

WATERSHED PROTECTION DEPARTMENT

P.O. Box 548 Pittsboro, NC 27312 PHONE: (919) 545-8394

Fax: (919) 542-2698 • E-mail: drew.blake@chathamcountync.gov • Website: www.chathamcountync.gov

June 8, 2022

Alyssa Ricci Withers Ravenel 115 Mackenan Drive Cary, NC 27511

Project Name: Flatiron Forest – Mt Gilead Parcel # 2014 & 2037

Location: <u>Hamlets Chapel Road, Chatham County</u>

Subject Features: One (1) ephemeral stream, one (1) intermittent stream

segment, one (1) perennial stream segments, and six (6)

potential wetlands

Date of <u>June 2, 2022</u>

Determination:

Explanation:

The site visit was completed on June 2, 2022, by Drew Blake with Chatham County Watershed Protection and staff of Withers Ravenel on Parcel # 2014 and 2037 that are located within the Jordan Lake watershed. Withers Ravenel personnel completed a previous site visit which resulted in the identification of two (2) ephemeral stream, one (1) intermittent stream segment, one (1) perennial stream segments, and six (6) potential wetlands on the property. Withers Ravenel submitted a request for Chatham County to complete a formal review to determine if the features would be subject to riparian buffers according to Section 304 of the Chatham County Watershed Protection Ordinance.

All points of origin, stream type transitions, and wetland boundaries were reviewed and agreed to in the field by all parties in attendance. One ephemeral stream segment (Feature B – Stream Form 2A) was removed as the segment did not meet the required 10 points for ephemeral streams.

Required Riparian Buffers:

All ephemeral stream segments will require a 30-ft buffer from the top of bank landward on both sides. All intermittent stream segments will require a 50-ft buffer from the top of bank landward on both sides. The perennial stream segment will require a 100-ft buffer from the top of bank landward on both sides. A 50-ft buffer will be required on all wetlands from the flagged boundary landward.

Impacts to Riparian Buffers:

Impacts to the riparian buffers may require a Riparian Buffer Authorization depending on the size and scope of the impacts. Please refer to Section 304 (J)(3) of the Chatham County Watershed Protection Ordinance to determine if your impacts will require a Riparian Buffer Authorization. If you determine that a Riparian Buffer Authorization is required please contact Drew Blake to receive the required application and submittal instructions.

This on-site determination shall expire five (5) years from the date of this letter. Landowners or affected parties that dispute a determination made by Chatham County, on parcels outside of the Jordan Lake



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watershed, may submit a request for appeal in writing to the Watershed Review Board. A request for a determination by the Watershed Review Board shall be made in accordance with Section 304 of the Chatham County Watershed Protection Ordinance. Landowners or affected parties that dispute a determination made by Chatham County, on parcels inside the Jordan Lake watershed, shall submit a request for appeal in writing to NC DWR, 401 & Buffer Permitting Unit, 1650 Mail Service Center, Raleigh, NC 27669-1650 attention of the Director of the NC Division of Water Quality.

Should this project result in any direct impacts to surface water features (i.e., crossing and/or filling streams or wetlands) additional reviews may be necessary. Additionally, a Section 404/401 Permit may be required. Any inquiries regarding Section 404/401 permitting should be directed to the Division of Water Resources (Central Office) at (919)-807-6364 and the US Army Corp of Engineers (Raleigh Regulatory Field Office) at (919)-554-4884.

Respectfully, Drew Blake

Drew Blake

Senior Watershed Specialist, CESSWI

Enclosures:

Buffer Determination Exhibit with Buffers - Completed by Withers Ravenel

NRCS Soil Survey - Completed by Withers Ravenel

USGS Topographic Map – Completed by Withers Ravenel

Withers Ravenel Stream ID Forms

Withers Ravenel Wetland Data Form

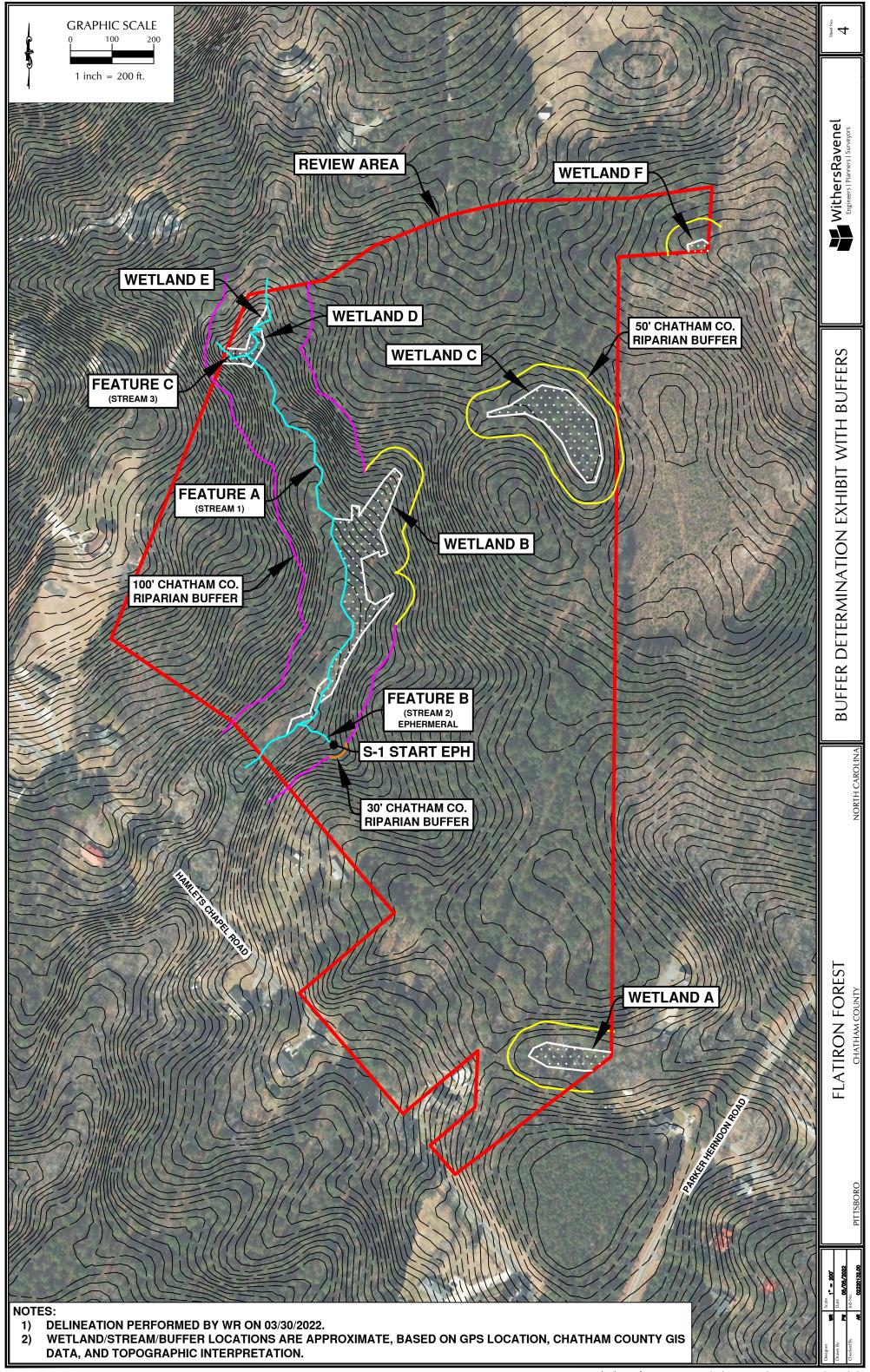
Major Subdivision Riparian Buffer Application

