

**LAND APPLICATION SITE**

**ROBERT P. LONGEST**

**KQRPL 1 – 9**

**KING & QUEEN COUNTY**

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION  
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

**PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS**

A. This land application agreement is made on 6-27-18 between <sup>Robert P. Longest (Executor)</sup> Healey Longest Est referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

**Landowner:**

The Landowner is the owner of record of the real property located in King & Queen Co Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) with county documentation identifying owners, attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>32-55R-472</u>			
<u>32-55R-476</u>			

Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:  The Landowner is the sole owner of the properties identified herein.  
 The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids      Water treatment residuals      Food processing waste      Other industrial sludges  
 Yes     No       Yes     No       Yes     No       Yes     No

Printed name <u>Healey Longest Estate</u>	Mailing Address <u>690 Canterbury Rd. St. Stephens Church, Va. 23148</u>	Landowner Signature <u>Robert P Longest</u>
By: <u>Robert P. Longest</u>	Phone No. <u>804-445-5466</u>	<u>EXECUTOR</u>
Title* <u>Executor</u>		
* <input checked="" type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc.		
* <input type="checkbox"/> I certify that I am a responsible official [or officer] authorized to act on behalf of the following corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

**Permittee:**

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name <u>Susan Trumbo</u>	Mailing Address <u>PO Box 562, Remington Virginia 22734</u>	Permittee- Authorized Representative Signature <u>[Signature]</u>
Title <u>Technical Manager</u>	Phone No. <u>540-547-3300</u>	

Permittee: Recyc Systems, Inc

County or City: King & Queen Co.

Landowner: Healey Longest Estate

Robert P. Longest (Executor)

**Landowner Site Management Requirements:**

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
  - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
  - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
  - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
  - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
  - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
  - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
  - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
  - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

  - a. Meat producing livestock shall not be grazed for 30 days,
  - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
  - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Robert P Longest  
Landowner's Signature

EXECUTOR

6-27-18

Date

Robert P Longest  
Operator's Signature

mailing address & phone

6-27-18

Date

# FARM DATA SHEET

<b>SITE NAME:</b>	Robert P. Longest	<b>COUNTY:</b>	King & Queen
<b>OWNER:</b>	Healey Longest Estate c/o Robert P. Longest	<b>OPERATOR:</b>	Robert P. Longest
<b>OWNER'S ADDRESS:</b>	690 Canterbury Road St. Stephens Church, VA 23148	<b>OPERATOR'S ADDRESS:</b>	690 Canterbury Road St. Stephens Church, VA 23148
<b>OWNER'S TELEPHONE:</b>	-	<b>OPERATOR'S TELEPHONE:</b>	-
<b>GENERAL FARM TYPE:</b>	Hay/ Pasture/ Row Crops	<b>CELL PHONE:</b>	804-445-5466
<b># CATTLE:</b>	30	<b>EMAIL:</b>	-
<b>LAGOON or SLURRY:</b>	None	<b>LATITUDE:</b>	Fields 1-7 37.821 Fields 8-9 37.830
<b>TOPO QUAD:</b>	Aylett	<b>LONGITUDE:</b>	Fields 1-7 -77.026 Fields 8-9 -77.024
<b>COMMENTS:</b>		<b>METHOD OF DETERMINATION:</b>	Online Maps

SD 

7-25-18

# RECYC SYSTEMS, INC

## FIELD DATA SHEET

Field Identification	DEQ Control ID	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
			Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood			
KQRPL 1	51097-00186-0000	14.0	5D Nov.-Apr.	-	-	-	YO 54	32-55R-476	T 1271 F 3
KQRPL 2	51097-00186-0000	30.4	5D Nov.-Apr.	-	-	-	YO 54	32-55R-476	T 1271 F 1, 2
KQRPL 3	51097-00186-0000	6.8	5D Nov.-Apr.	-	-	-	YO 54	32-55R-476	T 1271 F 18
KQRPL 4	51097-00186-0000	3.3	5D Nov.-Apr.	-	-	-	YO 54	32-55R-476	T 1271 F 4, 5
KQRPL 5	51097-00187-0000	9.1	5D Nov.-Apr.	-	-	-	YO 54	32-55R-476	T 1271 F 8
KQRPL 6	51097-00187-0000	9.3	-	-	-	-	YO 54	32-55R-476	T 1271 F 10
KQRPL 7	51097-00187-0000	14.3	5D Nov.-Apr.	-	-	-	YO 54	32-55R-476	T 1271 F 9
KQRPL 8	51097-00188-0000	21.9	5D Nov.-Apr.	-	-	-	YO 54	32-55R-472	T 2377 F 1
KQRPL 9	51097-00189-0000	23.9	5D Nov.-Apr.	-	-	-	YO 54	32-55R-472	T 2377 F 2
TOTAL ACRES IN SITE		133.0							

7-25-18

Landowner Coordination Form

This form is used by the Permittee to identify properties (tax parcels) that are authorized to receive biosolids and/or industrial residuals, and each of the legal landowners of those tax parcels. A Land Application Agreement-Biosolids and Industrial Residuals from original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee: Recyc Systems, Inc

Site Name: Robert P. Longest

County or City: King & Queen Co.

Please Print

Signature not required on this page

<u>Tax Parcel ID(s)</u>	<u>Landowners (s)</u>
32-55R-472	Healey Longest Estate (Robert P. Longest Executor)
32-55R-476	Healey Longest Estate (Robert P. Longest Executor)



www.aleastern.com

# A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC  
SUSAN TRUMBO  
8455 WHITESHOP RD  
CULPEPER VA 22701

Grower:  
ROBERT P LONGEST/KQRPL  
KING AND QUEEN CO

Farm ID:

## SOIL ANALYSIS REPORT

Analytical Method(s):  
Mehlich 3

Date Received: 01/26/2015

Date Of Analysis: 01/27/2015

Date Of Report: 01/27/2015

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C	
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Reserve Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g	
1 KQRPL	11265	1.2	L	69	94	H		87	M	49	M	452	H			6.3	6.90	0.3	3.2
2 KQRPL	11266	1.2	L	69	139	VH		104	H	58	M	487	H			6.6		0.2	3.4
3 KQRPL	11267	1.1	L	68	180	VH		82	M	50	H	295	M			6.0	6.89	0.4	2.5
4 KQRPL	11268	2.0	L	85	196	VH		147	VH	47	M	425	M			5.9	6.87	0.6	3.5
5 KQRPL	11269	2.1	L	86	169	VH		136	VH	67	M	551	M			6.1	6.87	0.6	4.2

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	SS ms/cm	Cl ppm	Al ppm
1 KQRPL	7.0	12.8	70.6		10.7			3.4	M	32	H				
2 KQRPL	7.8	14.2	71.6		5.9			4.4	H	39	H				
3 KQRPL	8.4	16.7	59.0		15.3			2.6	M	23	H				
4 KQRPL	10.8	11.2	60.7		17.1			5.0	H	25	H				
5 KQRPL	8.3	13.3	65.6		13.9			3.6	H	25	H				

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Paucic McGeary*

Paucic McGeary



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# A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC  
SUSAN TRUMBO  
8455 WHITESHOP RD  
CULPEPER VA 22701

Grower: ROBERT P LONGEST/KQRPL  
KING AND QUEEN CO

Farm ID:

