size: 10x10m)			Indicator	Dominance Test worksheet:
		Species?		Number of Dominant Species
Liquidamber styraciflua	55		FAC	That Are OBL, FACW, or FAC: (A)
Betula nigra	25	LP.	FACW	Total Music and Device at
		J.	1.0.00	Total Number of Dominant Species Across All Strata: (B)
i				Percent of Dominant Species 71 (A/F
)				That Are OBL, FACW, or FAC: (A/E
	1-			Prevalence Index worksheet:
•	1</td <td>= Total Cov</td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td>Total % Cover of: Multiply by:</td>	= Total Cov	· · · · · · · · · · · · · · · · · · ·	Total % Cover of: Multiply by:
50% of total cover:	200% of	= 10tal Cov	er 16	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10) 000)	20%0	total cover.		FACW species x 2 =
Acer - brum	2.2	10	THAN	FAC species x 3 =
			+HU DW	FACU species x 4 =
Carpins condiziana	40	<u> </u>	TAC	
Frgis grandifoliz		<u>n</u>	FHCU	UPL species x 5 =
\	_			Column Totals: (A) (B
	_			Prevalence Index = B/A =
	_	-		Hydrophytic Vegetation Indicators:
·			-	1 - Rapid Test for Hydrophytic Vegetation
<u>.</u>				
				2 - Dominance Test is >50%
	15	= Total Cov	or	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:	- 20% of	total cover:	13	4 - Morphological Adaptations ¹ (Provide supportin
Herb Stratum (Plot size: 5X5 m)				data in Remarks or on a separate sheet)
allivin schoencorasoin	- 6-	- 11-	Ehrin	Problematic Hydrophytic Vegetation ¹ (Explain)
Ilex opaca		y-	FACU	¹ Indicators of hydric soil and wetland hydrology must
			<u></u>	be present, unless disturbed or problematic.
				the first of an and a state of first of the state of the
			·	Definitions of Four Vegetation Strata:
			_	Definitions of Four Vegetation Strata:
·			Ξ	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
·	_			Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
		_		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.
		_		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
		_		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.
0		_		Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
0				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0 150% of total cover: 5				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
0 50% of total cover: <u>5</u> <u>Voody Vine Stratum</u> (Plot size: <u>ΣΣ</u> γγ_)			er 2	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
0 150% of total cover:5				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft tall.
0 50% of total cover: <u>5</u> <u>Voody Vine Stratum</u> (Plot size: <u>ΣΣ</u> γγ_)			er 2	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
0 50% of total cover: <u>5</u> <u>Voody Vine Stratum</u> (Plot size: <u>ΣΣ</u> γγ_)			er 2	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft tall.
0 50% of total cover: <u>5</u> <u>Voody Vine Stratum</u> (Plot size: <u>ΣΣ</u> γγ_)			er 2	 Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
0 1 <u>Voody Vine Stratum</u> (Plot size: <u>StS</u> ρη_) <u>Lower</u>			er 2	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
 0 1 50% of total cover: <u>5</u> <u>Voody Vine Stratum</u> (Plot size: <u>5</u> <u>χ</u> γγ_)	70 s		er 2 FAC	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic

SOIL

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Sampling Point: WNN-2

Depth	Matrix		Redox	Features	s						
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remark	IS	
0-2	104/2 5/3	100			_		Sel	_			
2-12+	10-1R 613	55	7.54R 5/4	45	<u> </u>	<u>_M_</u>	<u>sch</u>				
				Ξ			_			_	
		Ē		Ξ							
				_		_		Dava (ini			
ype: C=Cor dric Soil In	ncentration, D=Deple	etion, RM=R	educed Matrix, MS	=Masked	Sand Gr	ains.	² Location: PL=			ix. Hydric Soi	le ³ .
2 cm Muc Depleted Thick Dar Sandy Mu MLRA Sandy Glo Sandy Re	Layers (A5) k (A10) (LRR N) Below Dark Surface k Surface (A12) ucky Mineral (S1) (Ll 147, 148) eyed Matrix (S4) dox (S5) Matrix (S6)		Depleted Mat Redox Dark S Depleted Dari Redox Deprei Iron-Mangane MLRA 136 Umbric Surfac Piedmont Flo Red Parent M	Surface (F k Surface ssions (F ese Mass b) ce (F13) (odplain S	(F7) 8) es (F12) ((MLRA 13 oils (F19)	6, 122) (MLRA 14	Ver Oth ³ Indic 18) weth	ner (Explain ators of hy and hydro	Dark Surfa in in Remar	vegetation a	and
	ayer (if observed):			atonar (1		ee er Proes		
Type:											
Depth (inch	nes):						Hydric Soil P	resent?	Yes	No	X

Project/Site:	ndy loan of year? Yes No antly disturbed? Are "Norma	_ State: <u>SC</u> Sampling Point: <u>NOO-2</u> M B14045buFg
SUMMARY OF FINDINGS – Attach site map show Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks:		
High Water Table (A2) Hydrogen Saturation (A3) Oxidized F Water Marks (B1) Presence Sediment Deposits (B2) Recent Iro Drift Deposits (B3) Thin Muck	oply) tic Plants (B14) Sulfide Odor (C1) Rhizospheres on Living Roots (C3) of Reduced Iron (C4) on Reduction in Tilled Soils (C6) (Surface (C7) plain in Remarks)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (in: Water Table Present? Yes No Depth (in: Saturation Present? Yes No Depth (in: Saturation Present? Yes No Depth (in: Concludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial provides the stream gauge of the		lydrology Present? Yes 🔽 No
Remarks:		

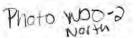
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	ames of	piants.		Sampling Point: WOO - 2
Tree Stratum (Plot size: 10x10mg) 1. Laudamans Staraciflua	% Cover	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A)
Unhus wbra	5	n	FAC	Total Number of Dominant
	~ <u> </u>		-	Species Across All Strata: (B)
			<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
	- 2 *			Prevalence Index worksheet:
50% of total cover: 15	20% of	= Total Cov total cover:		OBL species x 1 =
pling/Shrub Stratum (Plot size: 10×10m)	20 /8 01	total cover.		FACW species x 2 =
Liquidambar styracifica	15	4	FAC	FAC species x 3 =
Fraxmus pennsylvanica	15	-11	FACW	FACU species x 4 =
20		1		UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A =
		·		Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	30	= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 15	20% of	total cover:		 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
erb Stratum (Plot size: 5x 5m)				Problematic Hydrophytic Vegetation ¹ (Explain)
Rubrus Sp	30	<u>n</u>) resistance i jaroprijas regeleteri (Explant)
		-4-	ADI	¹ Indicators of hydric soil and wetland hydrology must
Pluchen sp	-10-	Jn	OBL.	be present, unless disturbed or problematic.
trantas ik		<u></u> µ_	_	Definitions of Four Vegetation Strata:
			() ;	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
			·	Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
	46			Herb - All herbaceous (non-woody) plants, regardless
50% of total cover: 323.		= Total Cov total cover:		of size, and woody plants less than 3.28 ft tall.
(Plot size: 5x5M)				Woody vine – All woody vines greater than 3.28 ft in height.
Lonicera iconnica	_10_	4	FAC	- Holgini
Toxicodentian raticans	_5_	y	FAC	
				Hydrophytic
	15		-	Vegetation Present? Yes X No
		Total Cov total cover:	2	
50% of total cover: 7,5				

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Sampling Point: 100 - 2 Wet

Depth Matrix Redox Features Type Loc ² Texture Remarks 0 - 4 2.5 YR 5/2 10 10.5 YR 5/4 10 6 M Ide_Isore Ide_Isore 4 - 12 + 2.5 YR 10/1 75 103/12 K 5/2 M 20 90 90 90 9 10.5 YR 5/4 10 10.5 YR 5/4 10.5 YR 5/4 10 10.5 YR 5/4 10.5 YR 5/4 10.5 YR 5/4 10 10.5 YR 5/4 10 10.5 YR 5/4	ks
Y = 13+ 2.5 YR LANT 75 Log(R S)/2 25 M Scd1	
Y - 13+ 2.5 YR LAPT 7.5 IQSR SIG 25 M Scd1 Yet	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ³ Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains. Type: Cast Praire Reduced Matrix, MS=Masked Sand Grains. ³ Location: PL=Pore Lining, M=Matrix, Indicators for Problematic Hydric Soil Indicators in Polyvalue Below Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S9) (MLRA 147, 148) 2 coast Praire Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Praire Redox (A16) Stratified Layers (A5) Depleted Matrix (F2) Pledmont Floodplain Soils (I (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Dark Surface (F7) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) MLRA 136) ³ Indicators of hydrophytic vege wetland hydrology must be prize soins (F12) (MLRA 148) Sandy Redox (S5) Pledmont Floodplain Soils (F19) (MLRA 148) ³ Indicators of hydrophytic vege wetland hydrology must be prize soils (F13) (MLRA 147, 147) Bischirte Layer (If observed): Trype: Hydric Soil Present? Yes Type: Depletin (inches): Hydric Soil Present? Yes	
ydric Soil Indicators: Indicators: Indicators for Problematic Hyd Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 14 Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (I Stratified Layers (A5) V Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (A17) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vege Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 136, 122) ³ Indicators of hydrophytic vege Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 147, 148) unless disturbed or problema Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema Upper	
ydric Soil Indicators: Indicators: Indicators for Problematic Hyd Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 14 Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (I Stratified Layers (A5) V Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (A17) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vege Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 136, 122) ³ Indicators of hydrophytic vege Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema strippe:	
Hydric Soil Indicators: Indicators for Problematic Hydrony Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (f Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (F7) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vege Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 136, 122) Indicators of hydrophytic vege Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) unless disturbed or problema Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema Depth (inches): Depth (inches): Hydric Soil Present? Yes Indicators Present? Yes </td <td></td>	
Indicators: Indicators: Indicators for Problematic Hyd Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 14 Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (f Stratified Layers (A5) V Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (F7) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vege Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema Type:	
Hydric Soil Indicators: Indicators for Problematic Hydrony Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (f Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (F7) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vege Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 136, 122) Indicators of hydrophytic vege Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) unless disturbed or problema Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema Depth (inches): Depth (inches): Hydric Soil Present? Yes Indicators Present? Yes </td <td>-</td>	-
Hydric Soil Indicators: Indicators: Indicators for Problematic Hydrony Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (f Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (F7) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vege Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Indicators of hydrophytic vege Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema Type:	
Hydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soil (A1) Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (I Stratified Layers (A5) V Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (F7) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vege Sandy Gleyed Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 136, 122) Indicators of hydrophytic vege Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Inless disturbed or problema Type:	
Histosol (A1)	
Type:	face (TF12) arks) vegetation and be present,
Depth (inches); Hydric Soil Present? Yes	
	No
rtemarks.	



Project/Site: 6214 / 185	City/County: Chu	rokec	Sampling Date: 12/09/15
Applicant/Owner: SCDOT			_ Sampling Point: NDO-2
Investigator(s): M. Frazer 4 S. E	Section, Township, F	Range: Blacksburg	
	Ind Local relief (concave, co	onvex, none): None	Slope (%): D
	: 35.132435 L	ong: -81.535939	Datum: NAD83
	ne sand lower	NWI classifica	ition:
Are climatic / hydrologic conditions on the site typical	and the second sec	(If no, explain in Re	
Are Vegetation, Soil, or Hydrology			esent? Yes 🔽 No
Are Vegetation, Soil, or Hydrology	10	needed, explain any answers	
SUMMARY OF FINDINGS – Attach site r			
SUMMART OF FINDINGS - Attach site I	nap snowing sampling point	nocations, transects,	important leatures, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No Is the Sample No No within a Wet		No
HYDROLOGY		A 1 (F 4	2.3.4. A. 1
Wetland Hydrology Indicators:	a off these stands of		ors (minimum of two required)
Primary Indicators (minimum of one is required; che Surface Water (A1)	True Aquatic Plants (B14)	Surface Soil C	etated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patt	
Saturation (A3)	Oxidized Rhizospheres on Living Re		
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season V	Vater Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils	the second se	
Drift Deposits (B3)	Thin Muck Surface (C7)		sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	Other (Explain in Remarks)	Stunted of Sti Geomorphic F	ressed Plants (D1) Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquit	and the second sec
Water-Stained Leaves (B9)			phic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)
Field Observations:	12.3.4.7		
Surface Water Present? Yes No			
Water Table Present? Yes No	Depth (inches):	Wetland Hydrology Present	Var No F
Saturation Present? Yes No (includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspection	ons), if available:	and the second second
Remarks:			

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Mura 1		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 0x10m)		Species?		Number of Dominant Species
, Liquidambar Sturacitlua	10	4	FAC	That Are OBL, FACW, or FAC: (A)
2. VIMUS WERA	5	Jn	FAC	
			THE	Total Number of Dominant
3				Species Across All Strata:(B)
4				Demonst of Demission Consists
5				Percent of Dominant Species That Are OBL, FACW, or FAC:(0_7)(A/B
				That Are OBL, FACW, OF FAC (A/D
B				Prevalence Index worksheet:
l		_		
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 37-1	5 20% of	total cover:	15	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10x10m)			_	FACW species x 2 =
Liquidambai Styraciflica	10		FAC	FAC species x 3 =
		<u>_</u> ()	and the second	
Juniper virginiaha	16	11-	FACO	FACU species x 4 =
Quecus phellos	5	N	FAC	UPL species x 5 =
Ligustium sinense	5	0	FACU	Column Totals: (A) (B
			FILL	
			_	Prevalence Index = B/A =
•				
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
		1.2.		1. 1997년 1월 28일 - 1일 -
	30	= Total Cov		3 - Prevalence Index is ≤3.0'
50% of total cover:/S				4 - Morphological Adaptations' (Provide supportin
	20% 01	total cover.	<u>w</u>	data in Remarks or on a separate sheet)
terb Stratum (Plot size: 5×5 pm_)			-	Problematic Hydrophytic Vegetation ¹ (Explain)
Lonicera japonica	10	U.	FAC	Problematic Hydrophytic vegetation (Explain)
Zigustium sinense	5	2	FACU	Street Constraint Provide State
	E	- <u>y</u> -	THOU	¹ Indicators of hydric soil and wetland hydrology must
, Robert and	2			be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
l				Some of tour toge anon of the.
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) o
l				more in diameter at breast height (DBH), regardless o
V				height.
				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
0				m) tall.
1	A			Herb - All herbaceous (non-woody) plants, regardless
	20	= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 10		total cover:	4	or size, and woody plants icas than 0.20 it tall.
2. 그 방법 전 영상, 2014년 1월 19일 - 1월	_ 20% 01	total cover:		Woody vine - All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot size: 515 M)			1.0	height.
Toxicodendion radicans	5	11 -	FAC	
·		-	<u> </u>	
		-		
	_			Hydrophytic
				Vegetation
				Vegetation Present? Yes + No
		Total Cove		Vegetation Present? Yes <u>+</u> No
50% of total cover: _2		= Total Cover:		
	∑ 20% of			
	∑ 20% of			
	∑ 20% of			
50% of total cover: _2 <	∑ 20% of			
	∑ 20% of			
	∑ 20% of			
	∑ 20% of			
	∑ 20% of			

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-	-	
-		

0- I2+ 7 5		<u>%</u> (00	2.5Y(6/ 7.5YR 6	st)	Features % 20 20	<u>Type¹</u>				Rema	arks
0- I2+ 7 5	SYR SI (e	A	2.5461	6	20						
Type: C=Concentr ydric Soll Indicat	ration, D=Dep				_						
ydric Soil Indicat											
ydric Soil Indicat											
ydric Soil Indicat							<u> </u>				
ydric Soil Indicat							=				
ydric Soil Indicat						_	\equiv	-			
ydric Soil Indicat						_	\equiv	<u> </u>			
dric Soil Indicat		Ξ				_	\equiv	<u> </u>			
dric Soil Indicat		Ξ									
ydric Soil Indicat		-						-	110		
ydric Soil Indicat											
ydric Soil Indicat								-			
		letion, RM=	Reduced Mai	trix, MS=	Masked	Sand Gra	ains.	² Locatio	on: PL=Pore L	ining, M=Ma	atrix.
	tors:							1	Indicators for	Problemat	ic Hydric Soils ³ :
_ Histosol (A1)				Surface ((A10) (ML	
Histic Epipedor							LRA 147,	148)	Coast Prai		A16)
Black Histic (AS						(MLRA 1	47, 148)			147, 148)	0-11- (540)
_ Hydrogen Sulfic					Matrix (F	-2)			Piedmont		Solis (F19)
Stratified Layer 2 cm Muck (A1)				ed Matri	urface (F	6)				136, 147) ow Dark Su	Inface (TF12)
Depleted Below		e (A11)			Surface					lain in Rem	
_ Thick Dark Sur		u ((117)			sions (F8					CENSEX CLER	
Sandy Mucky M		RR N,	and a second sec			es (F12) (LRR N,				
MLRA 147, 1	148)			RA 136)	and the second second second				a second of		
_ Sandy Gleyed						MLRA 13					c vegetation and
_ Sandy Redox ((MLRA 14				t be present,
_ Stripped Matrix		_	Red P	arent Ma	aterial (F	21) (MLR	A 127, 147	<u></u>	unless distu	rbeu or pro	iolematic.
estrictive Layer (ir observed):							1.1-			
Туре:			-					Sec. del.	- Call Descent	y vee	No
Depth (inches):	-	-	-					Hydro	c Soll Present	? Yes	NO
emarks:											

roject/Site:	185	City/County:(herokee Sampling Date: 12/09/15
pplicant/Owner:	SCOT		State: SC Sampling Point: WPP-
	M. Prazer + S. 1	BUILTON Section Townsh	ip, Range: Blacksburg
andform (hillslope, terra	THE REAL PROPERTY OF THE PARTY		
ubregion (LRR or MLR		5. 13/751	Long: Long: Datum: 1.141)
Ubregion (LRR or MLR			
	A-altavista fine Sandy		
	conditions on the site typical for th		No (If no, explain in Remarks.)
	Soil, or Hydrology	ar was are and the first	Are "Normal Circumstances" present? Yes No
re Vegetation,	Soil, or Hydrology	naturally problematic? NO	(If needed, explain any answers in Remarks.)
SUMMARY OF FI	IDINGS – Attach site map	showing sampling po	pint locations, transects, important features, e
		1	
Hydrophytic Vegetation			mpled Area
Hydric Soil Present? Wetland Hydrology Pre		No within a	Wetland? Yes <u>X</u> No
Remarks:	sent: Tes	NO	
(settlement			
Surface Water (A1 High Water Table Saturation (A3) Water Marks (B1)	(A2) Hyi Ox	le Aquatic Plants (B14) drogen Sulfide Odor (C1) idized Rhizospheres on Livin esence of Reduced Iron (C4)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) g Roots (C3) Moss Trim Lines (B16) Dry-Season Water Table (C2)
Water Marks (B1) Sediment Deposits		cent Iron Reduction in Tilled	
Drift Deposits (B3)		n Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust		ner (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)			Geomorphic Position (D2)
	on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Lea			Microtopographic Relief (D4) FAC-Neutral Test (D5)
Aquatic Fauna (B1	37		
Field Observations	? Yes No De	epth (inches): 0 - A	
Field Observations: Surface Water Present			/
Surface Water Present	Yes V No De	epth (inches): SUT + 4@	
Surface Water Present Water Table Present?		epth (inches): <u>SUF Face</u> epth (inches): JJ-Face	Wetland Hydrology Present? Yes No
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring	Yes 🔽 No _ De	epth (inches): JJ-face	
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring	Yes V No De	epth (inches): JJ-face	
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring Describe Recorded Da	Yes 🔽 No _ De	epth (inches): JJ-face	
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring	Yes 🔽 No _ De	epth (inches): JJ-face	
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring Describe Recorded Da	Yes 🔽 No _ De	epth (inches): JJ-face	
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring Describe Recorded Da	Yes 🔽 No _ De	epth (inches): JJ-face	
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring Describe Recorded Da	Yes 🔽 No _ De	epth (inches): JJ-face	
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring Describe Recorded Da	Yes 🔽 No _ De	epth (inches): JJ-face	
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring Describe Recorded Da	Yes 🔽 No _ De	epth (inches): JJ-face	
Surface Water Present Water Table Present? Saturation Present? (includes capillary fring Describe Recorded Da	Yes 🔽 No _ De	epth (inches): JJ-face	

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

Sampling Point: WPP-10 wet

Tree Stratum (Plot size: 10x10 M) 1. Platanus occidentalis	Absolute <u>% Cover</u> 30	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
2. Alev Robring	15	-li-	FAC	Total Number of Dominant
3. Liquidambar Styraciflua	20	<u> </u>	FAC	Species Across All Strata:(B)
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: 89 (A/B
6				Prevalence Index worksheet:
7	65	= Total Cov		Total % Cover of:Multiply by:
50% of total cover:		total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10x10m)			1.2	FACW species x 2 =
1. Liquidambar styraciflua	20	- u ·	FAG	FAC species x 3 =
2. QUEVEUS PHEILOS		07	FQ(FACU species x 4 =
3. Ulmus clata	10	ti.	FACU	UPL species x 5 =
4		3	TURE	Column Totals: (A) (B)
5		-		Dravelance Index = D/A =
6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7		<u></u>		1 Rapid Test for Hydrophytic Vegetation
8				2 - Domínance Test is >50%
9				The second se
	35	= Total Cov	er	3 - Prevalence Index is ≤3.01
50% of total cover: 17	.5 20% of	total cover:	7	4 - Morphological Adaptations ¹ (Provide supportin
Herb Stratum (Plot size: 5x5m)				data in Remarks or on a separate sheet)
1. Lonicara inponica	5	U.	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Diministin' annoinacam	10	N.	FAC	a torte the state of a state of the state of
The second		-9		¹ Indicators of hydric soil and wetland hydrology must
4		-	-	be present, unless disturbed or problematic.
		\sim	<u></u>	Definitions of Four Vegetation Strata:
5				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) o
6		-		more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9		_		than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11		Contract T		Herb - All herbaceous (non-woody) plants, regardless
50% of total cover: 7	e 001 -1	= Total Cove	er S	of size, and woody plants less than 3.28 ft tall.
	<u> </u>	total cover:		Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 5x5m)	10	1.20	mar	height.
1. LONICERA JEPONES	10	<u> </u>	FAC	
2. Textedendion headens	25	4-	FAC	
3				
4	_			Hydrophytic
5				Vegetation
	35	= Total Cove	er	Present? Yes X No
50% of total cover: 17	5 20% of	total cover:	1_	
Remarks: (Include photo numbers here or on a separate	sheet.)			L'

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C	\mathbf{n}	н.
0	U	ы.

Sampling Point: WPP wet

	ription: (Describe Matrix		Redox	Feature	s							
epth nches)	Color (moist)	%	Color (moist)	_%	Type	Loc ²	Texture	-	F	emark	S	_
5-4	IOYR 5/2	100		1.4			SEL			_		
4-12+	pyrulz	70	54R5/6	15		_ <u>M_</u>	SCL	15:7.5	YR	6/4	CM	Sel
-				-								
	<u></u>											
		_		_		\equiv						
				-				-		_		-
				_				-		19150		
and the second se	oncentration, D=Dep Indicators:	letion, RM=	Reduced Matrix, MS	=Masked	I Sand Gr	ains.	² Location:	PL=Pore Li cators for				
_ Thick Da _ Sandy M _ MLRA _ Sandy G _ Sandy R	Below Dark Surfac ark Surface (A12) Aucky Mineral (S1) (I A 147, 148) Bleyed Matrix (S4) Bedox (S5)		Depleted Dar Redox Depre Iron-Mangane MLRA 136 Umbric Surfa Piedmont Flo	ssions (F ese Mass 6) ce (F13) odplain S	8) es (F12) ((MLRA 13 ioils (F19)	6, 122) (MLRA 14	48) V	Other (Exp ndicators of vetland hyd	hydroj rology	ohytic v must b	egetatior e presen	
the second of the second	Matrix (S6) Layer (if observed)		Red Parent N	laterial (F	21) (MLR	A 127, 14	7) u	inless distu	rbed o	r proble	ematic.	-
Type: Depth (inc	zboc):						Hydric Sc	oil Present	? Ye	s X	No	
emarks:	siles).	-			_		- injune et				- 2014	_

Project/Site:/ 185 Applicant/Owner:S(1) nvestigator(s):M, P/0	or zer 4 S. Bur	City/County:		ate: <u>SC</u>	Sampling Date: 12/09/13 Sampling Point <u>: WPP-16</u>
Landform (hillslope, terrace, etc. Subregion (LRR or MLRA): <u>LLP</u> Soil Map Unit Name: <u>H-(A - a (</u>	P Lat: 35 tavista fine sand	131751 4 loan/My-mix		537981 NWI classificat	
Are climatic / hydrologic conditio Are Vegetation, Soil Are Vegetation, Soil SUMMARY OF FINDING	, or Hydrology si , or Hydrology na	gnificantly disturbed?	Are "Normal Circ (If needed, expla	umstances" pre in any answers	esent? Yes <u>//</u> No in Remarks.)
Hydrophytic Vegetation Presen Hydric Soil Present? Wetland Hydrology Present?	1	Is the S within a	ampled Area a Wetland?	Yes	No
HYDROLOGY					
Wetland Hydrology Indicator	s:		Sec	ondary Indicato	ors (minimum of two required)
Primary Indicators (minimum of	one is required; check all th	hat apply)		Surface Soil C	
 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Water-Stained Leaves (B9 Aquatic Fauna (B13) 	Imagery (B7)	Aquatic Plants (B14) ogen Sulfide Odor (C1) ized Rhizospheres on Liv ence of Reduced Iron (C4 int Iron Reduction in Tiller Muck Surface (C7) r (Explain in Remarks)	ing Roots (C3) I) I Soils (C6) 	Drainage Patte Moss Trim Line Dry-Season W Crayfish Burro Saturation Visi	es (B16) later Table (C2) ws (C8) ble on Aerial Imagery (C9) essed Plants (D1) osition (D2) urd (D3) hic Relief (D4)
Field Observations:	Ar	The second second			
Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes No Dep	th (inches): th (inches): th (inches):	Wetland Hydro	ology Present	? Yes No
Describe Recorded Data (strea	m gauge, monitoring well, a	erial photos, previous ins	pections), if available	9;	11 M
Remarks:					

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Tree Stratum (Plot size: 10x 0m)	Absolute	Dominant	Indicator	Dominance Test worksheet:
		Species?		Number of Dominant Species
. Liquidambar styraciflua	40	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
e. Acer Ruburn	10	-M-	FAC	Total Number of Dominant
3		5		Species Across All Strata:
		1		
5.			-	Percent of Dominant Species That Are OBL, FACW, or FAC: 83% (A/B)
5. 5.		· · · · · · · · · · · · · · · · · · ·		That Are OBL, FACW, or FAC: <u>X 5 Co</u> (A/B)
				Prevalence Index worksheet:
7	GO	= Total Cov		Total % Cover of: Multiply by:
50% of total cover: _25	0000-6	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10x10 m.)	20% 01	total cover.	10	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 10/11/19)	20	1.1.1	Enn.	
Ligustum sinense	20	_ <u>N_</u>	FHW	FAC species x 3 =
2. Juiliper Virginiana	5	_V-	FRO	FACU species x 4 =
				UPL species x 5 =
N				Column Totals: (A) (B)
i	C	· · · · · · · · · · · · · · · · · · ·	· · · · ·	
3		-		Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
3				2 - Dominance Test is >50%
)		Care care		3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 12	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: <u>5x5m</u>)			-	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Ligustnum sinevise	10	<u> </u>	FACU	Problematic Hydrophytic vegetation (Explain)
2. Dificnium anndinaceuri	5	N	FAG	States States Automatical States and a state
3. Microsh Parry viminium	30	и	FAC	¹ Indicators of hydric soil and wetland hydrology must
4.		-5-	<u>teres</u>	be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
5				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
ð				more in diameter at breast height (DBH), regardless of
/				height.
				And a second s
3		-		Conflag/Church Wenderslands qualitating stages land
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in DBH and greater than or equal to 3 28 ft (1
)		1	\equiv	than 3 in. DBH and greater than or equal to 3.28 ft (1
9 10		=		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9 10				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
9 10 11	45	= Total Cove		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9 0 11 50% of total cover: <u>22</u> _	45			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
9 0 11 50% of total cover: <u>22</u> _	45			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
) 0 1 50% of total cover: <u>22_</u> <u>Voody Vine Stratum</u> (Plot size:)	45			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9 0 1 1 50% of total cover: <u>22</u> <u>Voody Vine Stratum</u> (Plot size:)	45			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	45			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	45			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
9	45			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
8 9 10 11 50% of total cover: <u>22</u> <u>Woody Vine Stratum</u> (Plot size:) 1) 1 2 3 4	<u>45</u> 5 20% of	total cover:	9	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
9	<u>45</u> 5 20% of		9	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

US Army Corps of Engineers

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Sampling Point: WPP-P

Depth Matrix nches) Color (moist) %	Color (moist)	Features %	Type ¹	Loc2	Texture	Remarks
0-2 104R413 100			22.		SEL	
2-12+ 54R5/6 80	104R6/3	20	D	<u>M</u>	Sec .	
			-	_	_	
		Ξ		<u> </u>	_	
	Poduced Metrix MS		Sand Cr		² Location: PL	=Pore Lining, M=Matrix.
ype: C=Concentration, D=Depletion, RM= /dric Soil Indicators:	Reduced Matrix, MS	=Masked	Sand Gr	ains.		ors for Problematic Hydric Soils ³ :
Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	Depleted Material Redox Dark S Depleted Dark Redox Deprese Iron-Mangane MLRA 136 Umbric Surface Piedmont Floo Red Parent M	Surface (Fi & Surface Ssions (F8 Sse Masse) () (F13) (I Sodplain Sc	(F7) 8) 95 (F12) (MLRA 13 pils (F19)	6, 122) (MLRA 1	Vei Oth ³ Indic 48) weth	MLRA 136, 147) ry Shallow Dark Surface (TF12) her (Explain in Remarks) ators of hydrophytic vegetation and and hydrology must be present, ss disturbed or problematic.
strictive Layer (if observed): Type:		atoriai (r) (
Depth (inches):	-				Hydric Soil P	Present? Yes No k
emarks:						

Photo Wall-8 NE+SW

WE	TLAND DETERMIN	ATION DATA FORM	- Eastern Mount	ains and Piedmo	nt Region
Project/Site:17	5 16214	Citv/	County: Chero	Kec s	Sampling Date: 13/09/15
Applicant/Owner:	SCDOT	ony.	ovanij		Sampling Point: WQQ-14 WC
Investigator(s):	0.0/0	Burton Sect	ion, Township, Range:	71	
	Oall		elief (concave, convex,)		
Landform (hillslope, ter	2	Lat: 35, 131485		81.539074	Datum: NAD83
Subregion (LRR or MLI		- When have a state of the state of the	Long:		05.00
	nr-mixed all		1	NWI classificat	
		ical for this time of year?		_ (If no, explain in Rei	
		y significantly distu	and the second		esent? Yes No
Are Vegetation,	Soil, or Hydrolog	y naturally problem	natic?//o (If needed	d, explain any answers	in Remarks.)
SUMMARY OF F	NDINGS - Attach s	ite map showing sar	mpling point loca	tions, transects,	important features, etc.
Hydrophytic Vegetatio Hydric Soil Present? Wetland Hydrology P Remarks:	Yes _	No No No	Is the Sampled Are within a Wetland?	a Yes 🗹	No
HYDROLOGY				-	
Wetland Hydrology		town with the tree of the		and the second s	ors (minimum of two required)
11	inimum of one is required	particular of the second second second		Surface Soil C	
Surface Water (A		True Aquatic Plants			etated Concave Surface (B8)
High Water Table	: (A2)	Hydrogen Sulfide O	aor (C1) eres on Living Roots (C	 Drainage Patter Moss Trim Lin 	
Saturation (A3) Water Marks (B1	N.	Presence of Reduce			/ater Table (C2)
Sediment Deposi			ion in Tilled Soils (C6)	Crayfish Burro	
Drift Deposits (B:		Thin Muck Surface		Saturation Vis	ible on Aerial Imagery (C9)
Algal Mat or Crus		Other (Explain in Re	emarks)		essed Plants (D1)
Iron Deposits (B5				Geomorphic P	and the second se
	e on Aerial Imagery (B7)			Shallow Aquit	
Water-Stained Le				FAC-Neutral 1	ohic Relief (D4)
Aquatic Fauna (E Field Observations:	- A			12 PAC-Neulian	est (00)
Surface Water Prese	1	Depth (inches): ()	-8		• • • • • • • • • • • • • • • • • • •
Water Table Present	7	Depth (inches):	Concernant March Concernant Concernat		
Saturation Present?	Yes V No	Depth (inches): 5		d Hydrology Present	? Yes No
(includes capillary frin	ide)	oring well, aerial photos, p		ovailable:	
Describe Recorded L	ata (stream gauge, monit	oning wen, aenai priotos, pi	revious inspections), in	availabic.	
Remarks:					

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Free Stratum (Plot size:)	Absolute	Dominant		Dominance Test worksheet:
	<u>% Cover</u>	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	_		_	Total Number of Dominant Species Across All Strata:
	_	<u> </u>	_	Percent of Dominant Species 100 (A/B)
B		_	<u> </u>	Prevalence Index worksheet:
	;			Total % Cover of: Multiply by:
	_	= Total Cove		OBL species x 1 =
50% of total cover:	20% of	total cover:		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 0x 0M)	-		TON	FAC species x 2 =
Novidamber styrighting			THE	FACU species x 4 =
			(i	UPL species x 5 =
·				Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
		_		2 - Dominance Test is >50%
	5	= Total Cove	r	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 2-5	_ 20% of	total cover:	1	4 - Morphological Adaptations ¹ (Provide supporting
terb Stratum (Plot size: 5x5m)				data in Remarks or on a separate sheet)
. Festura, sa	5	-	-	Problematic Hydrophytic Vegetation ¹ (Explain)
KINDAUS SP.	20	-	-	
Fluchea sp.	5	17.00		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
, Junius erties	80	.U.	FACW	
		5	_	Definitions of Four Vegetation Strata:
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
é;				
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
0				m) tall.
			-	
				Harb - All herbaceous (non-woody) plants, regardless
	110 -	- Total Cove	C	I of size and woody plants less than 3.28 if fall
1		= Total Cove total cover:		of size, and woody plants less than 3.28 ft tall.
1 50% of total cover:		= Total Cove total cover:_		Woody vine - All woody vines greater than 3.28 ft in
150% of total cover:5				
1 50% of total cover:				Woody vine - All woody vines greater than 3.28 ft in
150% of total cover:5				Woody vine - All woody vines greater than 3.28 ft in
150% of total cover:5				Woody vine – All woody vines greater than 3.28 ft in height.
1				Woody vine – All woody vines greater than 3.28 ft in height.
150% of total cover:5	20% of	total cover:	22 	Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	20% of		22 	Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

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SOIL

tion also and t	Matrix	-		Feature		1 . 2	The second	Banada
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks
0-3	7.8411	10			-		CALLI	
2-12+	7.54R 6/1	60	7. SYRSIG	20	6	rr1		·
			754R416	20	C	m	- (n)	L
		·		_				
					-			
		-	-					
	*		·	-			-	
	<u></u>					-		1
				-	-		-	in the second and the second
		letion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Solls ³ :
lydric Soil I				1071				
Histosol	Construction of the local sector of the local		Dark Surface Polyvalue Be		00 /C9) (8	DA 147		2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16)
Black His	vipedon (A2) stic (A3)		Thin Dark Su				140)	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		•			Piedmont Floodplain Soils (F19)
	Layers (A5)		Pepleted Mat					(MLRA 136, 147)
	ck (A10) (LRR N)	- Jack	Redox Dark S					Very Shallow Dark Surface (TF12)
	Below Dark Surfac	e (A11)	Depleted Dar					Other (Explain in Remarks)
and the second s	rk Surface (A12) lucky Mineral (S1) (I	RR N.	Redox Depre Iron-Mangane			RR N.		
	147, 148)		MLRA 136		co (i 12/1			
	leyed Matrix (S4)		Umbric Surfa	1. S. C. S. C. S. C. S.	MLRA 13	6, 122)		dicators of hydrophytic vegetation and
Sandy R	edox (S5)		Piedmont Flo					etland hydrology must be present,
			Pod Parent M	laterial (F	21) (MLR	A 127, 14	7) u	nless disturbed or problematic.
Stripped	Matrix (S6)				1944 0 200		1	
Stripped Restrictive L	Matrix (S6) .ayer (if observed):						İ	
Stripped Restrictive L Type:	ayer (if observed):		4				ĺ	Il Present? Yes No
Stripped Restrictive L	ayer (if observed):		4				ĺ	Il Present? YesNo
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> No
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> potssivanal
Stripped testrictive L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> potessional
Stripped testrictive L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> potessional
Stripped testrictive L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> potessional
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> postussional
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> pottissional
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> potessional
Stripped testrictive L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u>
Stripped testrictive L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u>
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> pottissional
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> pottessional
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> potessional
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u>
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u>
Stripped Restrict/ve L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> potessivanal
Stripped testrictive L Type: Depth (inc	ayer (if observed):		4				ĺ	Il Present? Yes <u>No</u> potessional

nvestigator(s): <u>M.</u> F andform (hillslope, terrace, etc	S WOOT Cazer 4 S So: field	S. Burton see	//County;	_ State: <u>SC</u> Sampling Point: <u>WQQ-14</u> Blacksburg
ubregion (LRR or MLRA):	1.5 C	Lat: 35.131485		21, 539074 Datum: NAD83
			Long	
oil Map Unit Name: <u>IM V</u> −		and the second second second second		NWI classification:
re climatic / hydrologic conditi	Contraction of the second second	which and a subscription of the same		(If no, explain in Remarks.)
re Vegetation <u>Yes</u> , Soil <u>V</u>				I Circumstances" present? Yes No
re Vegetation, Soil			the second state of the second state of the	explain any answers in Remarks.)
SUMMARY OF FINDING	3S – Attach site	e map showing sa	impling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Prese Hydric Soil Present? Wetland Hydrology Present? Remarks:	ent? Yes Yes Yes	No No	is the Sampled Area within a Wetland?	Yes No
YDROLOGY Wetland Hydrology Indicato				Secondary Indicators (minimum of two required)
Primary Indicators (minimum (bock all that apply)		Surface Soil Cracks (86)
Surface Water (A1)	one la required, e	True Aquatic Plants	s (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide C		Drainage Patterns (B10)
Saturation (A3)			eres on Living Roots (C3)	Moss Trim Lines (B16)
Water Marks (B1)		Presence of Reduc	xed Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2)			tion in Tilled Soils (C6)	Crayfish Burrows (C8)
_ Drift Deposits (B3)		Thin Muck Surface	a contraction of the second se	Saturation Visible on Aerial Imagery (C9)
_ Algal Mat or Crust (B4)		Other (Explain in R	lemarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aeri	ial Imagery (B7)			Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B	Contraction of the second second			Microtopographic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral Test (D5)
ield Observations:		1		
urface Water Present?	Yes No _L	Depth (inches):		
under trater i resent.	Yes No _4	Depth (inches):		
		Contraction Construction	INCOMPANY OF 1	Hydrology Present? Yes No
Vater Table Present? aturation Present?	Yes No	Depth (inches):	vvetiand l	Hydrology Present? Tes No
Vater Table Present? aturation Present? includes capillary fringe)				
Vater Table Present? Saturation Present? Includes capillary fringe) Describe Recorded Data (stre Remarks:				

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16	Absolute	Dominant	Indicator	Dominance Test worksheet:	
ree Stratum (Plot size: <u>10 X10 m</u>) 1. Fraxinus pennsylvanica	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
- mantus portio que ance			11.00*	A CALL AND A	(A)
		-		Total Number of Dominant 4	(B)
		\equiv	\equiv	Percent of Dominant Species That Are OBL, FACW, or FAC: 50	(A/B
	-			Prevalence Index worksheet:	
Contract Contract Contract	15	= Total Cov	er	Total % Cover of:Multiply by	
50% of total cover: 7	5 20% of	total cover:	3	OBL species x 1 =	
ipling/Shrub Stratum (Plot size: 10x10m)	122		1.1.2.	FACW species x 2 =	
LIQUSTUM SINENSE	- 20	-4-	FACU	FAC species x 3 =	
Liquidambar styricifica.	10	_4_	FAC	FACU species x 4 =	
The second second second second				UPL species x 5 =	
				Column Totals: (A)	(B)
				Prevalence Index = B/A =	-
				Hydrophytic Vegetation Indicators:	
				1 - Rapid Test for Hydrophytic Vegetation	on
	1			2 - Dominance Test is >50%	
	30	= Total Cove	er	3 - Prevalence Index is ≤3.0 ¹	
50% of total cover: 15	20% of	total cover:		4 - Morphological Adaptations ¹ (Provide	
erb Stratum (Plot size: 5x.5m.)			1	data in Remarks or on a separate she	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Feshica so:	70	-	-	Problematic Hydrophytic Vegetation ¹ (E)	xplain)
Eupstenium capillifolium		4	FACU	And a second second second	
Rubrus SP,	10	2		¹ Indicators of hydric soil and wetland hydrolo be present, unless disturbed or problematic.	igy must
				Definitions of Four Vegetation Strata:	
	·			The Manual Anna and Anna Anna Anna	
	·			Tree – Woody plants, excluding vines, 3 in. (more in diameter at breast height (DBH), reg	
				height.	
				Sapling/Shrub - Woody plants, excluding vi	ines less
				than 3 in. DBH and greater than or equal to 3	
×1				m) tall.	
<u> </u>		-		Herb - All herbaceous (non-woody) plants, r	
	_/00 =	Total Cove	er næ	of size, and woody plants less than 3.28 ft ta	11.
50% of total cover: <u>50</u>	20% of	total cover:	20	Woody vine - All woody vines greater than :	3.28 ft in
oody Vine Stratum (Plot size: 5x.5m)	20	1.1	1.0	height.	1997 - 29X
Smilax sp	- 00				
		ليصب		Hydrophytic	1
				Vegetation	/
50% of total cover: /D		 Total Cove total cover: 	11	Present? Yes No	÷0
er familieren 2008 and 2008	and the second of	total of for.	<u> </u>		
Remarks: (Include photo numbers here or on a separate s	sheet.)				