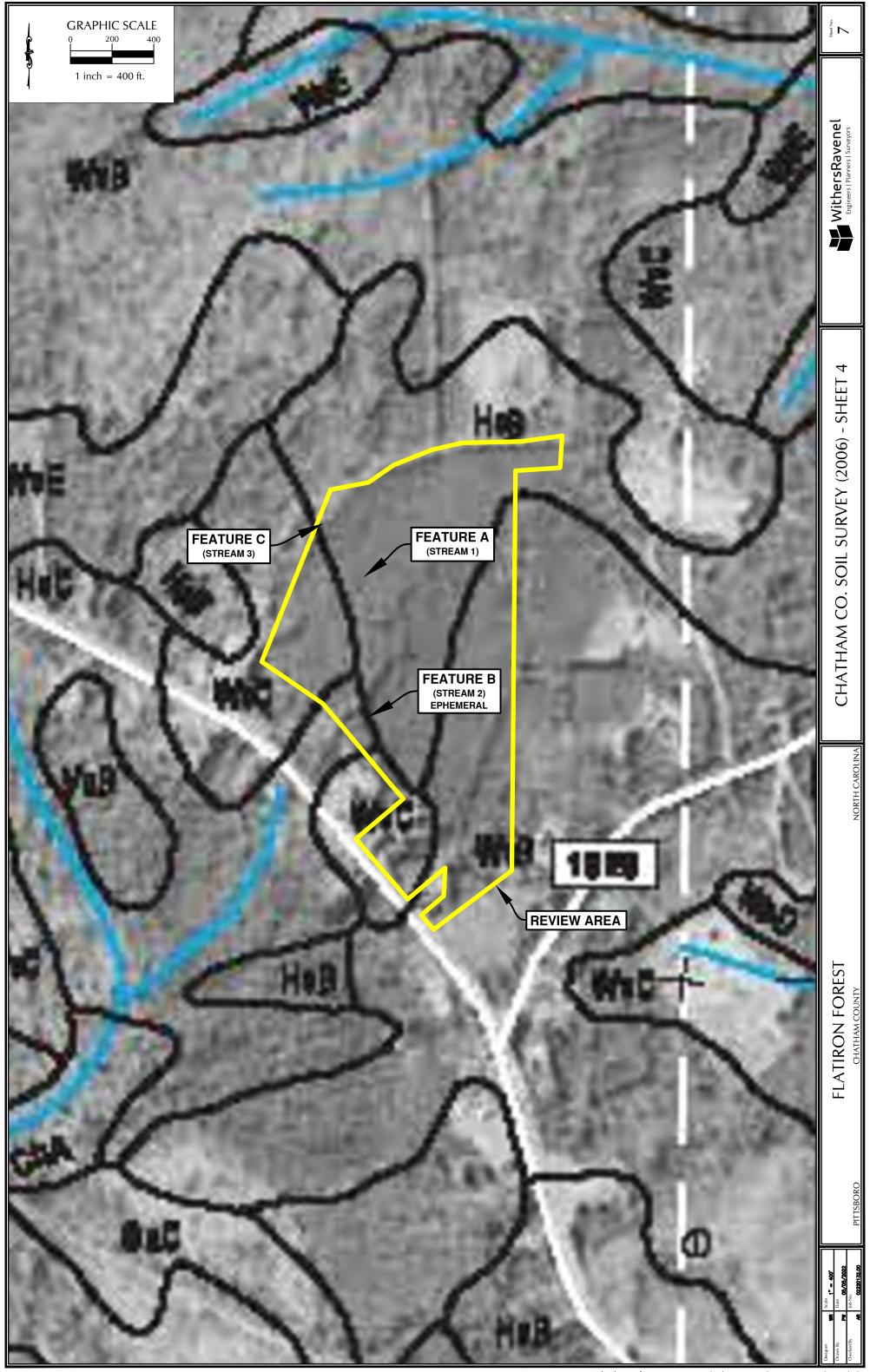
Authorized Agent Form

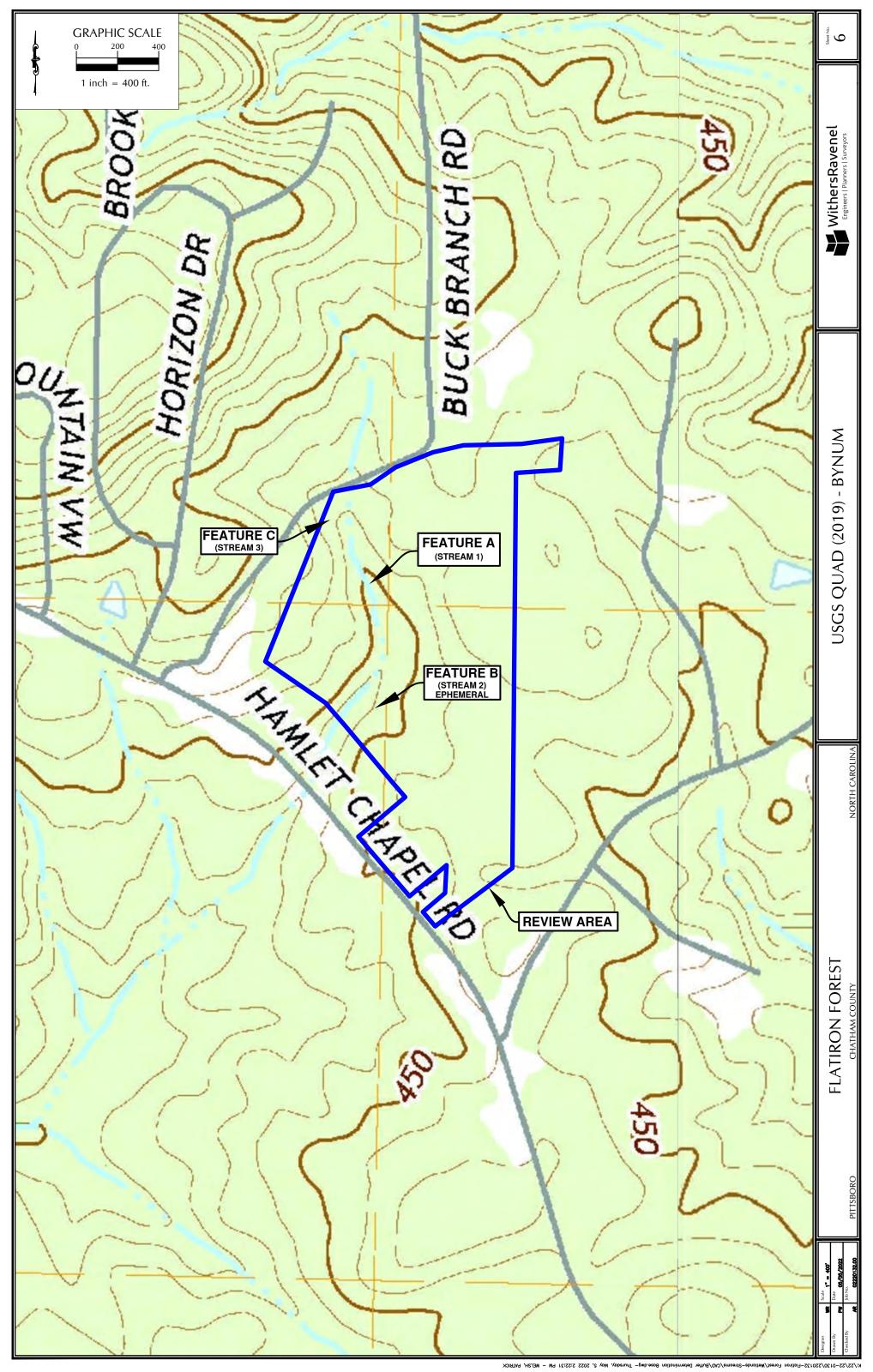
Authorization to Enter Property Form

Site Photographs – provided by Withers Ravenel

cc: Rachael Thorn, Director, Chatham County Watershed Protection Department Kimberly Tyson, Planner II/Subdivision Administrator, Chatham County Planning Department Hunter Glenn. Planner I, Chatham County Planning Department Angela Plummer, Planner II/Zoning Administrator, Chatham County Planning Department Jason Sullivan, Director, Chatham County Planning Department