## SOIL ANALYSIS REPORT

Analytical Method(s):  
Mehlich 3

Date Received: 01/26/2015

Date Of Analysis: 01/27/2015

Date Of Report: 01/27/2015

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
6 KQRPL	11270	1.9	L	82	134	VH		91	M	47	L	600	H			6.3	6.89	0.4	4.1	
7 KQRPL	11271	2.1	L	86	199	VH		135	VH	42	L	599	H			6.4	6.89	0.4	4.1	
8 KQRPL	11272	2.5	L	93	283	VH		121	VH	78	M	675	H			6.4	6.89	0.4	4.8	
9 KQRPL	11273	1.8	L	79	109	VH		72	M	36	L	799	VH			6.8		0.1	4.6	

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
6 KQRPL	5.7	9.6	73.2		10.4			2.6 M	17 M						
7 KQRPL	8.4	8.5	73.0		8.8			3.2 M	20 M						
8 KQRPL	6.5	13.5	70.3		8.9			15.9 VH	26 H						
9 KQRPL	4.0	6.5	86.8		2.9			5.3 H	17 M						

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Paucic McGroary*

Paucic McGroary

THE PLANNER IS NOT STATE CERTIFIED

**Nutrient Management Plan Balance Sheet  
(Fall, 2018-Winter, 2020)**

**Robert P. Longest  
Planner: John Doe**

Tract: 1271 Location: King & Queen  
(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes
3/KQRPL 1(N)	14/14	2018 2019	Wheat (grain) ... ..	100-30-60 -- -- --	0/0				100-30-60	N/A		
1, 2/KQRPL 2(1P)	30/30	2018 2019	Wheat (grain) ... ..	100-0-60 -- -- --	20/0				80-0-60	28		
18/KQRPL 3(1P)	7/7	2018 2019	Wheat (grain) ... ..	100-0-60 -- -- --	20/0				80-0-60	28		
4, 5/KQRPL 4(1P)	3/3	2018	Grass Pasture	50-0-0	0/0				50-0-0	30		
8/KQRPL 5(1P)	9/9	2018	Grass Pasture	50-0-0	0/0				50-0-0	25		
10/KQRPL 6(1P)	9/9	2018	Fescue grass hay mt.	70-0-95	0/0				70-0-95	41		
9/KQRPL 7(1P)	14/14	2018	Grass Pasture	50-0-0	0/0				50-0-0	30		

Commercial Application Methods:  
br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: 2377      Location: King & Queen  
 (N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
1/KQRPL 8(0P)	22/22	2018 2019	Wheat (grain) ... ..	100-0-40 -- --	0/0				100-0-40	28			
2/KQRPL 9(N)	24/24	2018 2019	Wheat (grain) ... ..	100-20-60 -- --	0/0				100-20-60	N/A			

Commercial Application Methods:  
 br - Broadcast ba - Banded sd - Sidedress  
 Notes:

**Soil Test Summary**

<b>Tract</b>	<b>Field</b>	<b>Acre</b>	<b>Date</b>	<b>P2O5</b>	<b>K2O</b>	<b>Lab</b>	<b>Soil pH</b>	<b>Lime Date</b>	<b>rec. lime tons/Ac</b>
1271	KQRPL 1	14	2015-Wi	H (94 P ppm)	M (87 K ppm)	A&L MIII	6.3		
1271	KQRPL 2	30	2015-Wi	VH (139 P ppm)	M (104 K ppm)	A&L MIII	6.6		
1271	KQRPL 3	7	2015-Wi	VH (180 P ppm)	M (82 K ppm)	A&L MIII	6.		
1271	KQRPL 4	3	2015-Wi	VH (196 P ppm)	H- (147 K ppm)	A&L MIII	5.9		
1271	KQRPL 5	9	2015-Wi	VH (169 P ppm)	H- (136 K ppm)	A&L MIII	6.1		
1271	KQRPL 6	9	2015-Wi	VH (134 P ppm)	M (91 K ppm)	A&L MIII	6.3		
1271	KQRPL 7	14	2015-Wi	VH (199 P ppm)	H- (135 K ppm)	A&L MIII	6.4		
2377	KQRPL 8	22	2015-Wi	VH (283 P ppm)	M+ (121 K ppm)	A&L MIII	6.4		
2377	KQRPL 9	24	2015-Wi	H+ (109 P ppm)	M (72 K ppm)	A&L MIII	6.8		

### Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
1271	1271/3	KQRPL 1*	14	Rumford	IVb	II	Not Suited	III	High Leaching, High Slope
	1271/1, 2	KQRPL 2*	30	Rumford	IVb	II	Not Suited	III	High Leaching, High Slope
	1271/18	KQRPL 3*	7	Rumford	IVb	III	Not Suited	III	High Leaching, High Slope
	1271/4, 5	KQRPL 4*	3	Emporia	IVa	III	III	III	High Leaching, High Slope
	1271/8	KQRPL 5*	9	Suffolk	IVa	II	Not Suited	III	High Slope
	1271/10	KQRPL 6	9	Suffolk	IIIb	II	Not Suited	III	
	1271/9	KQRPL 7*	14	Emporia	IIIb	II	III	III	High Slope
2377	2377/1	KQRPL 8*	22	Rumford	IVb	II	Not Suited	III	High Leaching, High Slope
	2377/2	KQRPL 9*	24	Rumford	IVb	II	Not Suited	III	High Leaching, High Slope

\* Do not apply manure or biosolids more than 30 days prior to planting. Apply commercial fertilizer nitrogen to row crops in split spring applications.

### Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

## Farm Summary Report

Plan: New Plan Fall, 2018 - Winter, 2020

Farm Name: Robert P. Longest

Location: King & Queen

Specialist: John Doe

N-based Acres: 37.9

P-based Acres: 95.1

Tract Name: 1271

FSA Number: 1271

Location: King & Queen

Field Name: KQRPL 1

Total Acres: 14.00 Usable Acres: 14.00

FSA Number: 3

Tract: 1271

Location: King & Queen

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

### *P-Index Summary*

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

### **Soil Test Results:**

DATE	PH	P	K		Lab
Wi-2015	6.3	H(94 P ppm)	M(87 K ppm)	A&L MIII	

### **Soils:**

PERCENT	SYMBOL	SOIL SERIES
10	4A	Emporia
9	5D	Emporia Slagle
81	14B	Rumford

**Field Warnings:**

*Environmentally Sensitive Soils due to:*

*Soils with potential for leaching based on soil texture or excessive drainage*

*Soils with perent slope in excess of 15%*

**Field Name: KQRPL 2**

Total Acres: 30.40 Usable Acres: 30.40

FSA Number: 1, 2

Tract: 1271

Location: King & Queen

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

*P-Index Summary*

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K		Lab
Wi-2015	6.6	VH(139 P ppm)	M(104 K ppm)	A&L MIII	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
64	14B	Rumford
26	5D	Emporia Slagle
10	4A	Emporia

**Field Warnings:**

*Environmentally Sensitive Soils due to:*

*Soils with potential for leaching based on soil texture or excessive drainage*

Soils with perent slope in excess of 15%

**Field Name: KQRPL 3**

Total Acres: 6.80 Usable Acres: 6.80

FSA Number: 18

Tract: 1271

Location: King & Queen

Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

*P-Index Summary*

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K		Lab
Wi-2015	6.0	VH(180 P ppm)	M(82 K ppm)	A&L MIII	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
54	5D	Emporia Slagle
46	14B	Rumford

**Field Warnings:**

*Environmentally Sensitive Soils due to:*

*Soils with potential for leaching based on soil texture or excessive drainage*

*Soils with perent slope in excess of 15%*

**Field Name: KQRPL 4**

Total Acres: 3.30 Usable Acres: 3.30

FSA Number: 4, 5

Tract: 1271

Location: King & Queen  
Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft  
Distance to stream: 0 ft