1.10

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	cription: (Describe t	o the dep				or confirm	n the absence	of indicator	rs.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Features %	S Type ¹	Loc ²	Texture		Remarks		
()- J	7.5YR4/3	90	7.5YR4/4	10	1	m	Sirl	-	() Stillaritie		
2 1-	7.5KR (1)2	10	10YR716	40		M	SECI	-			
d-lat	1. 1. V 1414	40		20		m	$\frac{2r-c-1}{p}$ H	dicko	bed so	1	
			<u>5 YR 416</u>						04C1 A19		
	oncentration, D=Depl Indicators:	etion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: P Indic	L=Pore Linin ators for Pro			ils ³ :
Black H Hydroge Stratifie 2 cm Mi Deplete Thick Di Sandy N MLR/ Sandy F Sandy F	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Jck (A10) (LRR N) d Below Dark Surface ark Surface (A12) Aucky Mineral (S1) (L A 147, 148) Sleyed Matrix (S4) Redox (S5)		Dark Surface Polyvalue Bit Thin Dark Si Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Iron-Mangar MLRA 13 Umbric Surff Piedmont Fl	elow Surfac urface (S9) ed Matrix (atrix (F3) Surface (F rrk Surface essions (F6 nese Masso 66) ace (F13) (oodplain S	(MLRA 1 F2) (F7) B) es (F12) (MLRA 13 oils (F19)	47, 148) LRR N, 6, 122) (MLRA 14	, 148) C P V C ³ Ind 48) we	cm Muck (A coast Prairie (MLRA 147 liedmont Flor (MLRA 138 (ery Shallow ther (Explain icators of hy etland hydrol	Redox (A16 7, 148) odplain Soils 5, 147) Dark Surfac n in Remarks drophytic ve ogy must be) s (F19) æ (TF12) s) getation present,	
	Matrix (S6)		Red Parent	Material (F	21) (MLR	A 127, 14	7) un	less disturbe	d or problem	natic.	_
Type:	Layer (if observed):										
Depth (in	ches):						Hydric Sol	Present?	Yes	No	~
Remarks:											

Applicant/Owner: SCDOT Investigator(s): E. Moman 4 S. Burton Section	es No (If no, explain in Remarks.) bed? No Are "Normal Circumstances" present? Yes No utic? No (If needed, explain any answers in Remarks.)
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No No	is the Sampled Area within a Wetland? Yes <u>No</u>
HYDROLOGY	
Water Marks (B1) Presence of Reduced Sediment Deposits (B2) Recent Iron Reductio Drift Deposits (B3) Thin Muck Surface (C Algal Mat or Crust (B4) Other (Explain in Ren Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)	or (C1) ✓ Drainage Patterns (B10) es on Living Roots (C3) Moss Trim Lines (B16) I Iron (C4) Dry-Season Water Table (C2) n in Tilled Soils (C6) Crayfish Burrows (C8) C7) Saturation Visible on Aerial Imagery (C9)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, present)	Hate Wetland Hydrology Present? Yes V No
Remarks:	

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

Sampling Point: WSS-4 Wet

Invite .	Absolute	Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 10210 m) 1. 11941 dambar sturaciflya	10		FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
2. <u>Alterous</u> prinué	5	<u> </u>	UPL	Total Number of Dominant Species Across All Strata:	(B)
4 5			Ξ	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>99</u>	(A/B
6				Prevalence Index worksheet:	
7	10	the later	<u> </u>	Total % Cover of:Multiply by:	
50% of total cover:	5 200% of	= Total Cov	er	OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: レンパロの)	10 20% or	total cover:		FACW species x 2 =	
1. Liquistanci sincinse	10-	10	Flores	FAC species x 3 =	-
2. Liquidambar styraciflua	15	_11	FACU	FACU species x 4 =	
a Alnus servicita		4	FAC	UPL species x 5 =	
	30	<u> </u>	OBL	Column Totals: (A)	
					_ (0)
				Prevalence Index = B/A =	
				Hydrophytic Vegetation Indicators:	
				1 - Rapid Test for Hydrophytic Vegetation	
l				2 - Dominance Test is >50%	
l				3 - Prevalence Index is ≤3.01	
75	<u>63</u>	Total Cov	er	4 - Morphological Adaptations ¹ (Provide sup	porting
50% of total cover: 37	. <u> </u>	total cover:	_//	data in Remarks or on a separate sheet)	portant
Herb Stratum (Plot size: _ うんうい_)				Problematic Hydrophytic Vegetation ¹ (Explain	n)
Land a japanica		4	FAC		
Typha lattitula		<u> </u>	OBL	Indicators of hudein pail and wetland hudeateeu a	
3. Whey's CEGUSUL	· · ·	<u>0</u>	FACW	¹ Indicators of hydric soil and wetland hydrology n be present, unless disturbed or problematic.	lust
4	_	1		Definitions of Four Vegetation Strata:	
5					
6		_		Tree - Woody plants, excluding vines, 3 in. (7.6 of more in diameter of breast bright (DBII)	cm) or
7				more in diameter at breast height (DBH), regardle height.	ess or
8		1000	_	State of the second second second second	
9				Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than or equal to 3.28	
10				m) tall.	u (i
11.			1		400
		Total Cove	1.00	Herb – All herbaceous (non-woody) plants, regar of size, and woody plants less than 3.28 ft tall.	dless
50% of total cover: Noody Vine Stratum (Plot size: _ ごえら か)	0_ 20% of 1	total cover:	2	Woody vine - All woody vines greater than 3.28	ft in
1. Smilax returnitolia	10	Ú	FAC	height.	-
LO THE MADOR	5.	- IV	FAC		
		-9-	The		
···				States and the second sec	
			-	Hydrophytic	
			<u> </u>	Vegetation Present? Yes No	
5	15	THE	0.4		
550% of total cover: 7.		Total Cove	er z	Present? Yes No No	

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SOIL

Sampling Point: WSS-4 Wet

(inches)	Matrix			x Features	Tural	Loc ²	τ.	exture	Remarks
1 . 2	Color (moist)	- %	<u>Color (moist)</u> 7.Sur 5/4	<u>%</u>	Type'	m		loan	
0-3	The suite	_100	1. 1.1	20		A 100 C 100 C			
3-12+	Jugr 412	10	logr celle_	30	_0_	m	sa	leave	1
		E		\equiv			-	_	
		-					_		
-		-		-	-	-	-	-	
		-		2			-		
Type: C=C	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	2Loc	ation: P	L=Pore Lining, M=Matrix.
	Indicators:								ators for Problematic Hydrlc Soils ³ :
Histosol			Dark Surface	e (S7)				_ 2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) (M	LRA 147	, 148)		Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su						(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)			P	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		101				(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark	the state of the second second	1. Sec. 1. Sec				/ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Da					_ c	Other (Explain in Remarks)
	ark Surface (A12)	00.01	Redox Depre			DDN			
	Mucky Mineral (S1) (I	LKK N,	Iron-Mangan MLRA 13		es (F12) (LAN N			
	A 147, 148)		Umbric Surfa		MI RA 13	6 1221		3Ind	licators of hydrophytic vegetation and
	Gleyed Matrix (S4) Redox (S5)		Piedmont Flo				48)		etland hydrology must be present,
	Matrix (S6)		Red Parent I		and the second second				less disturbed or problematic.
	Layer (if observed):						1		
Type:									and the second second second
Depth (in	ches):						Hy	dric Soil	Present? Yes No
Remarks:							-		
				-					

100	ERMINATION DATA FORM	I - Eastern Mountain County: Cherokee		Sampling Date: <u>12110/15</u>
Project/Site: 1 Y 5 Apolicant/Owner: SCDOT	Oity	County. Or corester	State: SC	_ Sampling Point: WSS-4 up
here a construction of the second sec	S. Burton see	-	Blackston	
Investigator(s): <u>E, Morgan</u> +		tion, Township, Range:		
		elief (concave, convex, non		Slope (%): 572
Subregion (LRR or MLRA): LRP	Lat: 35, 138645		1.511547	Datum://4083_
Soil Map Unit Name: <u>TaF3 - tat</u> 2	m silly clay loam, 15	-35%, enoded	NWI classifica	ation:
Are climatic / hydrologic conditions on t	ne site typical for this time of year?	Yes No (f no, explain in Re	emarks.)
Are Vegetation, Soil, or	Hydrology significantly dist	urbed? No Are "Normal	Circumstances" pr	resent? Yes No
Are Vegetation, Soil, or				
SUMMARY OF FINDINGS - A	and the second			
Sommarr of Themes - A	tuen site map showing su	inping point loouto	no, nunovoto,	Inipertant testarsel etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes	_ No
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of two required)
Primary Indicators (minimum of one is	required: check all that apply)		Surface Soil (A DITA STATE OF STATE
Surface Water (A1)	True Aquatic Plants	s (B14)		etated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide C		Drainage Pat	
Saturation (A3)		eres on Living Roots (C3)	Moss Trim Li	nes (B16)
Water Marks (B1)	Presence of Reduc	ed Iron (C4)	Dry-Season \	Nater Table (C2)
Sediment Deposits (B2)		tion in Tilled Soils (C6)	Crayfish Burr	
Drift Deposits (B3)	Thin Muck Surface			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in R	emarks)	Geomorphic	ressed Plants (D1) Position (D2)
Iron Deposits (B5) Inundation Visible on Aerial Image	env (R7)		Geomorphic Shallow Aqui	
Water-Stained Leaves (B9)	313 (01)			phic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral	
Field Observations:				
Surface Water Present? Yes _	No Depth (inches):			1.
Water Table Present? Yes _	No Depth (inches):			
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland H	ydrology Presen	t? Yes No
Describe Recorded Data (stream gau	ge, monitoring well, aeríal photos, p	revious inspections), if avai	lable:	
Remarks:				

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Tree Stratum (Plot size: 10x10m)	Absolute	Dominant		Dominance Test worksheet:		
	10	Species?	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
2. QUERIUS DHINUS		11	UPL			
. Facus availabilitatia		- <u>S</u>	FACO	Total Number of Dominant	5	(7)
Liquidambar styrariflua	10	NT	PAG	Species Across All Strata:		_ (B)
the second s		14	PHY	Percent of Dominant Species	110	
5		1		That Are OBL, FACW, or FAC:	40	_ (A/B)
				Prevalence Index worksheet:		_
				Total % Cover of:	Multiply by:	
		= Total Cov		OBL species x 1		
50% of total cover:		total cover:	17_	FACW species x 2		
apling/Shrub Stratum (Plot size: 10x10m)			-	LEY TEL ALENT TO POST A		
liquidembar suggestua		<u> </u>	FAC	FAC species x 3		
. Figlis granditalia	10		PACU	FACU species x 4		
ad u				UPL species x 5		
			·	Column Totals: (A)		(B)
			_	Prevalence Index = B/A =		
				Hydrophytic Vegetation Indicate		-
				1 - Rapid Test for Hydrophytic	c vegetation	
				2 - Dominance Test is >50%		
	15	= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹		
50% of total cover:				4 - Morphological Adaptations		
lerb Stratum (Plot size: <u>5x5m</u>)				data in Remarks or on a se	Contraction and the state	
	5	17	EAC	Problematic Hydrophytic Veg	etation ¹ (Expla	ain)
Lonicera japonica		J		I have a second second		
·		·	· · · · · · · · · · · · · · · · · · ·	¹ Indicators of hydric soil and wetla	ind hydrology	must
				be present, unless disturbed or pr	17. 0001030710	
			()	Definitions of Four Vegetation S	itrata:	
·			÷	Tree - Woody plants, excluding vi	ines 3 in (7 P	i cm) or
			(ii	more in diameter at breast height		
<u>.</u>				height.		
			\rightarrow	Sapling/Shrub - Woody plants, e	xcluding vine	s, less
L				than 3 in. DBH and greater than o		
0				m) tall.		
1				Herb - All herbaceous (non-wood	y) plants, req	ardless
	5	= Total Cov		of size, and woody plants less that	n 3.28 ft tall.	
50% of total cover:	2.5 20% of	total cover:		Woody vine - All woody vines gr	aator than 3.2	8 ft in
voody Vine Stratum (Plot size: 5×5m)				height.	saler alan o.L	o it in
SMURIX SP.		-	1			
	_					
6						
				16 August and		
				Hydrophytic Vegetation		/
	5	= Total Cov	er	Present? Yes	No	
50% of total cover:		total cover:				
emarks: (Include photo numbers here or on a separa	and the second s	one story)				
the second second second second second second						

SOIL

6214 / I-85

Sampling Point: WSS-4 4

$\frac{Color (moist)}{ () yr 4 iq}$ $\frac{ () yr 4 iq}{7.5 yr 6 iq}$ $\frac{7.5 yr 6 iq}{1.5 yr 6 iq}$ centration, D=Deple	<u>%</u> <u>100</u> <u>100</u> <u>100</u> 	Color (moist)	<u>40</u> <u>40</u> <u></u>		<u>Loc²</u>	<u>S& C </u> <u>"""</u> <u>"""</u> <u>Clay</u>	Remar	ks
centration, D=Deple		10yr 414	<u>40</u>					
Centration, D=Deple		10yr 414	<u>40</u>			<u>olay</u> 		
centration, D=Deple dicators:			11111			<u>elay</u> 		
centration, D=Deple dicators:								
dicators: (1)	tion, RM=F				=			
dicators: (1)	tion, RM=F		111	_	_			
dicators: (1)	tion, RM=F		E					
dicators: (1)	tion, RM=F		=					
dicators: (1)	tion, RM=F							
dicators: (1)	tion, RM=F			_	\sim			
dicators: (1)	tion, RM=F			_				
dicators: (1)	tion, RM=F				-			
dicators: (1)		Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: PL=	Pore Lining, M=Mal	rix.
v1)						Indicato	rs for Problematio	Hydric Soils ³ :
: Surface (A12) cky Mineral (S1) (LF I47, 148) yed Matrix (S4)		Redox Depre Iron-Mangan MLRA 13 Umbric Surfa	essions (F8 ese Masse 6) ace (F13) (1	3) es (F12) (MLRA 13	36, 122)	³ Indica	itors of hydrophytic	vegetation and
	-							
1630 COLONG	_					1.20		
es):						Hydric Soil P	resent? Yes	No Y
	Surface (A12)	Sulfide (A4) Layers (A5) (A10) (LRR N) Below Dark Surface (A11) (Surface (A12) Cky Mineral (S1) (LRR N, 147, 148) Hered Matrix (S4) dox (S5) Matrix (S6) yer (if observed):	Sulfide (A4) Loamy Gleye Layers (A5) Depleted Ma Loamy Cleye Depleted Ma Gelow Dark Surface (A10) Depleted Da Selow Dark Surface (A12) Redox Deprecessor Cky Mineral (S1) (LRR N, Iron-Mangan H47, 148) MLRA 13 Syed Matrix (S4) Umbric Surface dox (S5) Matrix (S6) Red Parent N yer (if observed): Matrix (S6)	Sulfide (A4) Loamy Gleyed Matrix (F3) Layers (A5) Depleted Matrix (F3) Agency (A10) (LRR N) Redox Dark Surface (F Below Dark Surface (A11) Depleted Dark Surface (F Selow Dark Surface (A12) Redox Depressions (F6 Cky Mineral (S1) (LRR N, Iron-Manganese Masse M47, 148) MLRA 136) Eved Matrix (S4) Umbric Surface (F13) (Jox (S5) Piedmont Floodplain Str Matrix (S6) Red Parent Material (F1)	Sulfide (A4) Loamy Gleyed Matrix (F2) Layers (A5) Depleted Matrix (F3) (A10) (LRR N) Redox Dark Surface (F6) Below Dark Surface (A11) Depleted Dark Surface (F7) Surface (A12) Redox Depressions (F8) cky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (MLRA 136) MLRA 136) eyed Matrix (S4) Umbric Surface (F13) (MLRA 13) dox (S5) Piedmont Floodplain Soils (F19) fatrix (S6) Red Parent Material (F21) (MLR	Sulfide (A4) Loamy Gleyed Matrix (F2) Layers (A5) Depleted Matrix (F3) (A10) (LRR N) Redox Dark Surface (F6) Below Dark Surface (A11) Depleted Dark Surface (F7) Surface (A12) Redox Depressions (F8) cky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) eyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) dox (S5) Piedmont Floodplain Soils (F19) (MLRA 144) Matrix (S6) Red Parent Material (F21) (MLRA 127, 142)	Sulfide (A4) Loamy Gleyed Matrix (F2) Piec .ayers (A5) Depleted Matrix (F3) (I .ayers (A5) Depleted Matrix (F3) (I .ayers (A5) Depleted Matrix (F3) (I .ayers (A5) Redox Dark Surface (F6) Ven .ayers (A12) Redox Depressions (F8) Other .cky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Iron-Manganese Masses (F12) (LRR N, .i47, 148) MLRA 136) MLRA 136) Image: Strate (F13) (MLRA 136, 122) 3 Indicated (S5) .eyed Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 148) wetla .iatrix (S6) Red Parent Material (F21) (MLRA 127, 147) unles	Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain So Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Loamy Dark Surface (A5) Redox Dark Surface (F6) Very Shallow Dark Surface (A12) Below Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks Surface (F12) (LRR N, MLRA 136) Kayers (A5) Iron-Manganese Masses (F12) (LRR N, MLRA 136) MLRA 136) Kyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Indicators of hydrophytic wetland hydrology must unless disturbed or prob Yer (if observed): Red Parent Material (F21) (MLRA 127, 147) Unless disturbed or prob

155	City/County: Chero	Vec Sampling Date: 13 16/15
Project/Site:	City/County:	State: SC Sampling Point: WTT-38 WC
Applicant/Owner: SUD01	5 0 T	21.001
Soil Map Unit Name: <u>Ultradianad</u> <u>WKD2. Wilkus</u> Are climatic / hydrologic conditions on the site typical for this tim Are Vegetation, Soil, or Hydrology signi Are Vegetation, Soil, or Hydrology natu SUMMARY OF FINDINGS – Attach site map sho	Local relief (concave, convex, r 131396 Long:	none): <u>CONCAVE</u> Slope (%): <u>D</u> <u>Sl. 543422</u> Datum: <u>NAD83</u> NWI classification: <u>PFOLA</u> (If no, explain in Remarks.) nal Circumstances" present? Yes No d, explain any answers in Remarks.) tions, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No_ Hydric Soil Present? Yes No_ Wetland Hydrology Present? Yes No_	Is the Sampled Are within a Wetland?	a Yes No
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	apply)	Surface Soil Cracks (B6)
High Water Table (A2) Hydrog Saturation (A3) Oxidize Water Marks (B1) Present Sediment Deposits (B2) Recent Drift Deposits (B3) Thin Max	quatic Plants (B14) en Sulfide Odor (C1) ed Rhizospheres on Living Roots (C ce of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) uck Surface (C7) Explain in Remarks)	 Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth Water Table Present? Yes No Depth Saturation Present? Yes No Depth	(inches): <u>1-101</u> 00 (inches): <u>5576418</u> (inches): <u>5476428</u> Wetlan	nd Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aer Remarks: Salamanders abundant	ial photos, previous inspections), if	available:

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

Sampling Point: WTT-38Wet

1. $DrAx (IAUS) De (INStylvar) i.ca. 3. He^{5} FACW That Are DBL, FACW, or FAC: 7 (A) 2. Platanus occurrent of Dominant Species 3. He^{5} FACW Total Number of Dominant Species (B) 3$	Tree Stratum (Plot size: 10X10 m)	Absolute	Dominant		Dominance Test worksheet:
3	1. Fraxinus pennsylvanica	30	MES	FACW	
5. Percent of Domains Species 6. That Re OBL, FACW, or FAC: (D2) 7. (D5) = Total Cover (D2) 50% of total cover: 32.5 20% of total cover: (D3) 50% of total cover: 10 U/S FAC 11 10 U/S FAC Septing/Shrub Stratum (Piot size: (A) 12 10 U/S FAC Septing/Shrub Stratum (Piot size: (A) (E) 14 10 U/S FAC Septing/Shrub Stratum (Piot size: (A) (E) 14 10 U/S FAC Septing/Shrub Stratum (Piot size: (A) (E) 15 10 U/S FAC Septing/Shrub Stratum (Piot size: (A) (E) 16 10 U/S FAC Septing/Shrub Stratum (Piot size: (A) (E) 17 10 U/S FAC Septing/Shrub Stratum (Piot size: (A) (E) 18 19 10 U/S FAC (A) (E) 19 10 U/S 10 (A) (E) (E) <td>3</td> <td></td> <td>1</td> <td></td> <td></td>	3		1		
7 Image: constraint of the section	5	_		_	
Total Cover 50% of total cover: 32.5 Total Cover of: $Multiply by: CBL species x 1 = 1 Sapling/Shrub Stratum (Plot size: M(1) m. 10 UCS FAC ACW species x 1 = 1 FAC species x 3 = 1 FAC species x 3 = 1 FAC species x 3 = 1 Colspan=2 AC species x 4 = 1 QUE species x 5 = 1 Column Totals: (A) (A) (B) Provalence Index = B/A = 1 Provalence Index = B/A = 1$		_			Provalence Index workshoot
50% of total cover: 32.5 20% of total cover: 3 Sapling/Shrub Stratum (Plot size: U/L m	7		-		 The work part of a center of a construction story.
Sapling/Shrub Stratum (Plot size: IO UCS FAC species x 2 = 11 IS UCS FAC Species x 3 = 2 IA model IS IA FAC species x 3 = 2 IA model IS IA FAC species x 3 = 2 IA model IS IA FAC species x 3 = 3 IA IS IA FAC species x 5 = 4 IS IA IA IA IA IA 4 IS IA IA IA IA IA IA 5 IA IA </td <td></td> <td>65</td> <td>= Total Cov</td> <td>rer</td> <td>the second se</td>		65	= Total Cov	rer	the second se
1 10 12 FAC species x 3 = 2 10 12 14 15 16 FAC species x 4 = 17 2 10	50% of total cover: <u>Ja</u>	20% of	total cover:	13_	
Production of the term of the term of the term of term				-	
a. A.W. All A.M.S. 40 JqfS. FAC VPL species x 5 =	Linna annaic				and the second
t	2. Infundamente at 1004				
Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 50% of total cover: 50% of total cover: 2 - Dominance Test is >50% 50% of total cover: 2 - Dominance Test is >50% 3 - Prevalence Index is >3.0° 4 - Morphological Adaptations' (Provide supportindata in Remarks or on a separate sheet) - Problematic Hydrophytic Vegetation' (Explain) 'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strate: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. 0 1 1 50% of total cover: 20% of total cover:	3. Aur Marino	_ 20_	yt.	FAC	
Image: Stratum (Plot size:	4/		1		Column Totals: (A) (B)
Image: Section 1 Hydrophytic Vegetation Indicators: Image: Section 2 Image: Section 2 Section 2 Image: Sectin 2 Section	5				Prevalence Index - R/A -
1 1	3		-		
a				1.1	
9. 45 = Total Cover 50% of total cover: 2.5 20% of total cover: 9 1 4 Morphological Adaptations' (Provide supportindation in the set is 50%) 14 2 1 4 Morphological Adaptations' (Provide supportindation in the set is 50%) 2 1 4 Morphological Adaptations' (Provide supportindation in the set is 50%) 3 1 4 Morphological Adaptations' (Provide supportindation in the set is 50%) 2 1 1 1 2 1 1 1 3 1 1 1 4 Morphological Adaptations' (Provide supportindation in the set is 50%) 1 4 Morphological Adaptations' (Explain) 1 1 1 1 1 2 1 1 1 1 3 1 1 1 1 4 1 1 1 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
4 - Morphological Adaptations' (Provide supporting the stratum (Plot size:)) - 4 - Morphological Adaptations' (Provide supporting the stratum (Plot size:)) 1				1	
50% of total cover: 9 4erb Stratum (Plot size:) 1		45	= Total Cov	er	
Herb Stratum (Plot size:))	50% of total cover: 2	1.5 20% of	total cover:	9	
1					
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present. Indicators of hydric soil and wetland hydrology must be present. Indicators of hydric soil and wetland hydrology must be present. Indicators of hydric soil and wetland hydrology must be present. Indicators of hydric soil and vetland hydrology must be present. Indicators of hydric soil and vetland hydrology must be present? Indicators of hydric soil and vetland hydrology must be present? In					Problematic Hydrophytic Vegetation ¹ (Explain)
3. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 4. Definitions of Four Vegetation Strata: 5. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. 3. Image: Additional context in the system of the	2		_		
4.			/		¹ Indicators of hydric soil and wetland hydrology must
5.					be present, unless disturbed or problematic.
5.					Definitions of Four Vegetation Strata:
more in diameter at breast height (DBH), regardless of height. 3.					Tree - Woody plants excluding vines 3 in /7.6 cm) of
8.					more in diameter at breast height (DBH), regardless of
9.					height.
$\frac{36}{10}$ $\frac{10}{10}$ $\frac{10}{11}$ $\frac{11}{11}$ 11		<u></u>			Sapling/Shrub - Woody plants excluding vines less
11.	9				than 3 in. DBH and greater than or equal to 3.28 ft (1
$\frac{1}{50\% \text{ of total cover:}} = \text{Total Cover}$ $\frac{1}{20\% \text{ of total cover:}} = \text{Total Cover}$ $\frac{1}{20\% \text{ of total cover:}} = \frac{1}{20\% \text{ of total cover}} = \frac{1}$	10,				m) tall.
50% of total cover: 20% of total cover: of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 5x5m) 30 465 FAC	11		_		Herb - All herbaceous (non-woody) plants regardless
Woody Vine Stratum (Plot size: Sx5m.)			Total Cove	er	of size, and woody plants less than 3.28 ft tall.
Noody vine stratum (Plot size:) 30 46 FAC		20% of	total cover:	-	
<u>Smilax raturation</u> <u>30</u> <u>ues</u> <u>FAC</u> <u>Jues</u> <u>FAC</u> <u>Ues</u> <u>FAC</u> <u>Ues</u> <u>FAC</u> <u>Ues</u> <u>FAC</u> <u>Ues</u> <u>FAC</u> <u>Ues</u> <u>FAC</u> <u>Vegetation</u> <u>Present?</u> <u>Yes</u> <u>Ves</u> <u>Ves</u>	Noody Vine Stratum (Plot size: 5x5m)			1.1.1	
Hydrophytic Hydrophytic Hydrophytic Vegetation Present? Yes Vo	transtradion ration	30	U.C.	FAC	
University of the second secon	. Smilax rolunder	15	JURS	FAC	
University of the second secon			1		
United State					
Vogetation					Hydrophytic
		45	Total Cau		
	3 4 5				Vegetation

6214/1-85

- 52	•	п	
-	S		_

Sampling Point: WIT-3 wet

	ription: (Describe Matrix	to me deh		ox Feature		or continu		
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-17+	10 yr 4/1	85	10 yr 5/8	15	C	m	clay 1	
		-		=	=	_		
				Ξ	_			
Tupe: C=Co	oncentration, D=Dep	lation RM	-Reduced Matrix M	S=Masker	Sand Gr	ains	² Location: PI =F	Pore Lining, M=Matrix.
Black His Hydrogen Stratified 2 cm Mur Depleted Thick Da Sandy M MLRA Sandy G Sandy Re	ipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) ck (A10) (LRR N) I Below Dark Surfac Ink Surface (A12) Iucky Mineral (S1) (I A 147, 148) Ileyed Matrix (S4) edox (S5) Matrix (S6)		Polyvalue B Thin Dark S Loamy Gley Depleted M Redox Dark Depleted Da Redox Depleted Da Iron-Manga MLRA 1: Umbric Surl Piedmont F Red Parent	urface (S9 red Matrix (atrix (F3) : Surface (F ark Surface ressions (F nese Mass 36) face (F13) loodplain S) (MLRA (F2) =6) = (F7) :8) es (F12) ((MLRA 13 Soils (F19)	147, 148) LRR N, 36, 122) (MLRA 1	(N Piedi (N Very Othe ³ Indicat 48) wetlar	st Prairie Redox (A16) ILRA 147, 148) mont Floodplain Soils (F19) ILRA 136, 147) Shallow Dark Surface (TF12) rr (Explain in Remarks) tors of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.
	ayer (if observed).	\$						
Type:	1.16						Hudrin Soll Pr	esent? Yes No
Depth (inc Remarks:	:nes):						Hydric Son Pro	

	185	City/County: Chen	line - Inlid	i e
Project/Site:	1.4-	_ City/County:		- 20
Applicant/Owner:	SCOOT	a 19 AT LOW IN Second on	State: <u></u> Sampling Point: <u></u>	1-301
nvestigator(s): <u>C.SLCA</u> -		Section, Township, Range:		FOR
andform (hillslope, terrace, etc.)		Local relief (concave, convex,		5%
Subregion (LRR or MLRA): LRR -	P Lat: 35.13	1396 Long: -	-81,543422 Datum: <u>NA</u>	<u>58 q</u>
Soil Map Unit Name: MV-mixe	a land WKD2- WILKES	PARA sandy learr	NWI classification:	
Are climatic / hydrologic condition	ns on the site typical for this time of	year? Yes No	(If no, explain in Remarks.)	
Are Vegetation, Soil	_, or Hydrology significar	ntly disturbed? NO Are "Non	mal Circumstances" present? Yes N	0
Are Vegetation, Soil	, or Hydrology naturally	problematic? NO (If neede	d, explain any answers in Remarks.)	
SUMMARY OF FINDING	S – Attach site map showi	ng sampling point loca	tions, transects, important feature	s, etc.
Hydrophytic Vegetation Present Hydric Soil Present? Wetland Hydrology Present? Remarks:	1? Yes <u>Ves</u> No Yes <u>No</u> <u>Ves</u> <u>No</u> <u>No</u> <u>Ves</u> <u>No</u> <u>No</u> <u>No</u> <u>Ves</u> <u>No</u> <u>Ves</u> <u>No</u> <u>Ves</u> <u>No</u> <u>No</u> <u>No</u> <u>No</u> <u>No</u> <u>No</u> <u>No</u> <u>No</u>	Is the Sampled Are within a Wetland?	ra No	
HYDROLOGY				
Wetland Hydrology Indicators			Secondary Indicators (minimum of two rec	uired)
	one is required; check all that app	(v)	Surface Soil Cracks (B6)	
Surface Water (A1)		c Plants (B14)	Sparsely Vegetated Concave Surface	e (B8)
High Water Table (A2)	Hydrogen S	ulfide Odor (C1)	Drainage Patterns (B10)	
Saturation (A3)		izospheres on Living Roots (C		
Water Marks (B1)		Reduced Iron (C4)	Dry-Season Water Table (C2) Crayfish Burrows (C8)	- II
Sediment Deposits (B2) Drift Deposits (B3)	Recent Iron Thin Muck S	Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery ((C9)
Algal Mat or Crust (B4)		ain in Remarks)	Stunted or Stressed Plants (D1)	
Iron Deposits (B5)			Geomorphic Position (D2)	
Inundation Visible on Aeria			Shallow Aquitard (D3)	
Water-Stained Leaves (B9)			Microtopographic Relief (D4)	
Aquatic Fauna (B13) Field Observations:			FAC-Neutral Test (D5)	
	Yes No Depth (inch	(ac).		-
	Yes No Depth (inch	Y1 Y		1
	Yes No Depth (inch		d Hydrology Present? Yes No_	V
(includes capillary fringe)	m gauge, monitoring well, aerial ph	notos previous inspections), if	available:	-
	n gaogo, montaning non, aona pr			
Remarks:				

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Tree Stratum (Plot size: 10×10m)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
Ruerals phillos	25	yes		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant Species Across All Strata: (B)
				Percent of Dominant Species
				Prevalence Index worksheet:
50% of total cover: 12.5	25	= Total Cove	^{er} 5	Total % Cover of:Multiply by: OBL species x 1 =
apling/Shrub Stratum (Plot size: 10×10,	_ 20% of	total cover:	2	FACW species x 2 =
Ligistum sinense	85	11:25	TAL	FAC species x 3 =
J				FACU species x 4 =
				UPL species x 5 =
		<u> </u>		Column Totals: (A) (B
1				
		_	· · · · · · · · ·	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
and and	85	= Total Cove	er	3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting)
50% of total cover: <u>42.5</u> erb Stratum (Plot size:)		_		data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
				more in diameter at breast height (DBH), regardless of height.
		\equiv		more in diameter at breast height (DBH), regardless of
		Total Cove		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
50% of total cover:				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover:		Total Cove		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:		Total Cove	_	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: 50% of total cover: 500 Vine Stratum (Plot size:) 500 Vine Stratum (Plot size:)	_ 20% of 25	Total Cover	FAC	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: 50% of total cover: 500dy Vine Stratum (Plot size:) 5mtb X3P	_ 20% of 25	Total Cover	_	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: 50% of total cover: 500 Vine Stratum (Plot size:) 5 M (D X)	_ 20% of 25	Total Cover	_	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover: 50% of total cover: 500 Vine Stratum (Plot size: <u>\$ × 5 m_</u>) 5mibx 3p 2mibx 3p 2mibx 3p	20% of 25 10 35	Total Cover	FAC	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