Sketch:

Date: 3/30/2022	Project/Site: Fl	Latitude: Longitude:			
Evaluator: A.Ricci - WithersRavenel	County: Chat				
Total Points: Stream is at least intermittent 43.75 if ≥ 19 or perennial if $\geq 30^*$		nation (circle one) mittent Perennial	Other e.g. Quad Name:		
A. Geomorphology (Subtotal = 23.5	Absent	Weak	Moderate	Strong	
1 ^{a.} Continuity of channel bed and bank	0	1 - 1	2	3	
Sinuosity of channel along thalweg	0	1	2	3	
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	
Particle size of stream substrate	0	1	2	3	
Active/relict floodplain	0	1	2	3	
6. Depositional bars or benches	0	1	2	3	
7. Recent alluvial deposits	0	1	2	3	
8. Headcuts	0	1	2	3	
9. Grade control	0	0.5	[1]	1.5	
10. Natural valley	0	0.5	9	1.5	
11. Second or greater order channel	No	= 0	Yes = 3		
B. Hydrology (Subtotal = 10.5) 12. Presence of Baseflow	0	1	2	3	
13. Iron oxidizing bacteria	0	1	2	3	
14. Leaf litter	1.5	1	0.5	0	
15. Sediment on plants or debris	0	0,5	1	1.5	
16. Organic debris lines or piles	0	0.5	46 ===	1.5	
17. Soil-based evidence of high water table?	No	= 0	Yes = 3		
C. Biology (Subtotal = 9.75)				1 - Total	
18. Fibrous roots in streambed	3	2		0	
19. Rooted upland plants in streambed	3	2	1	0	
20. Macrobenthos (note diversity and abundance)	0	1	2	3	
21. Aquatic Mollusks	0	1	2	3	
22. Fish	0	0.5	1)	1.5	
23. Crayfish	0	0.5	1	1.5	
24. Amphibians	0	0.5	1	1.5	
25. Algae	0	0.5	1	1.5	
26. Wetland plants in streambed		FACW = 0.75; OBL	= 1.5 Other = 0		
*perennial streams may also be identified using other meth	nods. See p. 35 of manual				
Notes:					

	Project/Site: Fl	Latitude:			
Evaluator: A.Ricci - WithersRavenel	County: Chath	nam	Congitude: Other e.g. Quad Name:		
Total Points: Stream is at least intermittent 8 if ≥ 19 or perennial if $\geq 30^*$	Stream Determin Ephemeral Inter	nation (circle one) mittent Perennial			
A. Geomorphology (Subtotal = 5	Absent	Weak	Moderate	Strong	
1 ^{a.} Continuity of channel bed and bank	0	1	2	3	
Sinuosity of channel along thalweg	0	1	2	3	
 In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 	0	1	2	3	
Particle size of stream substrate	0	1	2	3	
5. Active/relict floodplain	0	1	2	3	
6. Depositional bars or benches	0	1	2	3	
7. Recent alluvial deposits	0	1	2	3	
8. Headcuts	0	1	2	3	
9. Grade control	0	0.5	11+	1.5	
10. Natural valley	0	0.5	1	1.5	
11. Second or greater order channel	No	= 0	Yes = 3		
^a artificial ditches are not rated; see discussions in manual					
B. Hydrology (Subtotal = 0)		Î			
12. Presence of Baseflow	0	1	2	3	
13. Iron oxidizing bacteria	0	1	2	3	
14. Leaf litter	1.5		0.5	0	
15. Sediment on plants or debris	0	0.5	7	1,5	
16. Organic debris lines or piles	0	0.5	1	1.5	
17. Soil-based evidence of high water table?	No	= 0	Yes	= 3	
C. Biology (Subtotal = 3)					
18. Fibrous roots in streambed	3	2	1	0	
19. Rooted upland plants in streambed	3	2	1	0	
20. Macrobenthos (note diversity and abundance)	0	1	2	3	
21. Aquatic Mollusks	0	1	2	3	
22. Fish	0	0.5	1 +	1.5	
23. Crayfish	0	0.5	1	1.5	
24. Amphibians	0	0.5	11	1.5	
25. Algae	0	0.5	1	1.5	
		FACW = 0.75; OBI	_ = 1.5 Other = 0		
26. Wetland plants in streambed					
	ods. See p. 35 of manual				

Date: 3/30/2022	Project/Site: F1	atiron Forest	Latitude:		
Evaluator: A.Ricci - WithersRavenel	County: Chath	am	Longitude:		
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$	Stream Determin Ephemeral nter	nation (circle one) mittent Perennial	Other e.g. Quad Name:		
A. Geomorphology (Subtotal = 6	Absent	Weak	Moderate	Strong	
1 ^a Continuity of channel bed and bank	0	1	2	3	
2. Sinuosity of channel along thalweg	0	1	2	3	
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	
4. Particle size of stream substrate	0	4	2	3	
5. Active/relict floodplain	0	1	2	3	
6. Depositional bars or benches	0	1	2	3	
7. Recent alluvial deposits	0	1	2	3	
8. Headcuts	0	1)	2	3	
9. Grade control	0	0.5	1 1	1.5	
10. Natural valley	0	0.5	1	1.5	
11. Second or greater order channel	No	= 0	Yes	= 3	
artificial ditches are not rated; see discussions in manual					
B. Hydrology (Subtotal = 2)					
12. Presence of Baseflow	0	1	2	3	
13. Iron oxidizing bacteria	0	1	2	3	
14. Leaf litter	1.5	(1)	0.5	0	
15. Sediment on plants or debris	(0)	0.5	7	1,5	
16. Organic debris lines or piles	0	0.5	(1)	1.5	
17. Soil-based evidence of high water table?	No	= 0	Yes		
C. Biology (Subtotal = 5)					
18. Fibrous roots in streambed	3	2	1	0	
19. Rooted upland plants in streambed	(3)	2	1	0	
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3	
21. Aquatic Mollusks	0	1	2	3	
22. Fish	0	0.5	1	1.5	
23. Crayfish	0	0.5	1	1.5	
24. Amphibians	0	0.5	-1	1.5	
25. Algae	0	0.5	1	1.5	
26. Wetland plants in streambed		FACW = 0.75; OBI	_ = 1.5 Other = 0		
*perennial streams may also be identified using other method	ds. See p. 35 of manual				
Notes:					
Sketch:					

