

FLOOD PRONE SOILS EVALUATION

1017 Seabrook Road
1021 Seabrook Road
Raleigh, Wake County, NC
Earthly Elements Job Number: 26-062

Prepared For:

Zen Home Offer, LLC
1647 Willow Pass Road #322
Concord, CA 94250-2611

Prepared By:



Earthly Elements Soil Consulting, PLLC
PO Box 12131
Durham, NC 27709

May 7, 2026

A handwritten signature in black ink that reads "Evan T. Morgan".



Evan T. Morgan, LSS

INTRODUCTION & SITE DESCRIPTION

Earthly Elements Soil Consulting, PLLC (Earthly Elements) was retained to perform a Flood Prone Soil evaluation at the project sites located at 1017 Seabrook Road (PIN: 1712256232) and 1021 Seabrook Road (PIN: 1712257212) in Wake County, NC. The purpose of the evaluation is to identify and map the presence or absence of flood prone soils per Wake County UDO. The Chewacla soil (Cm) series is mapped at the site and classified as flood prone soils per Wake County.

INVESTIGATION METHODOLOGY

The field survey was conducted on May 5, 2026, by Evan T. Morgan, LSS. Soil borings were advanced via hand-auger. Soil color was determined using a Munsell Soil Color Chart. Observations of the soil properties (depth, texture, structure, soil wetness, restrictive horizons, etc.) were recorded. Soil borings were described per the USDA-NRCS, *Field Book for Describing and Sampling Soils, Version 3.0*.

The Wake County iMAPS, Wake County Soil Survey and USDA-NRCS Web Soil Survey were referenced prior to the site visit. The Chewacla (ChA, Cm), Pacolet (PbD), Rawlings (RgC), Rion (RgC), and Wehadkee (ChA), soil series are mapped at the site, varying by mapping service. Information for these series is listed in Table 1 below.

Table 1: Soil Series and Taxonomic Class

Soil Series	Taxonomic Class
Chewacla	Fine-loamy, mixed, active, thermic Fluvaquentic Dystrudepts
Pacolet	Fine, kaolinitic, thermic Typic Kanhapludults
Rawlings	Fine-loamy, mixed, subactive, thermic Typic Hapludults
Rion	Fine-loamy, mixed, semiactive, thermic Typic Hapludults
Wehadkee	Fine-loamy, mixed, active, nonacid, thermic Fluvaquentic Endoaquepts