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Sampling Point: WTT-380P

Depth Matrix	oth needed to docum Redox	Features				18 2020 ETT 1 34
(inches) Color (moist) %	Color (moist)	_%	Type ¹	Loc ²	Texture	Remarks
0-12 100x 4/4 100	and the second second	_			loam	
			-			
	1	<u> </u>				
	·	-	-			
	د				-	
		يتسب				
		-		_		
			2. mi		-	
			-			
	Destand Matrix MD		Cand Ca		2 contion: DI	=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletion, RM Hydric Soil Indicators:	=Reduced Mainx, MS	=maskeu	Sand Gr	anıs.		tors for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface	(\$7)				cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Bel		e (S8) (N	LRA 147.	a second s	past Prairie Redox (A16)
Black Histic (A3)	Thin Dark Su					(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleye				Pi	edmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Mat				-	(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark S					ery Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dar Redox Depre		A		_ 0	ther (Explain in Remarks)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N,	Iron-Mangane			RR N.		
MLRA 147, 148)	MLRA 136					
Sandy Gleyed Matrix (S4)	Umbric Surfa		MLRA 13	6, 122)		cators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Flo					land hydrology must be present,
Stripped Matrix (S6)	Red Parent N	Aaterial (F	21) (MLR	A 127, 147) uni	ess disturbed or problematic.
Restrictive Layer (if observed):						
					and and	
Туре:					Ludrig Soil	Present? Yes No V
Type: Depth (inches):					Hydric Soil	
Depth (inches):	-				Hydric Sol	
Depth (inches):	-				Hydric Sol	
Depth (inches):					Hyunc Sol	
Depth (inches):	<u></u>				Hyune Son	
Depth (inches):	<u> </u>				Hyune Son	
Depth (inches):					Hyune son	
Depth (inches):	-				Hyune son	
Depth (inches):					Hydric Son	
Depth (inches):					Hydric 30n	
Depth (inches):					Hydric 30	
Depth (inches):					Hyunc son	
Depth (inches):	-				Hyunc son	
Depth (inches):					Hyune son	
Depth (inches):					Hydric Son	
Depth (inches):					Hydric Son	
					Hydric 30n	
Depth (inches):					- Hyune Son	
Depth (inches):					- Hydric Soft	
Depth (inches):					Hydric Son	
Depth (inches):					- Hyune Son	
Depth (inches):					- Hydric Son	

Landform (hillslope, terrace, etc.): Subregion (LRR or MLRA): LR Soil Map Unit Name: MV - MIK Are climatic / hydrologic conditions or Are Vegetation, Soil, Are Vegetation, Soil,	4 S. Burton <u>clepression</u> Loc <u>Clepression</u> Loc <u>Clepression</u> Loc <u>Clepression</u> Lat: <u>35,1322</u> <u>d alluvial land</u> the site typical for this time of ye or Hydrology <u>significantly</u> or Hydrology <u>naturally pro-</u>	cal relief (concave, con <u>61</u> Lor ar? Yes No disturbed? No Are blematic? No (If no	State: Sampling Date: 13 15 15 State: SC Sampling Point: WU-13 Warder of the second
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	is the Sampled within a Wetla	I Area
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image	True Aquatic P Hydrogen Sulfin Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Surf Other (Explain	de Odor (C1) spheres on Living Roo duced Iron (C4) duction in Tilled Soils (ace (C7)	Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes	No Depth (inches		FAC-Neutral Test (D5)
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream ga			etland Hydrology Present? Yes No s), if available:
Remarks:			

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

Sampling Point: WUV-12 Wcf

	Absolute	the second second	Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size:) 1)	<u>% Cover</u>	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
2 3	_			Total Number of Dominant Species Across All Strata:	2	_ (B)
4	_	_	Ξ	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	_ (A/B)
0				Prevalence Index worksheet:		
				Total % Cover of:	Multiply by:	
50% of total cover:		= Total Cov		OBL species x 1	=	÷
Sapling/Shrub Stratum (Plot size: 10 X10 m)		total cover.		FACW species x 2		
Fraxinus perinsulvanica		URS	FAC			
		ges		FACU species x 4		
			(<u> </u>	UPL species x 5		
				Column Totals: (A)		
				Prevalence Index = B/A =		
				Hydrophytic Vegetation Indicat		
				1 - Rapid Test for Hydrophyti		
3)		-		2 - Dominance Test is >50%		
·	15	= Total Cov		3 - Prevalence Index is ≤3.0 ¹		
50% of total cover: 7.5	20% of	total cover	er 3	4 - Morphological Adaptation	s ¹ (Provide s	upportin
terb Stratum (Plot size: 5×5m)		total corer.		data in Remarks or on a s	eparate shee	et)
Juncus effusus	92	485	FACIN	Problematic Hydrophytic Veg	etation ¹ (Exp	lain)
Permana Sp	25	J-	-			
		-	(**** *	¹ Indicators of hydric soil and wetla	and hydrology	y must
				be present, unless disturbed or pr	oblematic.	
·			and the second sec	Definitions of Four Vegetation S	Strata:	
				Tree - Woody plants, excluding v	ines 3 in (7	6 cm) o
			<u> </u>	more in diameter at breast height	(DBH), regain	dless of
<u></u>				height.		
s				Sapling/Shrub - Woody plants, e	excluding vine	es, less
h <u></u>				than 3 in. DBH and greater than o	r equal to 3.3	28 ft (1
0				m) tall.		
1 50% of total cover: 57 , .	115	Total Cov	er 0.0	Herb – All herbaceous (non-wood of size, and woody plants less that		
50% of total cover: <u>54.</u> Voody Vine Stratum (Plot size:)	20% of	total cover:	23	Woody vine – All woody vines gro height.	eater than 3.	28 ft in
				1		
·				Hydrophytic		
				Vegetation	100	
		Total Cov		Present? Yes V	No	<u> </u>
	000/ -5	total cover:	the second se			

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	м	
-	,	
	6	J

Sampling Point: WUU-12 We+

(inches)	Matrix Color (moist)	%	Color (moist)	x Features %	Type ¹	Loc ²	Texture	Remarks
0-15	10yr 4/2		04r 318	30	C	m	laam	
).	•		~	-		=		
				1	-			
				\equiv				
;	-			-	-	-		
						-		
Type: C=Cor	centration, D=Dep	letion, RM=R	educed Matrix, M	S=Masked	Sand Gr	ains.	² Location: P	L=Pore Lining, M=Matrix.
lydric Soil In		1000		1			Indic	ators for Problematic Hydric Soils ³ :
Histosol (Dark Surface	e (S7)			2	2 cm Muck (A10) (MLRA 147)
	pedon (A2)		Polyvalue Be		e (S8) (I	ILRA 147,		Coast Prairie Redox (A16)
Black Hist	tic (A3)		Thin Dark Su	urface (S9)	(MLRA			(MLRA 147, 148)
	Sulfide (A4)		Loamy Gleye		F2)		F	Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Ma	and the second second				(MLRA 136, 147)
	k (A10) (LRR N)		Redox Dark					Very Shallow Dark Surface (TF12)
	Below Dark Surfac	e (A11)	Depleted Da				_	Other (Explain in Remarks)
	k Surface (A12)		Redox Depre			DOM		
	icky Mineral (S1) (I	LKK N,	Iron-Mangan MLRA 13	Control of the second sec	S (F12)	LIKK N,		
	147, 148)		Umbric Surfa		MI RA 1	6 122)	3Inc	dicators of hydrophytic vegetation and
_ Sandy Gil	eyed Matrix (S4)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent I					nless disturbed or problematic.
	ayer (if observed)				No broad	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1	
Type:	· · · · · · · · · · · · · · · · · · ·							 The second se
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	nes):		-				Hydric Sol	Present? Yes V No
Remarks:	ies).		-				1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	

Soil Map Unit Name: <u>My- mixed alloyiad land</u> Are climatic / hydrologic conditions on the site typical for this time of year? ((s) No	ine): <u>Convex</u> Slope (%): <u>5%</u> <u>51.54009 b</u> Datum: <u>NAD83</u> NWI classification: (If no, explain in Remarks.) Il Circumstances" present? <u>Yes</u> No explain any answers in Remarks.)
andform (hillslope, terrace, etc.): Slope Local relief (concave, convex, non- Subregion (LRR or MLRA): Soil Map Unit Name: MY - Mixed alloyiad land Lat: 35, 132261 Long: Soil Soil Map Unit Name: MY - Mixed alloyiad land Lond No Soil No Soil Are climatic / hydrologic conditions on the site typical for this time of year? Soil No No Soil Are "Norma Are Vegetation	ine): <u>Convex</u> Slope (%): <u>5%</u> <u>51.54009 b</u> Datum: <u>NAD83</u> NWI classification: (If no, explain in Remarks.) Il Circumstances" present? <u>Yes</u> No explain any answers in Remarks.)
andform (hillslope, terrace, etc.): Stape Local relief (concave, convex, non- ubregion (LRR or MLRA): Let: 35, 1322(6) Long:	Image: State Stat
ubregion (LRR or MLRA): UHP Lat: 35, 132261 Long:	51.54009.0 Datum: NAD83 NWI classification:
Image Unit Name: MY- Mixed alloying land e climatic / hydrologic conditions on the site typical for this time of year? No	NWI classification: (If no, explain in Remarks.) Il Circumstances" present? (Yes) No explain any answers in Remarks.)
e climatic / hydrologic conditions on the site typical for this time of year? (es No No e Vegetation , Soil , or Hydrology significantly disturbed? Are "Norma e Vegetation , Soil , or Hydrology naturally problematic? (If needed, or UMMARY OF FINDINGS – Attach site map showing sampling point location Hydrolophytic Vegetation Present? Yes No No Is the Sampled Area within a Wetland? Vetland Hydrology Present? Yes No Vetland Hydrology Present?	(If no, explain in Remarks.) Il Circumstances" present? (Yes) No explain any answers in Remarks.)
e Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Norma e Vegetation, Soil, or Hydrology naturally problematic? (If needed, e UMMARY OF FINDINGS – Attach site map showing sampling point location Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Vetland Hydrology Present? Yes No	Il Circumstances" present? Yes No explain any answers in Remarks.)
e Vegetation, Soil, or Hydrology naturally problematic? (If needed, or UMMARY OF FINDINGS – Attach site map showing sampling point location and the sample of the samp	explain any answers in Remarks.)
UMMARY OF FINDINGS – Attach site map showing sampling point location lydrophytic Vegetation Present? Yes No Is the Sampled Area lydric Soil Present? Yes No Is the Sampled Area Wetland Hydrology Present? Yes No within a Wetland?	
Hydrophytic Vegetation Present? Yes No Is the Sampled Area Hydric Soil Present? Yes No within a Wetland? Vetland Hydrology Present? Yes No within a Wetland?	ons, transects, important features, etc.
Hydric Soil Present? Yes No within a Wetland? Wetland Hydrology Present? Yes No within a Wetland?	
Remarks:	Yes No
YDROLOGY	Or and any logication (minimum of two provided)
Vetland Hydrology Indicators:	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	Sparsely Vegetated Concave Surface (B8)
Surface Water (A1) True Aquatic Plants (B14) High Water Table (A2) Hydrogen Sulfide Odor (C1)	Oparately vegetated concave ounade (00) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3)	
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
_ Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
_ Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Aquatic Fauna (B13)	
urface Water Present? Yes No Depth (inches):	
Vater Table Present? Yes No / Depth (inches):	· · · · · · · · · · · · · · · · · · ·
	Hydrology Present? Yes No
ncludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av	vailable:
and the state of the	1200
Remarks:	

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

Sampling Point: <u>M/VU-12</u> P

and the real stands of the	Absolute	Dominant		Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size:) 1)		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
23	_	_	_	Total Number of Dominant Species Across All Strata:	2	_ (B)
4 5	<u> </u>		=	Percent of Dominant Species That Are OBL, FACW, or FAC:	100	_ (A/B)
6		-		Prevalence Index worksheet:		
7		-		Total % Cover of:	Multiply by:	
		Total Cov		OBL species x 1	and the second se	
50% of total cover:	20% of	total cover:				
Sapling/Shrub Stratum (Plot size: 10X10m)	10		The	FACW species x 2		
1. Acer negundo	_ 60	yes	+HC	FAC species x 3		
2			, <u> </u>	FACU species x 4		
3		_		UPL species x 5		
k			-	Column Totals: (A)		(B)
i				Prevalence Index = B/A =		
)				Hydrophytic Vegetation Indicate		-
<u></u>						
3				2 - Dominance Test is >50%	o regulation	
9	_			3 - Prevalence Index is ≤3.0 ¹		
the second se	_(a)=	Total Cove	ar	4 - Morphological Adaptations	1 /Dravida eu	onartin
50% of total cover: 3(20% of	total cover:	12			
Herb Stratum (Plot size: <u>5x5++</u>)				data in Remarks or on a se	the second s	
RUBRUS SP.	25			Problematic Hydrophytic Veg	etation' (Expla	ain)
2. Carex	20			10 m		
Festuca sp	10		-	¹ Indicators of hydric soil and wetla be present, unless disturbed or pr	ind hydrology	must
the state of the s				the second state of the second state and the second state of the s	and the second second	
i				Definitions of Four Vegetation S	strata:	
3				Tree - Woody plants, excluding v	ines, 3 in. (7.6	cm) or
		1000	_	more in diameter at breast height height.	(DBH), regard	less of
				neight.		
				Sapling/Shrub - Woody plants, e		
				than 3 in. DBH and greater than o m) tall.	r equal to 3.2	3 ft (1
0						
50% of total cover: 27,	55=	Total Cove	r 11	Herb – All herbaceous (non-wood of size, and woody plants less that	y) plants, regan 3.28 ft tall.	ardless
	2 20% of t	otal cover:	1.1	Woody vine - All woody vines gre	eater than 3.2	B ft in
Noody Vine Stratum (Plot size: 575ff)	20	1100	The	height.		and the second
	RO	yes	FAC			
		1				
			·			
·				Hydrophytic		
	15			Vegetation	45	
		Total Cove	4	Present? Yes	No	
50% of total cover: 10	1 20% off	otal cover:				

SOIL

Depth					x Features			n the absence of	
(inches)	Color (n	Matrix noist)	%	Color (moist)	%	Type ¹	Loc ²		Remarks
0-4	lour	414	100				المتلك أب	loam.	
4-14	lowr	518	70	10 yr 4/3	30	C	m	clau leaver	
	10.0	1.~					1.1.1.1	- <u>J</u>	
			_		_		_		
	1								
					_				
				C				· · · · · · · ·	
					-	-			
			_						
Type: C=0	Concentration	D=Den	letion RM	=Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL=	Pore Lining, M=Matrix.
	Indicators:	, b bcp	iouon, run	Troad dog manning th	0			Indicato	rs for Problematic Hydric Solls ³ :
Histoso				Dark Surface	e (S7)				n Muck (A10) (MLRA 147)
the second secon	Epipedon (A2)	r i i		Polyvalue Be	elow Surfa				st Prairie Redox (A16)
	Histic (A3)			Thin Dark S			47, 148)		NLRA 147, 148)
	en Sulfide (A			Loamy Gley		F2)			Imont Floodplain Soils (F19) MLRA 136, 147)
	ed Layers (A5 luck (A10) (Ll			Depleted Ma Redox Dark		6)			Shallow Dark Surface (TF12)
	ed Below Dar		e (A11)	Depleted Da					er (Explain in Remarks)
	Dark Surface			Redox Depr		· · · · · · · · · · · · · · · · · · ·			
	Mucky Minera	al (S1) (L	.RR N,	Iron-Mangar		es (F12) (LRR N,		
	A 147, 148)	10.11		MLRA 13 Umbric Surf			6 4991	³ Indics	tors of hydrophytic vegetation and
	Gleyed Matrix Redox (S5)	x (54)		Piedmont FI					nd hydrology must be present,
	d Matrix (S6)			Red Parent				and a second	s disturbed or problematic.
	Layer (if ob		12-					1	
Type:	20 4 co 199 co			<u></u>					
								Hydric Soil P	resent? Yes No
Depth (in	nches):								
Depth (in Remarks:	nches):								
	nches):								
	nches):								
	nches):								
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Project/Site: 185	City/County:	Cherokee s	ampling Date: 12/15/15
Applicant/Owner: SCDOT		State: SC	Sampling Point: WVV-15W
1 Elevela 1 C	5. Burton Section, Township	Range: Blacksburg	
andform (hillslope, terrace, etc.):	Local relief (concave, Lat: <u>35. /33229</u> <u>Jand AFA-attivicta f</u> cal for this time of year? <u>Cas</u> N significantly disturbed? <i>W</i>	convex, none): <u>(ONCAVC</u> Long: <u>81, 53609</u> <u>202 Sandy</u> NWI classification No <u>(If no, explain in Rem</u> Are "Normal Circumstances" pres	Datum: <u>NAD83</u> on: <u>PF01</u> arks.) sent? <u>Yes</u> No in Remarks.)
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No Is the Sam No within a Watchin a		No
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicato	rs (minimum of two required)
Primary Indicators (minimum of one is required; of	check all that apply)	Surface Soil Cr	A COLOR AND A COLOR AND A
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Hundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)	 True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Se Thin Muck Surface (C7) Other (Explain in Remarks) 	Drainage Patte Dross Trim Line Dry-Season Wa Dis (C6) Crayfish Burrov Saturation Visil	es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) essed Plants (D1) osition (D2) rd (D3) hic Relief (D4)
Field Observations: Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No	Depth (inches): <u>1-10</u> , `^ Depth (inches): <u>410</u> Depth (inches): <u>410</u>	Wetland Hydrology Present?	Yes // No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previous inspec	tions), if available:	2 - 2 - 4
Remarks:			

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

Sampling Point: WVV-15-WC+

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
2			_	That Are OBL, FACW, or FAC: (A)
3.			22	Total Number of Dominant Species Across All Strata: <u> </u>
4 5	-			Percent of Dominant Species 100 (A/B
)			1.000	
				Prevalence index worksheet:
7		= Total Cov	er	Total % Cover of:Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10×16,)				FACW species x 2 =
. Alnus cernilata	20	_0.05.	OBL	FAC species x 3 =
Salix nigra	15	-Ves	OBL	FACU species x 4 =
savnbucus canandensis	15	1125	FAC	UPL species x 5 =
			-	Column Totals: (A) (B
1				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	50	= Total Cove		3 - Prevalence Index is ≤3.01
50% of total cover: _2.	20% of	total cover:	175	4 - Morphological Adaptations ¹ (Provide supportin
lerb Stratum (Plot size: <u>5×5m</u>)	2 20 /8 01	total cover.	- F.L. 5	data in Remarks or on a separate sheet)
Salidada KA	-28%	-		Problematic Hydrophytic Vegetation ¹ (Explain)
Loniora jupinica	5.7	11-00	Che	the second second second second second
. Der treite un printere		- de	TH-	¹ Indicators of hydric soil and wetland hydrology must
	· · · · · · · · · · · · · · · · · · ·			be present, unless disturbed or problematic.
			<u> </u>	Definitions of Four Vegetation Strata:
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) o
	_		÷	more in diameter at breast height (DBH), regardless o
				height.
			\longleftrightarrow	Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
)		<u> </u>		m) tall.
l	70	Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>36</u> <u>/oody Vine Stratum</u> (Plot size:)) 20% of	total cover:_	14	Woody vine - All woody vines greater than 3.28 ft in
(Plot size)				height.
			·	
				Hydrophytic
	~			Vegetation Present? Yes No
50% of total cover:	200/ 06	Jotal Cove total cover:		
JO % DI IDIAI COVEL	_ 20% 01	total cover		

SOIL

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Sampling Point: MNV-16 Wet

Depth Matrix	epth needed to documer Redox F	eatures			
(inches) Color (moist) %	Color (moist)	%Type1	Loc ²	Texture	Remarks
0-15 1000 111 -15	1048 38	15 0	\underline{m}	ricy liam	
	1		_	1	
· · · · · · · · · · · · · · · · · · ·					
	-	<u></u>			
ype: C=Concentration, D=Depletion, R	M=Reduced Matrix, MS=I	Masked Sand Gra	ins.	² Location: PL=Pore	
ydric Soil Indicators:					or Problematic Hydric Solls ³ :
_ Histosol (A1)	Dark Surface (S		5		ick (A10) (MLRA 147)
Histic Epipedon (A2)		v Surface (S8) (N		Contraction of the second s	rairie Redox (A16) A 147, 148)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Gleyed I	ice (S9) (MLRA 1 Matrix (E2)	47, 148)		nt Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix				A 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Su				allow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark S			Other (E	Explain in Remarks)
_ Thick Dark Surface (A12)	Redox Depress		DDA		
Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	Iron-Manganeso MLRA 136)	e Masses (F12) (LRR N,		
Sandy Gleyed Matrix (S4)		(F13) (MLRA 13	6, 122)	³ Indicators	of hydrophytic vegetation and
Sandy Redox (S5)		Iplain Soils (F19)			ydrology must be present,
Stripped Matrix (S6)	Red Parent Mat	terial (F21) (MLR	A 127, 147)	unless di	sturbed or problematic.
Restrictive Layer (if observed):					
Туре:	,			5.000.000	
Depth (inches):			N.	Hydric Soil Prese	nt? Yes <u>No</u> No
Remarks:					

Landform (hillslope, terrace, etc.): <u>Slope</u> Local m Subregion (LRR or MLRA): <u>LRR - P</u> Lat: <u>35, 133229</u> Soil Map Unit Name: <u>MV - mixed alluvial land AfA-a</u> Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation <u>, Soil , nor Hydrology significantly dist</u> Are Vegetation <u>, Soil , nor Hydrology </u> naturally problem	Ves No(If no, explain in Remarks.) urbed? 1/2 Are "Normal Circumstances" present? Yes No
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	Is the Sampled Area within a Wetland? Yes No
Water Marks (B1) Presence of Reduc	Odor (C1) Drainage Patterns (B10) eres on Living Roots (C3) Moss Trim Lines (B16) ped Iron (C4) Dry-Season Water Table (C2) tion in Tilled Soils (C6) Crayfish Burrows (C8) (C7) Saturation Visible on Aerial Imagery (C9)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents: Remarks:	Wetland Hydrology Present? Yes No

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Tree Stratum (Plot size:)		Dominant Indicator Species? Status	Number of Dominant Species
1		0 	That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
	- <u>(</u>		B)
h 5		·	Percent of Dominant Species
5	- <u></u>		That Are OBL, FACW, or FAC:(0) (A/B
	· · · · · · · ·		Prevalence Index worksheet:
4	1	= Total Cover	Total % Cover of:Multiply by:
50% of total cover:	20% of	total cover:	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: (0×10m))			FACW species x 2 =
	15	LIPS EDC	
Samburis Cinadensis	20	Jus inc	FACU species x 4 =
1			UPL species x 5 =
	1.1.1		Column Totals: (A) (B)
-			Prevalence Index = B/A =
<u> </u>			Hydrophytic Vegetation Indicators:
·			1 - Rapid Test for Hydrophytic Vegetation
La		ييچ زدرون	2 - Dominance Test is >50%
L			3 - Prevalence Index is ≤3.01
		Total Cover	4 - Morphological Adaptations' (Provide supportin
	> 20% of	total cover:	
50% of total cover:			data in Remarks or on a separate sheet)
lerb Stratum (Plot size:)			data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)			data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size:)			Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size:)			Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size:)) 	\geq		Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size:)	\geq		Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size:)	\geq		Problematic Hydrophytic Vegetation ¹ (Explain). ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o
Herb Stratum (Plot size:)	\geq		Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of
Herb Stratum (Plot size:)			Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height.
Ierb Stratum (Plot size:)	\geq		Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless o height. Sapling/Shrub – Woody plants, excluding vines, less
Ierb Stratum (Plot size:)			 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless o height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
lerb Stratum (Plot size:)			Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
lerb Stratum (Plot size:)			 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless o height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
Herb Stratum (Plot size:)			Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
lerb Stratum (Plot size:)			 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless o height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
lerb Stratum (Plot size:)		Total Cover	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless o height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
lerb Stratum (Plot size:)			 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless o height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
lerb Stratum (Plot size:)		Total Cover	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
Herb Stratum (Plot size:)		Total Cover	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
Herb Stratum (Plot size:)		Total Cover	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
Herb Stratum (Plot size:)		Total Cover total cover:	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
Herb Stratum (Plot size:)	20% of 30	Total Cover	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic

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Sampling Point: WWV-15 UP

ation, D=Dep ors: (A2) bie (A4) s (A5) (LRR N) bark Surfac		Loamy Gley Depleted Ma	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)		RA 147, 1	Indicators 2 cm 48) Coast (Mi	Remarks Dre Lining, M=Matrix. s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) t Prairie Redox (A16) LRA 147, 148) nont Floodplain Soils (F19)
ation, D=Dep ors: (A2)) de (A4) s (A5) D) (LRR N)		Reduced Matrix, M	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	2Location: PL=P/ Indicators 22 Cm 48)Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ation, D=Dep ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	² Location: PL=Pr Indicators 2 cm 48)Coast	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	ns. 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	RA 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	RA 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	RA 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	RA 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	RA 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	RA 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	RA 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	RA 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
ors: (A2))) de (A4) s (A5) D) (LRR N)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	e (S7) elow Surfac urface (S9) red Matrix (f atrix (F3)	ce (S8) (MLI) (MLRA 147	RA 147, 1	Indicators 2 cm 48) Coast (Mi	s for Problematic Hydric Soils ³ : Muck (A10) (MLRA 147) I Prairie Redox (A16) LRA 147, 148)
(A2))) de (A4) s (A5) D) (LRR N)		Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	elow Surfac urface (S9) ed Matrix (F atrix (F3)	(MLRA 147		2 cm 48) Coast (Mi	Muck (A10) (MLRA 147) I Prairie Redox (A16) L RA 147, 148)
i) de (A4) s (A5) D) (LRR N)		Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark	elow Surfac urface (S9) ed Matrix (F atrix (F3)	(MLRA 147		48) Coast (Mi	Prairie Redox (A16) LRA 147, 148)
i) de (A4) s (A5) D) (LRR N)		Thin Dark S Loamy Gley Depleted Ma Redox Dark	urface (S9) ed Matrix (f atrix (F3)	(MLRA 147		(MI	LRA 147, 148)
ie (A4) s (A5) D) (LRR N)	o (A11)	Loamy Gley Depleted Ma	ed Matrix (f atrix (F3)	the second se	1 (19)		
s (A5) 0) (LRR N)	e (A11)	Depleted Ma Redox Dark	atrix (F3)	4. Eu		FIGUI	Torre i tooopium oono (i io)
	o (A11)	the state of the second state of the second states	the state of the state				LRA 136, 147)
Dark Surfac	(A11)						Shallow Dark Surface (TF12)
	o (nin)	Depleted Da Redox Depr				Other	(Explain in Remarks)
ace (A12) lineral (S1) (I	LRR N.			es (F12) (LR	RR N.		
48)	4993-977	MLRA 1				4.0.0	
Matrix (S4)				MLRA 136,			ors of hydrophytic vegetation and
S5)				oils (F19) (N 21) (MLRA			d hydrology must be present, disturbed or problematic.
(S6) if observed)		Neu l'alent	Wateriai (i)	21/1016105	147, 147	4,1000	
							the second s
						Hydric Soil Pre	sent? Yes No
_							

nvestigator(s): <u>C. Sheats & S. Burton</u> andform (hillslope, terrace, etc.): <u>depression</u> Subregion (LRR or MLRA): <u>LRL- P</u> Lat: <u>35.134</u> Goil Map Unit Name: <u>allowed band</u> <u>fire strawister</u> over climatic / hydrologic conditions on the site typical for this time of the Vegetation <u>, Soil</u> , or Hydrology <u>, attrait</u> subre Vegetation <u>, Soil</u> , or Hydrology <u>, attrait</u>	Local relief (concave, convex, nor 1/31 Long: -3 FF - Guillied land, fF - Guillied land, fridgue materials of year? Yes No antly disturbed? No Are "Normal y problematic? No (If needed, e	ne): <u>CONCAVE</u> Slope (%): <u>D</u> <u>1.531633</u> Datum: <u>A/AD%3</u> NWI classification: (If no, explain in Remarks.) Circumstances" present? <u>Yes</u> No explain any answers in Remarks.)
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland?	Yes No
High Water Table (A2) Hydrogen Saturation (A3) Oxidized F Water Marks (B1) Presence Sediment Deposits (B2) Recent Iro Drift Deposits (B3) Thin Muck	uply) tic Plants (B14) Sulfide Odor (C1) Rhizospheres on Living Roots (C3) of Reduced Iron (C4) In Reduction in Tilled Soils (C6) Is Surface (C7) Isolain in Remarks)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	i i i	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Water Table Present? Yes No Depth (in		Hydrology Present? Yes No
Remarks:	Lucian Luciana makagananyi 0 gu	

6214/I.85

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

Sampling Point: WWW-13 WET

- 1/18/000	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>10X10m</u>) 1. <u>Populus</u> heterophylla	20		OBL	Number of Dominant Species (A)
2. <u>Salix nigra</u> 15 3.	60	- UUCE	OBL	Total Number of Dominant (0 (B)
4 5				Percent of Dominant Species
6				
7				Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover:	40 20% of	total cover:	16	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 10x10m)	1.4			FACW species x 2 =
1. Fraxinus pennsylvanica		ues.	FACW	FAC species x 3 =
2. Ligustrum sinense	20	yes.	FACV	FACU species x 4 =
3		U		UPL species x 5 =
4				Column Totals: (A) (B)
5				
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
8			<u> </u>	1 - Rapid Test for Hydrophytic Vegetation
		_		2 - Dominance Test is >50%
9	TIE			3 - Prevalence Index is ≤3.0 ¹
50% of total cover; 23		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size:SX 5++_)	20% 01	total cover.		data in Remarks or on a separate sheet)
1. Bochward what the	10	yes_	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
2		0		10-20-20-20-20-20-20-20-20-20-20-20-20-20
3	_			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5			_	Deminions of Four vegetation Strata:
6				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
			_	more in diameter at breast height (DBH), regardless of
				height.
				Sapling/Shrub - Woody plants, excluding vines, less
9	-			than 3 in. DBH and greater than or equal to 3.28 ft (1
10			-	m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
	-	Total Cove	-	of size, and woody plants less than 3.28 ft tall.
	5 20% of	total cover:	4	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 5x5ft)				height.
1. Lonicera aucunca	_ 95	ups:	FAC	
2.		1		
3.				
4				
5.		;;		Hydrophytic
	06			Vegetation Present? Yes No
550% of total cover: 4-7	5 20% 05	Total Cove	19	

SOIL

Sampling Point: MMM-13 WE

6214 / 1.85

(inches)	Matrix	0/		x Feature:		Loc ²	Texture	Remarks
	Color (moist)	40	Color (moist)		_Type'	M	loo II.	
0-8	-112 mg 1. 1			10	-			
5-14	100r 412	25	104x 51%	12	_6_	111	5 loan	<u>/</u>
		<u> </u>			-			
-								
					-			-
	<u> </u>							
				-			·	-
					_			
				_				1
Type: C=C	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		L=Pore Lining, M=Matrix.
lydric Soil	Indicators:	1.11	and the second	Sec. Sec.			Indic	ators for Problematic Hydric Soils ³ :
Histosol	I (A1)		Dark Surface	10 C C C C C C C C C C C C C C C C C C C		Carlos and		cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) (Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148) Piedmont Floodplain Soils (F19)
	en Sulfide (A4) d Layers (A5)		Loamy Gleye		F2)		-	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark \$		6)			/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar	and the second sec				Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre	essions (F	8)			and the second of the second
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) (LRR N,		
	A 147, 148)		MLRA 13				31	liastern of hydrophytic vagatation and
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo					licators of hydrophytic vegetation and etland hydrology must be present,
			Red Parent N	the second se	and the second second second			less disturbed or problematic.
Stripped						-	1	
Stripped Restrictive.	Layer (if observed):							
Restrictive.	the real states of the second states and the second states and the						1000	Sec. Sec. Sec. Sec. Sec. Sec. Sec. Sec.
Restrictive. Type:	Layer (if observed):		-				Hydric Soi	l Present? Yes 📈 No
Restrictive.	Layer (if observed):	Soils	erca mosig	ne, Et	-is l	odieva		
Restrictive. Type: Depth (in	Layer (if observed):	Soils	ere a mosig	ne, Ef	-is l	odieve		
Restrictive. Type: Depth (in	Layer (if observed):	Soils	ert a mosig	ne. I I	is l	odiev c		
Restrictive. Type: Depth (in	Layer (if observed):	Soils	ere a mosig	ne, IA	is l	odiev c		
Restrictive. Type: Depth (in	Layer (if observed):	Soils	are a mosio	ne. It	-is l	odiev c		
Restrictive. Type: Depth (in	Layer (if observed):	Soils	crca mosig	ne. It	-is l	o diev c		
Restrictive. Type: Depth (in	Layer (if observed):	Soils	ere a mosig	k. I	-is 1	o diev c		
Restrictive. Type: Depth (in	Layer (if observed):	Soils	ere a mosig	ne. I I	-is	odiev c		
Restrictive. Type: Depth (in	Layer (if observed):	Soils	ere a mosig	ne. It	is l	odiev c		
Restrictive. Type: Depth (in	Layer (if observed):	Soils	ert a mosig	ne. It	-is	odiev c		

Project/Site:	35		City/County: Cherokee	Sampling Date: 12/15/15		
and the second s	SCDOT			_ State: SC Sampling Point: W(M/M/-13		
nvestigator(s):	C. Sheat	s + S. Rurton	Section, Township, Range:	Blacksburg		
	the second second		cal relief (concave, convex, no			
Subregion (LRR or MI	the second	Lat: 35. 13418		71. 531633 Datum: 1/AD83		
Subregion (LRR or MI	W- WHILED	Ara- altaviste (Gr.	F-Gullica Jand	the second se		
Soil Map Unit Name:		from an of the state of the	,,	NWI classification:		
		he site typical for this time of ye		(If no, explain in Remarks.)		
Are Vegetation UCS	2, Soil, or !	Hydrology significantly	disturbed? No Are "Norma	I Circumstances" present? Yes No		
Are Vegetation	<u>-</u> , Soil <u>-</u> , or	Hydrology naturally pro	oblematic? ND (If needed, e	explain any answers in Remarks.)		
SUMMARY OF F	INDINGS - A	ttach site map showing	sampling point location	ons, transects, important features, etc.		
Hydrophytic Vegetat Hydric Soil Present?		Yes No	Is the Sampled Area	Yes No		
Wetland Hydrology		Yes No	within a Wetland?	Yes No		
HYDROLOGY						
Wetland Hydrology	/ Indicators:			Secondary Indicators (minimum of two required)		
Primary Indicators (r	minimum of one is	required; check all that apply)	1	Surface Soil Cracks (B6)		
Surface Water ((A1)	True Aquatic P	lants (B14)	Sparsely Vegetated Concave Surface (B8)		
High Water Tab		Hydrogen Sulfi	and the second Park Will some law residences and and	Drainage Patterns (B10)		
Saturation (A3)			spheres on Living Roots (C3)			
Water Marks (B			educed Iron (C4)	Dry-Season Water Table (C2)		
Sediment Depos	C CLUD OF CLUPY		eduction in Tilled Soils (C6)	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (E Algal Mat or Cruine Cruin Cru		Thin Muck Sur Other (Explain		Stunted or Stressed Plants (D1)		
Iron Deposits (B			in reenancy	Geomorphic Position (D2)		
	ble on Aerial Image	ery (B7)		Shallow Aquitard (D3)		
Water-Stained L				Microtopographic Relief (D4)		
Aquatic Fauna ((B13)			FAC-Neutral Test (D5)		
Field Observations	0					
i loid obset tationa	ent? Yes _	No Depth (inches):	X		
	t? Yes	No Depth (inches	a second se	/		
Surface Water Press	163_		Motiond I	d Hydrology Present? Yes No		
Surface Water Prese Water Table Presen Saturation Present?	Yes	No Depth (inches	veciality			
Surface Water Prese Water Table Presen Saturation Present? (includes capillary fr	Yes		os, previous inspections), if av			
Surface Water Prese Water Table Presen Saturation Present? (includes capillary fr	Yes					

6214 / I-85

VEGETATION (Four Strata) – Use scientific nam

Sampling Point: WWW-1300

nuo.	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: DXIO m)	<u>% Cover</u> <u>40</u>	Species?	a Cana I	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
		yes_	FAC	Total Number of Dominant Species Across All Strata: 4 (B)
4			_	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 75 (A/E
6	÷			Prevalence Index worksheet:
7		-		Total % Cover of: Multiply by:
2004 - 44-44	6 000	= Total Cov	er	OBL species x 1 =
50% of total cover: Sapling/Shrub Stratum (Plot size:/0×10 m)		total cover:	10	FACW species x 2 =
		in	CACIL	FAC species x 2 =
1. LIQUSHUM SILENSE		-402	THU	FACU species x 4 =
		<u> </u>		UPL species x 5 =
3				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9			<u> </u>	3 - Prevalence Index is ≤3.0 ¹
	_85	= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supportin
50% of total cover: 42	, <u>5</u> 20% of	total cover:	11	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: <u>5x5++</u>)				Problematic Hydrophytic Vegetation ¹ (Explain)
1,				
2				¹ Indicators of hydric soil and wetland hydrology must
3	-	4		be present, unless disturbed or problematic.
4) <u> </u>			Definitions of Four Vegetation Strata:
5			_	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless o
7	_			height.
8		_		
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.		-		The design of the design of the second state o
1.1		Total Cove	er.	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:		total cover:		
Woody Vine Stratum (Plot size: 5×5+)	-		1	Woody vine – All woody vines greater than 3.28 ft in height.
1. Lanicova naponica	20)	Ves	FAC	neight.
2.	1.00	1		
3.				
4				der ander
5.				Hydrophytic
v	20	Total Cove		Vegetation Present? Yes No
50% of total cover: / C		total cover:	4	