	NAT GENERALIE	atiron Forest	Latitude:			
Evaluator: A.Ricci - WithersRavenel	County: Chath	am	Longitude:			
Total Points: Stream is at least intermittent 26 if ≥ 19 or perennial if ≥ 30*		rmittent Perennial	Other e.g. Quad Name:			
A. Geomorphology (Subtotal = 11.5)	Absent	Weak	Moderate	Strong		
1 ^a Continuity of channel bed and bank	0	1	2	3		
Sinuosity of channel along thalweg	0	1	2	3		
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3		
Particle size of stream substrate	0	1	2	3		
5. Active/relict floodplain	0	1	2	3		
6. Depositional bars or benches	0	1 - 1 -	2	3		
7. Recent alluvial deposits	0	1	2	3		
8. Headcuts	0	1	2	3		
9. Grade control	0	0.5	11*	1.5		
10. Natural valley	0	0.5	1	1.5		
11. Second or greater order channel	No	= 0	Yes	= 3		
artificial ditches are not rated; see discussions in manual						
B. Hydrology (Subtotal = 8)		T-				
12. Presence of Baseflow	0	1	2	3		
13. Iron oxidizing bacteria	0	1	2	3		
14. Leaf litter	1.5	1	0.5	0		
15. Sediment on plants or debris	0	0.5	9	1,5		
15. Sediment on plants or debris 16. Organic debris lines or piles	0	0.5	The second	1.5		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table?	0			1.5		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5)	0 No	= 0	1 Yes	1.5		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5) 18. Fibrous roots in streambed	0 No	0.5	1 Yes	1.5		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed	0 No	0.5 = 0	1 Yes:	1.5 = 3		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal =6.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance)	0 No	0.5 = 0	1 Yes :	1.5 0 0 3		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks	3 3 0	0.5 = 0	1 Yes :	1.5 0 0 3 3		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish	3 3 0 0	0.5 = 0	1 Yes:	1.5 0 0 3 3 1.5		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish	3 3 0 0	0.5 = 0	1 Yes:	1.5 0 0 3 3 1.5 1.5		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians	0 No No O O O O O O O O O O O O O O O O O	0.5 = 0 2 2 1 1 0.5 0.5 0.5	1 Yes :	1.5 0 0 3 3 1.5 1.5		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae	3 3 0 0	0.5 = 0 2 2 1 1 0.5 0.5 0.5 0.5	1 Yes :	1.5 0 0 3 3 1.5 1.5 1.5		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed	0 No No 0 0 0	0.5 = 0 2 2 1 1 0.5 0.5 0.5 0.5 0.5 FACW = 0.75; OBI	1 Yes :	1.5 0 0 3 3 1.5 1.5 1.5		
15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 6.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae	0 No No 0 0 0	0.5 = 0 2 2 1 1 0.5 0.5 0.5 0.5 0.5 FACW = 0.75; OBI	1 Yes :	1.5 0 0 3 3 1.5 1.5 1.5		

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Flatiron Forest	City/County: Pittsboro/Chatham County Sampling Date: 3/30/2022
Applicant/Owner: RBV 1525, LLC - Rex Vick Jr, Manager	State: NC Sampling Point: DP-1
Investigator(s): A.Ricci & P.Welsh - WithersRavenel	Section, Township, Range:
	cal relief (concave, convex, none): Slope (%): <1
Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.795870731	
Soil Map Unit Name: HeB - Helena sandy loam, 6 to 10 percent slopes	
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly dis	
Are Vegetation, Soil, or Hydrologynaturally proble	
SUMMARY OF FINDINGS – Attach site map snowing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	
This sampling point was located within Wetland B, at Flag AA-5, near tas conditions were similar.	the lat/long specified above. This dataform also applies to Wetlands D, and E,
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) Sparsely Vegetated Concave Surface (B8)
X High Water Table (A2) Hydrogen Sulfide Od	or (C1) X Drainage Patterns (B10)
	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	<u> </u>
Sediment Deposits (B2) Recent Iron Reduction	
Drift Deposits (B3) Thin Muck Surface (C	
Algal Mat or Crust (B4) Other (Explain in Rer	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
X Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inche	
Water Table Present? Yes X No Depth (inche	
Saturation Present? Yes X No Depth (inche	es): 1 Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos	nrovious inspections) if available:
Describe Recorded Data (stream gauge, monitoring well, aerial priotos	, previous inspections), ii available.
Remarks:	
Wetland hydrology was present at this sampling point.	

VEGETATION (Five Strata) - Use scientific names of plants. Sampling Point: DP-1 Absolute Indicator Tree Stratum (Plot size: 30' Radius) % Cover Species? Status **Dominance Test worksheet:** 10 **FACW** 1. Betula nigra No **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Platanus occidentalis 10 No **FACW** (A) 3. Pinus taeda 50 Yes FAC Total Number of Dominant 4. Acer rubrum 20 Yes FAC Species Across All Strata: 9 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: =Total Cover 50% of total cover: 20% of total cover: Total % Cover of: Multiply by: Sapling Stratum (Plot size: 15' Radius) **OBL** species Pinus taeda 15 FAC **FACW** species 60 120 1. Yes x 2 =2. Acer rubrum 15 Yes FAC FAC species 110 x 3 = 330 0 3. **FACU** species x 4 = O 0 0 4. UPL species x 5 = 5. Column Totals: 170 (A) 450 6. Prevalence Index = B/A = 2.65 **Hydrophytic Vegetation Indicators:** 30 =Total Cover 50% of total cover: 15 20% of total cover: 1 - Rapid Test for Hydrophytic Vegetation Shrub Stratum (Plot size: 15' Radius) X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0¹ Acer rubrum FAC Morella cerifera 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. 4. Problematic Hydrophytic Vegetation¹ (Explain) 5. ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 6. 10 =Total Cover **Definitions of Five Vegetation Strata:** 50% of total cover: 20% of total cover: Tree – Woody plants, excluding woody vines, 5' Radius) approximately 20 ft (6 m) or more in height and 3 in. Herb Stratum (Plot size: (7.6 cm) or larger in diameter at breast height (DBH). Arundinaria gigantea **FACW** Woodwardia areolata 10 **FACW** Yes Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less 3. Juncus effusus **FACW** 10 Yes than 3 in. (7.6 cm) DBH. 4. 5. Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. 6. 7. Herb - All herbaceous (non-woody) plants, including 8. herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 9. 3 ft (1 m) in height. 10. Woody Vine - All woody vines, regardless of height. =Total Cover 50% of total cover: 20 20% of total cover: ___ Woody Vine Stratum (Plot size: 30' Radius) 1. None 2. 3. 4. Hydrophytic =Total Cover Vegetation

20% of total cover:

Present?

Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation was present at this sampling point.

50% of total cover:

No

Yes X

SOIL Sampling Point: DP-1

Profile Des	cription: (Describe to	the dep				ator or co	onfirm the absence o	of indicators.)
Depth	Matrix			k Featur				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 4/2	95	7.5YR 4/6	5	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox concentrations
3-14	10YR 5/1	90	7.5YR 4/6	10	С	M	Loamy/Clayey	Prominent redox concentrations
-								
1 _{Tyrpo:} C-C	oncentration, D=Deple	tion DM	-Paduood Matrix N		Lod Con	Croins	² l coation:	PL=Pore Lining, M=Matrix.
Hydric Soil		etion, Rivi=	Reduced Matrix, IV	io=ivias	keu Sand	Giains.		ators for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be	alow Sur	face (SR)	(MI RA		cm Muck (A10) (MLRA 147)
	pipedon (A2)		Thin Dark Su			-		coast Prairie Redox (A16)
	istic (A3)		Loamy Muck	•	, .			(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	•		ILIVA IO	•	iedmont Floodplain Soils (F19)
· ·	d Layers (A5)		X Depleted Ma				<u> </u>	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark				R	ed Parent Material (F21)
	d Below Dark Surface	(A11)	Depleted Da				<u>—</u> ·`	(outside MLRA 127, 147, 148)
	ark Surface (A12)	(,,,,	Redox Depre		, ,		V	ery Shallow Dark Surface (F22)
	/lucky Mineral (S1)		Iron-Mangan			2) (LRR N		Other (Explain in Remarks)
	Gleyed Matrix (S4)		MLRA 136		`	, (· —	,
	Redox (S5)		Umbric Surfa) (MLRA	122, 136	3Indic	ators of hydrophytic vegetation and
	Matrix (S6)		Piedmont Flo					retland hydrology must be present,
	rface (S7)		Red Parent N		•	, .		nless disturbed or problematic.
	Layer (if observed):				• / •		, , <u>, , , , , , , , , , , , , , , , , </u>	, , , , , , , , , , , , , , , , , , ,
Type:	Layer (ii observea).							
Depth (i	nches):						Hydric Soil Prese	nt? Yes X No
Remarks:							1	
	were present at this sa	amplina pa	oint.					
,								