**Conservation Practices:**  
Pasture (>75% cover)

*P-Index Summary*  
P-based(1.0)  
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K		Lab
Wi-2015	5.9	VH(196 P ppm)	H-(147 K ppm)	A&L MIII	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
33	14B	Rumford
67	5D	Emporia Slagle

**Field Warnings:**  
*Environmentally Sensitive Soils due to:*

*Soils with potential for leaching based on soil texture or excessive drainage*

*Soils with percent slope in excess of 15%*

**Field Name:** KQRPL 5  
Total Acres: 9.10 Usable Acres: 9.10  
FSA Number: 8  
Tract: 1271  
Location: King & Queen  
Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft  
Distance to stream: 0 ft

**Conservation Practices:**

Pasture (>75% cover)

*P-Index Summary*

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K		Lab
Wi-2015	6.1	VH(169 P ppm)	H-(136 K ppm)	A&L MIII	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
42	5D	Emporia Slagle
58	17B	Suffolk

**Field Warnings:**

*Environmentally Sensitive Soils due to:*

*Soils with percent slope in excess of 15%*

**Field Name: KQRPL 6**

Total Acres: 9.30 Usable Acres: 9.30

FSA Number: 10

Tract: 1271

Location: King & Queen

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft  
Distance to stream: 0 ft

**Conservation Practices:**

Pasture (>75% cover)

*P-Index Summary*

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K		Lab
Wi-2015	6.3	VH(134 P ppm)	M(91 K ppm)	A&L MIII	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
95	17B	Suffolk
3	4B	Emporia
2	5D	Emporia Slagle

**Field Warnings:**

**Field Name:** KQRPL 7

Total Acres: 14.30 Usable Acres: 14.30

FSA Number: 9

Tract: 1271

Location: King & Queen

Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

**Conservation Practices:**

Pasture (>75% cover)

*P-Index Summary*

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K		Lab
Wi-2015	6.4	VH(199 P ppm)	H-(135 K ppm)	A&L MIII	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
46	5D	Emporia Slagle
41	4B	Emporia
13	17B	Suffolk

**Field Warnings:**

*Environmentally Sensitive Soils due to:*

*Soils with perent slope in excess of 15%*

**Tract Name: 2377**

FSA Number: 2377

Location: King & Queen

**Field Name: KQRPL 8**

Total Acres: 21.90 Usable Acres: 21.90

FSA Number: 1

Tract: 2377

Location: King & Queen

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

*P-Index Summary*

Zero-P

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K		Lab
Wi-2015	6.4	VH(283 P ppm)	M+(121 K ppm)	A&L MIII	

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
77	14B	Rumford
23	5D	Emporia Slagle

**Field Warnings:**

*Environmentally Sensitive Soils due to:*

*Soils with potential for leaching based on soil texture or excessive drainage*

*Soils with perent slope in excess of 15%*

**Field Name: KQRPL 9**

Total Acres: 23.90 Usable Acres: 23.90

FSA Number: 2

Tract: 2377

Location: King & Queen

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

*P-Index Summary*

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K	Lab
Wi-2015	6.8	H+(109 P ppm)	M(72 K ppm)	A&L MIII

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
79	14B	Rumford
21	5D	Emporia Slagle

**Field Warnings:**

*Environmentally Sensitive Soils due to:*

*Soils with potential for leaching based on soil texture or excessive drainage*

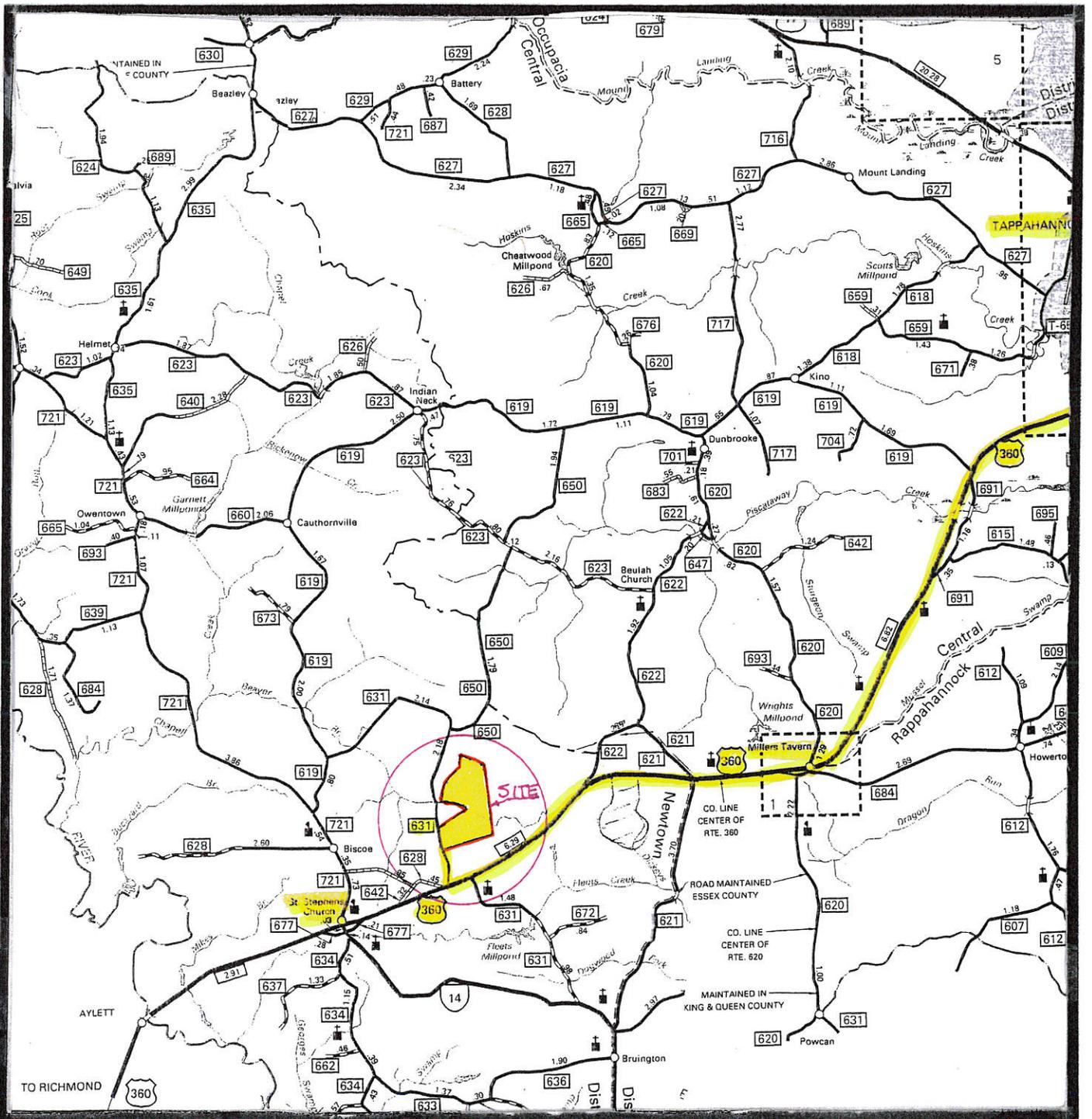
*Soils with perent slope in excess of 15%*



# MAPS

# Recyc Systems™ Inc.

(Biosolids Land Application)