SOIL

6214/1-85

Sampling Point: <u>۲۷۳-</u>13 س

Color (moist) 1047 514 1797 514	<u>100</u> <u>95</u>	Color (moist)	 		<u>Loc²</u>	<u>Clay toa</u> <u>112 11</u>	nv:	Remarks	
		<u>10 yr sta</u>		6	<u>m</u>	-10-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1			
liti'n ow		10 97 376	<u> </u>			_			
		<i>Q</i>	Ξ		=	=			
					=				
	\equiv		=	_	-		·		
	_								
	=					-	-		
						-			
			-						
					inter.	21 apostions E	-Daro Linio	g, M=Matrix.	1.1.1
	letion, RM=R	educed Matrix, MS	5=Masked	Sand G	ains,	Indic	ators for Pre	oblematic Hy	dric Soils ³
		Dark Surface	(57)						
All the second sec				ce (S8) (I	MLRA 147,	Contraction of the second s			
Sulfide (A4)				F2)				and the second sec	(F19)
									(TE12)
	e (ATT)						outor (Explai	in in residence, inc.	
	LRR N,				LRR N,				
		MLRA 13	6)					5.2.10	
		Red Parent M	Material (F.	21) (ML	CA 127, 14		ness distant		ano.
er (ir observeu).						1			
		-				Hydric So	Present?	Yes	No 4
·s)		-				Ingane co			
	Surface (A12) ky Mineral (S1) (47, 148) ved Matrix (S4) ox (S5) atrix (S6)	1) adon (A2) ; (A3) Sulfide (A4) ayers (A5) (A10) (LRR N) elow Dark Surface (A11) Surface (A12) ky Mineral (S1) (LRR N, 47, 148) red Matrix (S4) ox (S5) atrix (S6) rer (if observed):	1) Dark Surface adon (A2) Polyvalue Be adon (A2) Thin Dark Su Sulfide (A4) Loamy Gleye ayers (A5) Depleted Ma (A10) (LRR N) Redox Dark elow Dark Surface (A11) Depleted Da Surface (A12) Redox Depres ky Mineral (S1) (LRR N, Iron-Mangan 47, 148) MLRA 13 ved Matrix (S4) Umbric Surface ox (S5) Piedmont Fic atrix (S6) Red Parent I	1)	1)	1)	1) Dark Surface (S7) 2 2: (A3) Polyvalue Below Surface (S8) (MLRA 147, 148) 0 2: (A3) Thin Dark Surface (S9) (MLRA 147, 148) 0 2: (A3) Thin Dark Surface (S9) (MLRA 147, 148) 0 2: (A3) Loamy Gleyed Matrix (F2) Sulfide (A4) Loamy Gleyed Matrix (F2) ayers (A5) Depleted Matrix (F3)	1) Dark Surface (S7) 2 cm Muck (A 2 cdon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie 2 (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie 2 (A3) Loamy Gleyed Matrix (F2) Piedmont Flo ayers (A5) Depleted Matrix (F3) (MLRA 136) (A10) (LRR N) Redox Dark Surface (F6) elow Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain Surface (A12) Redox Depressions (F8) Other (Explain ky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,	1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 14 2 (A3) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) 2 (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) 2 (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) 3 upper (A5) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (MLRA 136, 147) (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface elow Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Surface (A12) Redox Depressions (F8)

Project/Site: 195	City/County: Cherokee Sampling Date: 12/16/15
Applicant/Owner:	State: SG Sampling Point: WXX-Set
nvestigator(s): C. Sheatst S. Burton	Section, Township, Range: Blacks burg
the second s	cal relief (concave, convex, none): CONCAVE Slope (%): D
ubregion (LRR or MLRA): LRR-P Lat: 35.13/05	8 Long: - 51. 551618 Datum: MAD & 3
oil Map Unit Name: TONF - tatum Very fine sounde	NWI classification:
re climatic / hydrologic conditions on the site typical for this time of year	ar? Yes No (If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology significantly	
re Vegetation, Soil, or Hydrology naturally pro	
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes <u>No</u>
IYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pl	
High Water Table (A2) Hydrogen Sulfic	de Odor (C1) Drainage Patterns (B10) spheres on Living Roots (C3) Moss Trim Lines (B16)
	duced Iron (C4) Dry-Season Water Table (C2)
	duction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surfa	ace (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain i	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches)	:
Water Table Present? Yes Vo Depth (inches)	······································
Saturation Present? Yes Ves Depth (inches)	: O'' Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	s previous inspections), if available:
Describe recorded bata (shearn gauge, monitoring non, aonar prist	a promote mapping and a second s
Remarks:	

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

Sampling Point: WXY-5a wet

11×10m	Absolute	Dominant	1 CE. 12 C 4 C .	Dominance Test worksheet:
Tree Stratum (Plot size: 1/1/0M)	<u>% Cover</u>	Species?	<u>Status</u> FACW	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Fraxibus Pansulvanica	10	1105	FACW	
3. Aver rubrum	15	yes	FAC	Total Number of Dominant
4	<u></u>	0		Percent of Dominant Species 1/70
5				That Are OBL, FACW, or FAC:(A/B)
6	<u> </u>	÷		Prevalence Index worksheet:
1	- 40	= Total Cov	<u> </u>	Total % Cover of: Multiply by:
50% of total cover:	() <u>70</u>	= Total Cov	er 😪	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: () X () M)	20% 01	total cover:	0	FACW species x 2 =
	10	Gar.	THE	FAC species x 3 =
1. Carpinus caroliniana		-yes	The	FACU species x 4 =
2. Acer whom		-yes	THU	UPL species x 5 =
3			-	Column Totals: (A) (B)
4			()	
5				Prevalence Index = B/A =
6	-			Hydrophytic Vegetation Indicators:
7				1 -Rapid Test for Hydrophytic Vegetation
8			_	2 - Dominance Test is >50%
9			_	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹
· · · · · · · · · · · · · · · · · · ·	25:	= Total Cov	er	
50% of total cover: 12	15 20% of	total cover:	5	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 51547-				data in Remarks or on a separate sheet)
1. Microstation vimineum	70	INP 5	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2Bochmernia unlinduca	15	The	FACW	
-			111000	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7	<u></u>			height.
8			_	Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10	1.00			m) tall.
11.				Herb - All herbaceous (non-woody) plants, regardless
	85:	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 42	5 20% of	total cover:	17	
Woody Vine Stratum (Plot size: 5x54+)				Woody vine - All woody vines greater than 3.28 ft in
1. Loniera inpunica	30	110.5	FAC	height.
, J partie		-gen		
		-		
3				
4				Hydrophytic
5		<u> </u>		Vegetation
	30 -	Total Cove		Present? Yes V No
50% of total cover:		total cover:		

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	ation: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Type: C P // // // Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators: Indicators for Problematic Hy Histic Epipedon (A2) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Statified Layers (A5) ½ Depleted Matrix (F2) MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shalow Dark Surface Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Indicators of hydrophytic veg wetland hydrology must be p Sandy Mucky Mineral (S1) (LRR N) Iron-Manganese Masses (F12) (LRR N, MLRA 136, 147) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MILRA 136, 147) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic veg Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be p Stripped Matrix (S6) Red Parent Material (F21) (MLRA 147, 147) ³ Indicators of hydrophytic veg Stripped Matrix (S6) Red Parent Material (F21) (MLRA 147, 147) ³ Indicators of hydrophytic veg	# ation: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Image: Strate Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ³ Location; PL=Pore Lining, M=Matrix, MS=Masked Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ³ Location; PL=Pore Lining, M=Matrix, MS=Masked Sand Grains. tydric Soil Indicators: Indicators for Problematic Hy Histosol (A1) Dark Surface (S7) Histosol (A1) Dark Surface (S8) (MLRA 147, 148) Histosol (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Hydrogen Suffice (A4) Loerny Gleyed Matrix (F2) Stratified Layers (A5) 2/ Depleted Matrix (F3) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) 2 bepleted Below Dark Surface (A11) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) (LRR N, Incn-Manganese Masses (F12) (LRR N, Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Sandy Redox (S5) Red Parent Material (F21) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 148) Type: Depletin (inches): Depth (inches): <td>ation: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³: 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</td>	ation: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Unperiod Iron-Manganese Masses (F12) (MLRA 127, 147) Depth (inches): Hydric Soil Present? Yes	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic veg Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be p Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema Restrictive Layer (If observed): Type:	wetland hydrology must be present, unless disturbed or problematic.
MLRA 147, 148) MLRA 136)	wetland hydrology must be present, unless disturbed or problematic.
	wetland hydrology must be present, unless disturbed or problematic.
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema Restrictive Layer (if observed):	unless disturbed or problematic.
Restrictive Layer (if observed): Type: Depth (inches):	
Type:	dric Soil Present? Yes No
Depth (inches): Hydric Soil Present? Yes	dric Soil Present? Yes No

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Hydrophytic Vegetation Prese Hydric Soil Present? Wetland Hydrology Present?	ent? Yes _ Yes _ Yes		Is the Sampled Area within a Wetland?	Yes No
YDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		True Aquatic Plants Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduce Recent Iron Reduce	odor (C1) eres on Living Roots (C3) ed Iron (C4) lion in Tilled Soils (C6)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Surface Soil Cracks
 Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Ae Water-Stained Leaves (I Aquatic Fauna (B13) 		Thin Muck Surface Olher (Explain in R		 Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Water Table Present? Saturation Present? Saturation Present?	Yes No Yes No Yes No	Depth (inches): Depth (inches): Depth (inches):	Wetland I	Hydrology Present? Yes No

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

Sampling Point: WXI - Se up

1/14/11/20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. QUEVEUS FUBRUE	15	no	FACU	That Are OBL, FACW, or FAC: (A)
2. Querus Alba	30	yes	FACU	Total Number of Dominant
3. Carya tomentasa	_15	ho	FACU	Species Across All Strata: (B)
4. Populus heterophylla	20	Les.	OBL	
5	1000	0		Percent of Dominant Species 20
6			-	That Are OBL, FACW, or FAC: (A/B)
7	-			Prevalence Index worksheet:
/	SO	-		Total % Cover of: Multiply by:
50% of total cover: 2	0 00	= Total Cov	er I/a	OBL species x 1 =
	() 20% of	total cover:	10	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: ()X()/n)	20	1000	min	
1. Ligustrum Sinense	X()	yes.	THW	FAC species x 3 =
2.	_			FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8	·		-	2 - Dominance Test is >50%
9		Sector 1		3 - Prevalence Index is ≤3.0 ¹
and the second sec		= Total Cove		4 - Morphological Adaptations' (Provide supporting
50% of total cover:1	/ 20% of	total cover:	T	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				
1,		-1		Problematic Hydrophytic Vegetation ¹ (Explain)
2		/		and the state of the second second state of the second state
3.	/		-	¹ Indicators of hydric soil and wetland hydrology must
4.				be present, unless disturbed or problematic.
	· — ·			Definitions of Four Vegetation Strata:
5	<u> </u>			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6		·		more in diameter at breast height (DBH), regardless of
1			(<u></u>)	height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				
		= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:		total cover:	1	
	_ 20% 01	Cardi Cover.		Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3	·	_		
4				Hydrophytic
				Vegetation
5	T	= Total Cove	er	Present? Yes No
5				
550% of total cover:		total cover:_		A CONTRACTOR OF

SOIL

6219/1-85

Sampling Point: WXX-5-14

Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	_%	Type ¹	Loc ²		Remarks
0-4	10ur 44	100					loam_	
4-12	1012 × 5/3	_ 100_					sa loam	
	J '	-		_	_			
-						_		
			· · · · · · · · · · · · · · · · · · ·					
	1				-			
						-		
					-		<u> </u>	
							یز زمیند.	
					_			Course have been a
	concentration, D=Dep	pletion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		re Lining, M=Matrix. for Problematic Hydric Soils ³ :
	Indicators:			1000				and the second
_ Histoso			Dark Surface Polyvalue Be		co /S8) /M	U DA 147		fuck (A10) (MLRA 147) Prairie Redox (A16)
	pipedon (A2) listic (A3)		Thin Dark Su					RA 147, 148)
	en Sulfide (A4)		Loamy Gleye				Piedmo	ont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma					RA 136, 147)
	uck (A10) (LRR N)	Sec. 16.	Redox Dark					hallow Dark Surface (TF12) (Explain in Remarks)
	ed Below Dark Surface (A12)	ce (A11)	Depleted Date Redox Depres					(Explain in Remarks)
	Mucky Mineral (S1) (LRR N.	Iron-Mangan			LRR N,		
	A 147, 148)		MLRA 13	6)			1000	
	Gleyed Matrix (S4)		Umbric Surfa					s of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo Red Parent M					hydrology must be present, listurbed or problematic.
	d Matrix (S6) Layer (if observed)		Red Parent i	viateriai (F	21) (MLR	A 121, 14	rj uness c	
	Layer (il observed)						11.000	
Type							Hydric Soil Pres	ent? Yes No/
Type:	iches).							
Depth (in	iches):							
Depth (in	nches):							
Depth (in	nches):							
Depth (in	nches):							
Depth (in	nches):							
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1950 1977	nches):							
Depth (in	nches):							
Depth (in	nches):							
Depth (in	nches):							
Depth (in	nches):							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Subregion (LRR or MLRA):P Soil Map Unit Name: $\underline{TaF3 - +A}$ Are climatic / hydrologic conditions on t Are Vegetation, Soil, or Are Vegetation, Soil, or	Lat: 35.1403 UM 51Hz Glove Joseph the site typical for this time of year? Hydrology significantly distu- Hydrology naturally problem	natic? NO Are "Norma	71. 511583 Datum: NAP83 NWI classification:
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes No
HYDROLOGY			
Wetland Hydrology Indicators: Primary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imag Water-Stained Leaves (B9) Aquatic Fauna (B13)	 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Other (Explain in Reduct) 	dor (C1) eres on Living Roots (C3) ed Iron (C4) ion in Tilled Soils (C6) (C7)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Crainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Kicrotopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _ Water Table Present? Yes _ Saturation Present? Yes _ (includes capillary fringe) Describe Recorded Data (stream gau	No Depth (inches): / No Depth (inches): No Depth (inches):	O Wetland	Hydrology Present? Yes <u>No</u> No
Remarks:			

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names of	A COLORADOR		Sampling Point: W44 - / W
	Species?	Status	Dominance Test worksheet:
30	lies	FACW	That Are OBL, FACW, or FAC: (A)
	0		Species Across All Strata: (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
		-	Prevalence Index worksheet:
80	= Total Cov	er	Total % Cover of:Multiply by:
			OBL species x 1 =
		-	FACW species x 2 =
	4es	FAC	FAC species x 3 =
	yes		FACU species x 4 =
0	utes	FACU	UPL species x 5 =
	<u>a</u>		Column Totals: (A) (B)
<u></u>			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
		·	1 - Rapid Test for Hydrophytic Vegetation
<u></u>	<u>(</u>		2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 ¹
			4 - Morphological Adaptations ¹ (Provide supporting
20% 01	total cover.	_0_	data in Remarks or on a separate sheet)
10	1105	Fin	Problematic Hydrophytic Vegetation ¹ (Explain)
a construction of the second second	-Hes	TALY	
			¹ Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
		-	Definitions of Four Vegetation Strata:
		-	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of
			height.
	<u> </u>		Sapling/Shrub - Woody plants, excluding vines, less
	-		than 3 in. DBH and greater than or equal to 3.28 ft (1
<u></u>	<u></u>		m) tall.
- 56	-		Herb - All herbaceous (non-woody) plants, regardless
		er In	of size, and woody plants less than 3.28 ft tall.
2 20% of	total cover:	10	Woody vine - All woody vines greater than 3.28 ft in
10		-in-	height.
12	Mas	+H-	and the second se
	<u> </u>		Hydrophytic
	(a		Vegetation
1.00	Total Cove	er	Present? Yes No
10 -	, oral optic		an and a state of the state of
	total cover:	5	1 March 1 1 March 2 (201-1-1-1)
	<u>% Cover</u> 50 30 30 20% of 10 10 10 20% of 50	$\frac{\% \text{ Cover Species?}}{50} \qquad \text{yes} \\ \frac{50}{40} \qquad \text{yes} \\ \frac{30}{40} \qquad \text{yes} \\ \frac{30}{40} \qquad \text{star Cover;} \\ \frac{10}{20\% \text{ of total cover;}} \\ \frac{10}{40} \qquad \text{yes} \\ \frac{20}{40} \qquad \text{star Cover;} \\ \frac{20}{40} \qquad star Cover$	$\frac{\% \text{ Cover Species? Status}}{50 \text{ UCS OBL}}$ $\frac{50 \text{UCS OBL}}{30 \text{ULS FACW}}$ $\frac{30 \text{ULS FACW}}{20\% \text{ of total cover}}$ $\frac{80}{20\% \text{ of total cover}} = 16$ $\frac{10 \text{US FAC}}{20 \text{US FACW}}$ $\frac{10 \text{US FAC}}{10 \text{US FAC}}$ $\frac{70 \text{US FAC}}{10 \text{US FAC}}$

SOIL

Sampling Point: Wigg-1 wet

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rofile Description: (Describe to th Depth Matrix		ox Features				
inches) Color (moist)	% Color (moist)		Type	Loc ²	Texture	Remarks
0-4 1041 312 8	0 10 ur 516	20	C	P	SIL	
1-15 IMIN 5/10 (10 TONY 514	40			Sand	
<u>12 10 ye 10 - 0</u>	e jan					
						7
	_					
						1
		· · · · · ·		<u></u>	-	1000 million 1000 mi
		. <u></u> .	_			
				(
					-	
				·	· · · · · · ·	
	Dia Data data data data data data data dat	D-Mashad	Cand Ca		2) contions	PL=Pore Lining, M=Matrix.
ype: C=Concentration, D=Depletion ydric Soil Indicators:	n, RM=Reduced Matrix, M	IS=Masked	Sand Gr	ains.		dicators for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surfac	0 (57)				2 cm Muck (A10) (MLRA 147)
_ Histic Epipedon (A2)	Polyvalue B		e (S8) (M	LRA 147	. 148)	Coast Prairie Redox (A16)
Black Histic (A3)	Thin Dark S					(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gley			100 200	1.1	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	L Depleted Ma	and the second se				(MLRA 136, 147)
_ 2 cm Muck (A10) (LRR N)	Redox Dark					Very Shallow Dark Surface (TF12)
_ Depleted Below Dark Surface (A1						Other (Explain in Remarks)
_ Thick Dark Surface (A12)	Redox Depr N, Iron-Mangar			DDN		
Sandy Mucky Mineral (S1) (LRR			5(12)1	LINKIN		
MI DA 147 1481	MIRA 1	361				
MLRA 147, 148) Sandy Gleved Matrix (S4)	MLRA 1: Umbric Surf		MLRA 13	6, 122)	3	Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	Umbric Surf	ace (F13) (I				Indicators of hydrophytic vegetation and wetland hydrology must be present,
		ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48)	
Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48)	wetland hydrology must be present,
_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6)	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6) estrictive Layer (if observed):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present,
_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6) estrictive Layer (if observed): Type:	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6) estrictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6) estrictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6) estrictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) estrictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6) estrictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6) estrictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
_ Sandy Gleyed Matrix (S4) _ Sandy Redox (S5) _ Stripped Matrix (S6) estrictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Strictive Layer (if observed): Type: Depth (inches):	Umbric Surf Piedmont Fl	ace (F13) (I loodplain Sc	oils (F19)	(MLRA 1	48) 7)	wetland hydrology must be present, unless disturbed or problematic.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Subregion (LRR or MLRA): <u>P</u> Lat: <u>35.140573</u> Lor Soil Map Unit Name: <u>TAF3- +Atym Silty Clay Joann</u> Are climatic / hydrologic conditions on the site typical for this time of year? <u>Yes</u> No_ Are Vegetation, Soil, or Hydrology significantly disturbed? <i>No</i> Are	nvex, none): <u>LOAVLX</u> Slope (%): 572 ng: <u>Slope</u> (%): 572 ng: <u>Slope</u> (%): 572 ng: <u>Slope</u> (%): 572 NWI classification:
Investigator(s): <u>C. Sheats 4 S. Burton</u> Section, Township, Ra Landform (hillslope, terrace, etc.): <u>Slape</u> Local relief (concave, con Subregion (LRR or MLRA): <u>P</u> Lat: <u>35.140573</u> Local Soil Map Unit Name: <u>TAF3- tatum Silty Clau Joann</u> Are climatic / hydrologic conditions on the site typical for this time of year? <u>Les</u> No Are Vegetation <u>Soil</u> , or Hydrology <u>significantly disturbed</u> ? <i>No</i> Are Are Vegetation <u>Soil</u> , or Hydrology <u>naturally problematic</u> ? <i>No</i> (If n SUMMARY OF FINDINGS – Attach site map showing sampling point Hydrophytic Vegetation Present? <u>Yes</u> <u>No</u> <u>Is the Sampler</u> Wetland Hydrology Present? <u>Yes</u> <u>No</u> <u>Ves</u> <u>No</u> <u>No</u> <u>Ves</u> <u>No</u> <u>Ves</u> <u>No</u> <u>No</u> <u>Ves</u> <u>No</u> <u>Ves</u> <u>No</u> <u>No</u> <u>V</u> <u>N</u> <u>No</u> <u>Ves</u> <u>No</u> <u>Ves</u> <u>No</u> <u>Ves</u> <u>No</u> <u>N</u> <u>N</u> <u>No</u> <u>V</u> <u>N</u>	nvex, none): <u>COAVEX</u> Slope (%): <u>575</u> ng: <u>Slope</u> (%): <u>575</u> Datum: <u>MAD83</u> NWI classification:
Landform (hillslope, terrace, etc.): Slape Local relief (concave, consumption of the state of the st	nvex, none): <u>COAVEX</u> Slope (%): <u>575</u> ng: <u>Slope</u> (%): <u>575</u> Datum: <u>MAD83</u> NWI classification:
Subregion (LRR or MLRA): P Lat: 35.140573 Lot Soil Map Unit Name: TAF3. tatym Soilty Clay for the site typical for this time of year? No Are climatic / hydrologic conditions on the site typical for this time of year? Soil No Are Vegetation , Soil , or Hydrology significantly disturbed? No Are Vegetation , Soil , or Hydrology naturally problematic? No Are Vegetation , Soil , or Hydrology If n SUMMARY OF FINDINGS – Attach site map showing sampling point Hydrophytic Vegetation Present? Yes No	ng: <u>- \$/. 5/1573</u> Datum: <u>MAD 83</u> NWI classification: (If no, explain in Remarks.) "Normal Circumstances" present? YesNo eeded, explain any answers in Remarks.) locations, transects, important features, etc. d Area
within a Wetland Yes No No No No In Vegetation No Is the Sampler No No No No No No <td>NWI classification:</td>	NWI classification:
re climatic / hydrologic conditions on the site typical for this time of year? (es No re Vegetation, Soil, or Hydrology significantly disturbed? NO Are re Vegetation, Soil, or Hydrology naturally problematic? NO (If n SUMMARY OF FINDINGS – Attach site map showing sampling point Hydrophytic Vegetation Present? Yes No Is the Samplewithin a Wetlaw Wetland Hydrology Present? Yes No	(If no, explain in Remarks.) "Normal Circumstances" present? Yes? No eeded, explain any answers in Remarks.) locations, transects, important features, etc. d Area
re Vegetation, Soil, or Hydrologysignificantly disturbed? No Are re Vegetation, Soil, or Hydrology naturally problematic? No (If n SUMMARY OF FINDINGS – Attach site map showing sampling point Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	"Normal Circumstances" present? Yes No No eeded, explain any answers in Remarks.) locations, transects, important features, etc. d Area
re Vegetation, Soil, or Hydrologynaturally problematic? <i>N2</i> (If n SUMMARY OF FINDINGS – Attach site map showing sampling point Hydrophytic Vegetation Present? YesNo Is the Sampler Wetland Hydrology Present? YesNo Wetland Hydrology Present? YesNo	eeded, explain any answers in Remarks.) locations, transects, important features, etc. d Area
SUMMARY OF FINDINGS – Attach site map showing sampling point Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	locations, transects, important features, etc. d Area
Hydrophytic Vegetation Present? Yes No Is the Sampler Hydric Soil Present? Yes No within a Wetland Wetland Hydrology Present? Yes No No	d Area
Hydric Soil Present? Yes No Is the Sample within a Wetla Wetland Hydrology Present? Yes No within a Wetla	C 0 3 1 Y
Remarks:	
YDROLOGY	
Netland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Roc	
Vater Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils	
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Aquatic Fauna (B13) leld Observations:	
Surface Water Present? Yes No Depth (inches):	
Vater Table Present? Yes No Depth (inches):	and the second state of the second
	Vetland Hydrology Present? Yes No
includes capillary fringe)	s) if available:
Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection Remarks:	is), if available:

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Dula na	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:V/U/M)	% Cover	Species?		Number of Dominant Species
Liquidambar stylacifing	-35	yes	FAC	That Are OBL, FACW, or FAC: (A)
L'hodendron Tulipifera	30	ues.	FACU	Total Number of Dominant
Pinus Tarda	10	no	FAC	Species Across All Strata: (0 (B)
		Carolan	-	
				Percent of Dominant Species 50 (A/R)
				That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
·				
2	75	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 3	1.5 20% of	total cover:	15	OBL species x 1 =
apling/Shrub Stratum (Plot size: 0 x 0 m)				FACW species x 2 =
Liquidambar Styracifiua	35	110.5	FAC	FAC species x 3 =
Liriodendran tulipitera		Ules	TACU	FACU species x 4 =
		- yes-	1100	UPL species x 5 =
				Column Totals: (A) (B)
	-			Prevalence Index = B/A =
	-			Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	50	= Total Cove		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:	5 000/ -5	= Total Cove	er 16	4 - Morphological Adaptations ¹ (Provide supporting
	20% 01	total cover.	_10_	data in Remarks or on a separate sheet)
terb Stratum (Plot size: 5x5 -f-4)	10		-	Problematic Hydrophytic Vegetation! (Explain)
Allum vineale		Mes.	FACO	(residuate () arep i) to a signation (explain)
·	_	1		The second se
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
				height.
			<u> </u>	Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
0				m) tall,
1.				Dark All backgroup (and mondul starts, succedure
·	10	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:		total cover:	2	
Voody Vine Stratum (Plot size: 5x6 Pt)		total cover.		Woody vine - All woody vines greater than 3.28 ft in
	115	1.05	-40	height.
Lonicera japonica	- 70	1:jes	FAC	
0		2		
				Hydrophytic
				Vegetation
	40	Total Cove	r	Present? Yes No
50% of total cover:	() 20% of	total cover:	"9	
emarks: (Include photo numbers here or on a separate				
emarka. Unclude photo numbers here of on a separate	sileet.)			

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SO		

	ription: (Describe Matrix	to the dept		nent the in x Features		or confirm	n the absence of in	dicators.)
Depth (inches)	Color (moist)	_%	Color (moist)	%	Type ¹	Loc2	Texture	Remarks
0-3	1041414	100		_	_	_	clay 1	
3-14	1024516	TO	10 yr 4/4	30	(m	11 5 11	
2+	10 yr pr	- <i>n</i> v-	- <u>j</u>		(
		·			. 			
					-			
						_		
					-			
-		Latter Dille	Deduced Metric Mit	Pathonkod	Fond Cr		2 ocation: BI = Pa	ore Lining, M=Matrix.
	oncentration, D=Dep Indicators:	ietion, RM=	Reduced Matrix, Mo	5-IVIASKEU	Sand Gi	airis.		for Problematic Hydric Soils ³ :
the state of the state of the			Dark Surface	(97)				Muck (A10) (MLRA 147)
Histosol Histic Fr	(A1) pipedon (A2)		Dark Surface		ce (S8) (N	LRA 147		Prairie Redox (A16)
	istic (A3)		Thin Dark Su				the second se	.RA 147, 148)
	en Sulfide (A4)		Loamy Gleye				Piedm	nont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma	trix (F3)				.RA 136, 147)
	uck (A10) (LRR N)	. Section	Redox Dark					Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dat				- Other	(Explain in Remarks)
	ark Surface (A12) /lucky Mineral (S1) (I	DDN	Redox Depre					
	A 147, 148)	LINK IN	MLRA 13		00 (112) (
	Sleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ Indicato	ors of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 1		d hydrology must be present,
	I Matrix (S6)		Red Parent M	Material (F	21) (MLR	A 127, 14	7) unless	disturbed or problematic.
Restrictive	Layer (if observed):	5						
Type:			_				S	
Depth (in	ches):						Hydric Soll Pres	sent? Yes No

Project/Site: <u>1-BS WIDENING</u> Applicant/Owner: <u>SCOOT</u> nvestigator(s): <u>MWDDD H SCACE</u> andform (hillslope, terrace, etc.): <u>HUUSLOF</u> Subregion (LRR or MLRA): <u>UPP-P</u> I Soil Map Unit Name: <u>Tm E - totum Ve</u> Are climatic / hydrologic conditions on the site typica Are Vegetation <u>, Soil</u> , or Hydrology <u>,</u> Are Vegetation <u>, Soil</u> , or Hydrology <u>,</u>	City/County:	e, convex, none): <u>CONGAVE</u> Slope (%): <u>3</u> Long: <u>81.448250</u> Datum: <u>NAD-83</u> <u>35'20 Slope</u> NWI classification: No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes <u>No</u> (If needed, explain any answers in Remarks.)
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	No Is the Sa	mpled Area Wetland? Yes <u>No</u> No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	eck all that apply) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)	Dry-Season Water Table (C2) Soils (C6) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3)
Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitorin Remarks: drainage, pipe-		and the second se

t

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Tree Stratum (Plot size: 30x 60 F4)			
	40	YES OLU	Number of Dominant Species
2 Populus deltoider	10		That Are OBL, FACW, or FAC: (A)
3 Provis talda			Total Number of Dominant
3_PUINS TAKALA		_NO FAC	Species Across All Strata: (B)
4			B
5			Percent of Dominant Species That Are OBL, FACW, or FAC: 100 %
6	_		That Ale OBL, FACW, OF FAC:,VB)
7			Prevalence Index worksheet:
		Contraction of the second	
50% of total cover	1(0)	= Total Cover	
50% of total cover:	-1.3 20% of	total cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 30x 60 ft) _	N/F	FACW species x 2 =
Myrica cerifera	5	Yes FAC	FAC species x 3 =
2 Salux nigra	5	Yes OBL	FACU species x 4 =
3		-102 000	UPL species x 5 =
4			Column Totals: (A) (B)
5			Discourse trades and the
I			Prevalence Index = B/A =
7,			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
)			3 - Prevalence Index is ≤3.0 ¹
	<u>10</u>	Total Cover	
, 50% of total cover:	20% of	total cover:	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:	 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
(Flot size	20% of	Ves FACW	[] [[] []] [] [] [] [] [] []
surpus cyperious	<u> </u>	Yes FACW	data in Remarks or on a separate sheet)
Surpus spp.	40	Yes FACW	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
Surpus cyperinus Junius spp.	40 5 30	Yes FACW	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must
Scirpus cyperinus Junius spp. Carex spp. Polyconum spp.	<u>40</u> <u>30</u>	Yes FACW	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Scirpus cyperinus Junius spp. Carex spp. Polyconum spp.	<u>40</u> <u>30</u>	Yes FACW NO OBL Yo ARE	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must
Scirpus cyperinus Junius spp. Carex spp. Polygonum spp. Polygonum sagittatum	30	Yes FACW	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
Scirpus cyperinus Junius spp. Carex spp. Polygonum spp. Polygonum sagittatum Rubus spp.	40 50 200	Yes FACW NO OBL YO THE	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in, (7.6 cm) or
Scirpus cyperinus Junius spp. Carex spp. Polygonum spp. Polygonum sagittatum Rubus spp.	40 50 20 20 20 20 20 50 20 50 20 50 20 50 20 50 20 50 20 20 50 20 20 20 20 20 20 20 20 20 20 20 20 20	Yes FACW NO OBL YO THE NO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
Scirpus cyperinus Junius spp. Carex spp. Polygonum spp. Polygonum sagittatum Rubus spp.	40 50 20 20 20 20 20 50 20 50 20 50 20 50 20 50 20 50 20 20 50 20 20 20 20 20 20 20 20 20 20 20 20 20	Yes FACW NO OBL YO THE NO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
Scirpus cyperinus Junius spp. Carex spp. Polygonum spp. Polygonum sagettatum Rubus spp.	40 5 30 10 10 15	Yes FACW NO OBL YO THE NO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
Scirpus cyperinus Junius spp. Carex spp. Polygonum spp. Polygonum sagettatum Rubus spp.	40 5 30 10 10 15	Yes FACW NO OBL YO THE NO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present. unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants. excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants. excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
Scirpus cyperinus Scirpus cyperinus Junius spp. Carex spp. Polygonum sog. Hatum Rubus spp.	40 5 30 10 10 15	Yes FACW NO OBL YO THE NO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall
Scirpus cyperinus Junius spp. Carex spp. Polygonum spp. Polygonum sagettatum Rubus spp.	40 30 20 15	Yes FACW XO YO YO MO OBL MO 	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall
Scirpus cyperinus Scirpus cyperinus Junius Spp. Carex Spp. Polygonum Sog. Hatum Rubus Spp.	40 50 20 15 15	Yes FACW YO OBC YO OBL NO OBL NO OBL NO OBL NO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present. unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants. excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants. excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
Scirpus cyperinus Scirpus cyperinus Junius Spp. Carex Spp. Polygonum Sagittatum Rubus Spp. 1 	40 50 20 15 15	Yes FACW XO YO YO MO OBL MO 	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Sci PUS Cyperinus Sci PUS Cyperinus JUNIUS Spp. Carex Spp. Polygonum Sagi Hatum RUDUS Spp. Polygonum Sagi Hatum RUDUS Spp. 1 50% of total cover <u>E</u> 50% of total cover <u>E</u>	40 50 20 15 15	Yes FACW YO OBC YO OBL NO OBL NO OBL NO OBL NO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall Woody vine – All woody vines greater than 3.28 ft in
Sci PUS Cyperinus Sci PUS Cyperinus JUNIUS Spp. Carex Spp. Polygonum Sagi Hatum RUDUS Spp. Polygonum Sagi Hatum RUDUS Spp. 1 50% of total cover <u>E</u> 50% of total cover <u>E</u>	40 50 20 15 15	Yes FACW NO OBC YO OBC NO OBC NO OBC NO OBC NO OBC NO OBC NO OBC NO OBC	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Sci pus cyperinus Sci pus cyperinus JUNIUS Spp. Carex Spp. Polygonum Sog. Hatum RUBUS Spp. Polygonum Sog. Hatum RUBUS Spp. 1 50% of total cover. 50% of total cover. 1 50% of total cover. 50% of total cover. 1 50% of total cover. 1 To Xi codendion radicans	40 50 20 15 15	Yes FACW Yo BBC Yo BBC WO OBL WO OBL WO OBL WO OBL WO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall Woody vine – All woody vines greater than 3.28 ft in
Scirpus cyperinus Scirpus cyperinus Junius Spp. Carex Spp. Polygonum Sog. Hatum Rubus Spp. Polygonum Sag. Hatum Rubus Spp. 1 50% of total cover: 50% of total cover: 1 50% of total cover: 1 50% of total cover: 1 1 1 1 1 1 1 1 1 1 1 1 1	40 50 20 15 15	Yes FACW NO OBC YO OBC NO OBC NO OBC NO OBC NO OBC NO OBC NO OBC NO OBC	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall Woody vine – All woody vines greater than 3.28 ft in
Sci rpus cyperinus Sci rpus cyperinus JUNIUS Spp. Polygonum Spp. Polygonum Sugi Hatum RUDUS Spp. Polygonum Sugi Hatum RUDUS Spp. 1 50% of total cover: 50% of total cover: 1 50% of total cover: 1 50% of total cover: 50% of total cover: 1 Toxi codendion radicans	40 50 20 15 15	Yes FACW Yo BBC Yo BBC WO OBL WO OBL WO OBL WO OBL WO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall Woody vine – All woody vines greater than 3.28 ft in
Scirpus cyperinus Scirpus cyperinus JUNIUS Spp. Carex Spp. Polygonum Sog. Hatum Rubus Spp. Polygonum Sag. Hatum Rubus Spp. 1 50% of total cover E 50% of total cover E 1 50% of total cover E 1 1 1 1 1 1 1 1 1 1 1 1 1	40 50 20 15 15	Yes FACW Yo BBC Yo BBC WO OBL WO OBL WO OBL WO OBL WO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall Woody vine – All woody vines greater than 3.28 ft in height.
Scirpus cyperinus Scirpus cyperinus JUNIUS Spp. Carex Spp. Polygonum Sog. Hatum Rubus Spp. Polygonum Sag. Hatum Rubus Spp. 1 50% of total cover E 50% of total cover E 1 50% of total cover E 1 1 1 1 1 1 1 1 1 1 1 1 1	40 50 20 15 15	Yes FACW Yo BBC Yo BBC WO OBL WO OBL WO OBL WO OBL WO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present. unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants. excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants. excluding vines, less than 3 in. DBH and greater than or equal to 3 28 ft (1 m) tall Herb – All herbaceous (non-woody) plants. regardless of size, and woody plants less than 3.28 ft tall Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
Scirpus cyperinus Scirpus cyperinus JUNIUS Spp. Carex Spp. Polygonum Sog. Hatum Rubus Spp. Polygonum Sag. Hatum Rubus Spp. 1 50% of total cover: 50% of total cover: 1 50% of total cover: 1 50% of total cover: 1 1 1 1 1 1 1 1 1 1 1 1 1	40 5 30 10 10 15 15 5 10 15 3 3 3	Yes FACW Yo BBC Yo BBC WO OBL WO OBL WO OBL WO OBL WO OBL YO TOTAL COVER TOTAL COVER TOTAL COVER TOTAL COVER YES FAC	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present. unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants. excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants. excluding vines, less than 3 in. DBH and greater than or equal to 3 28 ft (1 m) tall Herb – All herbaceous (non-woody) plants. regardless of size, and woody plants less than 3 28 ft tall Woody vine – All woody vines greater than 3 28 ft in height. Hydrophytic Vegetation
Sci rpus cyperinus Sci rpus cyperinus JUNIUS Spp. CUNEX Spp. Polygonum Sog. Hatum RUBUS Spp. Polygonum Sog. Hatum RUBUS Spp. 50% of total cover. 50% of total cover. 50% of total cover. 50% of total cover. 50% of total cover. To Xi codendion radicans	40 5 30 10 15 15 5 10 15 20% of 1 3 3 3	Yes FACW Yo BBC Yo BBC WO OBL WO OBL WO OBL WO OBL WO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL MO OBL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must be present. unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants. excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants. excluding vines, less than 3 in. DBH and greater than or equal to 3 28 ft (1 m) tall Herb – All herbaceous (non-woody) plants. regardless of size, and woody plants less than 3.28 ft tall Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic

6214/I-85

Profile Description: (Describe to the Depth Matrix		ment the indicat	or or confir	m the absence of	Sampling Point: <u>WEV</u> of Indicators.)
(inches) Color (moist) %	Color (moist)	% Type	Loc	Texture	Remarks
05 7.54R 516 6	E	40 C	M	l	
6-10 7.542 \$3 55	5 ISVR SI4	40 C	M	L	
	- ZSYR 518	5 .	M	L	
10-12+ 104R 613 100				CSL	
	-				
	7				
			_		
			-		
			_		
Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, M	S=Masked Sand	Grains.		=Pore Lining, M=Matrix.
lydric Soil Indicators:				Indicat	tors for Problematic Hydric Solls ³ :
Histosol (A1)	Dark Surface				cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)		elow Surface (S8)		, 148) Co	past Prairie Redox (A16)
Black Histic (A3)		urface (S9) (MLR	A 147, 148)		(MLRA 147, 148)
_ Hydrogen Sulfide (A4)		ed Matrix (F2)		Pie	edmont Floodplain Soils (F19)
_ Stratified Layers (A5)	X Depleted Ma	atrix (F3)			(MLRA 136, 147)
_ 2 cm Muck (A10) (LRR N)	Redox Dark	Surface (F6)		Ve	ry Shallow Dark Surface (TF12)
_ Depleted Below Dark Surface (A11) Depleted Da	rk Surface (F7)			her (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depr	essions (F8)		- 23	(
Sandy Mucky Mineral (S1) (LRR N		ese Masses (F12	(LRP N		
MLRA 147, 148)	MLRA 13		1		
_ Sandy Gleyed Matrix (S4)		No. of Contract of Contract of Contract	400 400	31-11-	
_ Sandy Redox (S5)		ace (F13) (MLRA	100 C C C C C C C C C C C C C C C C C C		ators of hydrophytic vegetation and
		oodplain Soils (F1			and hydrology must be present.
		Material (F21) (MI	RA 127 14	() unie	ess disturbed or problematic.
Stripped Matrix (S6)	Red Parent I				
	Red Parent I				

Remarks

THE SAIL IS RECEIVITLY DEPOSITED FILL/RUNJ-OFF FROM THE SURROUNDING UPLIANDS. THE SAIL IS DEVELOPING REDOXIMORPHIC FEATURES CONSISTENT WITH A HYDREC WATER REGIME WHICH WOULD BECOME A DEPLETED MATRIX IF PRESENT CONDITIONS REMAIN. THEREFORE, IT'S CONSIDERED HYDRIC

Project/Site: 1-85 WIPENING Applicant/Owner: SCOOT	FORM - Eastern Mountai		ate: 9/16/16 FI
Investigator(s) M. WOOD H. SULLER	and the f	1 L	Point WEV-UP
11	Section, Township, Range		<u>issburg</u>
Landform (hillslope, terrace, etc.): HILLHOP'2 Subregion (LRR or MLRA): UKL-P Lat: 35.164	Local relief (concave, convex, nor 3 9 Long: -Y	440.3 0	Slope (%): 2() atum: NAD- 63
Soil Map Unit Name: TME - tatury very fire sonaly 10		NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of			N
Are Vegetation N_{2} , Soil Yes , or Hydrology N_{2} significant			1
		I Circumstances" present? Yes	
Are Vegetation No_, Soil No_, or Hydrology No_ naturally		explain any answers in Remarks	
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point location	ons, transects, importan	t features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland?	Yes No)	<u>(</u>
Pemarks:	ALL		
BE FOUND IN UPLAND ARE		FAC" PLANTI SO	(ald
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minimum	n of two required)
Primary Indicators (minimum of one is required; check all that apply	0	Surface Soil Cracks (B6)	
Surface Water (A1) True Aquatic	Plants (B14)	Sparsely Vegetated Conca	ve Surface (B8)
High Water Table (A2) Hydrogen Su	lfide Odor (C1)	Drainage Patterns (B10)	
Saturation (A3) Oxidized Rhi	zospheres on Living Roots (C3)	Moss Trim Lines (B16)	
	Reduced Iron (C4)	Dry-Season Water Table (C2)
	Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)	
Drift Deposits (B3) Thin Muck Si	urface (C7)	Saturation Visible on Aeria	I Imagery (C9)
Algal Mat or Crust (B4) Other (Explain	in in Remarks)	Stunted or Stressed Plants	
Iron Deposits (B5)		Geomorphic Position (D2)	
Inundation Visible on Aerial Imagery (B7)		Sballow Aquitard (D3)	
Water-Stained Leaves (B9)		crotopographic Relief (D	4)
Aquatic Fauna (B13)		FAC-Neutral Test (D5)	
Field Observations:			2
Surface Water Present? Yes No Depth (inche			\sim
Nater Table Present? Yes No Depth (inche			
Saturation Present? Yes No Depth (inche includes capillary fringe)	s): Wetland H	ydrology Present? Yes	No_V
Describe Recorded Data (stream gauge, monitoring well, aerial pho	los, previous inspections), if avai	lable	
Remarks			

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<u>Tree Stratum</u> (Plot size: <u>20x20F</u> 1. <u>PINUS talda</u> 2. 12 Stylacfiua	Absolute % Cover 40	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
3. deditria tridianthos	5	X	FAL	Total Number of Dominant Species Across All Strata:
5			_	Percent of Dominant Species LO That Are OBL, FACW, or FAC: (A/
7	55 20% of	Total Cov	er []	Prevalence Index worksheet:
1_ Pinus taeda			FAC	FAC species 10 x 3 = 380 FACU species 0 x 4 = 0
3 4			_	UPL species O x 5 = O Column Totals: 10 (A) 320 (B
5 6 7				Prevalence Index = B/A = <u>5</u> Hydrophytic Vegetation Indicators:
8	-		-	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
50% of total cover: <u>10</u> Herb Stratum (Plot size: <u>20 × 70 F+</u>) 1. <u>RUDUS SPP</u> 2. <u>SUCIK Prolifera</u> 3	_ 20% of 1	Total Cover: total cover:		 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4 5 6				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
7 8				more in diameter at breast height (DBH), regardless o height.
9		_		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
50% of total cover: 7.5		Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 20x20ft) 1 Vitic (0tund) Folia 2 Smilax (0tund) Folia	<u>IS</u>		AU	Woody vine - All woody vines greater than 3.28 ft in height.
3 4 5			<u> </u>	Hydrophytic Vegetation
50% of total cover: 10	20% of to	Total Cove		Present? Yes No
Remarks: (Include photo numbers here or on a separate shi NOT PAILT OF WETLAN WETLAND		spite	. VEG	ANJTANIAN LUTATJ

SOIL

Flag 6 Sampling Point: WZV-UP

Depui	Matrix	Redox	Feature	5			
(inches)	Color (moist) %	Color (moist)	_%	Type	_Loc ²	Texture	Remarks
0-4	2.54 74 100					SL	
4-08+	51 8 3 100	· · · · · · · · · · · · · · · · · · ·	_			si -	
	the second s						
			-				
	2	-					
			-	2.25			
Type: C=Co	ncentration, D=Depletion, RM	Reduced Matrix, MS=	Masked	Sand Gra	ins.	² Location: PL=Pore	Lining M=Matrix
Histosol (iuicators:					Indicators fo	r Problematic Hydric Soils ³ :
	A1) pedon (A2)	Dark Surface (S7)			2 cm Mu	ck (A10) (MLRA 147)
Black His		Polyvalue Belo	w Surfac	e (S8) (MI	RA 147,	148) _ Coast Pr	airie Redox (A16)
Hydrogen	Sulfide (A4)	Loamy Gleyed	Matrix (F	(MLRA 14	7, 148)		4 147, 148)
	Layers (A5)	Depleted Matrix	(F3)	-/		Piedmon	l Floodplain Soils (F19) A 136, 147)
_ 2 cm Muc	k (A10) (LRR N)	Redox Dark Su	rface (F6	5)		Verv Sha	llow Dark Surface (TF12)
_ Depleted I	Below Dark Surface (A11) & Surface (A12)	Depleted Dark	Surface ((F7)		Other (Ex	plain in Remarks)
Sandy Mu	cky Mineral (S1) (LRR N,	Redox Depress	ions (F8))	a a w		
MLRA	147, 148)	Iron-Manganese MLRA 136)	e Masses	s (F12) (LI	RR N,		
_ Sandy Gle	yed Matrix (S4)	Umbric Surface	(F13) (N	I RA 136	122)	Junitaria	Transaction and
_ Sandy Rec		Piedmont Flood	plain Sol	Is (F19) (M	ILRA 148	wetland by	of hydrophytic vegetation and drology must be present,
_ Stripped M		Red Parent Mat	erial (F2	1) (MLRA	127, 147)		urbed or problematic.
	yer (if observed):						in problemand.
Type:		÷.					12
Depth (inche emarks:	əs):					Hydric Soil Present	Yes No X
	STRONGLY (Semen TEI	<i>N</i> : C	or p	-rAu	y soil	

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: <u>I-85 Wides</u> Applicant/Owner: <u>ScpoT</u>	city/	County: <u>Chero IC</u>	State: 5C Sampling Point: WZW-6
nvestigator(s): <u>M. Wood</u> + H	51	tion, Township, Range:	
A A A A A A A A A A A A A A A A A A A			
		elief (concave, convex, no	a los sentencias de la companya de l
Subregion (LRR or MLRA):	Lat: 35, 13902	6 Long:	81,514335 Datum: NAD-83
Soil Map Unit Name: <u>TaC3</u>			NWI classification:
are climatic / hydrologic conditions on th	he site typical for this time of year?	Yes No	(If no, explain in Remarks.)
Are Vegetation No, Soil No, or	Hydrology No significantly distu	urbed? NO Are "Norma	Il Circumstances" present? Yes No
re Vegetation NO, Soil NO, or	Hydrology No naturally problem	natic? No (If needed.)	exolain any answers in Remarks.)
김 사장이는 감독을 빼놓는 지구들을 생성			
SUMMART OF FINDINGS - A	ttach site map showing sai		ons, transects, important features, etc.
Hydrophytic Vegetation Present?	Yes No	Is the Sampled Area	
Hydric Soil Present?	Yes No	within a Wetland?	Ves No
Wetland Hydrology Present?	Yes No	Within a Wonand	
Remarks:			
IYDROLOGY			Secondary Indicators (minimum at two required)
Wetland Hydrology Indicators:	والمحاجبة الحاجبة والمحاجبة والمحاد		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is		(P14)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)
Surface Water (A1) High Water Table (A2)	True Aquatic Plants Hydrogen Sulfide O	12	Drainage Patterns (B10)
Saturation (A3)		eres on Living Roots (C3)	
Water Marks (B1)	Presence of Reduce		Dry-Season Water Table (C2)
Sediment Deposits (B2)		ion in Tilled Soils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Re	emarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)			Geomorphic Position (D2)
Inundation Visible on Aerial Image	ery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9)			Microtopographic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral Test (D5)
Fleld Observations:	1 a de maria	2.0	
Surface Water Present? Yes	No V Depth (inches):	2	
Water Table Present? Yes	No Depth (inches):	<u> </u>	
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland	Hydrology Present? Yes <u>No</u> No
Describe Recorded Data (stream gaug	je, monitoring well, aerial photos, pr	revious inspections), if ava	ailable:
Remarks:	X		
M5M1-5:	draimage from s	stream	

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

6214 / T- 85 Sampling Point: WZW-6wet

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20x20fl) 1. Lire odudrun tu lipfera	<u>% Cover</u> 30	Species?	Status FAC 9	Number of Dominant Species (A)
23		-	-	Total Number of Dominant 7 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 7/9-(A/B)
6			-	That Are OBL, FACW, OF FAC: (AVB)
				Prevalence Index worksheet:
7	30	7-1-10-		Total % Cover of: Multiply by:
50% of total cover: 15		= Total Cov total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 20 x 20 ft)	20% 01	total cover.		FACW species x 2 =
	22	V.	-01	FAC species x 3 =
1. Alnus seriulata	20	-1-	OBL	
2. Sampucus canadusis	<u> </u>	N	FAL	FACU species x 4 =
3		_		UPL species x 5 =
4			_	Column Totals: (A) (B)
5				20.000000000000000000000000000000000000
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9		-		3 - Prevalence Index is ≤3.0 ¹
	2	= Total Cov	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 10.5	20% of	total cover:	4.4	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 20 + 26 Ft)	1	14.00	201-	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Microsteandon vi mine un	2	<u></u>	FAC	Problematic Hydrophytic Vegetation (Explain)
2. Lig indamber styreciting	5	Y	FAC	P. S. 17 March 2015 (1999) 199
3. Woodwardia virginica	ÍD	Y	OBL	¹ Indicators of hydric soil and wetland hydrology must
A POLAGUOVA- SOO		AL	FAC	be present, unless disturbed or problematic.
4. Polygynum spp		<u></u>		Definitions of Four Vegetation Strata:
b				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6		-		more in diameter at breast height (DBH), regardless of
7			-	height.
8			_	Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10			_	m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
	21	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 10,4	5 20% of	total cover	4.2	
Woody Vine Stratum (Plot size: 20 × 20 FY)		ional our of		Woody vine - All woody vines greater than 3.28 ft in
1. Vitis Cotundifolig	5	Y	FAL	height.
	-1	V	1000	
2. Parthano cisus quinquetolia		1	FACY	
3				
4				Hydrophytic
				Vegetation
5	Contraction of the second seco			
5	8	= Total Cov	er , ,	Present? Yes No
550% of total cover:		= Total Cov total cover:		Present? Yes No

SOIL

6214 / I-85

Sampling Point: W2W bue

Depth	Matrix		Redo	x Features	s			Sec. et est a
(inches)	Color (moist)	_%	Color (moist)	_%	_Type ¹	Loc ²	Texture	Remarks
0-3	2.54312	75	1046 3K4	25	-6-	m	_SL_	
3-9	5Y 512	80	104R 414	20	C	PL	SL	
9-12+	54 4/1	80	104R 414	20	- 0	m	SL.	
				-		_		
			_	Ξ				
Type: C=Ce Hydric Soil	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Masked	Sand Gr	ains.		.=Pore Lining, M≍Matrix. Itors for Problematic Hydric Solls ³ :
 Depleted Thick Date Sandy M MLRA Sandy G Sandy R 	uck (A10) (LRR N) d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1) (I A 147, 148) Sleyed Matrix (S4) Redox (S5) I Matrix (S6)		Redox Dark 3 Depleted Dark Redox Depre Iron-Mangan MLRA 13 Umbric Surfa Piedmont Flo Red Parent M	rk Surface essions (Fi ese Mass 6) ace (F13) (podplain S	e (F7) 8) es (F12) ((MLRA 13 colls (F19)	6, 122) (MLRA 14	O ³ Indi 18) we	ery Shallow Dark Surface (TF12) ther (Explain in Remarks) icators of hydrophytic vegetation and tland hydrology must be present, less disturbed or problematic.
	Layer (if observed):	1		viaterial (i	21) (MEN	A (4() 14		
Type:								. /
Depth (ind	ches):						Hydric Soil	Present? Yes No

WETLAND DETERMINATION DATA FORM	 Eastern Mountains and Piedmont Region
Project/Site: I-85 Widning City/C	County: Cherokee Sampling Date: 9-16-16
Applicant/Owner: SC POT	State: SC Sampling Point: WZW-6U
	on, Township, Range: 8 1443 5 5 7
	lief (concave, convex, none): LandCX Slope (%): 3
Subregion (LRR or MLRA): LR-P Lat: 35, 1390	
	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation \underline{N} , Soil \underline{N} , or Hydrology \underline{N} significantly distu	and a second
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	Is the Sampled Area
	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
 Surface Water (A1) High Water Table (A2) Saturation (A3) Oxidized Rhizosphere Water Marks (B1) Presence of Reduces Sediment Deposits (B2) Recent Iron Reduction Drift Deposits (B3) Thin Muck Surface (Context) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) 	(B14)
Field Observations:	
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):	— ./ ./ ./
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	avious inspections), if available:
Remarks:	

6214) 7-85

Sampling Point: VEGETATION (Four Strata) - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 20 x 20 ft % Cover Species? Status Number of Dominant Species 1. Lives dud on tuliofora 30 FACY That Are OBL, FACW, or FAC: 00 FAC Liguidanbarstyracifug Total Number of Dominant QUEICUS alba 20 FALY N Species Across All Strata: 4. Quercus rubra 20 N FACU Percent of Dominant Species That Are OBL, FACW, or FAC: **Prevalence Index worksheet:** 130 = Total Cover Total % Cover of: Multiply by: bS 20% of total cover: 26 OBL species x 1 = 50% of total cover: Sapling/Shrub Stratum (Plot size: 20×20 FL) 1. Cornus alternaflora FAC Y. Q. alba 5 FACH N FACH 5 Llex opaca 4 1556 SVIVAtica N FAC WYA tomis N FALL 2 CAId N 2 FACM 1/1mus plata

33_= Total Cover 50% of total cover: _/6.5 20% of total cover:_6,6 Herb Stratum (Plot size: 20x20 84) FACU 1. Polystichum acrostichoides 10 = Total Cover 2 20% of total cover:_ 50% of total cover: Woody Vine Stratum (Plot size: 25+20ff) 1. V. tus votundifolia 15 10 onivera icponica

FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = ____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A =

WZW-GUP

(B)

(A/B)

Hydrophytic Vegetation Indicators:

- 1 Rapid Test for Hydrophytic Vegetation
- 2 Dominance Test is >50% 3 - Prevalence Index is ≤3.01
- 4 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:

Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall,

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

Yes

Hydrophytic Vegetation Present?

25 = Total Cover

50% of total cover: 2.5 20% of total cover:

Remarks: (Include photo numbers here or on a separate sheet.)

3.

4.

6

8.

9.

10. 11.

3. 4

5

Sampling Point: WZW-604 SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix **Redox Features** Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks (inches) 7.54R 313 100 SL Ń loyf 416 100 SL ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Indicators for Problematic Hydric Soils³; Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Black Histic (A3) Piedmont Floodplain Soils (F19) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) Very Shallow Dark Surface (TF12) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) ___ Iron-Manganese Masses (F12) (LRR N, Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) ³Indicators of hydrophytic vegetation and Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soll Present? Yes No Remarks:

6214/1-80

WETLAND DETERMINATION DATA FOR	M – Eastern Mountains and Piedmont Region
Project/Site: I-85 Widening Cit	ty/County: Cherolcee Sampling Date: 9-16-16
Applicant/Owner: SC DOT	State: SC Sampling Point: WZY - 5
nvestigator(s): Michael Wood + Hannah Slyce se	
	I relief (concave, convex, none): <u>None</u> Slope (%): 4
Subregion (LRR) or MLRA): Lat: 35, 138	
	NWI classification:
Soil Map Unit Name:	
Are climatic / hydrologic conditions on the site typical for this time of year	
re Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly dis	
are Vegetation N_2 , Soil N_2 , or Hydrology N_2 naturally problem	
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes <u>No</u>
Remarks:	
Water Marks (B1) Presence of Redu	Odor (C1) Drainage Patterns (B10) wheres on Living Roots (C3) Moss Trim Lines (B16) uced Iron (C4) Dry-Season Water Table (C2) crayfish Burrows (C8) crayfish Burrows (C8) saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3) Microtopographic Relief (D4)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	FAC-Neutral Test (D5) N/O
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	

6214 / I-85

SILL SILL SILL	Absolute		Indicator	Dominance Test works	neet:	1
Free Stratum (Plot size: <u>30×30</u> ++	<u>% Cover</u> 30	Species?	FACU	Number of Dominant Sp That Are OBL, FACW, o		5 (A)
Acer rubrum	30	Y.	FAC			
Liquidambar styracifius	15	N	FAL	Total Number of Domina		6
		Ň		Species Across All Strats	a:	(B)
Salix nigra			OBL	Percent of Dominant Spo	ecies	8201
and the state of the second				That Are OBL, FACW, o		026 (A/E
		· · · · · · · · · · · · · · · · · · ·			·	
		Q		Prevalence Index work		1.1.1.1
1 million 1	85	= Total Cov	er	Total % Cover of:		ultiply by:
50% of total cover: 42, 1	5_ 20% of	total cover:	1+	OBL species	x 1 =	
apling/Shrub Stratum (Plot size: 30×30FA)		1.000		FACW species	x 2 =	
ALEFrubrum	30	Y	FAC	FAC species	x 3 =	
Linu dampsty rociflug	15	Y	FAC	FACU species	x 4 =	
the state of the s			1100	UPL species		
e				Column Totals:		
· · · · · · · · · · · · · · · · · · ·						
· · · · · · · · · · · · · · · · · · ·				Prevalence Index	= B/A =	
·	_		-	Hydrophytic Vegetation	and the second second	
·			_	1 - Rapid Test for H		
				2 - Dominance Test		egotation
	45	= Total Cov	er -	3 - Prevalence Index		
50% of total cover: 22.	5 20% of	total cover:	9	4 - Morphological Ad		
terb Stratum (Plot size: 30+30 Fl)				data in Remarks	or on a sepa	arate sheet)
Micholtegium Vimineum	20	V	FAC	Problematic Hydrop	hytic Vegeta	tion ¹ (Explain)
Which 2 Hog with VI MILLER	20					
			ITTL.			and a state of the second
			170	¹ Indicators of bydric soil		and the second
				¹ Indicators of hydric soil be present, unless distur	and wetland	hydrology must
	_			be present, unless distur	and wetland bed or probl	hydrology must ematic.
·	\equiv				and wetland bed or probl	hydrology must ematic.
·	=			be present, unless distur Definitions of Four Veg Tree – Woody plants, ex	and wetland bed or probl getation Stra	hydrology must ematic. ata: s, 3 in. (7.6 cm) c
				be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea	and wetland bed or probl getation Stra	hydrology must ematic. ata: s, 3 in. (7.6 cm) c
				be present, unless distur Definitions of Four Veg Tree – Woody plants, ex	and wetland bed or probl getation Stra	hydrology must ematic. ata: s, 3 in. (7.6 cm) c
				be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody	and wetland bed or probl getation Stra scluding vine st height (DI y plants, excl	hydrology must ematic. ata: s, 3 in. (7.6 cm) c BH), regardless o luding vines, less
				be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea	and wetland bed or probl getation Stra scluding vine st height (DI y plants, excl	hydrology must ematic. ata: s, 3 in. (7.6 cm) c BH), regardless o luding vines, less
				be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody	and wetland bed or probl getation Stra scluding vine st height (DI y plants, excl	hydrology must ematic. ata: s, 3 in. (7.6 cm) c BH), regardless o luding vines, less
0				be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea m) tall.	and welland bed or probl getation Stra cluding vine st height (DI v plants, excl ler than or e	hydrology must lematic. ata: s, 3 in. (7.6 cm) o BH), regardless o BH), regardless o luding vines, less qual to 3.28 ft (1
0				be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea	and welland bed or probl getation Stra cluding vine st height (DI y plants, excl ter than or e non-woody)	hydrology must lematic. ata: s, 3 in. (7.6 cm) d BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless
0	20			be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea m) tall. Herb – All herbaceous (r of size, and woody plant	and wetland bed or probl retation Stra ccluding vine st height (DI v plants, excl ter than or e hon-woody) ; s less than 3	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall.
 0 1 50% of total cover: <u>10</u>	20	= Total Cov		be present, unless distur Definitions of Four Veg Tree – Woody plants, ex- more in diameter at brea- height. Sapling/Shrub – Woody than 3 in. DBH and grea- m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody	and wetland bed or probl retation Stra ccluding vine st height (DI v plants, excl ter than or e hon-woody) ; s less than 3	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall.
	20	= Total Cov		be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea m) tall. Herb – All herbaceous (r of size, and woody plant	and wetland bed or probl retation Stra ccluding vine st height (DI v plants, excl ter than or e hon-woody) ; s less than 3	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall.
0	<u>Zə</u> 20% of	= Total Cov	Pr 4-	be present, unless distur Definitions of Four Veg Tree – Woody plants, ex- more in diameter at brea- height. Sapling/Shrub – Woody than 3 in. DBH and grea- m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody	and wetland bed or probl retation Stra ccluding vine st height (DI v plants, excl ter than or e hon-woody) ; s less than 3	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall.
50% of total cover: <u>10</u> 1	<u>Zə</u> 20% of	= Total Cov		be present, unless distur Definitions of Four Veg Tree – Woody plants, ex- more in diameter at brea- height. Sapling/Shrub – Woody than 3 in. DBH and grea- m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody	and wetland bed or probl retation Stra ccluding vine st height (DI v plants, excl ter than or e hon-woody) ; s less than 3	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall.
50% of total cover: <u>10</u> 1	<u>Zə</u> 20% of	= Total Cov	Pr 4-	be present, unless distur Definitions of Four Veg Tree – Woody plants, ex- more in diameter at brea- height. Sapling/Shrub – Woody than 3 in. DBH and grea- m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody	and wetland bed or probl retation Stra ccluding vine st height (DI v plants, excl ter than or e non-woody) ; s less than 3	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall.
50% of total cover: <u>10</u> 1	<u>Zə</u> 20% of	= Total Cov	Pr 4-	be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody height.	and wetland bed or probl retation Stra ccluding vine st height (DI v plants, excl ter than or e non-woody) ; s less than 3	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall.
0	<u>Zə</u> 20% of	= Total Cov	Pr 4-	be present, unless distur Definitions of Four Veg Tree – Woody plants, ex- more in diameter at brea- height. Sapling/Shrub – Woody than 3 in. DBH and grea- m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody	and wetland bed or probl retation Stra ccluding vine st height (DI v plants, excl ter than or e non-woody) ; s less than 3	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall.
0	<u>Z</u> 20% of <u>5</u> 1	= Total Cover; total cover; <u>Y</u>	FAC FACU	be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody height.	and wetland bed or probl retation Stra ccluding vine st height (DI v plants, excl ter than or e non-woody) ; s less than 3	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall. er than 3.28 ft in
0. 1. Voody Vine Stratum (Plot size: 30730FY) LOAIDER JEPONICA Parthenocissus Guiguetuna	Zə 20% of 5 1	= Total Cov total cover; Total Cov	Pr 4	be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody height.	and wetland bed or probl retation Stra cluding vine st height (DI plants, excl ter than or en non-woody) ; s less than 3 r vines great	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall. er than 3.28 ft in
5 5 5 5 50% of total cover: <u>10</u> 1 Voody Vine Stratum (Plot size: <u>30730 FY</u>) <u>Lonivera</u> <u>Japonica</u> <u>Lonivera</u> <u>Japonica</u> <u>Lonivera</u> <u>Japonica</u> <u>Som of total cover:</u> <u>3</u>	20% of	= Total Cover; total cover; <u>Y</u>	Pr 4	be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody height.	and wetland bed or probl retation Stra cluding vine st height (DI plants, excl ter than or en non-woody) ; s less than 3 r vines great	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall. er than 3.28 ft in
0. 1. Voody Vine Stratum (Plot size: 30730FY) LOAIDER JEPONICA Parthenocissus Guiguetuna	20% of	= Total Cov total cover; Total Cov	Pr 4	be present, unless distur Definitions of Four Veg Tree – Woody plants, ex more in diameter at brea height. Sapling/Shrub – Woody than 3 in. DBH and grea m) tall. Herb – All herbaceous (r of size, and woody plant Woody vine – All woody height.	and wetland bed or probl retation Stra cluding vine st height (DI plants, excl ter than or en non-woody) ; s less than 3 r vines great	hydrology must ematic. ata: s, 3 in. (7.6 cm) o BH), regardless o luding vines, less qual to 3.28 ft (1 plants, regardless .28 ft tall. er than 3.28 ft in

SOIL

6214 /I- 85

Profile Description: (Describe to the depth needed to document the indicator or confir						or confirm	the absence of i	ndicators)
Depth (inches)	Matrix	%	Color (moist)	Feature %	s Type ¹	Loc ²	Texture		Remarks
O-Z	Color (moist) by R 313	80	7,54R314	20	TAbe	m	SL		
2-6	7.5YR SIZ	65	7.54R4/4	35		m	SL		
	and the second se		the second			and the second second	56		4
6-12+	Z, SYR 3 3	<u>70</u>	10YR416	<u>>o</u>					
							21 agation: DI -D	Pore Liping	- M=Motrix
Type: C=C Hydric Soil	oncentration, D=Deple	etion, RM	Reduced Matrix, MS	=Masked	d Sand Gr	ains.	² Location: PL=P Indicator		h, M=Matrix. blematic Hydric Solls ³
Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy & MLRA	istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) (LRR N) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) (L1 A 147, 148) Gleyed Matrix (S4) Redox (S5)		Thin Dark Sur Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 136 Umbric Surfar Piedmont Flo Red Parent M	d Matrix (rix (F3) Surface (I k Surface ssions (F ese Mass 5) ce (F13) odplain S	(F2) ∋ (F7) ⊗ (F7) ⊗) ees (F12) ((MLRA 1 3 Goils (F19)	LRR N, 6, 122) (MLRA 14	Piedi (M Very Othe ³ Indicat 18) wetlar	ILRA 136, Shallow D r (Explain tors of hyd	dplain Soils (F19)
Stripped	I Matrix (S6)						1		1
Stripped Restrictive I Type:	Layer (if observed):	1	-				Hydric Soil Pre	esent?	Yes No
Stripped Restrictive I	Layer (if observed):		3	_	-		Hydric Soll Pre	esent?	Yes No

Dity/County: Cherolee Sampling Date: 9-16-16 State: SC Sampling Point: WZ-Y-4 Section, Township, Range: B 44485 burg al relief (concave, convex, none): CONVEX Slope (%): 4 &93 Long: S1.5 9.59 Datum: NAOG3
State: Sc Sampling Point: W7-Y-4 Section, Township, Range: B 44145 burg Section, Township, Range: B 44145 burg al relief (concave, convex, none): Convex Slope (%): 4 Slope (%): 4 NVE Slope (%): 4 NADES NWI classification: NADES NVII classification: Image: No (If no, explain in Remarks.) disturbed? Are "Normal Circumstances" present? Yes blematic? (If needed, explain any answers in Remarks.)
Section, Township, Range: B 4LLCS burg al relief (concave, convex, none): CONVEX Slope (%): 4 &938 Long: -81.5154-59 Datum: NAO53
al relief (concave, convex, none): <u>CONVEX</u> Slope (%): <u>4</u> <u>8938</u> Long: <u>81.5154-59</u> Datum: <u>NAD63</u> <u>NWI classification:</u> ar? Yes <u>No</u> (If no, explain in Remarks.) disturbed? Are "Normal Circumstances" present? Yes <u>No</u> blematic? (If needed, explain any answers in Remarks.)
&938 Long: -81. 51.54-59 Datum: NADE3
NWI classification:
ar? Yes No (If no, explain in Remarks.) disturbed? Are "Normal Circumstances" present? Yes No blematic? (If needed, explain any answers in Remarks.)
disturbed? Are "Normal Circumstances" present? Yes No blematic? (If needed, explain any answers in Remarks.)
blematic? (If needed, explain any answers in Remarks.)
sampling point locations, transects, important features, etc.
Is the Sampled Area within a Wetland? Yes No
Secondary Indicators (minimum of two required)
Surface Soil Cracks (B6)
ants (B14) Sparsely Vegetated Concave Surface (B8)
e Odor (C1) Drainage Patterns (B10)
spheres on Living Roots (C3) Moss Trim Lines (B16)
duced Iron (C4) Dry-Season Water Table (C2) duction in Tilled Soils (C6) Crayfish Burrows (C8)
ace (C7) Saturation Visible on Aerial Imagery (C9)
n Remarks) Stunted or Stressed Plants (D1)
Geomorphic Position (D2)
Shallow Aquitard (D3)
Microtopographic Relief (D4)
FAC-Neutral Test (D5)
Wetland Hydrology Present? Yes No
s, previous inspections), if available:
s, previous inspections), ir available:

6214/1-85

Tree Stratum (Plot size: 20x 30 FL)			Indicator	Dominance Test worksheet:
		Species?		Number of Dominant Species /
Liquidambarstyracitua	20		FAC	That Are OBL, FACW, or FAC: (A)
Acer rubrum	20	<u> </u>	FAC	Total Number of Dominant
Liresdudran tulipfera	30	<u> Y </u>	FACH	Species Across All Strata: (B)
·			<u> </u>	Percent of Dominant Species 75% (A/B)
·				That Are OBL, FACW, or FAC: (A/B)
		< i		Prevalence Index worksheet:
	70	= Total Cov		Total % Cover of:Multiply by:
50% of total cover: 35	20% of	total cover:		OBL species x 1 =
apling/Shrub Stratum (Plot size: 20 + 30 FL)	_ 2070 01			FACW species x 2 =
. L. Styraciflug	7 -	V.	EAC	FAC species x 3 =
	20		FAC	FACU species x 4 =
Fagues grande folia			KACY	
Allerrubrum	5	N	FAL	UPL species x 5 =
· · · · · · · · · · · · · · · · · · ·			<u> </u>	Column Totals: (A) (B)
				Prevalence Index = B/A =
· · · · · · · · · · · · · · · · · · ·				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
	10.00			2 - Dominance Test is >50%
	35	= Total Cove		3 - Prevalence Index is ≤3.01
50% of total cover: 17, 5	20% of	total cover:	er 7	4 - Morphological Adaptations ¹ (Provide supporting
	2010 01	total cover.		date in Democks as an a second start)
				data in Remarks or on a separate sheet)
lerb Stratum (Plot size: 20 ×30 KX)	16	V	5	
lerb Stratum (Plot size: 20 ×30 KX)	15	Y	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 20 +30 KX)	15	<u> </u>	5	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 23 × 30 (X) Microstegium Viniaeum		- <u></u>	FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must
Herb Stratum (Plot size: <u>20 KBOKK</u>) Microstegium Vinineum L		_	FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>20 ×30 (X)</u>) Mickostegium Vinineum		_	FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must
Herb Stratum (Plot size: <u>20 ×30 (x)</u>) Mickostegium Vinineum		_	FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Herb Stratum</u> (Plot size: <u>23 ×30 (x)</u>) Micko Stegium Viniaeum		_	FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
<u>Herb Stratum</u> (Plot size: <u>20 ×30 (X)</u>) Mickostegium Vinineum		=	FAC	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
herb Stratum (Plot size: <u>20 ×30 (X)</u>) Mickostegium Vinineum		=	FAC	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Ierb Stratum (Plot size: <u>20 K30 (V)</u> Microstegium Vinineum			Fac.	Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Ierb Stratum (Plot size: <u>20 x30 (x)</u>) Mickostegium Vinineum			Fac.	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
<u>lerb Stratum</u> (Plot size: <u>23 x30 (k</u>) <u>Micko Stegikm Vimineum</u> 			Fac.	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
<u>lerb Stratum</u> (Plot size: <u>23 ×30 (V)</u> 			Fac.	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
Ierb Stratum (Plot size: <u>23 × 30 (¥)</u>	15		Fac.	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
Ierb Stratum (Plot size: <u>73 × 30 (k)</u>)	15		Fac.	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
<u> Erb Stratum</u> (Plot size: <u>23 × 30 (火</u>) <u> MA, CKD Stegium Viniaeum</u> 	15		FAC	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
1. Solution (Plot size: <u>20 × 30 (k)</u>) <u>NA, CXO Steps were Viewine um</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Solution</u> <u>Sol</u>	15		FAC	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
<u> Erb Stratum</u> (Plot size: <u>23 × 30 (火</u>) <u> MA, CKD Stegium Viniaeum</u> 	15		FAC	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
Ierb Stratum (Plot size: <u>10 ×30 {k}</u>)	15		FAC	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
terb Stratum (Plot size: <u>23 × 30 {k}</u>)	15		FAC	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
terb Stratum (Plot size: <u>23 × 30 {k}</u>)	15		FAC	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
1erb Stratum (Plot size: <u>10 × 30 {k}</u>)	15 _ 20% of _ 5 _ 2	= Total Cover:	FAC	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
1erb Stratum (Plot size: <u>10 × 30 {k}</u>)	15 _ 20% of 5 2		FAC	 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