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Flatiron Forest		City/County: Pittsboro/	Chatham County	Sampling Date: 3/30/2022		
Applicant/Owner: RBV 1525, LLC - Rex	Vick Jr, Manager		State: NC	Sampling Point: DP-2		
Investigator(s): A.Ricci & P.Welsh - WithersF	Ravenel	Section, Township, Range:				
Landform (hillside, terrace, etc.):		cal relief (concave, convex,		Slope (%): >1		
Subregion (LRR or MLRA): LRR P, MLRA 1			79.129765404	Datum: NAD83		
Soil Map Unit Name: HeB - Helena sandy lo						
<u>-</u>			NWI classifica			
Are climatic / hydrologic conditions on the site	,,			explain in Remarks.)		
Are Vegetation, Soil, or Hydro			ircumstances" present			
Are Vegetation, Soil, or Hydro	logynaturally proble	ematic? (If needed, exp	olain any answers in R	emarks.)		
SUMMARY OF FINDINGS – Attach	site map showing s	sampling point locati	ons, transects, in	nportant features, etc.		
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Area				
Hydric Soil Present?	Yes No X	within a Wetland?	Yes	No X		
Wetland Hydrology Present?	Yes No X					
This sampling point was located within uplar uplands adjacent to Wetlands D, and E, as o	•	, act lay AA-0, fiedt tile lavi	ону эрсошей авоче. Т	тто часатотті атоб аррпео (О		
HYDROLOGY			On a serial and the discrete re-	(- i - i - i - i - i - i - i - i - i -		
Wetland Hydrology Indicators:			-	(minimum of two required)		
Primary Indicators (minimum of one is required Surface Water (A1)	red; cneck all that apply) True Aquatic Plants	/D14\	Surface Soil Crac	ed Concave Surface (B8)		
High Water Table (A2)	Hydrogen Sulfide Od					
Saturation (A3)		res on Living Roots (C3)	Drainage Patterns (B10) Moss Trim Lines (B16)			
Water Marks (B1)	Presence of Reduce	= : : :	Dry-Season Wate			
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows			
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible	e on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Rei	marks)	Stunted or Stress	sed Plants (D1)		
Iron Deposits (B5)			Geomorphic Pos	ition (D2)		
Inundation Visible on Aerial Imagery (B7	7)		Shallow Aquitard			
Water-Stained Leaves (B9)			Microtopographic			
Aquatic Fauna (B13)		1	FAC-Neutral Tes	t (D5)		
Field Observations:		,				
Surface Water Present? Yes	No X Depth (inche					
Water Table Present? Yes Saturation Present? Yes	No X Depth (inche	· ——	Hydrology Present?	Yes No X		
(includes capillary fringe)	No A Deptil (illicht	es). 24 Welland	nyurology Fresent:	Yes No _X_		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if a	vailable:			
, ,						
Remarks:						
Wetland hydrology was not present at this sa	ampling point.					

VEGETATION (Five Strata) - Use scientific names of plants. Sampling Point: DP-2 Absolute Indicator Tree Stratum (Plot size: 30' Radius) % Cover Species? Status **Dominance Test worksheet:** Pinus taeda FAC 70 Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Acer rubrum 10 No FAC (A) 3. Total Number of Dominant 4. Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: 80 =Total Cover 50% of total cover: 20% of total cover: Total % Cover of: Multiply by: Sapling Stratum (Plot size: 15' Radius) **OBL** species Pinus taeda 30 FAC **FACW** species 0 1. Yes x 2 =2. Acer rubrum 10 Yes FAC FAC species 120 x 3 = 360 10 50 3. llex opaca Yes **FACU FACU** species x 4 = 200 0 4. 0 UPL species x 5 = 5. Column Totals: 170 (A) 560 6. Prevalence Index = B/A = 3.29 **Hydrophytic Vegetation Indicators:** 50 =Total Cover 50% of total cover: 20% of total cover: 1 - Rapid Test for Hydrophytic Vegetation Shrub Stratum (Plot size: 15' Radius) 2 - Dominance Test is >50% **FACU** 3 - Prevalence Index is ≤3.01 Ligustrum sinense 15 Yes llex opaca 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. 4. Problematic Hydrophytic Vegetation¹ (Explain) 5. ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 6. **Definitions of Five Vegetation Strata:** =Total Cover 50% of total cover: 13 20% of total cover: Tree – Woody plants, excluding woody vines, 5' Radius) approximately 20 ft (6 m) or more in height and 3 in. Herb Stratum (Plot size: (7.6 cm) or larger in diameter at breast height (DBH). 1. Polystichum acrostichoides 2. Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less 3. than 3 in. (7.6 cm) DBH. 4. 5. Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. 6. 7. Herb - All herbaceous (non-woody) plants, including 8. herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 9. 3 ft (1 m) in height. 10. Woody Vine - All woody vines, regardless of height. 15 =Total Cover 8 20% of total cover: 50% of total cover: Woody Vine Stratum (Plot size: 30' Radius) 1. None 2. 3. 4. Hydrophytic =Total Cover Vegetation

20% of total cover:

Present?

Yes

Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation was not present at this sampling point.

50% of total cover:

No X

SOIL Sampling Point: DP-2

Profile Des	cription: (Describe t	o the depth i	needed to doc	ument tl	ne indica	tor or co	onfirm the absence of	of indicators.)	
Depth	Matrix			x Featur	es				
(inches)	Color (moist)	<u></u> % C	color (moist)	%	Type ¹	Loc ²	Texture	Re	emarks
0-14	10YR 5/3	100					Loamy/Clayey		
							, , ,		
			_				_		
	oncentration, D=Deple	etion, RM=Re	duced Matrix, N	/IS=Mas	ked Sand	Grains.		: PL=Pore Lining,	
Hydric Soil									natic Hydric Soils ³ :
Histosol		_	Polyvalue Be			-		2 cm Muck (A10) (I	
	pipedon (A2)	_	Thin Dark Su					Coast Prairie Redo	
	istic (A3)	_	Loamy Muck			ILRA 136		(MLRA 147, 148)	
	en Sulfide (A4)	_	Loamy Gley				<u> </u> f	Piedmont Floodplai	
	d Layers (A5)	_	Depleted Ma				-	(MLRA 136, 147)	
	uck (A10) (LRR N) d Below Dark Surface	(//11)	Redox Dark Depleted Da				<u> </u>	Red Parent Materia	
	ark Surface (A12)	(A11) _	Redox Depre		, ,		\	(outside MLRA 1 ery Shallow Dark)	
	Mucky Mineral (S1)	_	Iron-Mangan		. ,) (LRR N		Other (Explain in R	
	Gleyed Matrix (S4)	_	MLRA 136		3000 (1 12	., (= :\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Stror (Explain in re	omanoj
	Redox (S5)		Umbric Surfa	-) (MLRA	122, 136	3Indic	cators of hydrophyt	ic vegetation and
	d Matrix (S6)	_	Piedmont Fl					vetland hydrology i	-
	ırface (S7)		Red Parent I					ınless disturbed or	·
Restrictive	Layer (if observed):								
Type:	, ,								
Depth (i	nches):						Hydric Soil Prese	ent? Yes_	No X
Remarks:	<u> </u>								
Hydric soils	were not present at th	is sampling p	oint.						