Scale: 1" = 2 Miles

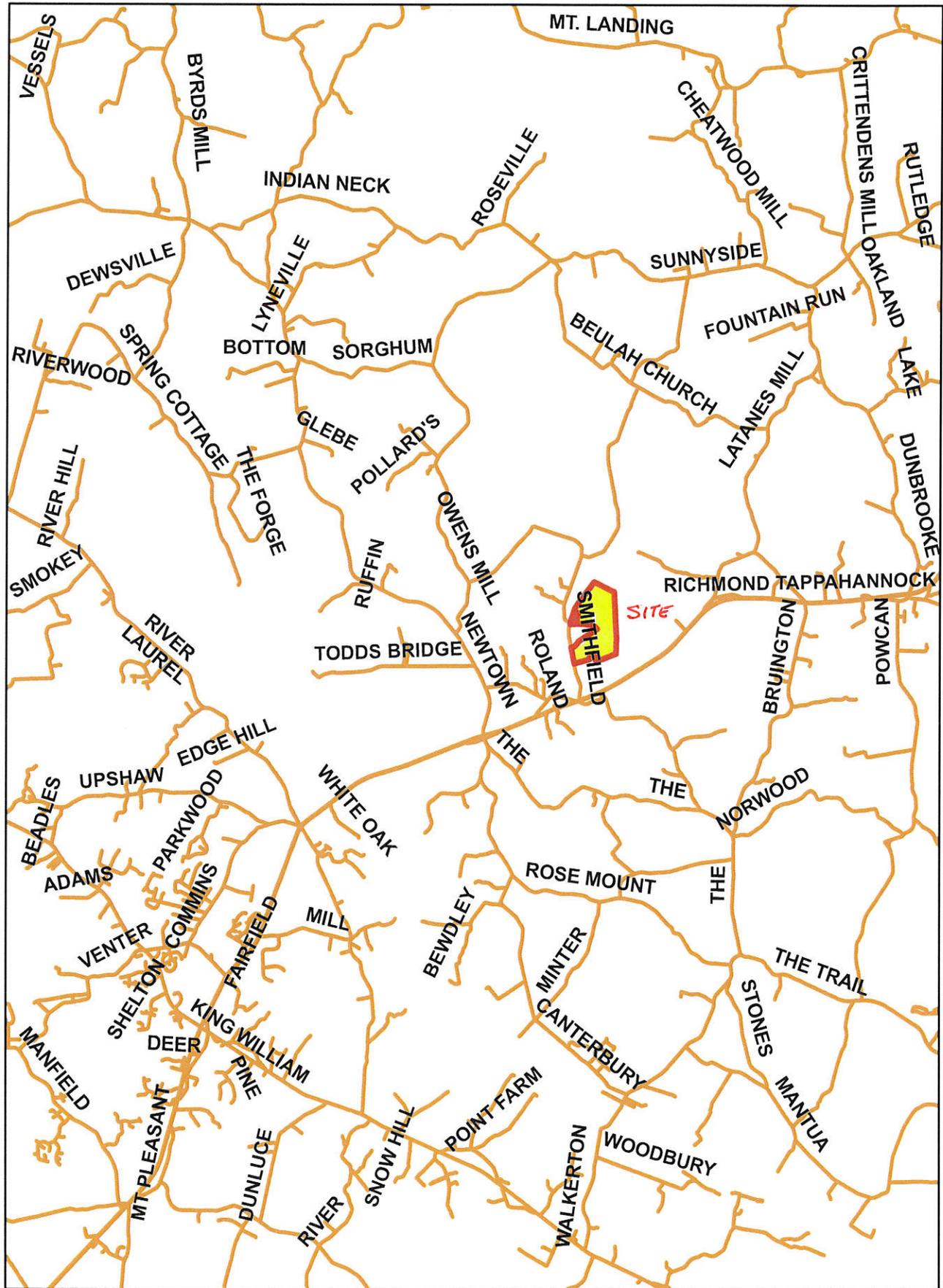
Truck Route marked in Yellow

## VICINITY MAP

7-25-18





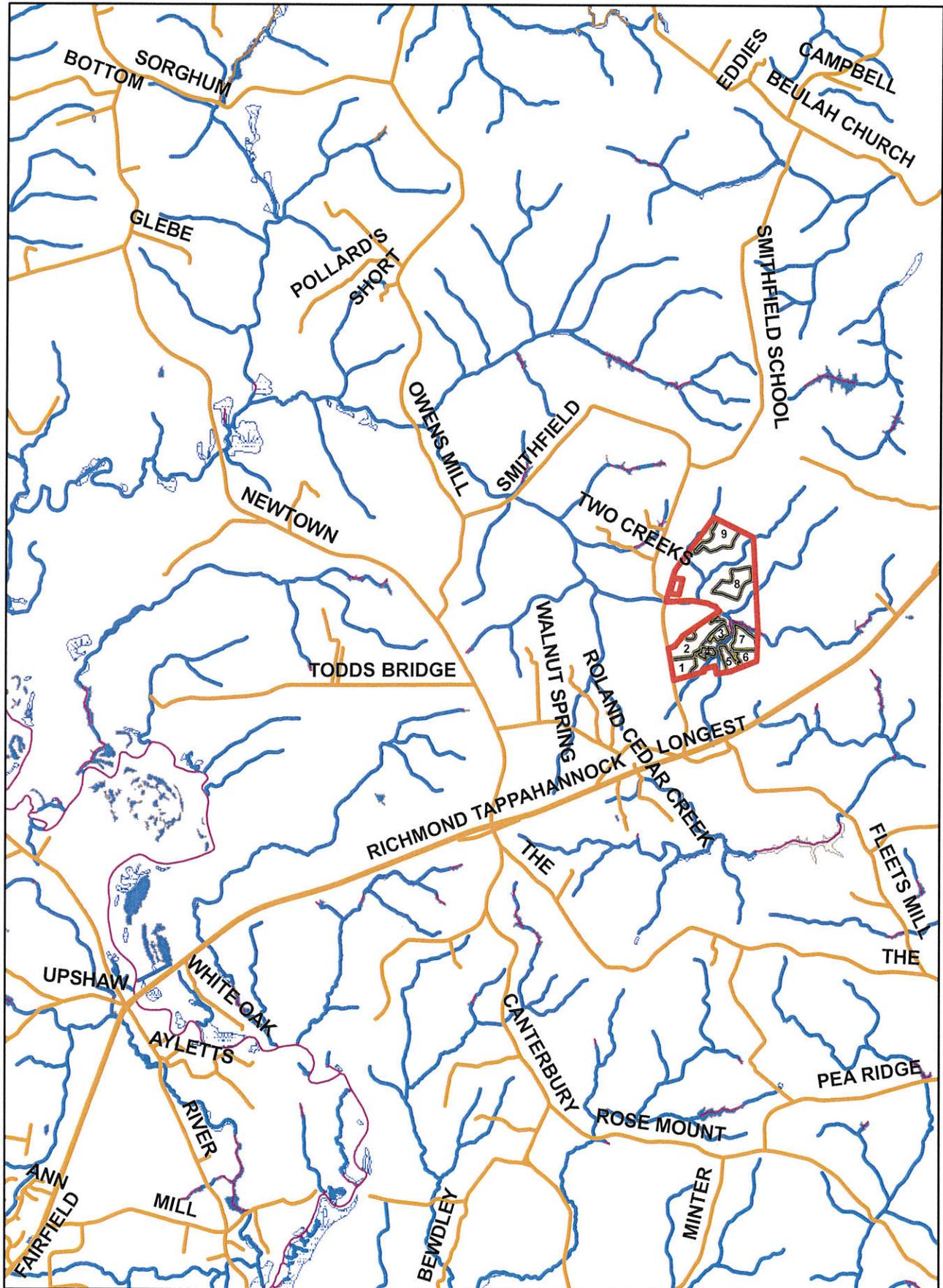


7-25-18

VICINITY MAP

1 in = 2 miles





7-25-18

VICINITY MAP

1 in = 1 miles





# ADJOINING LANDOWNERS

## ROBERT P. LONGEST

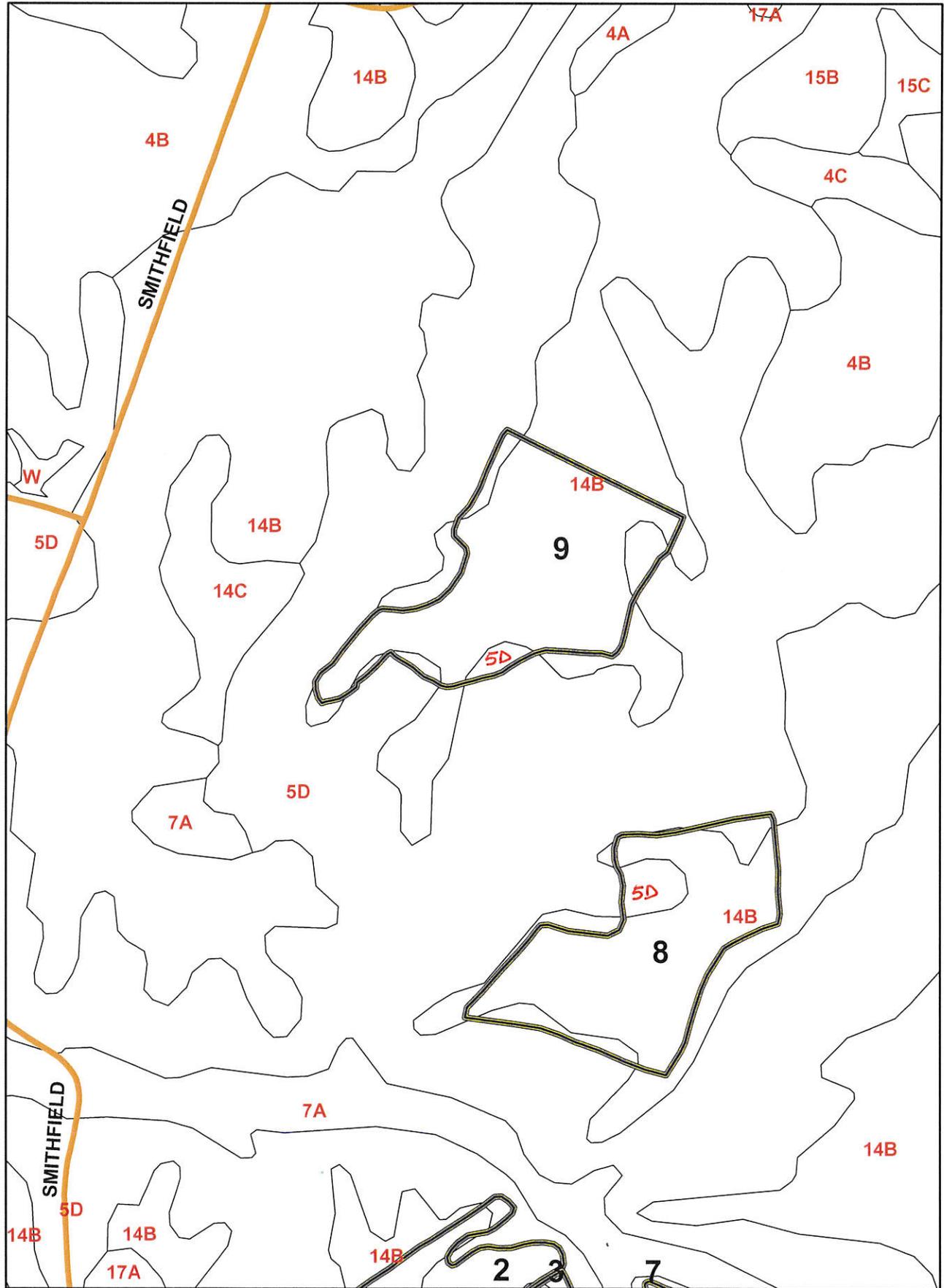
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### KING & QUEEN COUNTY

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Tax Map Parcel #	Owner Name(s)
32-55R-453	Jerry and Dee Dee Becker
32-55R-456A	A. Fleet Dillard III and Sarah Pope
32-55R-458	A. Fleet Dillard III and Sarah Pope
32-55R-451	Earl and Gladys Longest Living Trust
32-55R-476A	Robert L. Mundy
32-55L-477B	Walter and Catherine Hague
32-55L-500	J. R. Longest, Jr.
32-55L-499A	Robert Kendric Smith
32-55L-499	Leslie and Kimberly Davis
32-55L-498	John and Meegan Zarbock
32-55L-473C	Robert and Florence Smith
32-55L-473B	Phylis F. Birkett
32-55L-473	Ross and Susan Wilson
32-56L-471	Monterio V. Wrenn
32-55R-472A	Aharon A. Mundy
32-56R-470	Brian and Laurie Landers
32-56R-470A	Brian and Laurie Landers
32-56R-469	Lauren Otto et. als.
32-56R-468	Dunkirk Bridge LLC
32-55R-461	Robert F. Longest