RESULTS

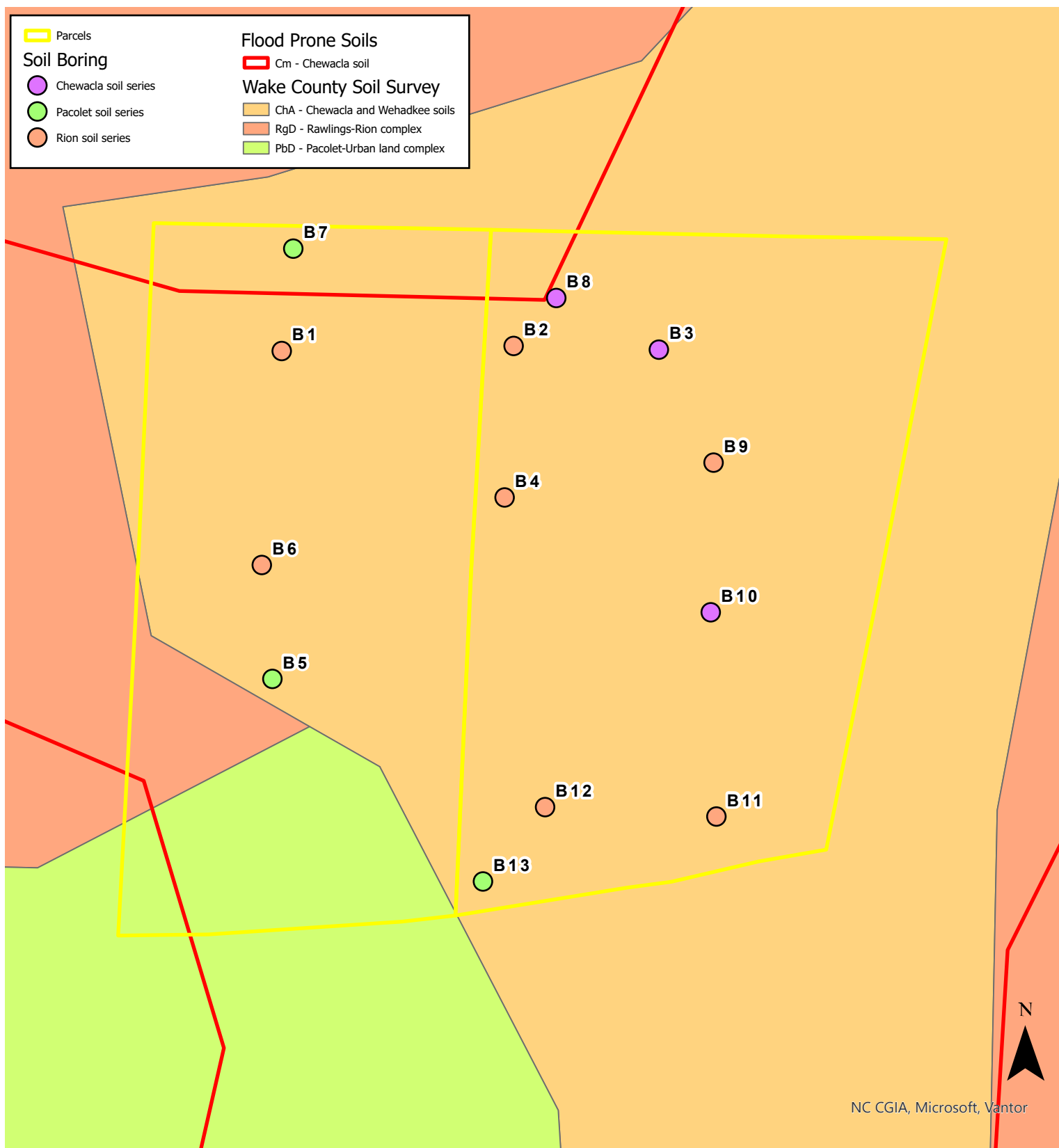
Thirteen (13) soil borings were evaluated within the mapped flood prone soils. Five representative soil profile descriptions were compared to the USDA-NRCS Official Soil Series Descriptions (OSDs), and a soil series determination was made and listed in Table 2. Detailed soil profile descriptions are appended.

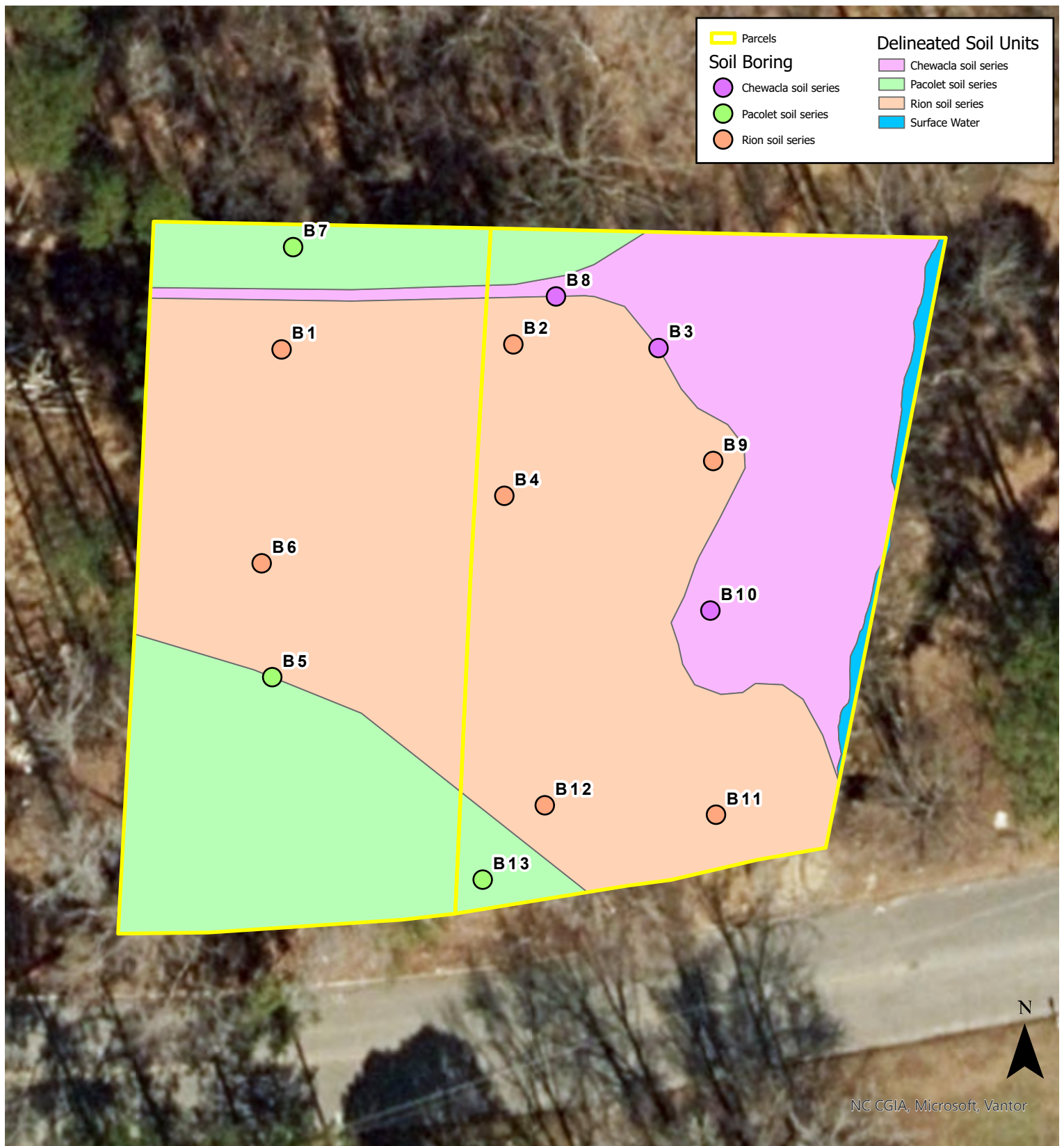
Table 2: Soil Boring and Soil Series Determination