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Flatiron Forest	City/County: Pittsboro/	Chatham County Sampling Date: 3/30/2022
Applicant/Owner: RBV 1525, LLC - Rex Vick Jr, Manager		State: NC Sampling Point: DP-3
Investigator(s): A.Ricci & P.Welsh - WithersRavenel	Section, Township, Range:	
Landform (hillside, terrace, etc.):	Local relief (concave, convex,	
Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.797		79.128303468 Datum: NAD83
		NWI classification: Headwater forest
Soil Map Unit Name: HeB - Helena sandy loam, 6 to 10 percer		
Are climatic / hydrologic conditions on the site typical for this tim	<u>—</u>	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signific		ircumstances" present? Yes X No
Are Vegetation, Soil, or Hydrologynatural		plain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point locati	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland?	Yes X No
Wetland Hydrology Present? Yes X No		
Remarks: This sampling point was located within Wetland C at Flag C-10 conditions were similar.), near the lat/long specified above.	This dataform also applies to Wetlands A and F, as
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)
X Surface Water (A1) True Aquatic	Plants (B14)	Sparsely Vegetated Concave Surface (B8)
	Ifide Odor (C1)	X Drainage Patterns (B10)
	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 St	, ,	Saturation Visible on Aerial Imagery (C9)
	n in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)		X Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
X Water-Stained Leaves (B9) Aquatic Fauna (B13)		Microtopographic Relief (D4) X FAC-Neutral Test (D5)
		A PAC-Neutral Test (D3)
Field Observations: Surface Water Present? Yes X No Dep	th (inches):	
·	th (inches): 1 th (inches): 2	
	· · · · · · · · · · · · · · · · · · ·	Hydrology Present? Yes X No
(includes capillary fringe)	Trettana i	100 <u>X</u> 100 <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aeria	photos, previous inspections), if a	vailable:
Remarks: Wetland hydrology was present at this sampling point.		
, , , , , , , , , , , , , , , , , , , ,		

VEGETATION (Five Strata) – Use scientific names of plants. Sampling Point: DP-3 Absolute Indicator Tree Stratum (Plot size: 30' Radius) % Cover Species? Status **Dominance Test worksheet: FACW** 1. Betula nigra 20 Yes **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. Platanus occidentalis 30 Yes **FACW** 11 (A) 3. Pinus taeda 30 Yes FAC Total Number of Dominant Salix nigra 4. 15 No OBL Species Across All Strata: (B) 11 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: =Total Cover 50% of total cover: 20% of total cover: Total % Cover of: Multiply by: Sapling Stratum (Plot size: 15' Radius) **OBL** species OBL 15 **FACW** species 120 240 1. Salix nigra Yes x 2 =2. Pinus taeda 20 Yes FAC FAC species 70 x3 =210 0 3. 10 Yes FAC 0 Acer rubrum **FACU** species x 4 =0 0 4. **UPL** species x5 =5. Column Totals: 220 (A) 480 (B) 6. Prevalence Index = B/A = 2.18 **Hydrophytic Vegetation Indicators:** 45 =Total Cover 50% of total cover: 20% of total cover: 1 - Rapid Test for Hydrophytic Vegetation 23 15' Radius) X 2 - Dominance Test is >50% Shrub Stratum (Plot size: X 3 - Prevalence Index is ≤3.0¹ **FACW** 1. Vaccinium corymbosum 15 Yes Acer rubrum 4 - Morphological Adaptations¹ (Provide supporting

6.			
	25	=Total Cover	
50% of total cover:1	3 209	% of total cover:	5
Herb Stratum (Plot size: 5' Radius)			
Woodwardia areolata	20	Yes	FACW
2. Juncus effusus	15	Yes	FACW
3. Carex spp.	20	Yes	FACW
4.			
5			
6.			
7.			
8			
9.			
10			
11			
	55	=Total Cover	
50% of total cover: 2	8 20°	% of total cover:	11
Woody Vine Stratum (Plot size:30' Radius)			
1. None			

be present, unless disturbed or problematic. Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody Vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present?

=Total Cover

20% of total cover:

esent? Yes X

X No

Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation was present at this sampling point.

50% of total cover:

3. 4.

5.

3. 4. SOIL Sampling Point: DP-3

		o the dep				ator or c	onfirm the absence o	of indicators.)
Depth	Matrix			Featur	- 1	. 2	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc ²	Texture	Remarks
0-4	10YR 3/2	90	7.5YR 4/6	10	С	M	Loamy/Clayey	Prominent redox concentrations
4-14	10YR 4/1	90	7.5YR 4/6	10	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox concentrations
					_	_		
		<u> </u>			_	_		
¹ Type: C=Co	ncentration, D=Deple	etion, RM	=Reduced Matrix, M	IS=Mas	ked Sand	d Grains.	² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil I								ators for Problematic Hydric Soils ³ :
Histosol ((A1)		Polyvalue Be	low Sur	face (S8)	(MLRA		cm Muck (A10) (MLRA 147)
	ipedon (A2)		Thin Dark Su			-		Coast Prairie Redox (A16)
Black His			Loamy Muck					(MLRA 147, 148)
	Sulfide (A4)		Loamy Gleye					riedmont Floodplain Soils (F19)
	Layers (A5)		X Depleted Ma				 `	(MLRA 136, 147)
	ck (A10) (LRR N)		X Redox Dark				R	led Parent Material (F21)
	Below Dark Surface	(A11)	Depleted Dai					(outside MLRA 127, 147, 148)
 ·	rk Surface (A12)	,	Redox Depre		` '		V	ery Shallow Dark Surface (F22)
	ucky Mineral (S1)		Iron-Mangan			2) (LRR I		Other (Explain in Remarks)
	eyed Matrix (S4)		MLRA 136)	,		<u> </u>	,
Sandy Re	edox (S5)		Umbric Surfa	ce (F13	3) (MLRA	122, 13	6) ³ Indic	ators of hydrophytic vegetation and
Stripped	Matrix (S6)		Piedmont Flo	odplain	Soils (F	19) (MLR	A 148) w	vetland hydrology must be present,
Dark Sur			Red Parent N	/laterial	(F21) (M	LRA 127	-	nless disturbed or problematic.
Restrictive L	ayer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil Prese	nt? Yes <u>X</u> No
Remarks:								
Hydric soils v	ere present at this s	ampling p	oint.					

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Flatiron Forest		City/County: Pittsboro/C	hatham County	Sampling Date: 3/30/2022		
Applicant/Owner: RBV 1525, LLC - Rex \	ick Jr, Manager		State: NC	Sampling Point: DP-4		
Investigator(s): A.Ricci & P.Welsh - WithersR	avenel	Section, Township, Range:		_		
Landform (hillside, terrace, etc.):		al relief (concave, convex, n	ione):	Slope (%): >1		
Subregion (LRR or MLRA): LRR P, MLRA 13			9.128303468	Datum: NAD83		
Soil Map Unit Name: HeB - Helena sandy loa						
			NWI classifica			
Are climatic / hydrologic conditions on the site	,,			explain in Remarks.)		
Are Vegetation, Soil, or Hydrol			rcumstances" present	? Yes X No		
Are Vegetation, Soil, or Hydrol	ogynaturally proble	matic? (If needed, expl	ain any answers in Re	emarks.)		
SUMMARY OF FINDINGS – Attach	site map showing s	ampling point locatio	ons, transects, in	nportant features, etc.		
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Area				
	Yes No X	within a Wetland?	Yes	No X		
Wetland Hydrology Present?	Yes No X					
This sampling point was located within uplan uplands adjacent to Wetlands A and F, as co		atriag C-10, near the labion	ту эреспіви авоче. ТГ	iis uataiviiii aisu appiles tu		
HYDROLOGY			0	(
Wetland Hydrology Indicators:	- dblll (b - (b)			(minimum of two required)		
Primary Indicators (minimum of one is require Surface Water (A1)			Surface Soil Crac	` '		
High Water Table (A2)	True Aquatic Plants (I Hydrogen Sulfide Odd	•		ed Concave Surface (B8)		
Saturation (A3)		es on Living Roots (C3)	Drainage Patterns (B10) Moss Trim Lines (B16)			
Water Marks (B1)	Presence of Reduced			Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Recent Iron Reduction	` '	Crayfish Burrows			
Drift Deposits (B3)	Thin Muck Surface (C	37)		e on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Rem	narks)	Stunted or Stress	ed Plants (D1)		
Iron Deposits (B5)		- -	Geomorphic Posi	tion (D2)		
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard	(D3)		
Water-Stained Leaves (B9)		-	Microtopographic			
Aquatic Fauna (B13)			FAC-Neutral Test	t (D5)		
Field Observations:						
Surface Water Present? Yes	No X Depth (inche					
Water Table Present? Yes Saturation Present? Yes	No X Depth (inche	′ 	vdrology Procent?	Voc. No. V		
Saturation Present? Yes (includes capillary fringe)	No X Depth (inche	S). 24 Wellaliu H	ydrology Present?	Yes No <u>X</u>		
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos.	previous inspections), if av	ailable:			
		.,,				
Remarks:	malina naint					
Wetland hydrology was not present at this sa	impling point.					