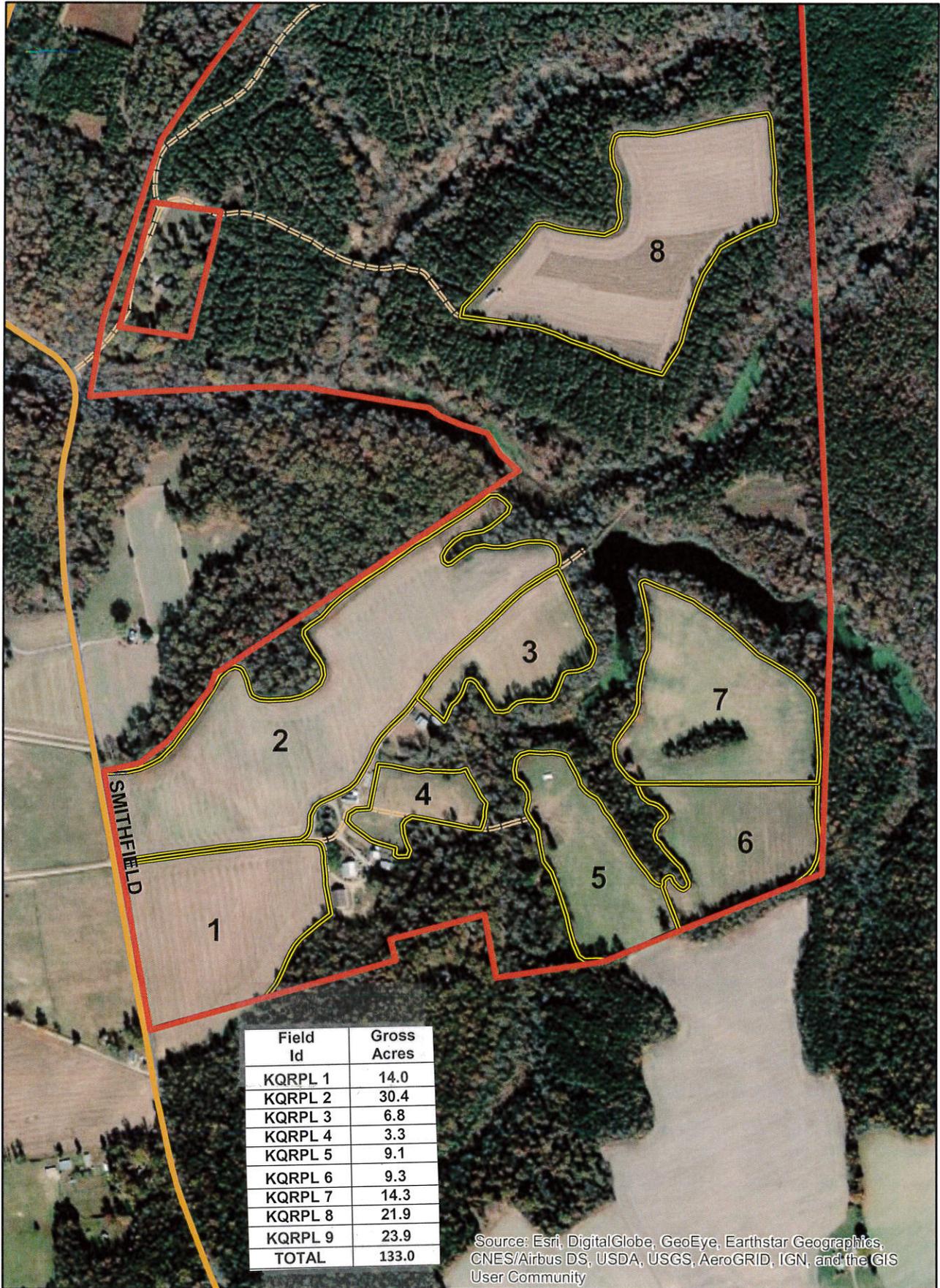


 Frequent Flooding

7-25-18

# SOIL MAP

1 in = 660 feet

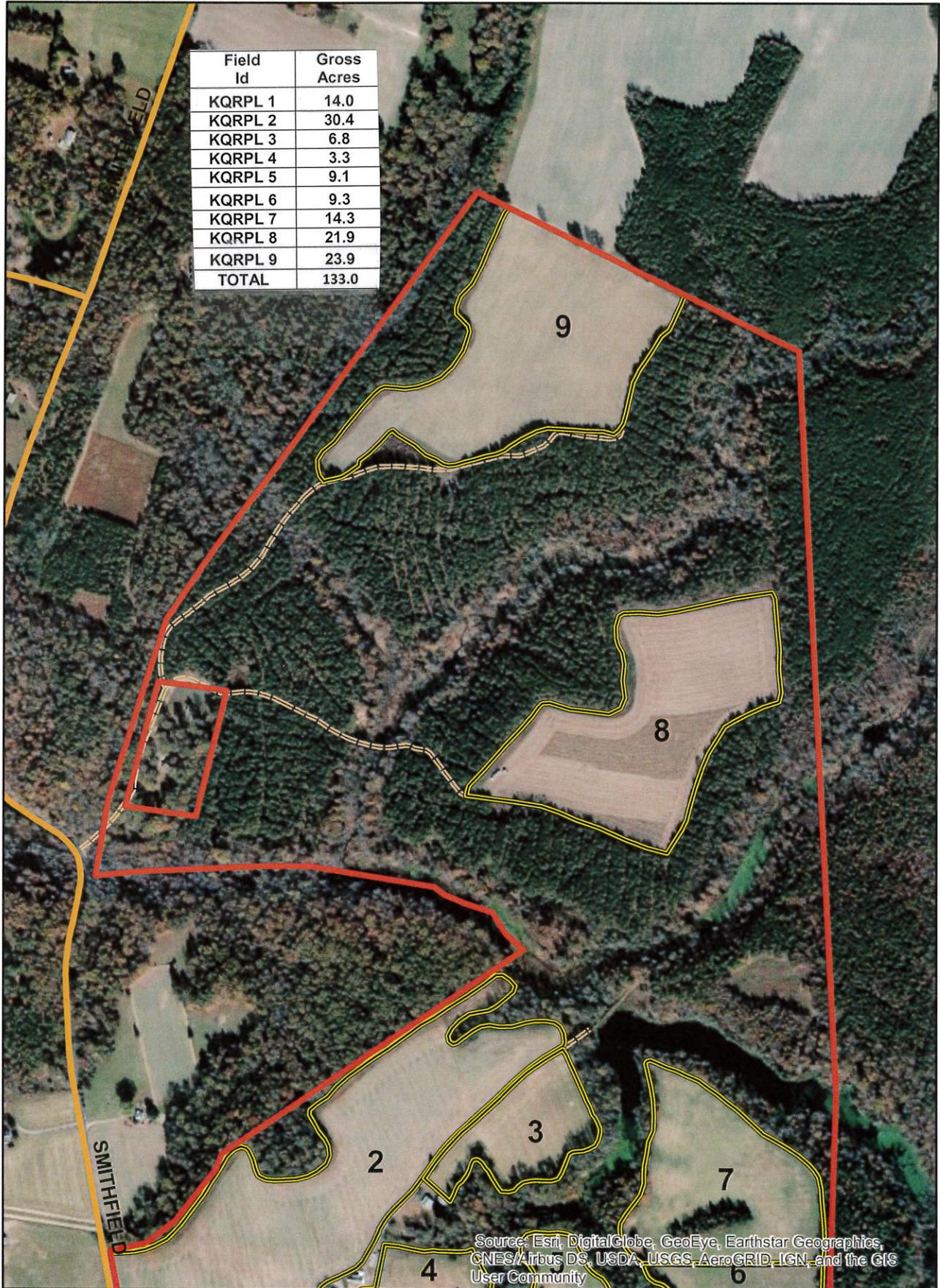


7-25-18

# AERIAL MAP

1 in = 660 feet



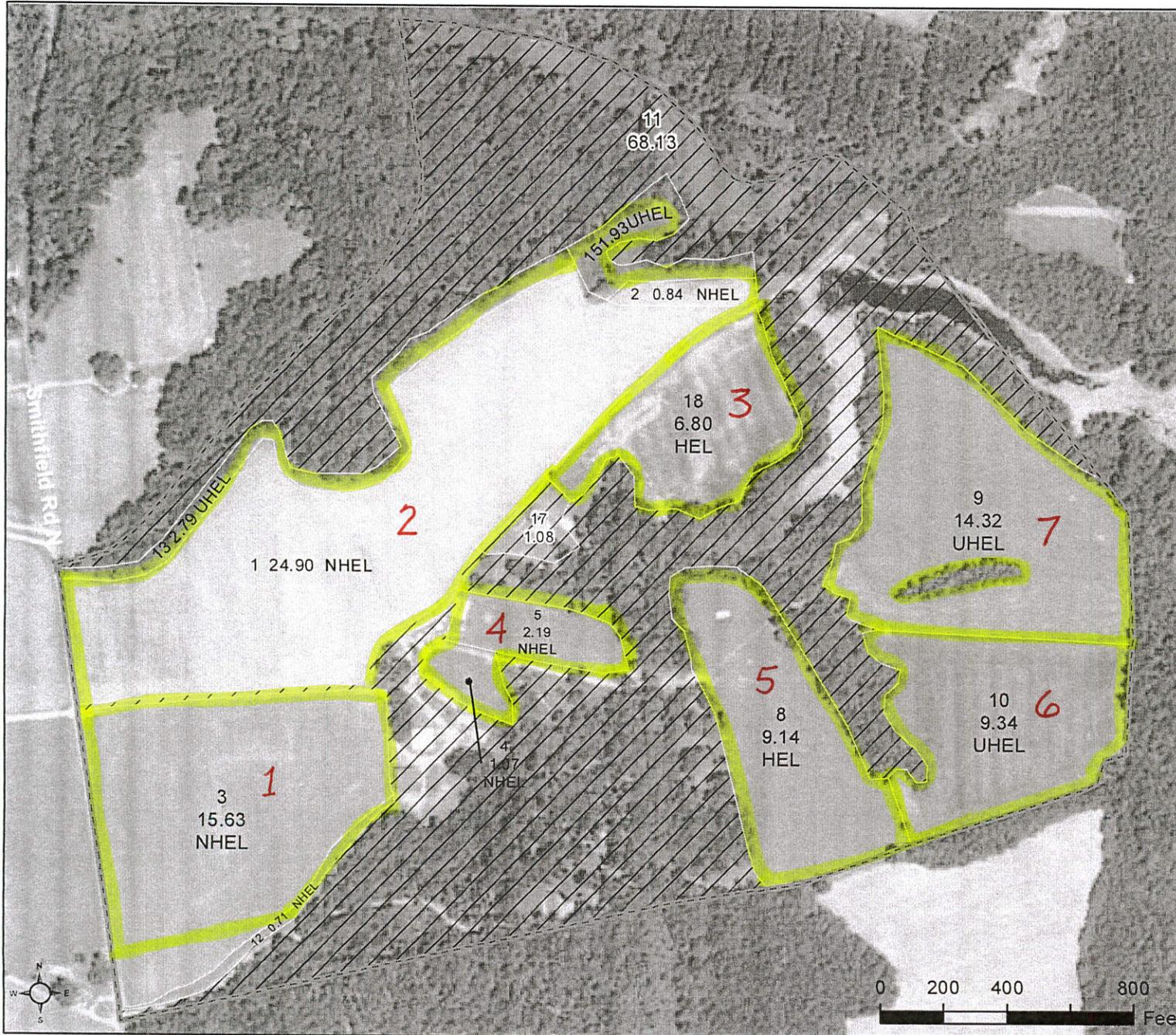


7-25-18

# AERIAL MAP

1 in = 660 feet





2018 Program Year

Map Created May 15, 2018

**Common Land Unit**

- Non-Cropland
  - Cropland
  - rcl\_va097
  - Tract Boundary
- NAIPUSDA\_CONUS\_PRIME RGB**
- Red: Band\_1
  - Green: Band\_2
  - Blue: Band\_3

**Wetland Determination Identifiers**

- Restricted Use
- ▽ Limited Restrictions
- Exempt from Conservation Compliance Provisions