Soil Boring	Soil Series Determination
B1	Rion
B2	Rion
B3	Chewacla
B4	Rion
B13	Pacolet

CONCLUSIONS

The findings presented herein represent Earthly Elements' professional opinion based on our Flood Prone Soil evaluation. Flood prone soils were identified on the two parcels and re-mapped. A surface water feature was observed along the eastern property line of 1021 Seabrook Road.





SOIL EVALUATION FORM

Earthly Elements Soil Consulting, PLLC
PO Box 12131
Durham, NC 27709
919-417-0509

1017
Job: 1021 Seabrook Rd
County: Wake
Date: 5-5-26
Sheet: 1 of 1

Profile #	Horizon	Horizon Depth (in)	Structure / Texture	Consistence / Mineralogy	Matrix Color	Mottle Colors (Quantity, Size, Contrast, Color)
B1	Ap	0-3	ImGR / SL	FR / SO, PO	10YR 4/3	
	BE	3-9	ImSBH / SCL	FE / SS, SP	7.5YR 6/4	
	Bt	9-26	ImSBH / C	FE / SS, P	7.5YR 6/6	C, L, P 2.5Y 7/4; C, L, P 10YR 8/1 quartz
	BC	26-31	ImABH / SCL	FE / SS, SP	10YR 6/8	C, L, P 10YR 6/2
B2	Ap	0-7	ImGR / SL	FR / SO, PO	7.5YR 4/2	
	Bt	7-16	ImSBH / SCL	FE / SS, SP	7.5YR 5/6	
	BC	18-26	ImABH / SCL	FE / SS, SP	10YR 6/8	C, L, P 10YR 8/1; C, L, P 10YR 6/3
B3	Ap	0-6	ImGR / SL	FR / SO, PO	7.5YR 4/3	
	Bw	6-15	ImGR / SL	FR / SO, PO	7.5YR 6/3	C, L, P 10YR 5/2; C, L, P 5YR 5/8
B4	Ap	0-9	ImGR / SL	FR / SO, PO	5YR 6/4	
	Bt1	9-17	ImSBH / C	FE / SS, SP	7.5YR 5/6	C, L, P 2.5Y 7/4
	Bt2	17-24	ImABH / CL	FE / S, P	5YR 5/6	C, L, P 2.5Y 7/4; C, L, P 10YR 8/1 quartz
	BC	24-30	ImABH / SCL	FR / SS, SP	7.5YR 5/8	C, L, P 10YR 6/2; C, L, P 10YR 6/6
B13	A	0-3	ImGR / SL	VFR / SO, PO	7.5YR 5/4	
	Bt1	3-19	ImSBH / C	FE / SS, SP	2.5YR 4/6	
	Bt2	19-30	ImSBH / C	FE / SS, SP	2.5YR 5/8	C, L, P 10YR 6/6

Evaluated by: E. Morgan