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Depth		to the dep			idicator o	or confirm	the absence of indic	ators.)	
(inches)	Matrix Color (moist)			Loc ²	Texture	Remarks			
5- 4	10465/b	100	Color (moist)		Тура		SL	Tremarka	
1-7	104R 5/3	50	10 YR 5/6	50	-		SL		
and the second s	The second			1		M	sL		
-12 1	13YR 614	60	10YRS16	<u>70</u>		<u></u>			
		_		=	_	_			
				_	_	=			
	ncentration, D=Depl	etion RM:	Reduced Matrix MS	Masked	Sand Gra		² Location: PL=Pore	Lining M=Matri	x
lydric Soil li		00011, 1111	rioudoud mains, me	muonuu	ound on		Indicators fo	r Problematic H	Hydric Soils ³ :
Stratified 2 cm Muc Depleted Thick Dat Sandy Mi MLRA Sandy Gl Sandy Re Stripped	n Sulfide (A4) Layers (A5) ck (A10) (LRR N) Below Dark Surface rk Surface (A12) ucky Mineral (S1) (L .147, 148) leyed Matrix (S4) edox (S5) Matrix (S6)		Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangana MLRA 134 Umbric Surfa Piedmont Flo Red Parent M	d Matrix (F rix (F3) Surface (F(k Surface ssions (F8 sse Masse 5) ce (F13) (I odplain Sc	52) (F7))) s (F12) (I VILRA 13 bils (F19)	LRR N, 6, 122) (MLRA 14	Piedmoni (MLRA Very Sha Other (E) ³ Indicators (8) wetland hy	A 147, 148) It Floodplain Soil A 136, 147) Ilow Dark Surfac plain in Remark of hydrophytic ve rdrology must be turbed or proble	ce (TF12) (s) egetation and e present,
Type:	ayer (if observed):								
Depth (incl	hes):						Hydric Soil Presen	t? Yes	No
emarks:				-			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		-C. // 46

WETLAND DETERMINATION DATA FORM	- Eastern Mountains ar	d Piedmont Region
roject/site: I-85 Widening City	County: Cherolepe	Sampling Date:6-16-16
oplicant/Owner: SCPOT		e: SC Sampling Point: WZY-1
	ion, Township, Range: Blac	
	lief (concave, convex, none):	
ubregion (LRR) or MLRA): LRR P Lat: 35.14.13 -	9 Long:-81.	512992 Datum: NAD-
bil Map Unit Name: <u>TaC3</u>	N	WI classification:
re climatic / hydrologic conditions on the site typical for this time of year?	Yes <u> </u>	explain in Remarks.)
re Vegetation <u>Mo</u> , Soil <u>Mo</u> , or Hydrology Y $\mathfrak{C}_{\mathfrak{L}}$ significantly dist	rbed? Are "Normal Circu	mstances" present? Yes No
re Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> naturally problem	natic? (If needed, explain	any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland?	Yes No
Remarks:		
YDROLOGY Wetland Hydrology Indicators:		ndary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants		parsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide C		Drainage Patterns (B10)
Saturation (A3) Vater Marks (B1) Vater Marks (B1) Vater Marks (B1)		Aoss Trim Lines (B16) Dry-Season Water Table (C2)
		Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface		Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Ro Iron Deposits (B5)		Sjunted or Stressed Plants (D1) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9)	02.1	Acrotopographic Relief (D4)
Aquatic Fauna (B13)		AC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No Depth (inches): Vater Table Present? Yes No Depth (inches):	-	1
Saturation Present? Yes No Depth (inches):	Wetland Hydro	ogy Present? Yes Mo No
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	evious inspections), if available	
2000/00 (1000/000 Dova (2000/00 Jan 30/30/10/00/00 Jan 4 Jan 5 Proved F		
Remarks:		1
Wetland is old dramage por pier outlet rocated near	id that has b	zeen drained,
Allow Mark Land Land	a flad	an with
file outlet located nea	r we thank w	ea with
Standing water in sple	rock barn	

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

Sampling Point: WZY-10we+

10, 10,00	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>15 × 15 F4</u>) 1. <u>Salix</u> nigra		<u>Species?</u>	OBL	Number of Dominant Species (A)
2 3			<u> </u>	Total Number of Dominant (B)
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: 1007 (A/B)
6				Paraulares Indexes have
7		-		Prevalence Index worksheet: Total % Cover of: Multiply by:
1		= Total Cov		
50% of total cover: 10	20% of	total cover:	4	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1	-			FAC species x 3 =
2		-		FACU species x 4 =
3	_	_		UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
7	1	<u></u>		Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
8	~			2 - Dominance Test is >50%
9.				
		= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:		total cover:		4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 15×15+1	- 201		1.00	data in Remarks or on a separate sheet)
1. Tupha latifalig	_85_	N	UBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. typha augustifolia	S	N	OBL	e de la transferita de la transferita de
3 SUSDUN CORDONN	5	N	FACW	¹ Indicators of hydric soil and wetland hydrology must
3. Scirpus cypeinus 4. Polygynum sp.	2	N		be present, unless disturbed or problematic.
4. Toggynom str			_	Definitions of Four Vegetation Strata:
5			<u> </u>	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11	-0-			Herb - All herbaceous (non-woody) plants, regardless
50% of total cover: <u>48.5</u>	97	= Total Cove	eria 4	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>4۲٫۵</u> <u>Woody Vine Stratum</u> (Plot size:)	20% of	total cover:	19.7	Woody vine – All woody vines greater than 3.28 ft in height.
1		_		
2				
3		_		
4.				
5.			-	Hydrophytic Vegetation
		Total Cove	er	Present? Yes Vo
		a carrier of a con-		2.1640.0.1 2.640.0.0 at a 2.65.0 at a - 1.1
50% of total cover:	_ 20% of	total cover:		

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Sampling Point: W24-10 wet

(inches)	Matrix	î		Features			the absence	
A- A	Color (moist)	- %	Color (moist)	-%	Type'	Loc ²	Texture	Remarks
54	104R +13	75	104R 414	25	<u></u>	m		6
1-10	7.57R 513	65	7.54R 516	35	0	m		-
0-12	var juted	-	÷					parent material
_					-	6 - S		
_		<u> </u>	·			<u></u>		
-		1000				-	-	
1.11								
A								
ype: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ins.		L=Pore Lining, M=Matrix.
ydric Soil	Indicators:	1.1				1.1		ators for Problematic Hydric Soils ³ :
_ Histosol	and a second		Dark Surface		1000 100			cm Muck (A10) (MLRA 147)
and the second s	pipedon (A2) istic (A3)		Polyvalue Bel Thin Dark Sur				148) _ C	coast Prairie Redox (A16) (MLRA 147, 148)
the second se	en Sulfide (A4)		Loamy Gleyed	And the second second second	Section 1.		P	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat					(MLRA 136, 147)
	uck (A10) (LRR N) d Below Dark Surface	10111	Redox Dark S Depleted Darl	and a second second	And a second sec			ery Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ark Surface (A12)		Redox Depres				-	
Sandy M	Aucky Mineral (S1) (L	RR N,	Iron-Mangane			RR N,		
	A 147, 148)		MLRA 136			- 4001	31	leastern of hudron hudron constation and
	Gleyed Matrix (S4) Redox (S5)		Umbric Surface Piedmont Floo			a construction of the second		licators of hydrophytic vegetation and atland hydrology must be present,
	Matrix (S6)		Red Parent M			the second second second		less disturbed or problematic.
estrictive	Layer (if observed):							
Туре:								· · · · ·
Depth (in	ches):				_			Present? Yes No
emarks:						~	-!Z" OF	
THE	SULL IS P	EANIL	1015800	ED Co	MISIS	TING.	OF FILL	DIER PAREET
							~	
		- 1°	DRIMMARINY	88 3	ALTA	13100	The FAIL	And the second sec
MATE	RIAL, HU	~ 1 J	Aler Micieb			ALC: NO. 10	LU SUIL	COMBINED UT T
								COMPLUED WITH
SEDII	nout RUN	orf.	THAT IS OB	V1005	17 DI	EVELO	NNG A	(EDOXIMOR PHIC
SEDII	nout RUN	orf.	THAT IS OB	V1005	17 DI	EVELO	NNG A	(EDOXIMOR PHIC
SEDII FEATU	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	
SEDII FEATL	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	(EDOXIMOR MAC
SEDII FEATU	nout RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	GEDOXIMOR PHIC
SEDII FEATU	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	(EDOXIMOR PHIC
SEDII FEATU	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	(EDOXIMOR PHC
SEDII FEATU	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	(EDOXIMOR PHC
SEDII FEATU	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	(EDOXIMOR PHC
SEDII FEATU	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	(EDOXIMOR MAC
SEDII FEATU	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	(EDOXIMOR MAC
SEDII FEATL	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	LEDOXIMOR PHC
SEDII FEATL	NEUT RUN	off -	THAT IS OB	V1005	17 DI	EVELO	NNG A	LEDOXIMOR PHIC

SOIL

WETLAND DETERMINATION DATA FORM	- Eastern Mountains and Piedmont Region
Project/Site: I-85 Widening City/	County: Cherokee Sampling Date: 9-16-16
Applicant/Owner: SCD OT	State: SC Sampling Point: W7 Y-
nvestigator(s): M. Wood + H. Shre sect	ion, Township, Range: Blacks burg
the second se	lief (concave, convex, none): (GAVER Slope (%): 10
Subregion ([RR or MLRA): Lat: 35. 1413	79 Long: -81, 512442 Datum: NADS
ioil Map Unit Name: TGC3	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology significantly distu	irbed? Are "Normal Circumstances" present? Yes No
re Vegetation A, Soil, or Hydrology A/ naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sar	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks:	
IYDROLOGY	and the second sec
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants High Water Table (A2) Hydrogen Sulfide Oc	
	eres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduce	
	ion in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (
Algal Mat or Crust (B4) Other (Explain in Re	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3) Microtopographic Relief (D4)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	_ /
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Bamarka	
Remarks:	The second se
old drainage pand	enbarement

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Free Stratum (Plot size: <u>36 × 30ff)</u> 1. finus tacda		Dominant Species?		Dominance Test worksh Number of Dominant Spec That Are OBL, FACW, or	cles 5	(A)
Pinus Virginiang	30	4	-	That Are Obc, I AOW, OF		. (~)
Platanus excidentalis	10	N	FALW	Total Number of Dominan		
	- 5	N	-	Species Across All Strata:		(B)
Liguidanbar styracifius			FAC	Percent of Dominant Spec	cies 42°	2
				That Are OBL, FACW, or I	cies FAC: <u>837</u>	(A/B)
				Prevalence Index works	hands	
			_		A DECEMBER OF A	
	05	= Total Cov	er	Total % Cover of:		
50% of total cover: 32	5 20% of	total cover:	13	OBL species		
apling/Shrub Stratum (Plot size: 30×30+1)	2.32	1.63		FACW species		
Dissevios Virginica	10	N	FAL	FAC species		
Betula nigra	3	N	FACW	FACU species	x 4 =	_
Ligustium simense	50	Y	FACM	UPL species	x5=	200
VIMUS alata	10	N	FALM	Column Totals:	(A)	(8)
				Prevalence Index =	B/A =	-
				Hydrophytic Vegetation	Indicators:	
				1 - Rapid Test for Hyd	trophytic Vegetation	
				2 Dominance Test is		
			_	3 - Prevalence Index		
	73	= Total Cov	er , ,	4 - Morphological Ada		oporting
50% of total cover: 36.	> 20% of	total cover:	19+6			
erb Stratum (Plot size: <u>Sox 30 F.1</u>)	- 16 C	1.11			r on a separate sheet	
Lespedeza angustitolia		Y	FAC	Problematic Hydrophy	viic Vegetation' (Expla	ain)
	-			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		
				¹ Indicators of hydric soil and	nd wetland hydrology	must
				be present, unless disturb		
	·			Definitions of Four Vege	tation Strata:	
	- <u></u> -			Tree - Woody plants, excl	luding vines 3 in /7 6	cm) or
				more in diameter at breas	t height (DBH), regard	less of
	- <u></u>			height.		
		<u></u>	_	Sapling/Shrub - Woody	ante evoluding vine	lare
	· · · · · ·			than 3 in. DBH and greate	r than or equal to 3.2	8 ft (1
	i seema i			m) tall.	and the second second	
Sector and the sector of the s	10 10		_	Mark All backsons (as	a market starter source	
		= Total Cov	er	Herb - All herbaceous (no of size, and woody plants		ardiess
50% of total cover: 0.3	5 20% of	total cover:				
ody Vine Stratum (Plot size: 30x30f)			1000	Woody vine - All woody v	vines greater than 3.2	8 ft in
Smilaxrotundifolia	1.1	N	FAL	height.		
Lonicera joponica	2	V.				
+			FAC			
Toxicodudren racticans			FAC			
Campsis radicans		1	FAL	Hydrophytic	/	
			Canal and Canal	Vegetation	/	
	12 :	Total Cove	er 🖌	Present? Yes _	No	
50% of total cover:	20% of	total cover:	2,4			
marks: (Include photo numbers here or on a separate		and surprise		u		
and a substance for the state of the state o	out to a					

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-	-	ĥ	Ξ.
- Sec. 1	()	٠	
-	-		

Sampling Point: WZY-9 00

	n needed to document the indicator or confirm	the absence of indicators.)
Depth <u>Matrix</u> (inches) Color (moist) %	Redox Features Color (moist) % Type ¹ Loc ²	Texture Remarks
		SL
5-121 7.54R 510 100		Sel
وراهيريسة المستعملية بالمستعمل		
· · · · · · · · · · · · · · · · · · ·	and the second se	
		· · · · · · · · · · · · · · · · · · ·
¹ Type: C=Concentration, D=Depletion, RM=8	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	and bright date	Indicators for Problematic Hydric Solis ³ :
Histosol (A1)	Dark Surface (S7)	2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2) Black Histic (A3)	 Polyvalue Below Surface (S8) (MLRA 147, Thin Dark Surface (S9) (MLRA 147, 148) 	148) Coast Prairie Redox (A16) (MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)	(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	Iron-Manganese Masses (F12) (LRR N, MLRA 136)	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	³ Indicators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.
Restrictive Layer (if observed):		
Туре:		lunion in the second se
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		

WETLAND DETERMINATION DATA		요즘 집 사람이 있는 것은 것은 것은 것이 없습니다. 그는 것은 것이 많이 많이 했다.
roject/site: T-85 Widening	_ City/County: Cheral	cee Sampling Date: 9-16-16
pplicant/Owner: SCPST		State: SC Sampling Point: W 22-7
vestigator(s): M. Wood + H. Slyce	Section, Township, Range:	
andform (hillslope, terrace, etc.): toes lope	Local relief (concave, convex, nor	
ubregion (LRR or MLRA): Lat: Lat:		81.552246 Datum: NAD 83
	CTTCC Long.	
oil Map Unit Name: <u>The E</u> Z	1	NWI classification:
re climatic / hydrologic conditions on the site typical for this time of		(If no, explain in Remarks.)
re Vegetation $\mathcal{M}_{\mathcal{I}}$, Soil $\mathcal{M}_{\mathcal{I}}$, or Hydrology $\mathcal{M}_{\mathcal{I}}$ significa		Circumstances" present? Yes No
re Vegetation No, Soil No, or Hydrology No natural	/ problematic? (If needed, e	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks:	Is the Sampled Area within a Wetland?	Yes No
YDROLOGY		
Wetland Hydrology Indicators:	la.	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap		Surface Soil Cracks (B6)
	ic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
	Sulfide Odor (C1) hizospheres on Living Roots (C3)	Drainage Patterns (B10) Moss Trim Lines (B16)
	of Reduced Iron (C4)	Dy-Season Water Table (C2)
	Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
	Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Exp	lain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)		Seomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)		Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No Depth (inc	hes):	
Water Table Present? Yes No Depth (inc		./
Saturation Present? Yes No Depth (inc	D	lydrology Present? Yes V No
includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial p		
Remarks:	And a set of the set o	C. I. th
possibly an old turn	pond, seeps	flow down into
Remarks: possibly an old form larger wetland area		
larger wetland area		
· ~ ·		

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ree Stratum (Plot size: <u>30 × 15 FF</u>)		Species?	Indicator Status	Dominance Test worksheet:
Fraxinus pennsylvanica	-	Y	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:
Carpinus carolmiana	15	Y	FAC	
		_	_ <u></u>	Total Number of Dominant
				Species Across All Strata: (B)
			·	Percent of Dominant Species 7142
			-	That Are OBL, FACW, or FAC: 1.4 5 (A/B)
				Prevalence Index worksheet:
	40	= Total Cov	er _	Total % Cover of: Multiply by:
50% of total cover: 2	0 20% of	total cover:	8	OBL species x 1 =
apling/Shrub Stratum (Plot size: 30x15F+)		-		FACW species x 2 =
Flex peacy	15	Y	FACU	FAC species x 3 =
Liquidanbar styraciflug	5	A COLORADO	FAC	FACU species x 4 =
- quality of all flow				UPL species x 5 =
	~ ~~~			Column Totals: (A) (B)
		a construction of the second s	·	
	· · · · ·			Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
		_		
	2			1_Rapid Test for Hydrophytic Vegetation
				⊥ 2 - Dominance Test is >50%
	70	Tetal Ori		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 10	200/ 04	= Total Cov	er 4	4 - Morphological Adaptations ¹ (Provide supporting
	20% 01	total cover.		data in Remarks or on a separate sheet)
erb Stratum (Plot size: 30715F+)	A	N	-	Problematic Hydrophytic Vegetation ¹ (Explain)
Microstegium vimineum	40	1	FAL	
Polygynim Sagittation	5	N	OBL	The strength of the state and the state of the strength of the
Bechmeria cy indrica	2	N	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
the state of the s	1 mm - 1 mm - 2		1	be present, unless disturbed of problematic.
A CONTRACTOR OF				B C UL CE UL CU OL L
	÷			Definitions of Four Vegetation Strata:
		_		
	<u> </u>		\equiv	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	<u> </u>	\equiv	_	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
		=		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
			HHH	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
		\equiv		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
	47	Total Cove		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
 50% of total cover: 2.3	47	Total Cove		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: 23	47 5 20% of	Total Cove		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	47	Total Cove		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: 23	47 5 20% of	Total Cove		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: 23	47 5 20% of	Total Cove		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>23</u>	47 5 20% of	Total Cove		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>23</u>	47 5 20% of	Total Cove		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
50% of total cover: <u>23</u>	47 5 20% of 10 4	Total Cover; total cover;	FACU FAC	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover: 23	47 5 20% of 10 4	Total Cove	FACU FAC	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic

SOIL

6214 / I - 85 Sampling Point: W777 we

Depth	Matrix			Features	S			
(inches)	Color (moist)	%	Color (moist)	%	_Type1_	Loc ²	Texture	Remarks
06	1041412	00	1,511416	20	_ <	n	sc	
6-8	2.54R 514	75	2.548512	15	0	m	sL	
			7,54R 516	10	<	M	SL	
8-124	2.572513	80	7.54R51b	20	<u> </u>	M	6054	
		-		=	=	_		
Type: C=C	oncentration, D=Deple	tion, RM	Reduced Matrix, MS=	Masked	Sand Gra	ains.	² Location: Pl	L=Pore Lining, M=Malríx.
lydric Soil I							Indica	ators for Problematic Hydric Soils ³ :
2 cm Mu Depleted Thick Da Sandy M MLRA Sandy G Sandy R	d Layers (A5) ick (A10) (LRR N) d Below Dark Surface ark Surface (A12) fucky Mineral (S1) (LF A 147, 148) ileyed Matrix (S4) fedox (S5) Matrix (S6)		Depleted Matri Redox Dark Si Depleted Dark Redox Depres Iron-Manganes MLRA 136) Umbric Surface Piedmont Floo Red Parent Ma	urface (F Surface sions (F& se Masse e (F13) (dplain Se	(F7) 8) es (F12) (I MLRA 13 oils (F19)	6, 122) (MLRA 14	O ³ lndi 18) we	(MLRA 136, 147) ery Shallow Dark Surface (TF12) ther (Explain in Remarks) icators of hydrophytic vegetation and tland hydrology must be present, less disturbed or problematic.
	ayer (if observed):			V		2.77.6 0.0		
Туре:			_				20.0	1/
Depth (inc	ches):						Hydric Soil	Present? Yes No

WETLA	ND	DETERMINAT	ION DATA	FORM -	Eastern	Mountains	and	Piedmont	Regi	on

Soil Map Unit Name: $T_{M} E^{2}$ Are climatic / hydrologic conditions on the site typical f Are Vegetation \underline{N}_{a} , Soil \underline{M}_{a} , or Hydrology \underline{N}_{a}	Local relief (concave, conv 35,129922 Lon	State: SC Sampling Point: W27-7 nge: 33 164255479
Landform (hillslope, terrace, etc.): $h, 11 3 log$ Subregion (ER or MLRA): P Lat Soil Map Unit Name: $T_{N} E^{2}$ Are climatic / hydrologic conditions on the site typical f Are Vegetation N_{2} , Soil M_{3} , or Hydrology Λ	Local relief (concave, conv 35,129922 Lon	vex, none): CONJEC Slope (%): 20
Are Vegetation No., Soil No., or Hydrology	for this time of year? Yes VNo	NWI classification:
Are Vegetation No, Soil No, or Hydrology	significantly disturbed? Are	"Normal Circumstances" present? Yes No eeded, explain any answers in Remarks.)
SUMMART OF FINDINGS - Attach site in	hap showing sampling point is	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No Is the Sampled within a Wetlan	
HYDROLOGY		
Wetland Hydrology Indicators:	6411 - A	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check	ck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (810)
Saturation (A3)	Oxidized Rhizospheres on Living Rool	and a state of the
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (이 가슴 그 것은 아니라 있는 것은 가슴을 통해서 있는 것이 같아요. 그는 것 같아요. 이 가 있는 것이 같아요. 이 가 있는 것이 없는 것이 같아요. 이 가 있는 것이 없는 것이 않는 것이 없는 것이 없 않이 않이 않이 않는 것이 없 않이 않이 않 않이 않이 않이 않 않이 않이 않이 않이 않이 않이 않이
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (C7) Other (Explain in Remarks)	Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Oner (Explain in Remarks)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9)		Microtopographic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral Test (D5)
Field Observations:	/	
Surface Water Present? Yes No	_ Depth (inches):	
Water Table Present? Yes No	Depth (inches):	/
Saturation Present? Yes No	_ Depth (inches): We	etland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections	s), if available:
Remarks:		

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Absolute	Dominant Indicator	Dominance Test worksheet:
% Cover	Species? Status	Number of Dominant Species
Zo	Y FAC	That Are OBL, FACW, or FAC:
15		
20		Total Number of Dominant
	1 PAVI	Species Across All Strata: (B)
		Percent of Dominant Species 2 (/ 7)
	<u></u>	That Are OBL, FACW, or FAC: (WB)
		Prevalence Index worksheet:
LC		Total % Cover of: Multiply by:
500	= Total Cover	OBL species x 1 =
<u>1</u> 20% of	total cover: 11	FACW species x 2 =
-		
5	N FACW	FAC species x 3 =
10	Y. FACU	FACU species x 4 =
70		UPL species x 5 =
		Column Totals: (A) (B)
-5_	IN PAL	
<u></u>		Prevalence Index = B/A =
()		
		Hydrophytic Vegetation Indicators:
_		1 - Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
-20	· · · · · · · · · · · · · · · · · · ·	3 - Prevalence Index is ≤3.01
38 :	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
20% of	total cover: 1.6	
		data in Remarks or on a separate sheet)
5	Y. Free	Problematic Hydrophytic Vegetation ¹ (Explain)
20	- 1	
		¹ Indicators of hydric soil and wetland hydrology must
-	N FACh	be present, unless disturbed or problematic.
		Definitions of Four Vegetation Strata:
1000		Deminions of Four vegetation Strata.
		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
÷		more in diameter at breast height (DBH), regardless of
		height.
		Sapling/Shrub - Woody plants, excluding vines, less
		than 3 in. DBH and greater than or equal to 3.28 ft (1
		m) tall.
37		m) tall.
37		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
37		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
37		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
37		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
37		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
37		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
37		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
37		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
<u>37</u> 20% of	= Total Cover total cover: <u>7,</u> 7	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
<u>37</u> 20% of		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
	20 55 520% of 5 20% of 38 20% of 5 20% of 5 20% of 5 20% of	$\frac{20}{7} \frac{1}{FAM}$ $\frac{55}{20\% \text{ of total cover}} \frac{1}{10}$ $\frac{5}{7} \frac{N}{FACW}$ $\frac{10}{7} \frac{Y}{FACW}$ $\frac{10}{7} \frac{Y}{FACW}$ $\frac{10}{7} \frac{Y}{FACW}$ $\frac{10}{7} \frac{Y}{FACW}$ $\frac{10}{7} \frac{Y}{FACW}$ $\frac{38}{7} = \text{Total Cover}$ $\frac{38}{7} = \text{Total Cover}$ $\frac{10}{7} \frac{FACW}{FAC}$ $\frac{10}{7} \frac{Y}{FAC}$ $\frac{10}{7} \frac{FACW}{FAC}$ $\frac{10}{7} \frac{Y}{FAC}$ $\frac{10}{7} \frac{FACW}{FAC}$ $\frac{10}{7} \frac{FACW}{FAC}$

6214/1-85

Color (moist) % Color (moist) % Type1 Loc2 Texture Remarks 0-5 10 Y R 5/14 100 5L 5L <t< th=""><th>-</th><th>Color (moist) 104 R 514</th><th></th><th></th><th></th><th></th><th>or communitie</th><th>ne absence of indicators.)</th><th></th></t<>	-	Color (moist) 104 R 514					or communitie	ne absence of indicators.)			
DY A 5/4 DOD 5L F12+ DOY R 5/6 DOD SL F12+ DOY R 5/6 DOD SL State SL SL SL State State SL SL State State State State Histosol (A1) Datk Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Coast Praifie Redox (A15) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) Scate Praifie Redox (A16) MLRA 147, 148) Statified Layers (A5) Depleted Dark Surface (F6) Very Shallow Dark Surface (TF12) State (TF12) Statified Layers (A12) Redox Depressions (F8) <	0-5	104 R 514	Color (moist) % Color (moist) % Type ¹ Loc ²			S.	1 2	Testure Determine	Distantia		
YPE: IOYR5/b JOO SL YPE: Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Coast Prairie Redox (A16) Histosol (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) (MLRA 147, 148) (MLRA 147, 148) Histosol (A1) Depleted Matrix (F3) (MLRA 147, 148) (MLRA 147, 148) YPergen Sulfide (A4) Loamy Gleyed Matrix (F3) (MLRA 147, 148) (MLRA 146, 147) Yend Wuck (A10) (LRR N) Redox Dark Surface (F7) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 148) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) <td< th=""><th>5-12+</th><th></th><th></th><th>Color (moist)</th><th></th><th>Type</th><th>_LOC</th><th></th><th></th></td<>	5-12+			Color (moist)		Type	_LOC				
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: Indicators for Problematic Hydric Soils ² : Histosol (A1)	<u> </u>	104R3/6				-		<u></u>			
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)			100				<u>ل سے</u>	SL			
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)											
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)			<u> </u>			1		(
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)											
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)											
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)											
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)			·				÷ — ÷				
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)											
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)		· · · · · · · · · · · · · · · · · · ·	·								
ydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : _ Histosol (A1)											
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 147, 147) unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.			letion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains. ² l				
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type: Type: Type: Indicators of hydrophytic vegetation and	Hydric Soil Indicators:								oils':		
Black Histic (A3)		And the second of the second second				001 /00	U DA 447 44				
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Other (Explain in Remarks) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type: Type: Yep: Yep:	문제 2014년 19월 19일 19일 20일 20일 20일 20일 20일 20일 20일 20일 20일 20										
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.							47, 140)				
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Redox Depressions (F8) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136,] Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 136,]								(MLRA 136, 147) Very Shallow Dark Surface (TF12)			
Thick Dark Surface (A12) Chick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Type: Type:				and the second s							
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148)			e (A11)								
MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type: Type: Type: Type:			DON				DON				
_ Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ^a Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. _ Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. _ Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type: Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.			.KK N,			95 (F12) (LICK N,				
_ Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) welland hydrology must be present, _ Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. astrictive Layer (if observed): Type:						MLRA 13	6, 122)	³ Indicators of hydrophytic vegetation	and		
estrictive Layer (if observed): Type:				Piedmont Flo	odplain S	oils (F19)	(MLRA 148)	wetland hydrology must be present			
Type:			_	Red Parent M	laterial (F	21) (MLR.	A 127, 147)	unless disturbed or problematic.	_		
The second	estrictive L	ayer (if observed):									
Depth (inches): Hydric Soil Present? Yes No		c e bl									
	Depth (incl	hes):		-				Hydric Soil Present? Yes No			

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

		County: <u>Cherokee</u>		oling Date: <u>10/05/201</u> 6 mpling Point: <u>WAAA - 1</u> (v
Investigator(s): Nathan How	ell Sec	tion, Township, Range:		
Landform (hillslope, terrace, etc.): To		elief (concave, convex, no		Slope (%):
Subregion (LRR or MLRA): LAR -		and an array being the rest of the second	81.502339	Datum: NAL 83
		the second s	the second	and the second s
	4 Clay loam, 15-35 70 510			
	the site typical for this time of year?			1.9
Are Vegetation, Soil, o	or Hydrology significantly distu	urbed? NO Are "Norma	I Circumstances" present	1? Yes No
Are Vegetation, Soil	or Hydrologynaturally problem	natic? ND (If needed,	explain any answers in R	lemarks.)
SUMMARY OF FINDINGS -	Attach site map showing sa	mpling point locati	ons, transects, imp	ortant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	YesN	o
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (r	ninimum of two required)
Primary Indicators (minimum of one	is required; check all that apply)		Surface Soil Cracks	s (B6)
Surface Water (A1)	True Aquatic Plants	(B14)	Sparsely Vegetated	d Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide O	dor (C1)	Drainage Patterns	(810)
L_ Saturation (A3)	Oxidized Rhizosphe	eres on Living Roots (C3)	Moss Trim Lines (B	316)
Water Marks (B1)	Presence of Reduce		Dry-Season Water	and the second
Sediment Deposits (B2)		ion in Tilled Soils (C6)	Crayfish Burrows (
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (Other (Explain in Re		Stunted or Stresse	on Aerial Imagery (C9)
Algai wat of Clost (64) Iron Deposits (B5)		enarsy	Geomorphic Positio	
Inundation Visible on Aerial Ima	gery (B7)		Shallow Aquitard (I	25.28
Water-Stained Leaves (B9)	5.0.0		Microtopographic F	
Aquatic Fauna (B13)			FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present? Yes	No Depth (inches):	3"		
Water Table Present? Yes	No Depth (inches):	0		and the second s
Saturation Present? Yes	No Depth (inches):	D Wetland	Hydrology Present? Y	es No
(includes capillary fringe)	une monitoring well serial photos pr	revious inspections) if av	ailable:	
(includes capillary fringe)	uge, monitoring well, aerial photos, pr	revious inspections), if av	ailable:	

	Dominant		Dominance Test worksheet:
	Species?		Number of Dominant Species
40	yes	FAC	Number of Dominant Species (A)
			Total Mumber of Demissrat
			Total Number of Dominant Species Across All Strata:(B)
			(b)
			Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (A/B)
			That Are OBL, FACW, or FAC: (A/B)
		ر ت مع اد ا	Prevalence Index worksheet:
	Tulo		Total % Cover of: Multiply by:
			OBL species x 1 =
_ 20% 01	total cover.	0	FACW species x 2 =
-	Vac	CAL.	FAC species x 2 =
		FACY	
			FACU species x 4 =
	_		UPL species x 5 =
			Column Totals: (A) (B)
			Developer Index: - Dia -
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 ¹
	= Total Cove	er 1	4 - Morphological Adaptations ¹ (Provide supporting
20% of	total cover:	<u>h</u>	data in Remarks or on a separate sheet)
~			Problematic Hydrophytic Vegetation ¹ (Explain)
			The all states of the all states and shad the destruction of the
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Definitions of Four Vegetation Strata:
			Demittions of Four vegetation Strata:
			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of
			height.
			Sapling/Shrub - Woody plants, excluding vines, less
			than 3 in. DBH and greater than or equal to 3.28 ft (1
			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
			m) tall.
	Total Cove		
	=		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	- Total Cove		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
	Total Cover:	2 	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
; 20% of	- Total Cove		m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
; 20% of	Total Cover:	2 	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
; 20% of	Total Cover:	2 	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
; 20% of	Total Cover:	2 	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
20% of	Total Cover: total cover: Yes	FAC	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
_ 20% of _5	Total Cover:	FAC	m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
		<u>40</u> = Total Cover 20% of total cover: <u>5</u> <u>465</u> <u>5</u> = Total Cover: 20% of total cover: <u>20% of total cover:</u> <u>20% of total cover:</u>	$\frac{40}{20\% \text{ of total cover}} = Total Cover}{8}$

0 - You		to the dep	th needed to docun			or confirm	n the absen	ce of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	K Feature %	s Type ¹	Loc ²	Texture	Remarks
N-4	10 YR a/1	100		/8	Type		SiL	Organic Accumulations
1-7	104R 6/3		·					- Uponic Accumulances
7-11		100	IN FL	10			Sand	
7-14	104R 4/2	90	10 YR 5/4				Loam	<u></u>
		_				_		
Tupo: C=C			-Daduard Matrix MS				² l apptions	Di -Dero Linizo M-Metric
	Indicators:	neuon, RM	Reduced Matrix, MS	-wasked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. Icators for Problematic Hydric Soils
Black Hi Hydroge Stratified Cepleted Thick Da Sandy M MLR/ Sandy F Sandy F Stripped	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Juck (A10) (LRR N) d Below Dark Surfac ark Surface (A12) Aucky Mineral (S1) (I A 147, 148) Sleyed Matrix (S4) Redox (S5) I Matrix (S6) Layer (if observed):	LRR N,	Polyvalue Bel Thin Dark Sur Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane MLRA 136 Umbric Surfar Piedmont Flo Red Parent M	rface (S9) d Matrix (rix (F3) Surface (F k Surface ssions (Fi ese Masso 5) ce (F13) (odplain S	(MLRA 1 F2) (F7) 8) es (F12) (MLRA 13 oils (F19)	147, 148) LRR N, 6, 122) (MLRA 14		Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Type:		· · · · · · · · · · · · · · · · · · ·					1.30	Second and and
Depth (in	ches):						Hydric Se	oil Present? Yes No

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Applicant/Owner: Schot Investigator(s): Nation Landform (hillslope, terrace, etc.): HILSLOPE Local relief (Subregion (LRR or MLRA): LRP - P Lat: 35.144504 Soil Map Unit Name: Tatum very fine Sondy login 15-2 Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation Soil or Hydrology significantly disturbed Are Vegetation Soil or Hydrology naturally problematic	No (If no, explain in Remarks.) 1? No (If no, explain in Remarks.) 1? No No
Investigator(s): <u>NAHAA Howell</u> Section, Landform (hillstope, terrace, etc.): <u>HILSTOPE</u> Local relief (Subregion (LRR or MLRA): <u>LRR - P</u> Lat: <u>35,144504</u> Soil Map Unit Name: <u>Tatum Very Fine</u> <u>Sandy</u> <u>loam</u> <u>15-2</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation <u>Soil</u> , or Hydrology <u>significantly</u> disturbed Are Vegetation <u>L</u> , Soil <u></u> , or Hydrology <u>naturally</u> problematic	Township, Range: BIGLESHUE9 (concave, convex, none): Convex Slope (%): 40 Long: 181, 502275 Datum: NAD - 83 5% Slope NVI classification: NAD - 83 No (If no, explain in Remarks.) 1? No Yes
Landform (hillstope, terrace, etc.): <u>HILSTOPE</u> Local relief (Subregion (LRR or MLRA): <u>LRR - P</u> Lat: <u>35.144564</u> Soil Map Unit Name: <u>Tatum very fine Sandy loam 15-2</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation <u>Soil</u> , or Hydrology <u>significantly disturbed</u> Are Vegetation <u>L</u> , Soil <u>, or Hydrology</u> naturally problematic	(concave, convex, none): ConVEX Slope (%): 40 Long: CB1.602275 Datum: NAD - 8 3 5% Slope (%): 40 8 3 5% Slope (%): NAD - 8 3 5% Slope (%): NO 8 3 1? No (If no, explain in Remarks.) 17 No No 17
Subregion (LRR or MLRA): <u>LRR - P</u> Lat: <u>35.144504</u> Soil Map Unit Name: <u>TGLum Very Fine</u> , <u>Sandy loam 15-2</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation <u>Soil</u> , or Hydrology <u>significantly disturbed</u> Are Vegetation <u>L</u> , Soil <u>Soil</u> , or Hydrology <u>naturally problematic</u>	Long: <u>-81, 502275</u> Datum: <u>NAD -8</u> 3 <u>5% Slones</u> NWI classification: <u>NAD -8</u> 3 <u>No</u> (If no, explain in Remarks.) 1? No Are "Normal Circumstances" present? Yes <u>No</u>
Soil Map Unit Name: Tatum Very Fine, Sandy loan 15-2 Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation, Soil, or Hydrology significantly disturbed Are Vegetation, Soil, or Hydrology naturally problematic	5% Slone NWI classification: <u>NONE</u> <u>No</u> (If no, explain in Remarks.) I? No Are "Normal Circumstances" present? Yes <u>No</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation, Soil, or Hydrology significantly disturbed Are Vegetation, Soil, or Hydrology naturally problematic	No (If no, explain in Remarks.) 1? N > Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology significantly disturbed Are Vegetation, Soil, or Hydrology naturally problematic	1? N 2 Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic	
	a 13 Sector State Stat
	? NO (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sample	ing point locations, transects, important features, etc.
	ithe Sampled Area ithin a Wetland? Yes No
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) True Aquatic Plants (B1-	
High Water Table (A2) Hydrogen Sulfide Odor (Saturation (A3) Oxidized Rhizospheres (
Saturation (A3) Oxidized Rhizospheres (Water Marks (B1) Presence of Reduced Inc	
Viale Marks (B1) Recent Iron Reduced in	그 같은 것 같은
Drift Deposits (B3) Thin Muck Surface (C7)	
Algal Mat or Crust (B4) Other (Explain in Remar	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	_
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	ous inspections), if available:
Remarks:	