Tract Cropland Total: 89.66 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).



2018 Program Year

Map Created May 15, 2018

**Common Land Unit**

- Non-Cropland
- Cropland
- rcl\_l\_va097

Tract Boundary

**NAIP\USDA\_CONUS\_PRIME**

**RGB**

- Red: Band\_1
- Green: Band\_2
- Blue: Band\_3

**Wetland Determination Identifiers**

- Restricted Use
- Limited Restrictions
- Exempt from Conservation Compliance Provisions

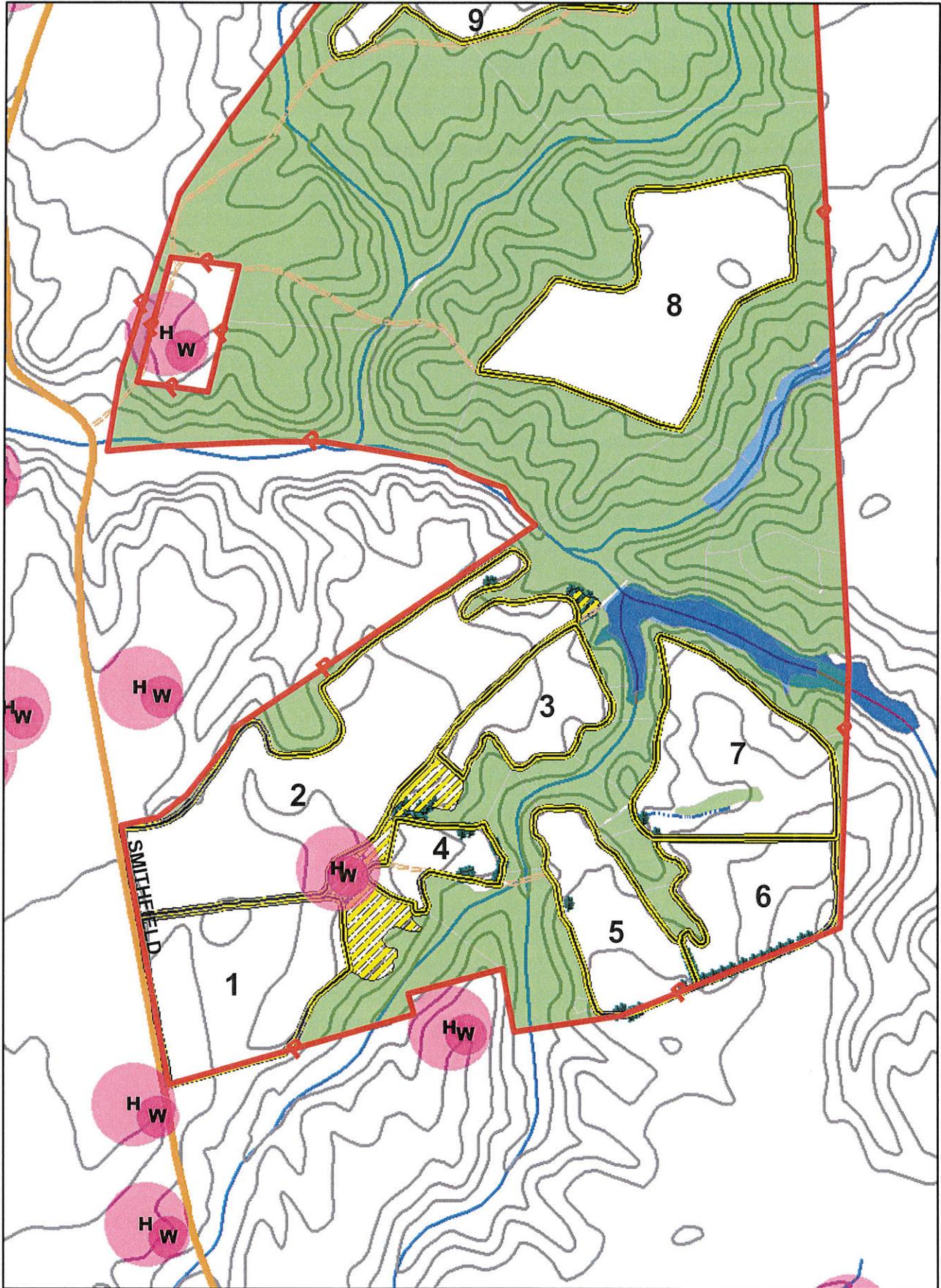
Tract Cropland Total: 45.84 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

# Legend For Site Plan

Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
	Slope	15% maximum
	Hashed out Area	No application