VEGETATION (Five Strata) - Use scientific names of plants. Sampling Point: DP-4 Absolute Indicator Tree Stratum (Plot size: 30' Radius) % Cover Species? Status **Dominance Test worksheet:** Pinus taeda 30 FAC 1. Yes **Number of Dominant Species** FAC That Are OBL, FACW, or FAC: 2. Acer rubrum 10 No 5 (A) 3. Quercus falcata 20 Yes **FACU** Total Number of Dominant 4. Quercus stellata 10 No UPL Species Across All Strata: 10 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: =Total Cover 50% of total cover: 20% of total cover: Total % Cover of: Multiply by: Sapling Stratum (Plot size: 15' Radius) **OBL** species Pinus taeda 20 FAC **FACW** species 0 1. Yes x 2 =0 2. Acer rubrum 20 Yes FAC FAC species 90 x3 =270 **FACU** species 75 3. llex opaca 10 Yes **FACU** x 4 = 300 4. 10 UPL species x 5 = 50 Column Totals: 5. 175 (A) 620 6. Prevalence Index = B/A = 3.54 **Hydrophytic Vegetation Indicators:** 50 =Total Cover 50% of total cover: 20% of total cover: 1 - Rapid Test for Hydrophytic Vegetation Shrub Stratum (Plot size: 15' Radius) 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 1. Pinus taeda Yes FAC Acer rubrum FAC 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 3. llex opaca 5 Yes **FACU** 4. Problematic Hydrophytic Vegetation¹ (Explain) 5. ¹Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. 15 **Definitions of Five Vegetation Strata:** =Total Cover 20% of total cover: 50% of total cover: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. Herb Stratum (Plot size: 5' Radius) (7.6 cm) or larger in diameter at breast height (DBH). Ligustrum sinense Yes **FACU** Polystichum acrostichoides **FACU** Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less 3. than 3 in. (7.6 cm) DBH. 4. 5. Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. 6. 7. Herb - All herbaceous (non-woody) plants, including 8. herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 9. 3 ft (1 m) in height. 10. Woody Vine - All woody vines, regardless of height. =Total Cover 50% of total cover: _ 20 20% of total cover: Woody Vine Stratum (Plot size: 30' Radius) 1. None 2. 3. 4. Hydrophytic =Total Cover Vegetation

20% of total cover:

Present?

Yes

Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation was not present at this sampling point.

50% of total cover:

No X

SOIL Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix			x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Rem	narks
0-14	10YR 5/4	100					Loamy/Clayey	/		
										_
¹ Type: C=C	oncentration, D=Deple	etion, RM=I	Reduced Matrix, N	1S=Mas	ked Sand	Grains.	² Loca	ation: PL=P	ore Lining, N	∕l=Matrix.
Hydric Soil	Indicators:									ntic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	low Su	face (S8)	(MLRA	147, 148)	2 cm Mu	uck (A10) (M I	LRA 147)
	pipedon (A2)		Thin Dark Su			-	_		rairie Redox	-
	istic (A3)		Loamy Muck				_		A 147, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matri	x (F2)			Piedmor	nt Floodplain	Soils (F19)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			_	(MLR/	A 136, 147)	
2 cm Mu	uck (A10) (LRR N)		Redox Dark	Surface	(F6)			Red Par	ent Material	(F21)
Deplete	d Below Dark Surface	(A11)	Depleted Da	rk Surfa	ce (F7)		·-	(outsi	de MLRA 12	7, 147, 148)
Thick Da	ark Surface (A12)		Redox Depre	essions	(F8)		_	Very Sh	allow Dark S	urface (F22)
Sandy N	Mucky Mineral (S1)		Iron-Mangan	ese Ma	sses (F12	2) (LRR N	١,	Other (E	xplain in Rer	marks)
Sandy C	Gleyed Matrix (S4)		MLRA 136	5)						
Sandy F	Redox (S5)		Umbric Surfa	ace (F13	B) (MLRA	122, 136	3)	Indicators o	f hydrophytic	vegetation and
Stripped	d Matrix (S6)		Piedmont Flo	oodplain	Soils (F	19) (MLR	A 148)	wetland	hydrology m	ust be present,
Dark Su	ırface (S7)		Red Parent I	Material	(F21) (M	LRA 127	, 147, 148)	unless d	listurbed or p	roblematic.
Restrictive	Layer (if observed):									
Type:										
Depth (i	nches):						Hydric Soil P	resent?	Yes	No _ X
Remarks:	·						-			
Hydric soils	were not present at th	is sampling	g point.							

6/7/22, 2:27 PM OpenGov



County of Chatham, NC

06/07/2022

WP-22-294

On-site Riparian Buffer Review

Status: Active Date Created: May 11, 2022

Applicant

Alyssa Ricci aricci@withersravenel.com 115 Mackenan Drive Cary, North Carolina 27511 9192158619

Location

0 VACANT North Carolina 00000

Owner:

CHATHAM LAND & TIMBER MGMT LLC BROWNING MARGARET 981 OLD GRAHAM RD PITTSBORO , NC 27312

Project Information

Review Type

Major Subdivision

Before continuing please complete a phone or email conversation with Paula Phillips of the Planning Department. (919) 542-8276 paula.phillips@chathamcountync.gov

If your project will result in a review of greater than 10 acres please contact a private consulting firm to complete the surface water determination. For stream determinations the consultant must have successfully completed the NCDWQ/NC State University Surface Waters Classification. For wetland delineations the consultant must demonstrate at least 2 years of experience delineating jurisdictional wetlands in accordance with the Eastern Mountains and Piedmont Regional Supplement to the 1987 US Corps of Engineers Wetland Delineation Manual. Please visit the Watershed Protection Department website for a list of consultants that regularly complete work within Chatham County.

If your project is a Major Subdivision please contact a private consulting firm to complete the surface water determination. For stream determinations the consultant must have successfully completed the NCDWQ/NC State University Surface Waters Classification. For wetland delineations the consultant must demonstrate at least 2 years of experience delineating jurisdictional wetlands in accordance with the Eastern Mountains and Piedmont Regional Supplement to the 1987 US Corps of Engineers Wetland Delineation Manual. Please visit the Watershed Protection Department website for a list of

Number of Features Found

9

Feature is defined as any surface water that is subject to Chatham County Riparian Buffers (streams, wetlands, ponds). Include each stream type transition, with corresponding forms, and individual wetland in your total. Total is total features found before USACE or County site visit.

consultants that regularly complete work within

Chatham County.

Date Field Work Was Completed

03/30/2022

Has USACE on-site review been scheduled or completed

--

A Minor Subdivision is the creation of 5 or less new lots. If the original tract is over 10 acres and the subdivision results in the total of that tract becoming

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less than 10 acres then two lots have been created by default.