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

Sampling Point: WAAA-2 UPL

	Absolute	Dominant	Indicator	Dominance Test worksheet:		-
Tree Stratum (Plot size: 10 X to m)		Species?		Number of Dominant Species	0	
1. Quercus alba	30	Yes	FACU	That Are OBL, FACW, or FAC:	_2_	(A)
2. Pinus echinata		Yes	NI	Total Number of Dominant	-	
3. Litiodendron tulipitera	10	NO	FACU	Species Across All Strata:	5	(B)
4.		1				1-1
5				Percent of Dominant Species	40%	14/01
6				That Are OBL, FACW, or FAC:	10 10	(AVB)
			· · · · · · · · · · · · · · · · · · ·	Prevalence Index worksheet:		
7	TE		=	Total % Cover of:	Multiply by:	
50% of total cover: 27	5 000 -6	= Total Cov	er 11	OBL species x		
	20% of	total cover:		FACW species x		
Sapling/Shrub Stratum (Plot size: 10 K10 m)		sind.	20	FAC species x		
1. Fanus granditolla	10	402	TRU			
2. Kalmia latitolia	40	yes	FACH	FACU species x		
3		_		UPL species x		
4				Column Totals: (A	.)	_ (B)
5				2000 00000 240		
6				Prevalence Index = B/A =		·
				Hydrophytic Vegetation Indica		
7				1 - Rapid Test for Hydrophy	tic Vegetation	
8		-		2 - Dominance Test is >50%		
9				3 - Prevalence Index is ≤3.0	F	
has been well	-50 -	= Total Cov	er	4 - Morphological Adaptation	ns ¹ (Provide sup	porting
50% of total cover: 25	20% of	total cover:	10	data in Remarks or on a		
Herb Stratum (Plot size: 10 × 10 m)				Problematic Hydrophytic Ve		-
1		÷		Problematic Hydrophytic Ve	geration (Explai	(1)
2			6	4	and the second second	
3				¹ Indicators of hydric soil and wet		nust
4				be present, unless disturbed or p		
				Definitions of Four Vegetation	Strata:	
5		(Tree - Woody plants, excluding	vines 3 in (7.6	cm) or
6		. 		more in diameter at breast heigh	t (DBH), regardl	ess of
7			÷	height.		
8				Sapling/Shrub - Woody plants,	evoluting vines	loce
9				than 3 in. DBH and greater than		
10				m) tall.	and the second	
11.				Lines All backs around from one	di A stanta asaa	an Josef
		= Total Cov	ar	Herb – All herbaceous (non-woo of size, and woody plants less th		diess
50% of total cover:		total cover:	51			1.1
Woody Vine Stratum (Plot size: 10×10 m)				Woody vine - All woody vines g	reater than 3.28	ft in
1. Smillax Intunditolia	E	Yos	EN	height.		
	2	100	FAC			
2. Toxico denotion todicons		_Yes	EAC			
3						
4				Hydrophytic		-
		_		Vegetation	/	
5	10	Total Cove	er	Present? Yes	No	
5	10 =					

SOIL

Sampling Point: WAPA-2 4PL

Depth	cription: (Describe Matrix	to the depth		dox Feature	s				
(inches) D - 12	Color (moist) 7.5 YR 5/6	<u>%</u> <u>100</u>	Color (moist)	%		_Loc ²		Rema	arks
1 Type: C=C	oncentration, D=Dep		Peduced Matrix	MS=Maske				Pore Lining, M=M	atrix.
Hydric Soil Histoso Histic E Black H Hydroge Stratifie 2 cm Me Deplete Thick D Sandy f MLR Sandy f Sandy f	Indicators:	se (A11)	Dark Surfa Polyvalue Thin Dark Loamy Gle Depleted N Redox Dal Depleted I Redox Depleted I Redox Depleted I Redox Depleted I Iron-Mang MLRA Umbric Su Piedmont	ce (S7) Below Surfa Surface (S9 syed Matrix Matrix (F3) k Surface (I Dark Surface oressions (F anese Mass	nce (S8) (N) (MLRA 1 (F2) 56) e (F7) 58) es (F12) ((MLRA 13 Soils (F19)	ILRA 147, 47, 148) LRR N, 6, 122) (MLRA 14	, 148) 2 cm , 148) Coas (M Pied (N Very Othe ³ Indicat 48) wetlar	Muck (A10) (ML st Prairie Redox (ILRA 147, 148) mont Floodplain - ILRA 136, 147) Shallow Dark Su rr (Explain in Rem	A16) Soils (F19) Inface (TF12) narks) ic vegetation and it be present,
	Layer (if observed)	6					Hydric Soil Pr	esent? Yes	No L
Remarks:									

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 6214 I-85	City/County: Cher	okee	Sampling Date: 10/05/2016
Applicant/Owner: SCDOT		State: SC	Sampling Point: WBBB-10 (we
Investigator(s): Nathan Howell	Section, Township, Ran		
Landform (hillslope, terrace, etc.): Toe-ut-SloP		and a second	Slope (%):
Soil Map Unit Name: Tatum very fine sand			
Are climatic / hydrologic conditions on the site typical for	A second s		
	significantly disturbed? NO Are "		
	naturally problematic? NO (If neg		
SUMMARY OF FINDINGS – Attach site ma			
	-		
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	No Is the Sampled		/
Wetland Hydrology Present? Yes	No within a Wetlan	d? Yes	No
B 1	redention feature. Ri	Prap dam is	halwer as the D
		TING WANT IS	holding water in
wetland. Stream SZN flo	ws into wbbb.		
HYDROLOGY		Secondary India	ators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check	all that apply)	and the second s	Cracks (B6)
	Frue Aquatic Plants (B14)		getated Concave Surface (B8)
	Hydrogen Sulfide Odor (C1)		atterns (B10)
	Oxidized Rhizospheres on Living Roots		
	Presence of Reduced Iron (C4)		Water Table (C2)
Sediment Deposits (B2) F	Recent Iron Reduction in Tilled Soils (C	6) Crayfish Bu	rrows (C8)
	Thin Muck Surface (C7)		/isible on Aerial Imagery (C9)
	Other (Explain in Remarks)	the second se	Stressed Plants (D1)
Iron Deposits (B5)		the second	Position (D2)
 Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) 		Shallow Aqu	aphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutra	A SALA A MARK PART OF A MARK AND A
Field Observations:			
Surface Water Present? Yes No	Depth (inches): 0-4		
	Depth (inches): 3		
Saturation Present? Yes No	Depth (inches): O Wet	tland Hydrology Prese	nt? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring w	ell, aerial photos, previous inspections'	, if available:	
		• • • • • • • • • • • • • • • • • • • •	
Remarks:	× ·	2	
Two very shallow channe	15 Flow through wet	land	
		(HI GA	

Tree Stratum (Plot size: 10 Klo m)	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	Species?	Status	Number of Dominant Species
	60	Yes	OBL	That Are OBL, FACW, or FAC: (A)
Querius nigra		ND	FAL	Total Number of Dominant
Liquidambar styraciting	15	NO	FAC	Species Across All Strata: (B)
Aler rubrum		No	FAC	Percent of Dominant Species
		· — —		That Are OBL, FACW, or FAC: 100 (A/B)
				Prevalence Index worksheet:
· · · · · · · · · · · · · · · · · · ·	105	(Total % Cover of: Multiply by:
50% of total cover:	105 - 105 - 1	= Total Cov	er	OBL species x1 =
apling/Shrub Stratum (Plot size: 10 X 15 m)	the second se	total cover:	al	FACW species x 2 =
Sally nigra		NOG	OBL	FAC species x 3 =
Ligustrum sinense	5	ND	FACU	FACU species x 4 =
Elsperinus unbelleta	- 5		NI	UPL species x 5 =
ALER FUBRICA	10	Yes	FAC	Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	35			3 - Prevalence Index is ≤3.0 ¹
50% of total cover: _/		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
arb Stratum (Plot size: 10 X 0 m)	7.5 20% or	total cover.	1	data in Remarks or on a separate sheet)
	35	VIES	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
JANUAS effasas				
		Yes	THOM	¹ Indicators of hydric soil and wetland hydrology must
Deer.				be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
				height.
				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
			\equiv	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
		_	_	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
	45	= Total Cove	_	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
 50% of total cover:	45	_	_	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
 50% of total cover: <u>-</u> <u>oody Vine Stratum</u> (Plot size: <u>」の X 16 M</u>)	45	= Total Cove	er 9	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: <u>5</u> 50% of total cover: <u>5</u> 50dy Vine Stratum (Plot size: <u>b X 16 m</u>) Toxico dendron Fadirans	45	= Total Cove	er 4 FAC	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>50% of total cover:</u>	45	= Total Cove	er 9	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>5</u> 50% of total cover: <u>5</u>	45	= Total Cove	er 4 FAC	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>5</u> 50% of total cover: <u>5</u>	45	= Total Cove	er 4 FAC	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: <u>50% of total cover:</u> <u>body Vine Stratum</u> (Plot size: <u>b X 16 m</u>) Toxico dendron Fadirans Smillax Fot-unditatics	45	= Total Cove	er 4 FAC	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover: <u>5</u> 1 <u>foody Vine Stratum</u> (Plot size: <u>10 X 16 M</u>) Toxico Jendion Fedirens	<u>45</u> 20% of	= Total Cove	FAC FAC	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.

-	-	
-	n	
-0	•	L

Sampling Point: WBBB - 10 Wt

	cription: (Describe	to the dep				or confirm	the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	s Type ¹	Loc ²	Texture		Remarks
0-4	1042 2/2	100					SiLoam	Dreenle	Accompletion
4-8	10YR 4/1	60	104R 6/2	40			Loam	- erganic	
1-14	IOYL 6/4	100	- IN IN IN	_10_	1		Sand		
-0-11	10/14 414	100	·				DANG		
				-			()		
		<u></u>		_		_			_
	(_							Sev Country
					2				
				100		-			
				_					
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: PL	=Pore Lining.	M=Matrix.
Hydric Soil									lematic Hydric Soils ³
Histosol			Dark Surface) (MLRA 147)
	oipedon (A2)		Polyvalue Be				148) C	oast Prairie Re	
	stic (A3) en Sulfide (A4)		Thin Dark Su Loamy Gleye	and the second se	the second second as the second	47, 148)	D	(MLRA 147,	148) plain Soils (F19)
	d Layers (A5)		Depleted Ma		F2)			(MLRA 136,	and the second se
	ick (A10) (LRR N)		Redox Dark	and the second second	6)		Ve		ark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dat	rk Surface	(F7)		_ 0	ther (Explain i	n Remarks)
	ark Surface (A12)	20.0	Redox Depre	and the second sec					
	lucky Mineral (S1) (L A 147, 148)	.RR N,	Iron-Mangan MLRA 13		es (F12) (I	LRR N,			
	Sleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ Indi	cators of hydr	ophytic vegetation and
	tedox (S5)		Piedmont Flo						y must be present,
La concessión de la concessión de la	Matrix (S6)		Red Parent M	Aaterial (F	21) (MLR.	A 127, 147	') unl	ess disturbed	or problematic.
	Layer (if observed):								
Type:							1.1.1.2.2		1/10
Depth (ind	ches):		-				Hydric Soil	Present? Y	'es No
Remarks:									

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Soil Map Unit Name: Tatum Wary fine Sundy Are climatic / hydrologic conditions on the site typical for this Are Vegetation, Soil, or Hydrology si	time of year? Yes <u>No</u> gnificantly disturbed? NO Are "Norma aturally problematic? NO (If needed, a	ne): <u>COAVEX</u> Stope (%): <u>35</u> <u>51.5/2/55</u> Datum: <u>NAD-83</u> NWI classification: <u>NOAE</u> (If no, explain in Remarks.) I Circumstances" present? Yes <u>No</u>		
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	Is the Sampled Area within a Wetland?	Yes No		
HYDROLOGY				
High Water Table (A2) Hydr Saturation (A3) Oxidi Water Marks (B1) Press Sediment Deposits (B2) Rece Drift Deposits (B3) Thin Algal Mat or Crust (B4) Othe Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)	hat apply) Aquatic Plants (B14) ogen Sulfide Odor (C1) ized Rhizospheres on Living Roots (C3) ence of Reduced Iron (C4) ent Iron Reduction in Tilled Soils (C6) Muck Surface (C7) rr (Explain in Remarks)	Dry-Season Water Table (C2)		
Water Table Present? Yes No Dep		Hydrology Present? Yes No		
Remarks:				

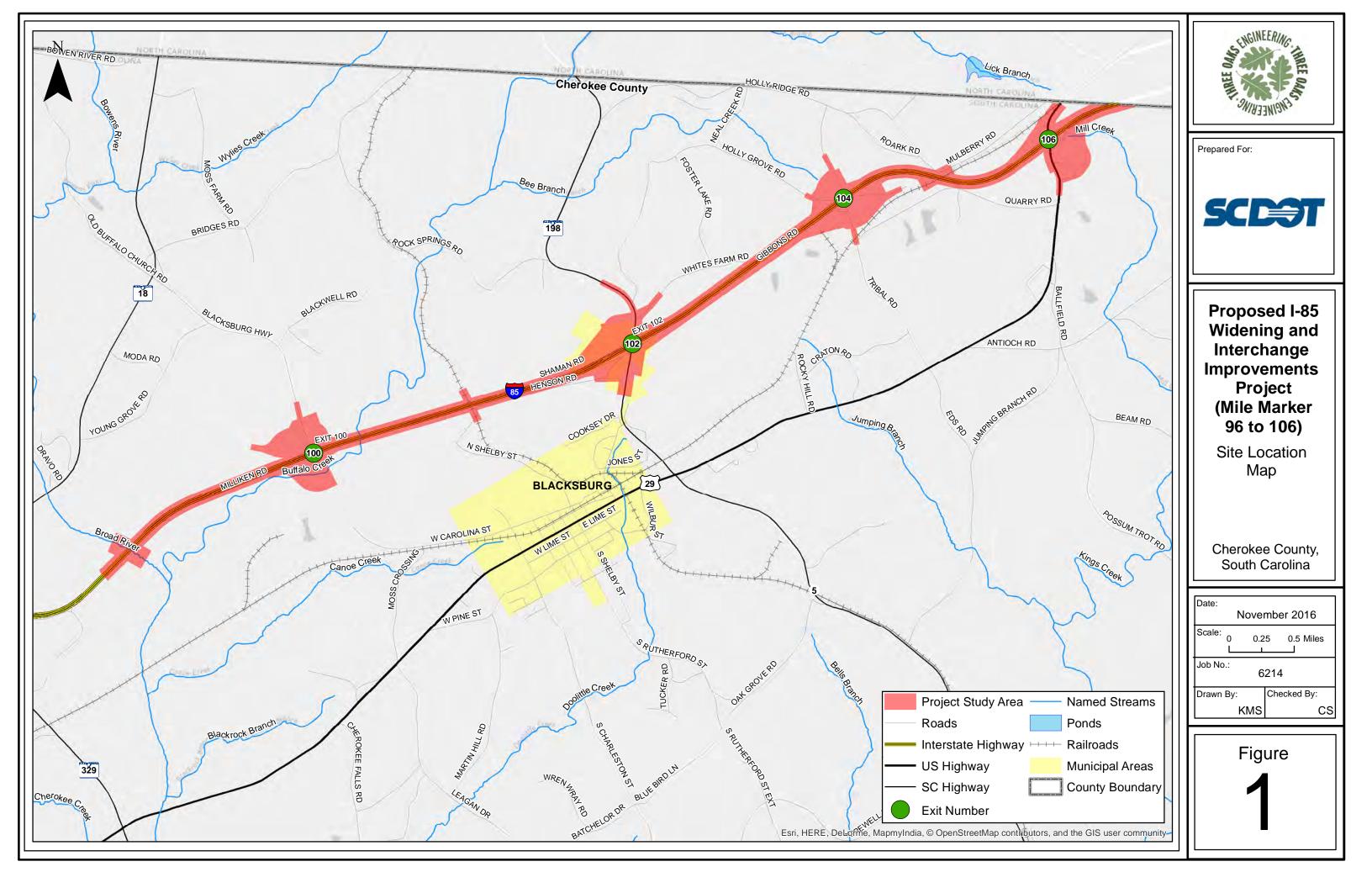
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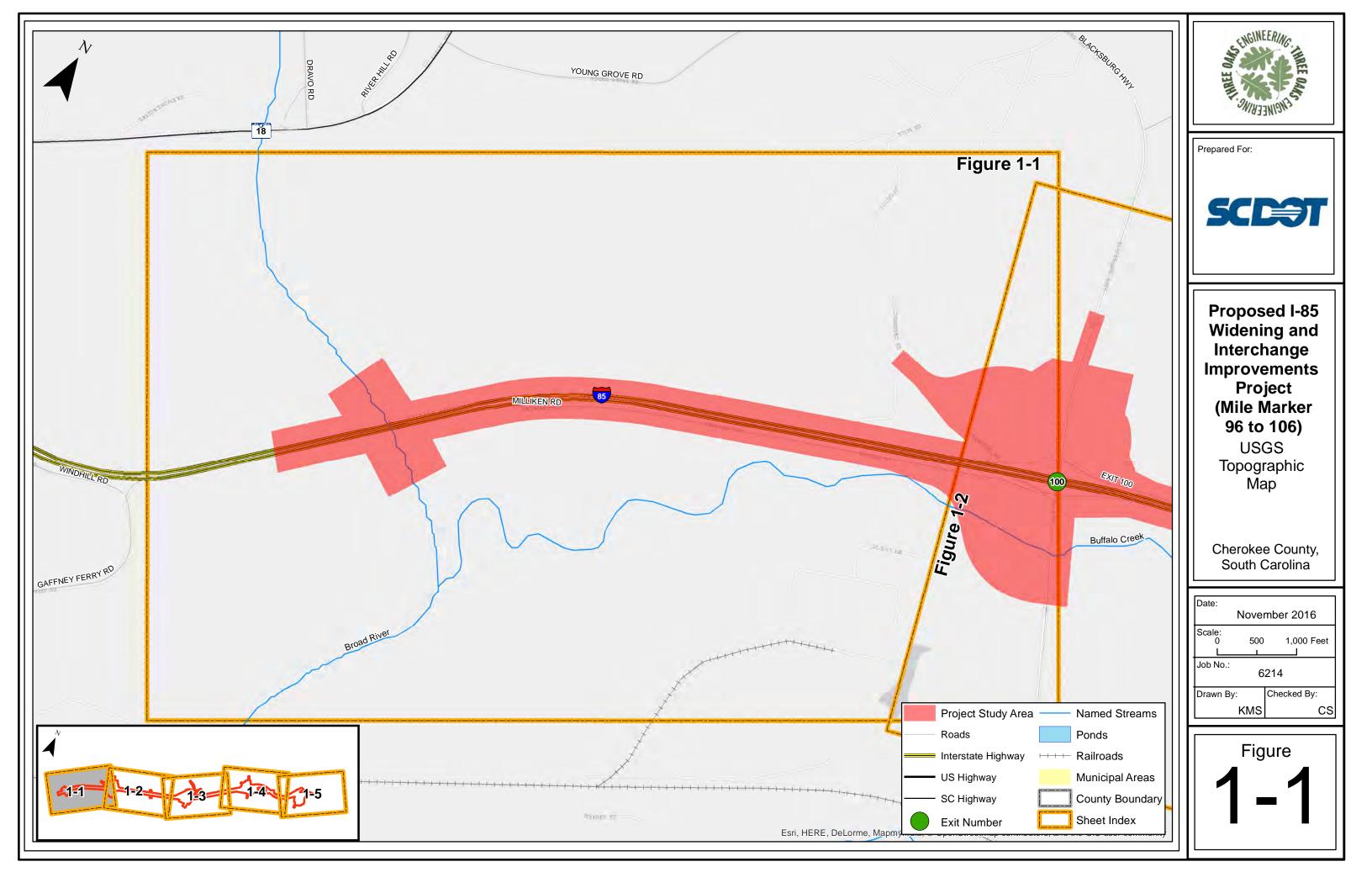
0	<u>Yes</u> Yes Yes	<u>Status</u> ERLU EACU EAC	Number of Dominant Species 4 That Are OBL, FACW, or FAC: 4 Total Number of Dominant 7
0	yes	FACU	That Are OBL, FACW, or FAC: (A) Total Number of Dominant /
_			Total Number of Dominant /
_		FAC	
_	7		Species Across All Strata: (B)
_			Percent of Dominant Species
		_	That Are OBL, FACW, or FAC: (A/B)
_		_	Prevalence Index worksheet:
10 =	= Total Cove	er	Total % Cover of:Multiply by:
0% of	total cover:	8	OBL species x 1 =
			FACW species x 2 =
5		TAC	FAC species x 3 =
		· · · ·	FACU species x 4 =
			UPL species x 5 =
_	<u></u>		Column Totals: (A) (B)
			(6)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
-			2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 ¹
=	Total Cove	er _	
0% of t	total cover:_	3	4 - Morphological Adaptations ¹ (Provide supporting
			data in Remarks or on a separate sheet)
2	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
	_		Indicators of hydric soil and wetland hydrology must
-	3.4		be present, unless disturbed or problematic.
			Definitions of Four Vegetation Strata:
			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of
			height.
			Sapling/Shrub - Woody plants, excluding vines, less
_			than 3 in. DBH and greater than or equal to 3.28 ft (1
			m) tall.
			Herb - All herbaceous (non-woody) plants, regardless
=	Total Cove	r	of size, and woody plants less than 3.28 ft tall.
% of t	otal cover:	5	
		1.11	Woody vine - All woody vines greater than 3.28 ft in height.
	485	FAC	neight.
		Ch C	
-			
-			Hydrophytic
	an avent		Vegetation Present? Yes / No
			Present? Yes No
_	Total Cover otal cover:	in the second	
	00% of 5 	0% of total cover: 5 6 7 7 7 7 8 7 7 8 7<	Total Cover Total Cover Total cover: Total cover: Total cover Total cover Total cover Total cover Total cover Total cover Total cover Total cover

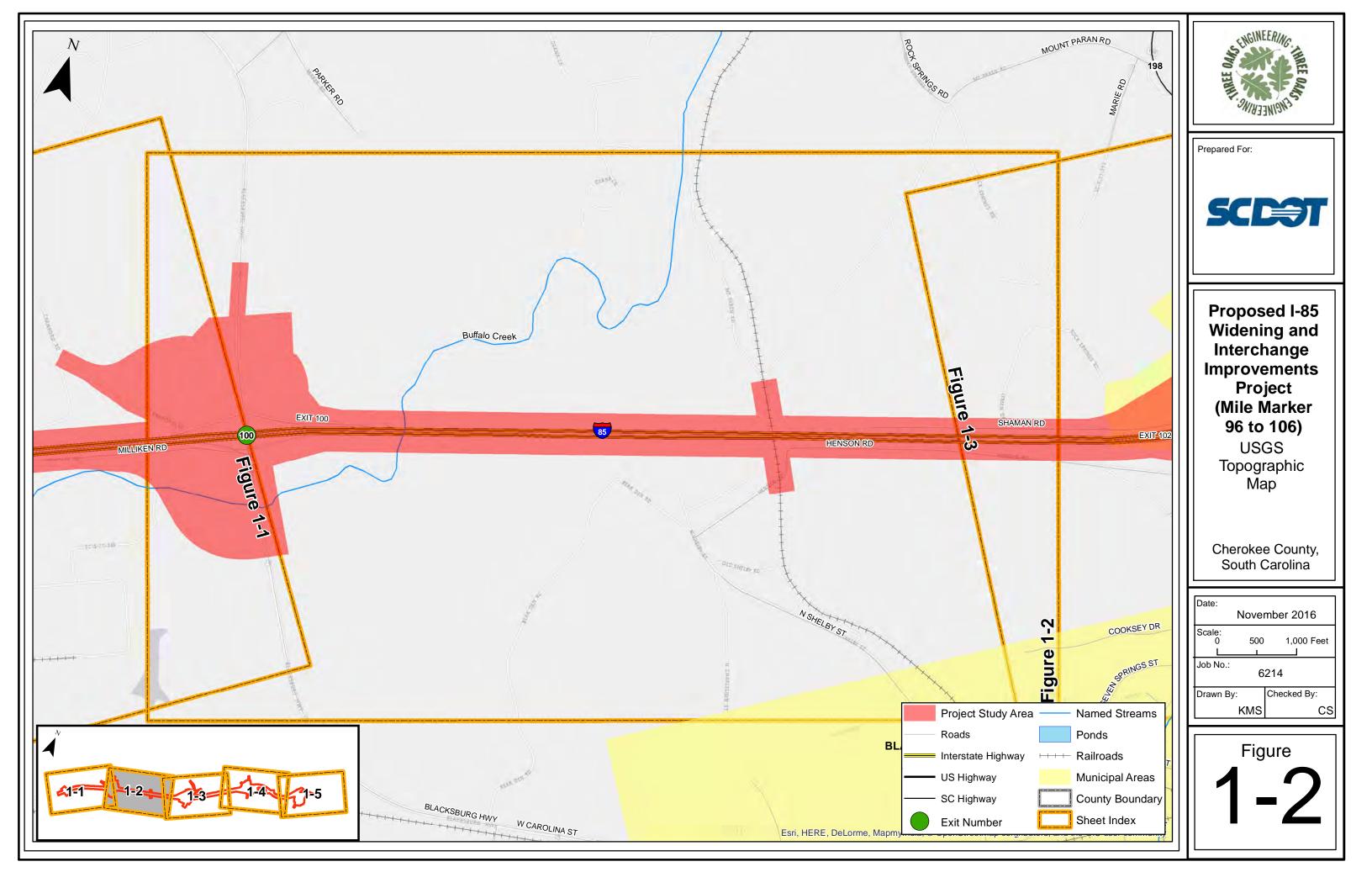
Depth			Redo	x Feature	s		ndicators.)	
inches)	Color (moist)	%	Color (moist)	_%	Type ¹	Loc ²	Texture	Remarks
0-12	10 YR 5/6	100		-			CI LOAM	
	(*************************************	· <u>· · · · ·</u> ·					· · · · · · · · · · · · · · · · · · ·	or Problematic Hydric Soils ³ : uck (A10) (MLRA 147) rairie Redox (A16) (A 147, 148) Int Floodplain Soils (F19) (A 136, 147) allow Dark Surface (TF12) (Explain in Remarks)
				_		-		
				-	-	_		
					-	-		
					<u> </u>			
	oncentration, D=Dep Indicators:	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: PL=Po	ore Lining, M=Matrix.
Black Hi Hydroge Stratified 2 cm ML Depleted Thick Da Sandy M MLR/ Sandy G Sandy F Stripped	bipedon (A2) stic (A3) in Sulfide (A4) i Layers (A5) ick (A10) (LRR N) d Below Dark Surfac ark Surface (A12) Nucky Mineral (S1) (L A 147, 148) Sleyed Matrix (S4) redox (S5) Matrix (S6) Layer (if observed):	LRR N,	Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mai Redox Dark S Depleted Dar Redox Depre Iron-Mangan MLRA 13i Umbric Surfa Piedmont Flo Red Parent M	rface (S9) d Matrix (frix (F3) Surface (F k Surface ssions (F ese Mass 6) ce (F13) (odplain S) (MLRA 1 F2) 6) (F7) 8) es (F12) ((MLRA 13 oils (F19)	47, 148) LRR N, 6, 122) (MLRA 1	(ML Piedm (ML Very S Other ³ Indicato 48) wetland	Prairie Redox (A16) .RA 147, 148) nont Floodplain Soils (F19) .RA 136, 147) Shallow Dark Surface (TF12) (Explain in Remarks) mrs of hydrophytic vegetation and hydrology must be present, disturbed or problematic.
	ches):		-				Hydric Soil Pres	sent? Yes No
Depth (ind								