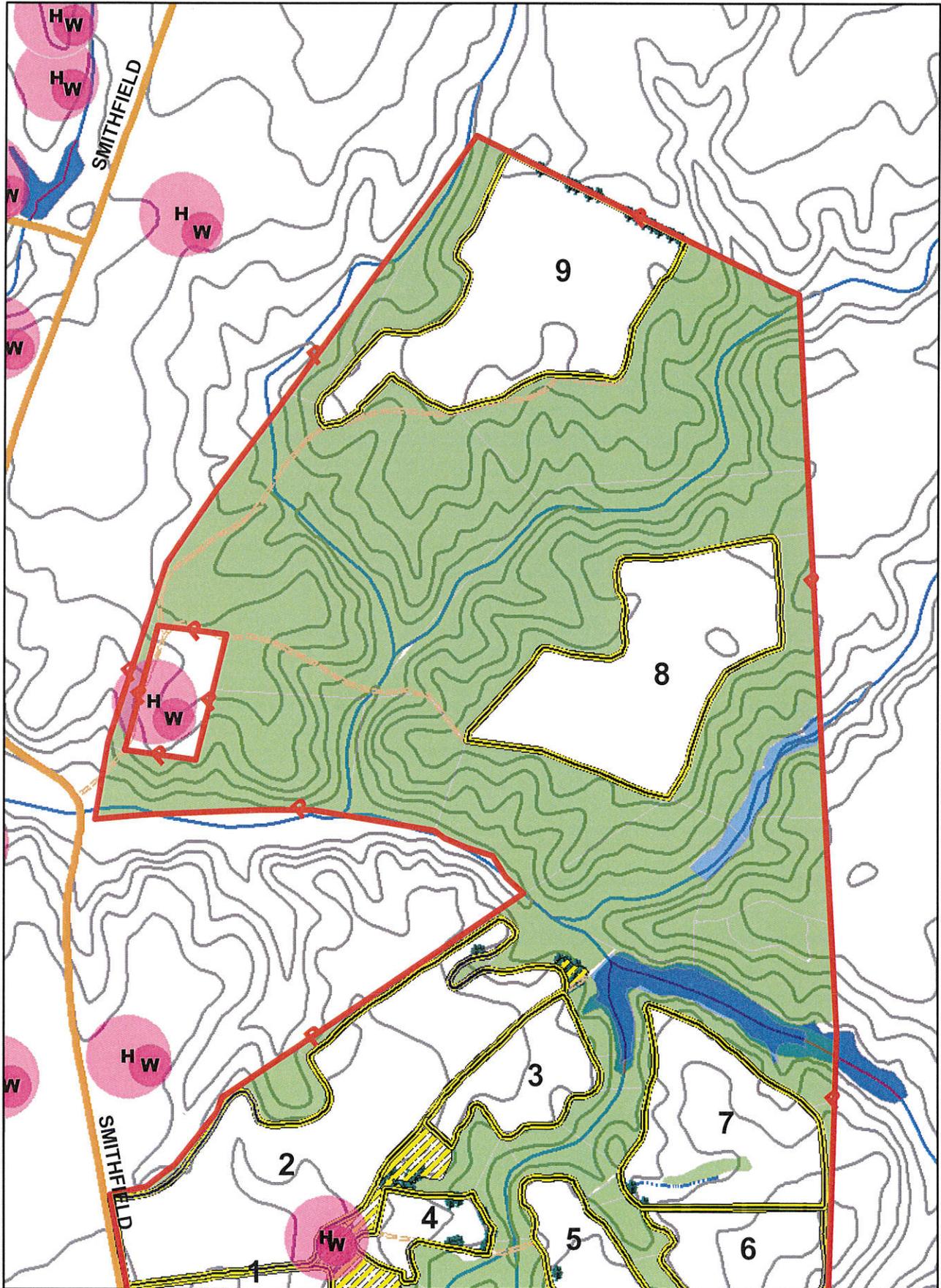
\*Buffer can be reduced or waived upon written consent from landowner.



7-25-18

SITE PLAN

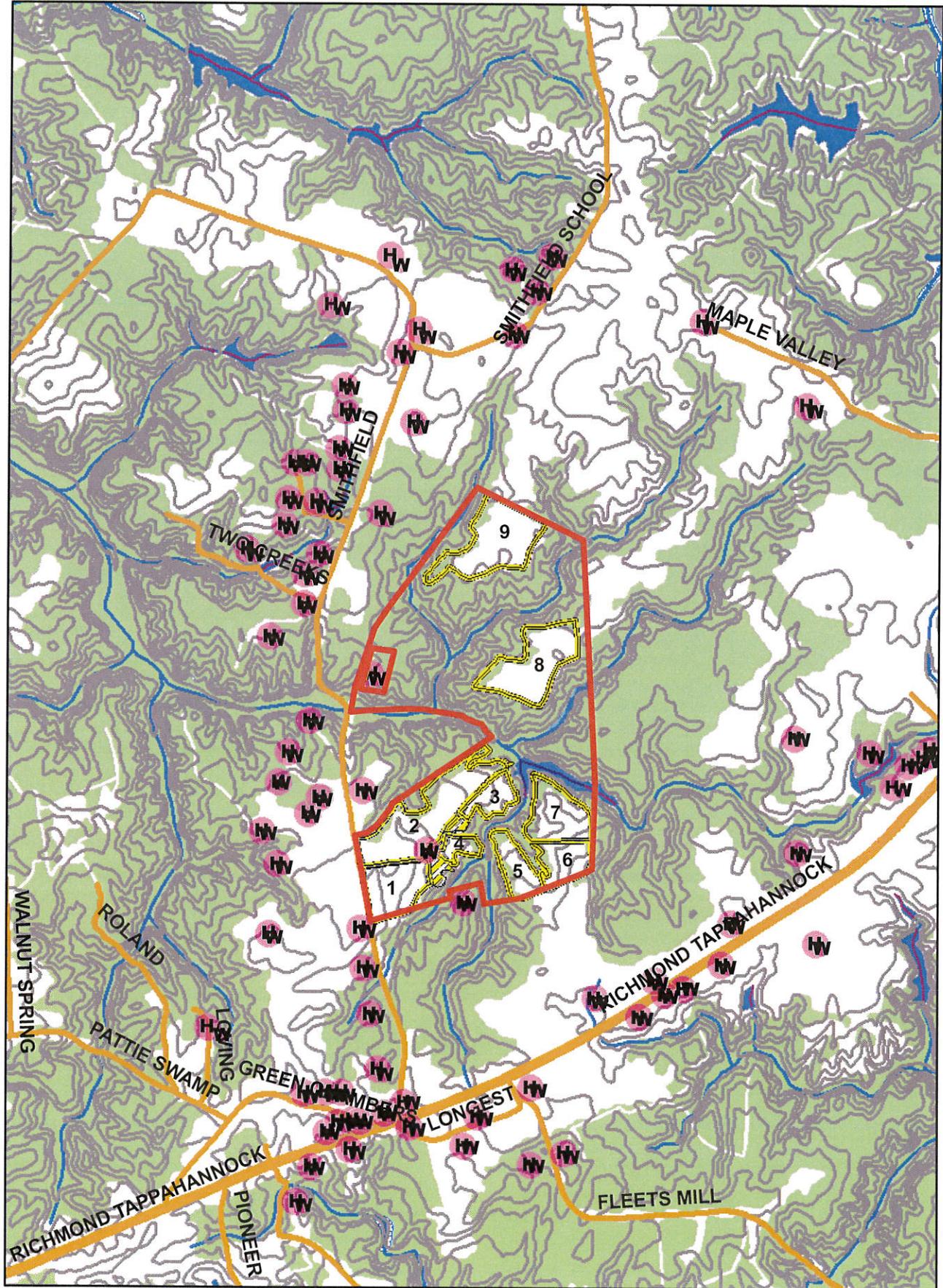
1 in = 660 feet



7-25-18

**SITE PLAN**

1 in = 660 feet



7-25-18

TOPOGRAPHIC MAP

1 in = 2,000 feet