Parcel Information

Parcel Number (s)

9764-00-14-6789, 9764-00-13-3695

Watershed District

WS-IV PA

Is the property within the Jordan Lake Watershed

Yes

Property Owner Name

Chatham Land & Timber Management LLC & Margaret Browning

Location of Tract (address if applicable)

Located immediately north of 624 Hamlets Chapel Road

Driving Directions from Pittsboro

Drive north on 15-501, turn left on Hamlets Chapel Rd, Site on right side of road just past Parker Herndon Rd.

Subdivision Name (if applicable)

Flatiron Forest Subdivision

Please describe access issues (provide gate codes, or information for scheduling site visit)

No gate, park on the side of the road

Applicants Information

Are you the Landowner or an Agent

Agent

Primary Phone Number

919-215-8619

Mailing Address 115 Mackenan Dr

Zip Code 27511

Full Name

Alyssa Ricci

Primary Email

aricci@withersravenel.com

City/State

Cary

How would you like to receive the completed review letter?

I would like to pick up the completed Riparian Buffer Review at the County Office

I would like the completed Riparian Buffer Review mailed to me

I would like the completed Riparian Buffer Review e-mailed to me.

 \checkmark

Statement of Understanding

I have read and understand the regulations of the Watershed Protection Ordinance, Section 304, and I agree to adhere to these associated policies and guidelines.

Name

Alyssa Ricci

New Field

05/10/2022

Attachments

pdf) Access Authorization_Chatham Land and Timber Management LLC.pdf Uploaded by Alyssa Ricci on May 10, 2022 at 12:42 pm

pdf

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Agent Authorization_RBV 1525 LLC.pdf Uploaded by Alyssa Ricci on May 10, 2022 at 12:43 pm

pdf Coverletter.pdf

Uploaded by Alyssa Ricci on May 11, 2022 at 8:12 am

pdf Flatiron Forest_Buffer Determination Exhibit.pdf Uploaded by Alyssa Ricci on May 10, 2022 at 12:44 pm

pdf Stream ID Forms.pdf

Uploaded by Alyssa Ricci on May 11, 2022 at 8:16 am

pdf Soil Survey.pdf

Uploaded by Alyssa Ricci on May 10, 2022 at 12:47 pm

pdf USGS.pdf

Uploaded by Alyssa Ricci on May 10, 2022 at 12:45 pm

pdf Stream Photo Documentation.pdf

Uploaded by Alyssa Ricci on May 11, 2022 at 8:55 am

History

Date	Activity
May 10, 2022 at 12:26 pm	Alyssa Ricci started a draft of Record WP-22-294
May 11, 2022 at 8:54 am	Alyssa Ricci added attachment Stream Photo Documentation.pdf to Record WP-22-294
May 11, 2022 at 8:55 am	Alyssa Ricci submitted Record WP-22-294
May 11, 2022 at 8:55 am	approval step Intake Approval was assigned to Drew Blake on Record WP-22-294
May 11, 2022 at 11:04 am	Drew Blake changed Number of Features Found from "3" to "9" on Record WP-22-294
May 11, 2022 at 11:04 am	Drew Blake approved approval step Intake Approval on Record WP-22-294
Jun 1, 2022 at 7:40 pm	completed payment step Major Subdivision Riparian Buffer Review Fee on Record WP-22-294
Jun 1, 2022 at 7:40 pm	changed the deadline to Jun 15, 2022 on approval step Field Review on Record WP-22-294
Jun 1, 2022 at 7:40 pm	approval step Field Review was assigned to Drew Blake on Record WP-22-294
Jun 1, 2022 at 7:40 pm	changed the deadline to Jun 15, 2022 on approval step Field Review on Record WP-22-294

Timeline

Label		Status	Activated	Completed	Assignee	Due Date
~	Intake Approval	Complete	May 11, 2022 at 8:55 am	May 11, 2022 at 11:04 am	Drew Blake	-
•	Major Subdivision Riparian Buffer Review Fee	Paid	May 11, 2022 at 11:04 am	Jun 1, 2022 at 7:40 pm	-	-
~	Field Review	Active	Jun 1, 2022 at 7:40 pm	-	Drew Blake	06/14/2022
	Major Subdivision Riparian Buffer Confirmation Report	Inactive	-	-	-	-



AUTHORITY FOR APPOINTMENT OF AGENT

The undersigned contract purchaser, <u>RBV 1525</u>, <u>LLC</u> (Client) does hereby appoint <u>WithersRavenel</u>, <u>Inc.</u> as his, her, or it's agent for the purpose of petitioning the appropriate local, state and federal environmental regulatory agencies (US Army Corps of Engineers, NC Division of Water Quality, NC Division of Coastal Management, local municipalities, etc.) for: a) review and approval of the jurisdictional boundaries of onsite jurisdictional areas (wetlands, streams, riparian buffers, etc.) and/or; b) preparation and submittal of appropriate environmental permit applications/requests for <u>±42-acres of the ±91.39-acre parcel</u>, <u>Chatham Co. PIN: 9764-00-14-6789</u>, <u>located directly north of 624 Hamlets Chapel Road</u>, in Pittsboro, NC.

The Client does hereby authorize that said agent has the authority to do the following acts on behalf of the owner:

- (1) To submit appropriate requests/applications and the required supplemental materials;
- (2) To attend meetings to give representation on behalf of the Client.
- (3) To authorize access to subject property for the purpose of environmental review by appropriate regulatory agencies.

This authorization shall continue in effect until completion of the contracted task or termination by the Client.

		Date: 4/2	21/2022
Agent's Name, Address & Telephone: WithersRavenel, Inc.	Signature Rex Vi	of Client: ck Jr.	Manager
115 MacKenan Drive	EocuSigned Rex Vick		(Title)
Cary, NC 27511	Y7AFA1BDO	Signature)	
Tel. (919)-469-3340	3434 Ki	ldaire Farm	Rd. Ste 135
	Mailing A	ddress	
	Cary	NC	27518
	City	State	Zip
	Phone: _	(919)868-492	24
	Email: rv	rick@windjam	ndevelopment.co



AUTHORIZATION FOR PROPERTY ACCESS

The undersigned owner(s), Chatham Land & Timber Management LLC, do(es) hereby authorize WithersRavenel, Inc. to access ±42-acres of the ±91.39-acre parcel, Chatham Co. PIN: 9764-00-14-6789, located directly north of 624 Hamlets Chapel Road, in Pittsboro, NC for the purpose of environmental regulatory agency review (US Army Corps of Engineers, NC Division of Water Quality, NC Division of Coastal Management, US Fish and Wildlife Service, local Municipalities, etc.) and approvals (i.e. wetland delineation, stream/buffer determination, environmental permitting, etc.) at the request of the contract purchaser.

This authorization does not bind the current property owner(s) to financial responsibility for services rendered on the subject property by WithersRavenel, Inc.

This agreement shall continue in effect until completion/termination of the purchase contract for the subject property.

	Date:				
Contract Purchaser's Agent Info:	Signature of Owner(s):				
WithersRavenel, Inc.					
115 MacKenan Drive	Name - Print Title Richard B. Darck				
Cary, NC 27511	*Stignsettmess				
Tel. (919)-469-3340	Mailing Address				
	Mailing Address				
	City State	Zip			
	Phone:				
	Email:				



Flatiron Forest - Pittsboro, Chatham County Photographic Documentation



Photo 1: View of Feature A (Stream 1) that runs throughout the review area.



Photo 2: View of the channel above the ephemeral start flag of Feature B (Stream 2).





Photo 3: View of Feature B (Stream 2), facing upstream, just below the ephemeral start flag.



Photo 4: View of Feature B (Stream 2), facing downstream, just above the ephemeral start flag.





Photo 5: View of Feature C (Stream 3) in the northern portion of the review area.