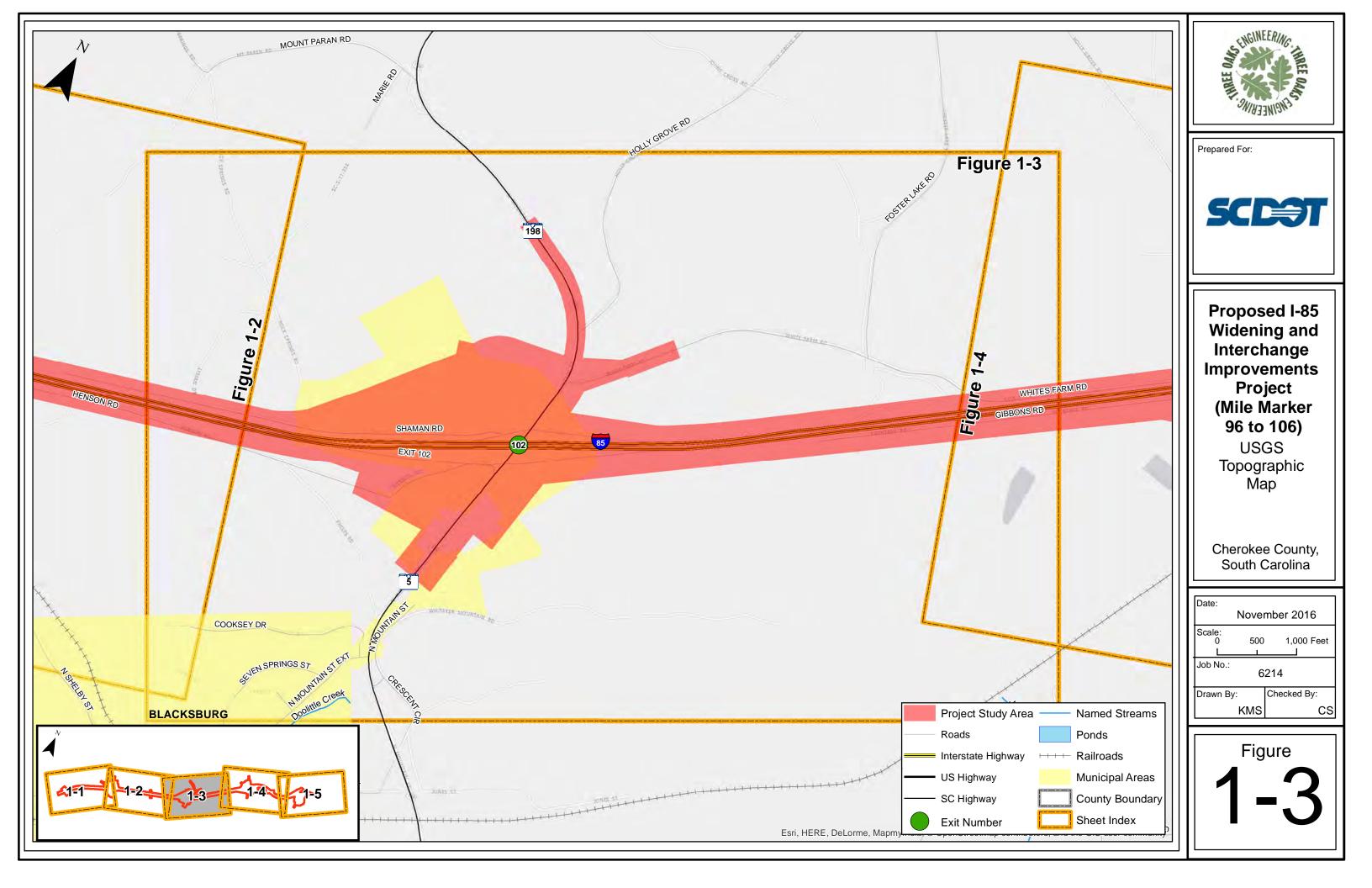
Attachment E

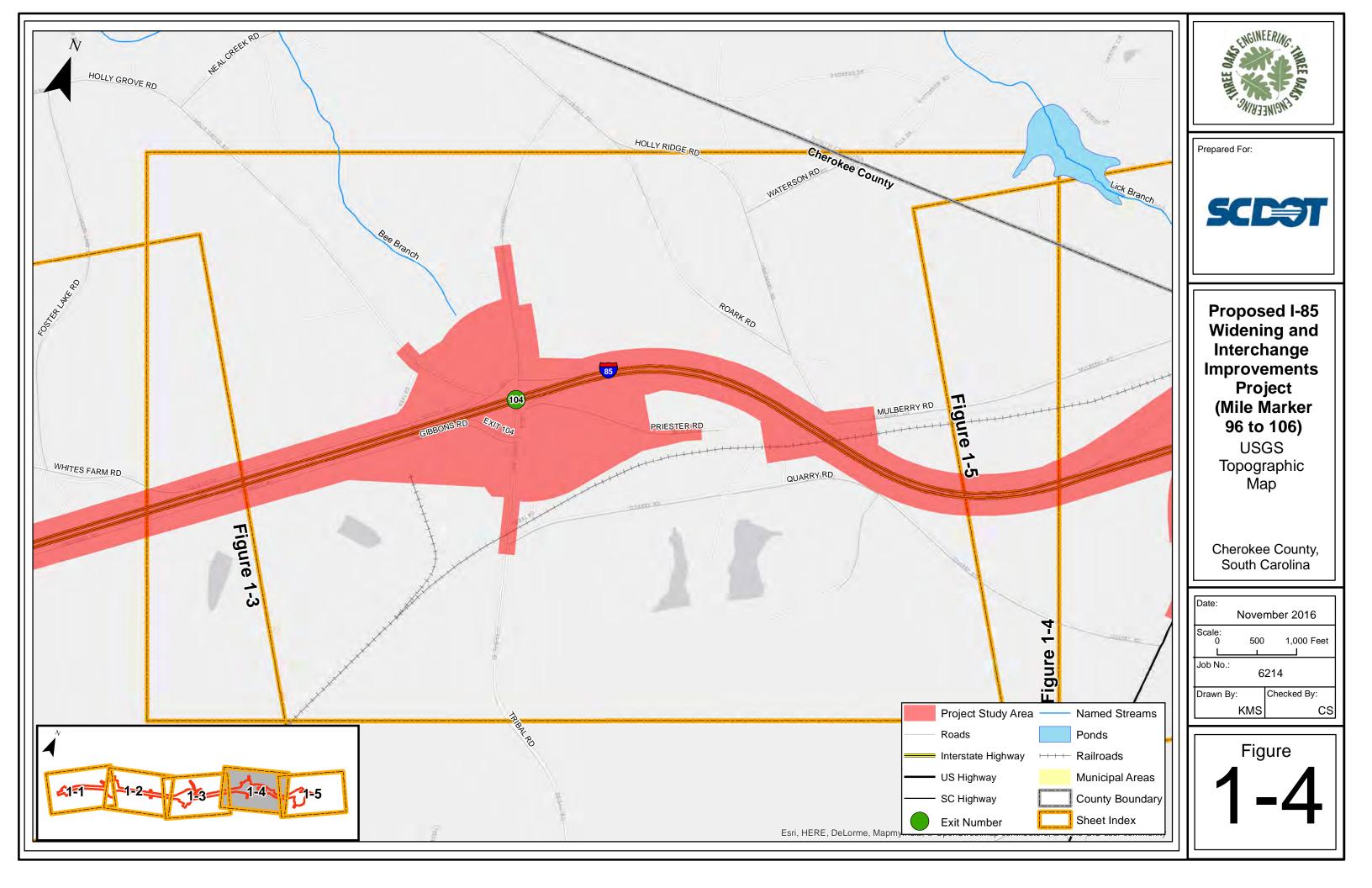
Figures

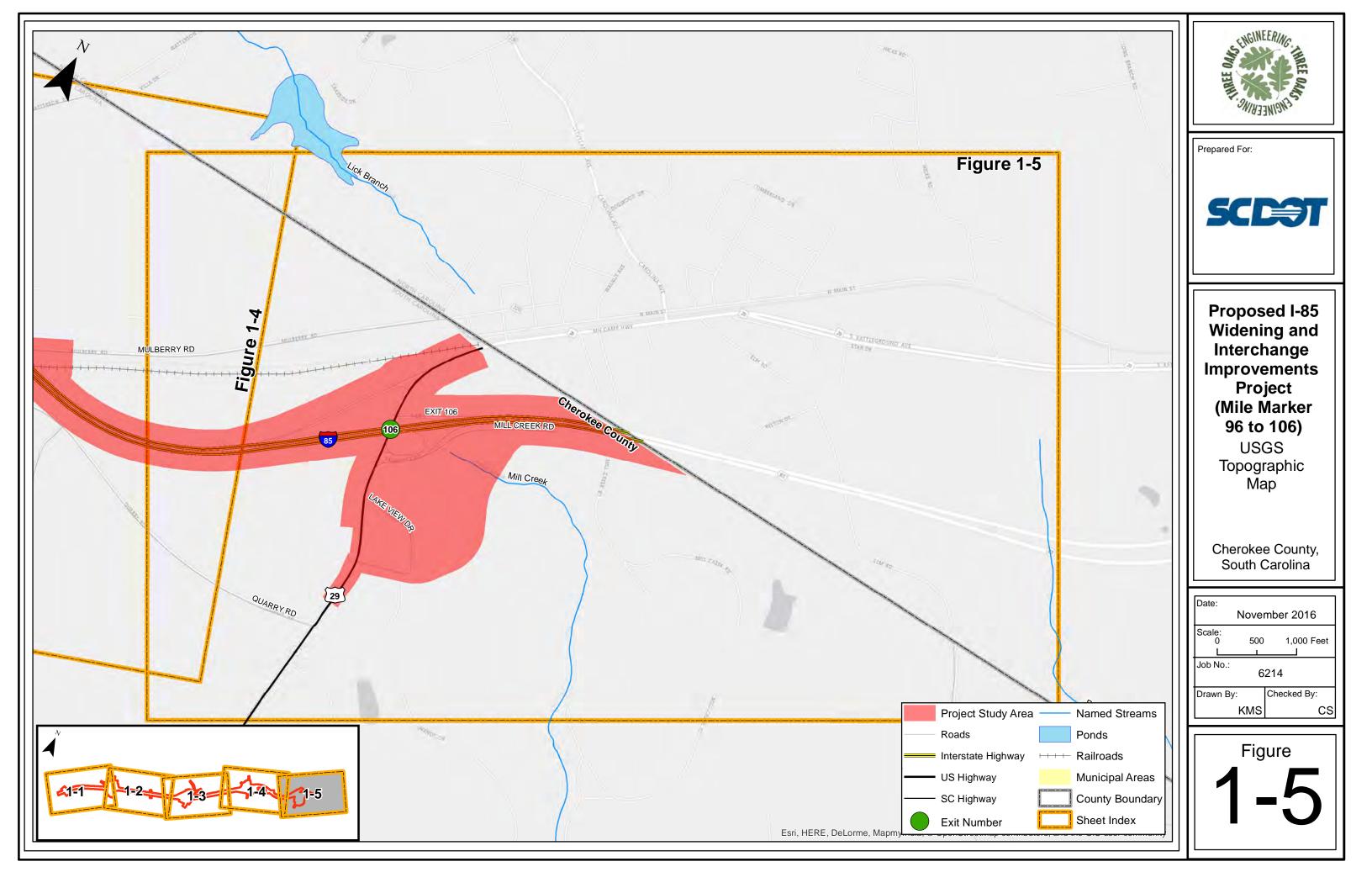


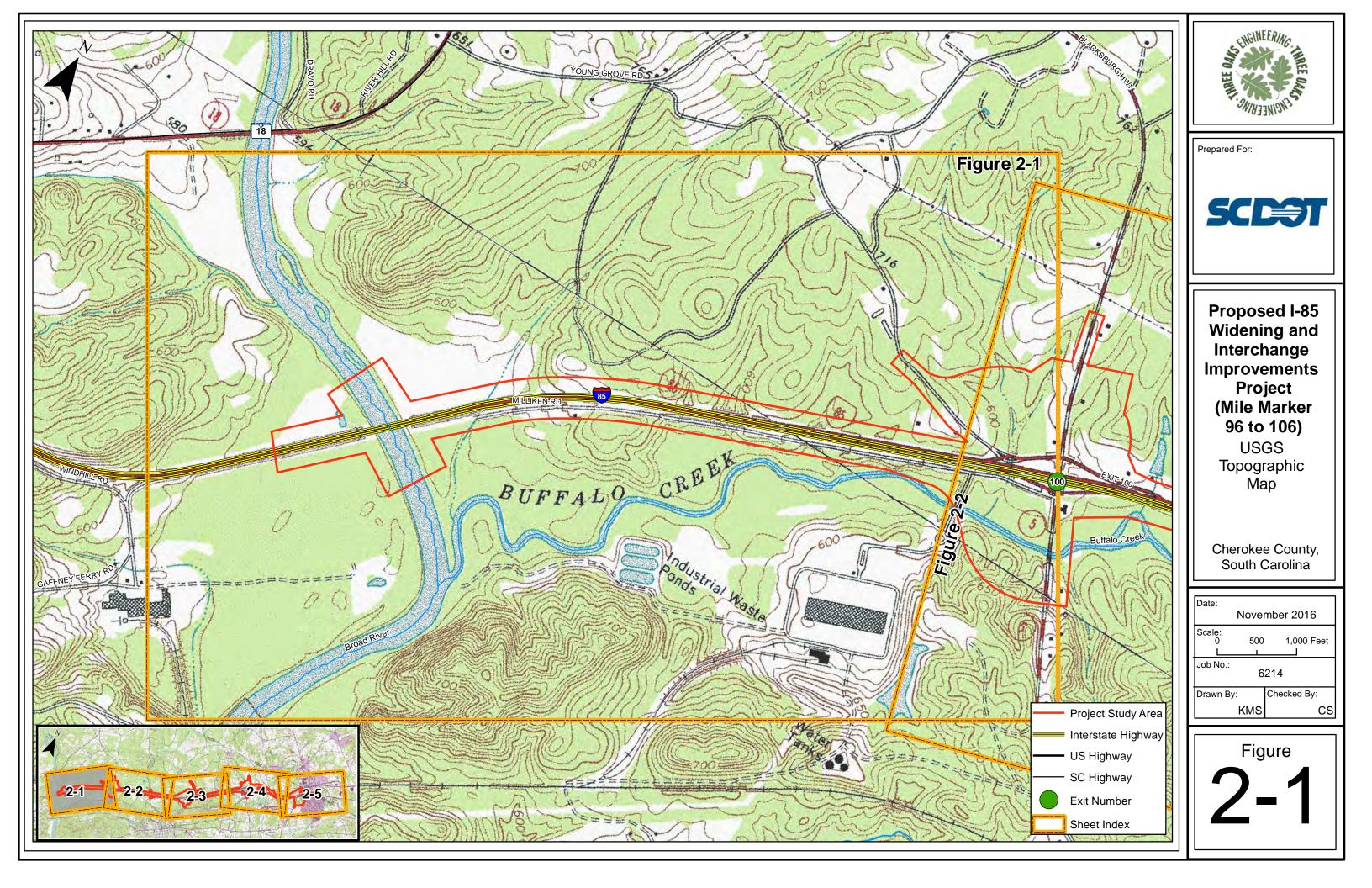


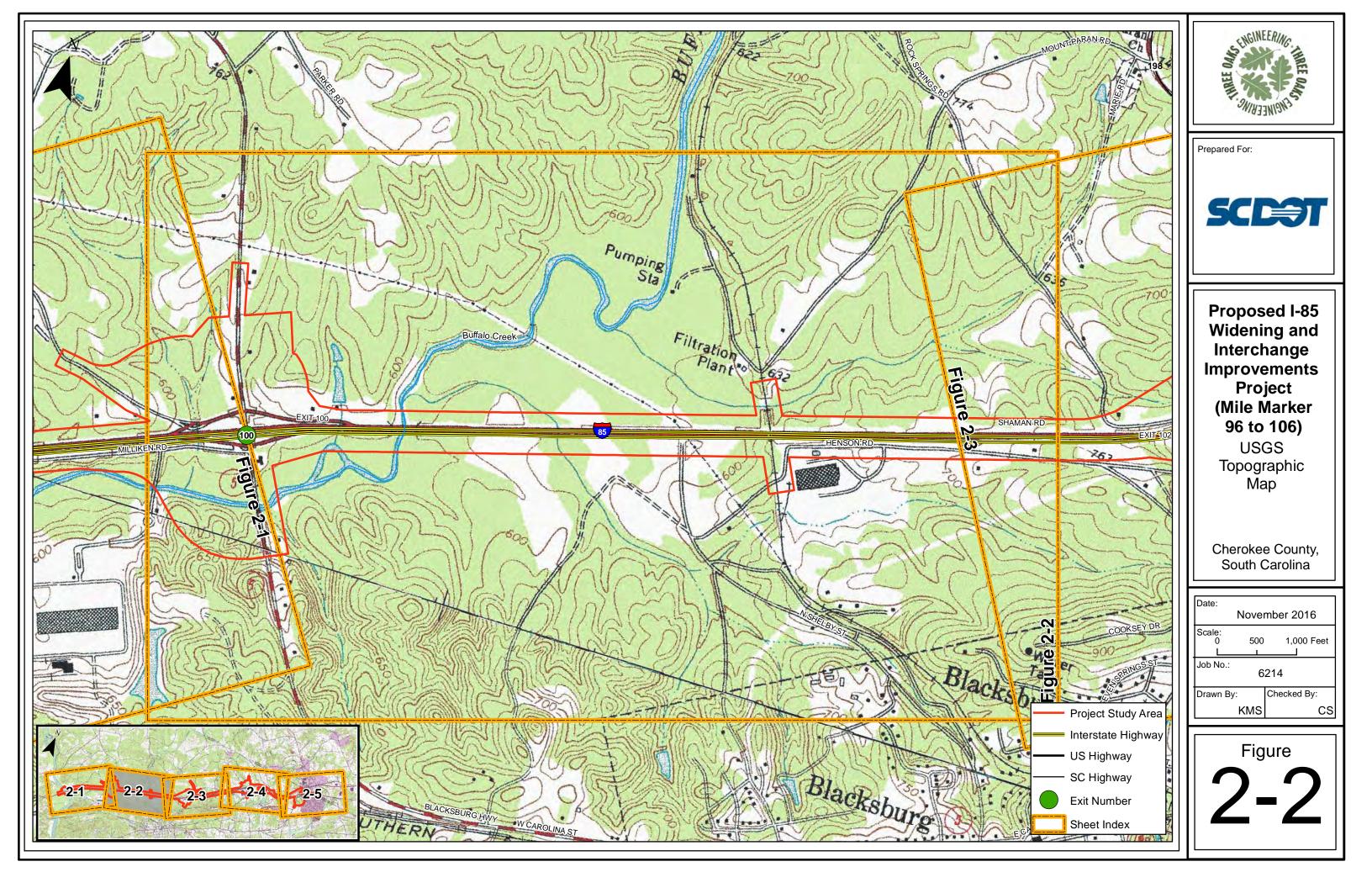


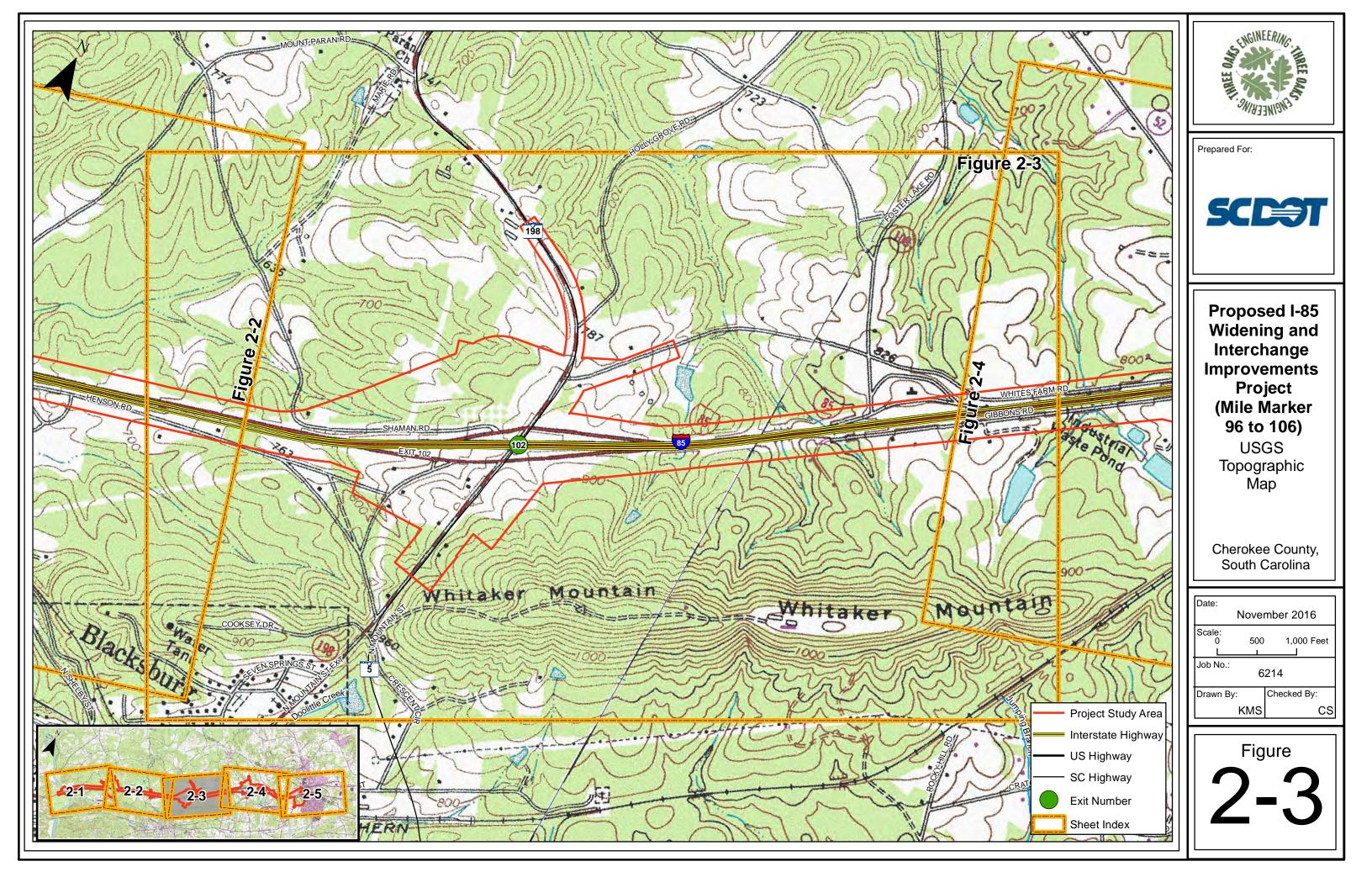


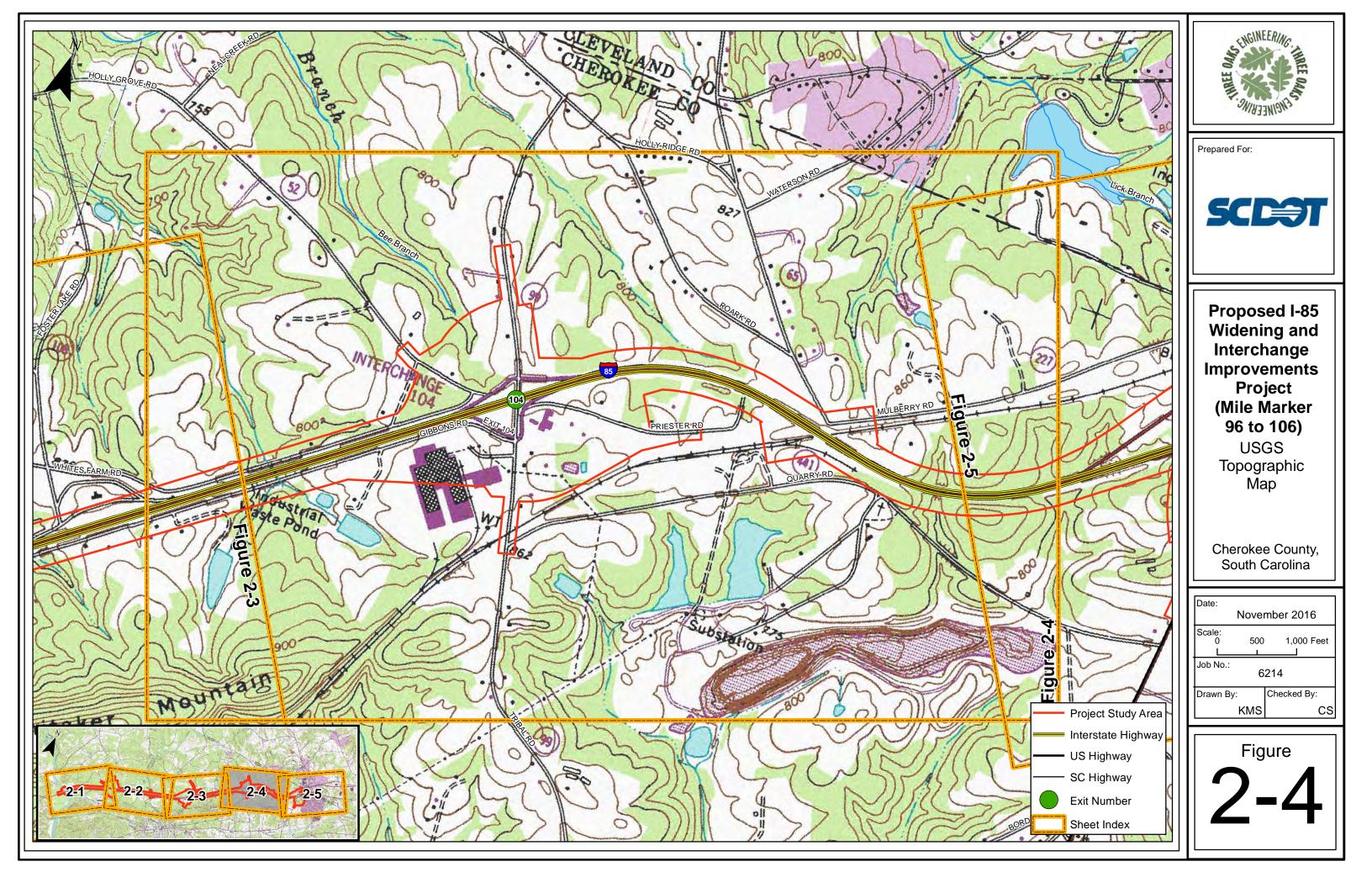


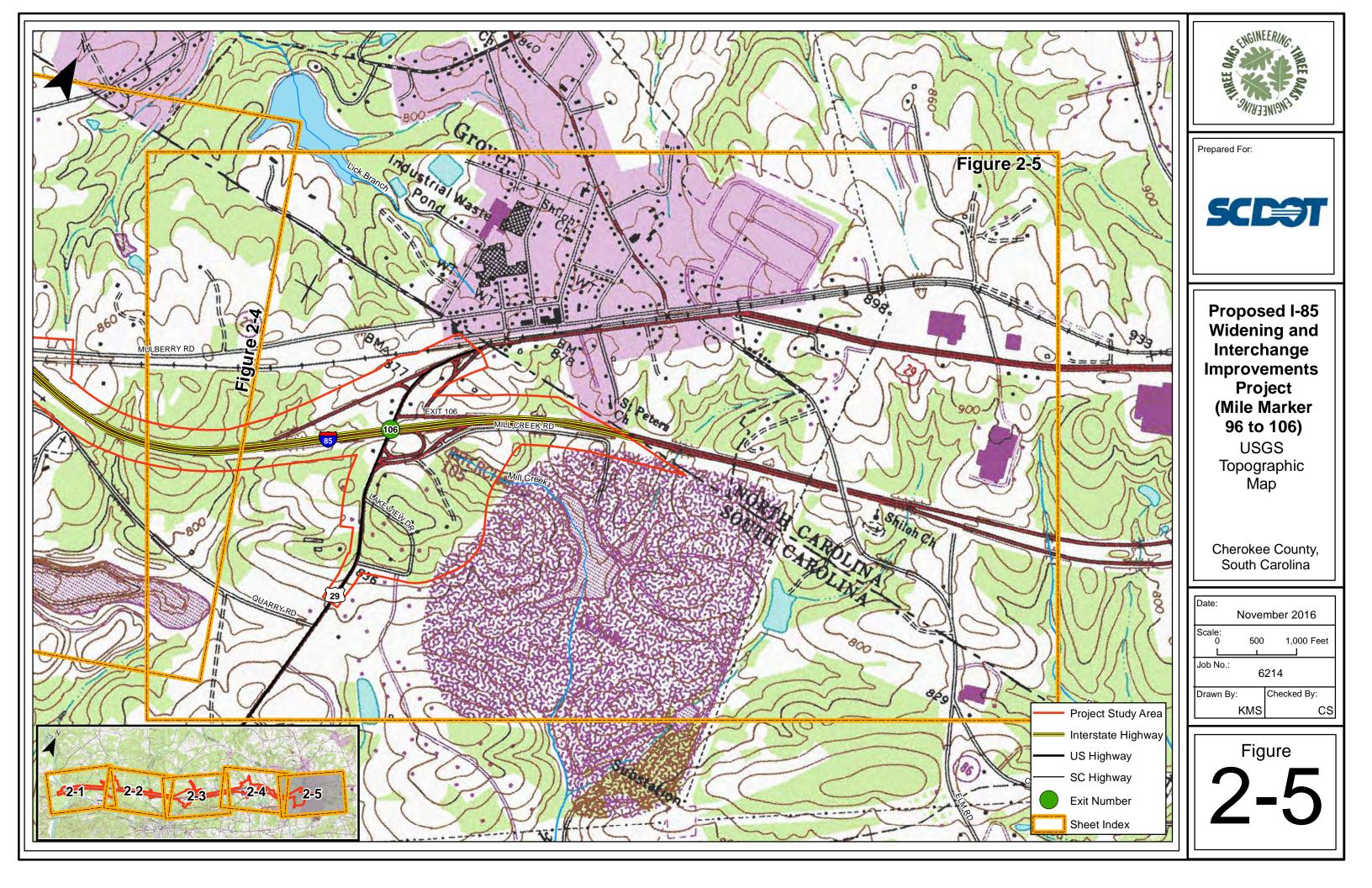


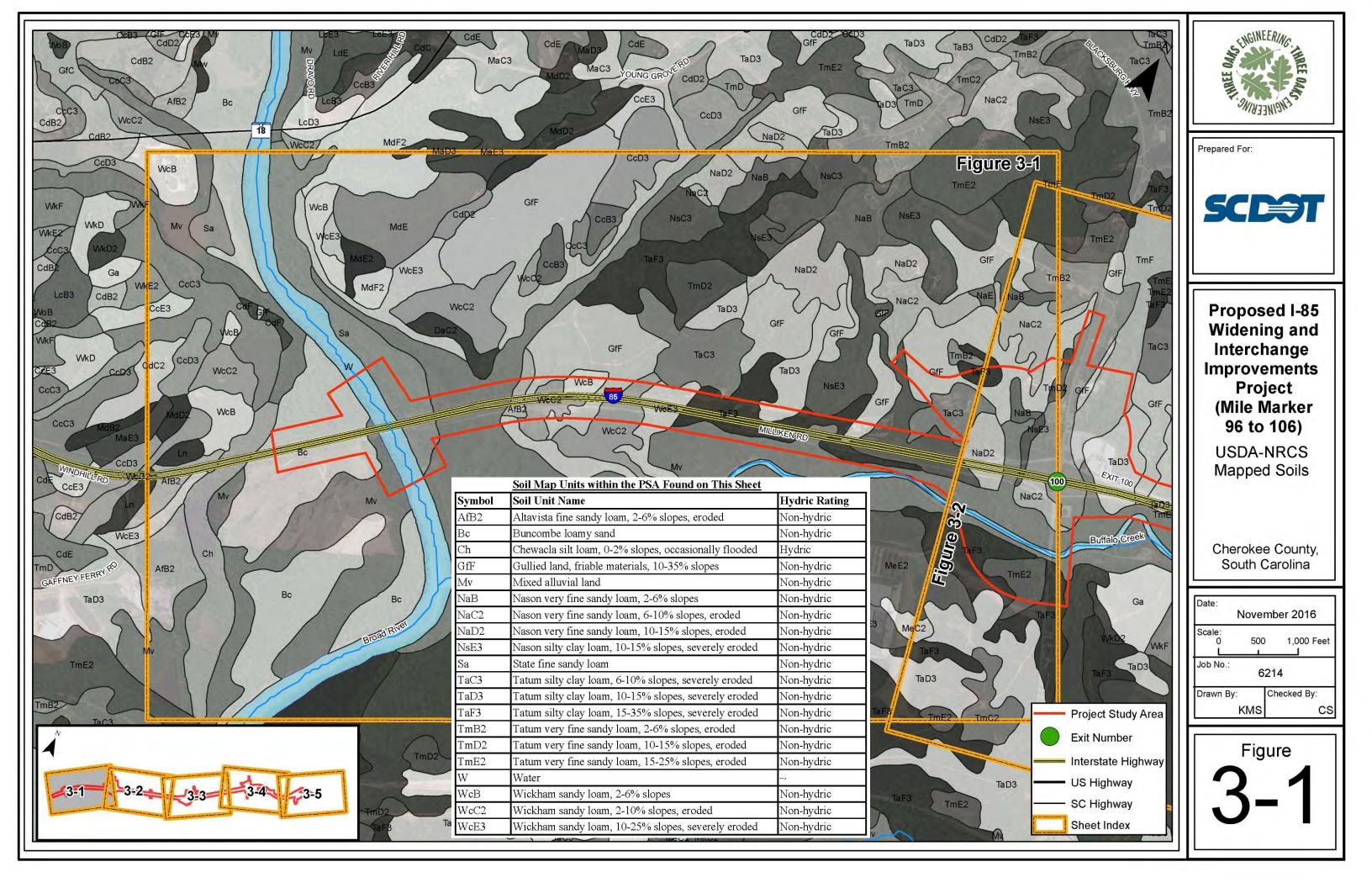


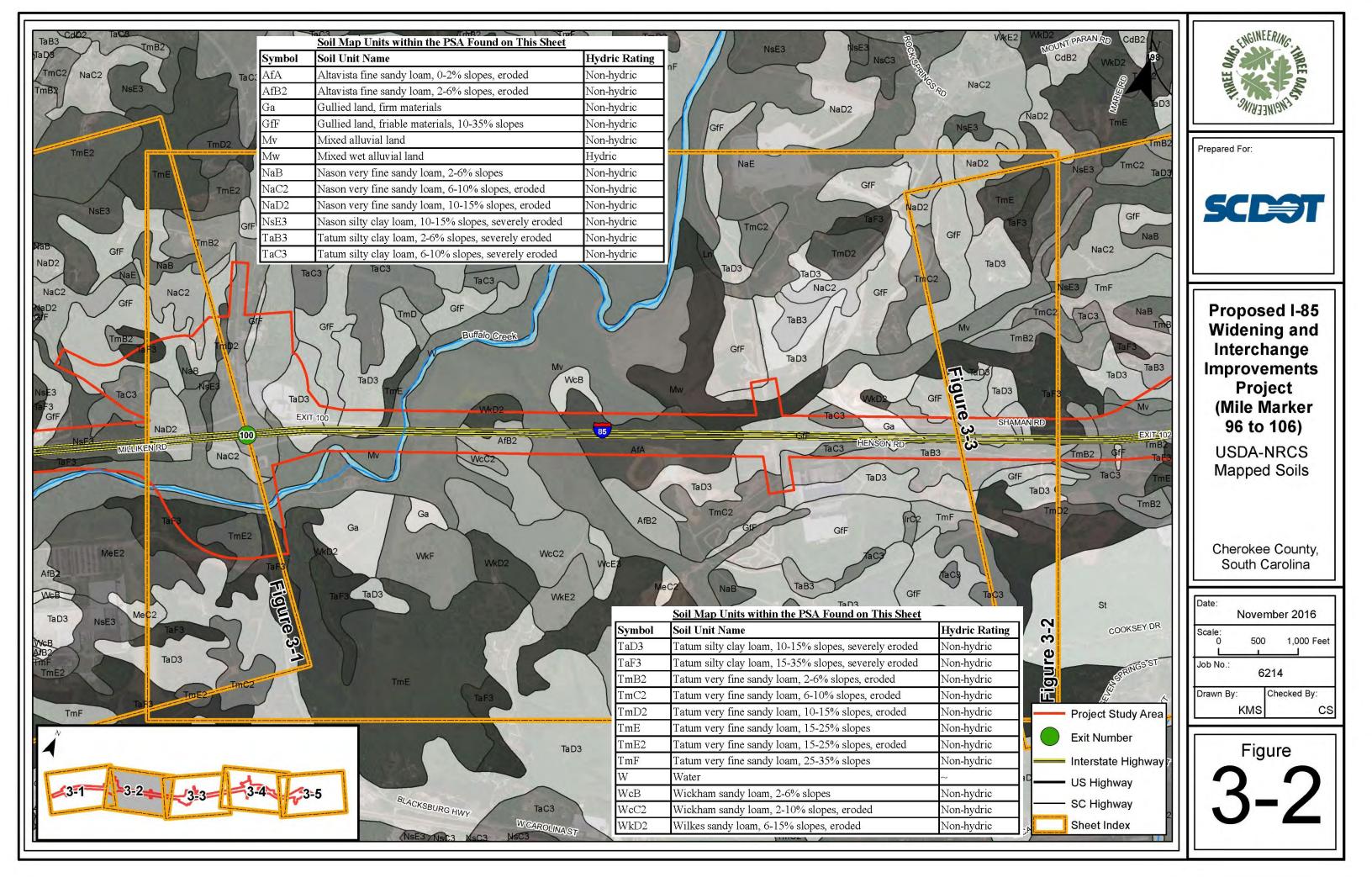


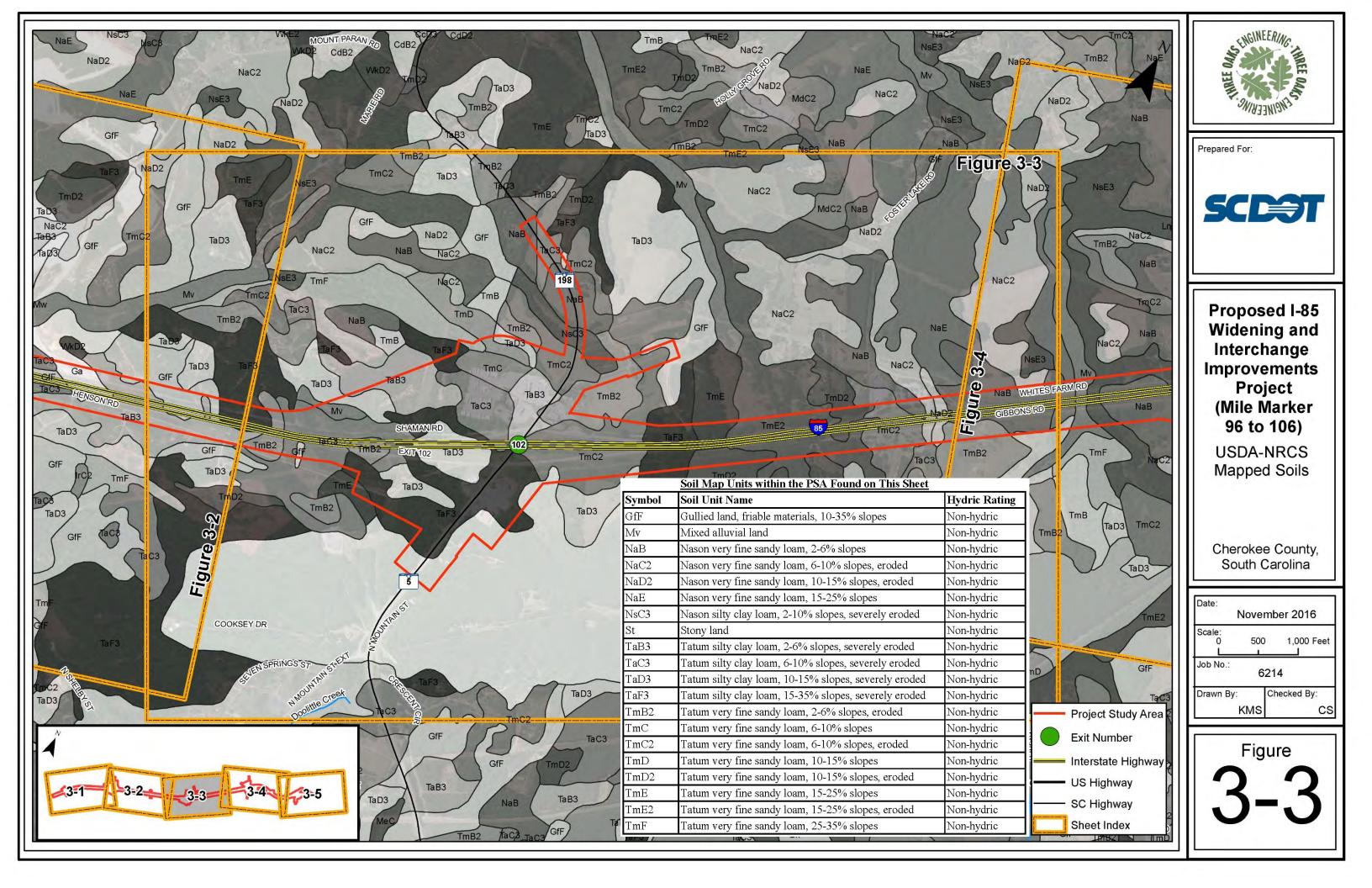


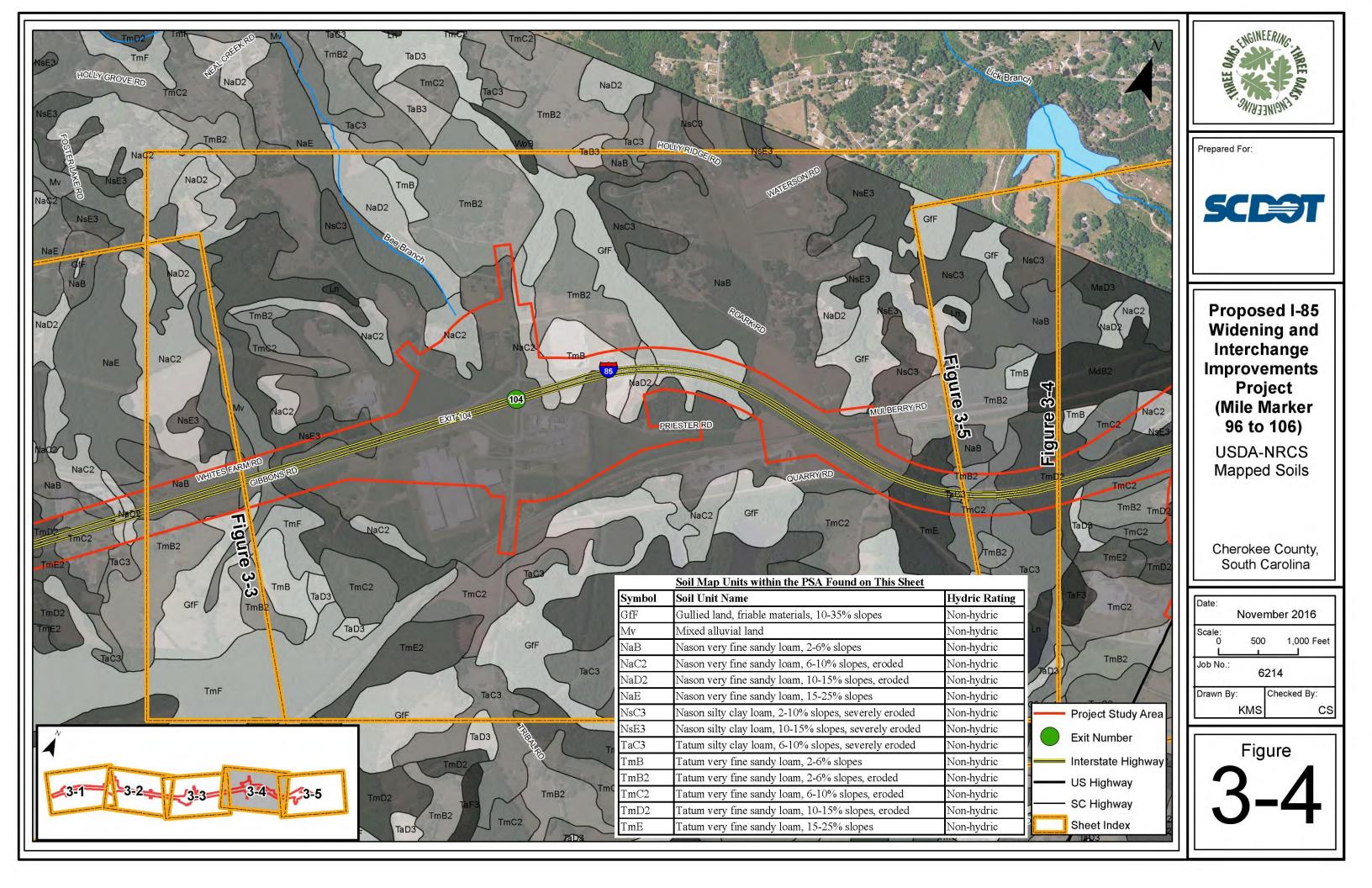












NBB NSB NBB NSB GF NBD NSB NBD	<complex-block></complex-block>			
TaD3 TaB3 TaC3 TmE2 TmD2	TmD	[]]		Canada and and and and and and and and an
			Soil Map Units within the PSA Found on This Sheet	
	TaD3 TmD2	Symbol	Soil Unit Name	Hydric Rating
	the second	ApC ApD2	Appling sandy loam, 6-10% slopes Appling sandy loam, 10-15% slopes	Non-hydric Non-hydric
TaC3 Gff TaC3 TaD3	TaD3	ApD2 ApE2	Appling sandy loam, 15-25% slopes	Non-hydric
	GfC TaB3	ApE2 GfF	Gullied land, friable materials, 10-35% slopes	Non-hydric
TmB2 TmB2 TmB2		MdB2	Madison and Cecil sandy loams, 2-6% slopes, eroded	Non-hydric
TmG TmD2	TaF3 Ln Mv	NaC2	Nason very fine sandy loam, 6-10% slopes, eroded	Non-hydric
TmC2		NsE3	Nason silty clay loam, 10-15% slopes, severely eroded	Non-hydric
TIME MV TIME2 TIAF3		TaC3	Tatum silty clay loam, 6-10% slopes, severely eroded	Non-hydric
	TmD2	TaD3	Tatum silty clay loam, 0-10% slopes, severely eroded Tatum silty clay loam, 10-15% slopes, severely eroded	Non-hydric
, TmE2,		TaD3 TmB2	Tatum sitty clay loam, 10-15% slopes, severely eroded Tatum very fine sandy loam, 2-6% slopes, eroded	Non-hydric
	TmB	TmB2 TmC	Tatum very fine sandy loam, 2-0% slopes, eroded Tatum very fine sandy loam, 6-10% slopes	Non-hydric
		TmC TmC2	Tatum very fine sandy loam, 6-10% slopes roded	Non-hydric
TmC2	TmB2 The	TmC2	Tatum very fine sandy loam, 10-15% slopes	Non-hydric
3-1-3-2-3-3-4-3-5		TmD TmD2	Tatum very fine sandy loam, 10-15% slopes Tatum very fine sandy loam, 10-15% slopes, eroded	Non-hydric
3-3-5 TaD3	GfF TmD2	TmD2 TmE	Tatum very fine sandy loam, 10-15% slopes, eroded	Non-hydric
				-
v) TmBs	TaD3 TmD2 GfA GfA	LMOR	Worsham sandy loam, 0-6% slopes	Non-hydric

