

**LAND APPLICATION SITE**

**K & J TIMBERLANDS**

**CRKJT 1 & 2**

**CAROLINE COUNTY**



VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION; PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc County or City: Caroline County  
Landowner: Kand J Timberlands LLC

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).

John Reid Manager Date 2/2/2017  
Landowner's Signature

B. A. Digney Jr. 31398 SPARTA RD. MILFORD, VA 22514 804-633-9008  
Farm Operator Signature Mailing Address & Phone Number 804-512-8992

# Fwd: K and J Timberlands crop field

Edwin Upshaw

Wed 4/18/2018 4:03 PM

To: Susan Trumbo <strumbo@recycsystems.com>;

Sent from my iPhone

Begin forwarded message:

From: "John Reid" <[john@frmva.com](mailto:john@frmva.com)>  
Date: April 18, 2018 at 3:12:50 PM EDT  
To: <[upshaw@vt.edu](mailto:upshaw@vt.edu)>  
Subject: K and J Timberlands crop field

Ned,

I give Recyc permission to apply sludge up to my property line.

Good talking with you.

John

John R. Reid, CF, ACF  
Forest Resources Management, Inc.  
7840 Richmond-Tappahannock Highway  
Aylett, Virginia 23009  
(804) 690-7011

*BATIGNOT  
M Broadbent*

# FARM DATA SHEET

<b>SITE NAME:</b>	K & J Timberlands	<b>COUNTY:</b>	Caroline
<b>OWNER:</b>	K & J Timberlands LLC	<b>OPERATOR:</b>	B Allen Tignor Jr
<b>OWNER'S ADDRESS:</b>	c/o John R Reid, Manager 169 Braxton-Corr Road Saluda Virginia 23149	<b>OPERATOR'S ADDRESS:</b>	31398 Sparta Road Milford Virginia 22514
<b>OWNER'S TELEPHONE:</b>	804.690.7011	<b>OPERATOR'S TELEPHONE:</b>	804-633-9008
<b>GENERAL FARM TYPE:</b>	Row Crops	<b>CELL PHONE:</b>	804-512-8992
<b># CATTLE:</b>	none	<b>EMAIL:</b>	
<b>LAGOON or SLURRY:</b>	none	<b>LATITUDE:</b>	38.007
<b>TOPO QUAD:</b>	Supply	<b>LONGITUDE:</b>	- 77.184
<b>COMMENTS:</b>	<b>Method of Determination:</b> Online Maps		
			SD
			5-28-19

# RECYC SYSTEMS, INC

## FIELD DATA SHEET

Field Identification	Gross Acres	DEQ Control ID	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
			Water Table	Bed Rock/Shallow	Surf/Leach	Freq Flood			
CRKJT 1	24.8		-	-	-	-	YO51	60 - A - 12A	T 3109 F 1
CRKJT 2	12.9		-	-	-	-	YO51	60 - A - 12A	T 3109 F 2
TOTAL ACRES IN SITE	37.7								

5-28-19



Report Number: 19-064-0650

Account Number: 70594



"Every acre...Every year."™

7621 Whitepine Road, Richmond, VA 23237  
 Main 804-743-9401 ° Fax 804-271-6446  
 www.waypointanalytical.com

Send To: Recyc Systems Inc  
 Susan Trumbo  
 8455 Whiteshop Road  
 Culpepper VA 22701

Grower: K & J Timberland  
 Caroline Co

**SOIL ANALYSIS REPORT**

Analytical Method(s): SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 03/05/2019

Date Of Analysis: 03/06/2019

Date Of Report: 03/07/2019

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
1	25419	1.6 L		75	89 H			87 M	85 H	625 M		6.1	6.87	0.6	4.7
2	25420	1.7 L		80	49 M			61 L	68 H	425 H		6.5		0.2	3.0

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	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		
1	4.7	15.1	66.5		12.8			7.5 H	37 H						
2	5.2	18.9	70.8		6.7			5.8 H	31 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: Waypoint Analytical Virginia, Inc.

by: *Paucic McGeary*

Paucic McGroary

**Nutrient Management Plan Balance Sheet**  
**(Spring, 2017-Summer, 2022)**  
**K & J Timberlands**  
**Planner: Susan Trumbo (cert. No. 103)**

Tract: 3109      Location: Caroline  
(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/CRKJT 1(N)	25/25	2017	Soybeans (FS)	0-60-60	0/0				0-60-60	N/A		
			Fallow	0-0-0	0/0				0-60-60	N/A		
		2018	Corn (grain)	140-60-60	20/0				120-120-120	N/A		
2/CRKJT 2(N)	13/13	2017	Soybeans (FS)	0-60-60	0/0				0-60-60	N/A		
			Fallow	0-0-0	0/0				0-60-60	N/A		
		2018	Corn (grain)	140-60-60	20/0				120-120-120	N/A		

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

**Notes:**

**Field Productivities for Major Crops**

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
3109	3109/1	CRKJT 1	25	Kempsville	IIIa	II	Not Suited	II	
	3109/2	CRKJT 2	13	Kempsville	IIIa	II	Not Suited	III	

**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 Spring, 2017 - Summer, 2022

**Farm Name:** K & J Timberlands

**Location:** Caroline

**Specialist:** Susan Trumbo

**N-based Acres:** 37.7

**P-based Acres:** 0.0

**Tract Name:** 3109

**FSA Number:** 3109

**Location:** Caroline

**Field Name:** CRKJT 1

**Total Acres:** 24.78 **Usable Acres:** 24.78

**FSA Number:** 1

**Tract:** 3109

**Location:** Caroline

**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
	[NO TEST]			

## **Soils:**

PERCENT	SYMBOL	SOIL SERIES
25	11A	Emporia Kempsville
65	11B	Emporia Kempsville
10	22B	Slagle

**Field Warnings:**

**Crop Rotation:**

PLANTED	YIELD	CROP NAME
2017-Sp	40.0 bushel(s)	Soybeans (FS) - No Till
2017-Fa	0.0	Fallow - No Till
2018-Sp	141.0 bushel(s)	Corn (grain) - No Till

**Field Name: CRKJT 2**

Total Acres: 12.88 Usable Acres: 12.88  
FSA Number: 2  
Tract: 3109  
Location: Caroline  
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
	[NO TEST]			

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
45	11A	Emporia Kempsville
55	11B	Emporia Kempsville

**Field Warnings:**

**Crop Rotation:**

PLANTED	YIELD	CROP NAME
2017-Sp	40.0 bushel(s)	Soybeans (FS) - No Till
2017-Fa	0.0	Fallow - No Till

2018-Sp

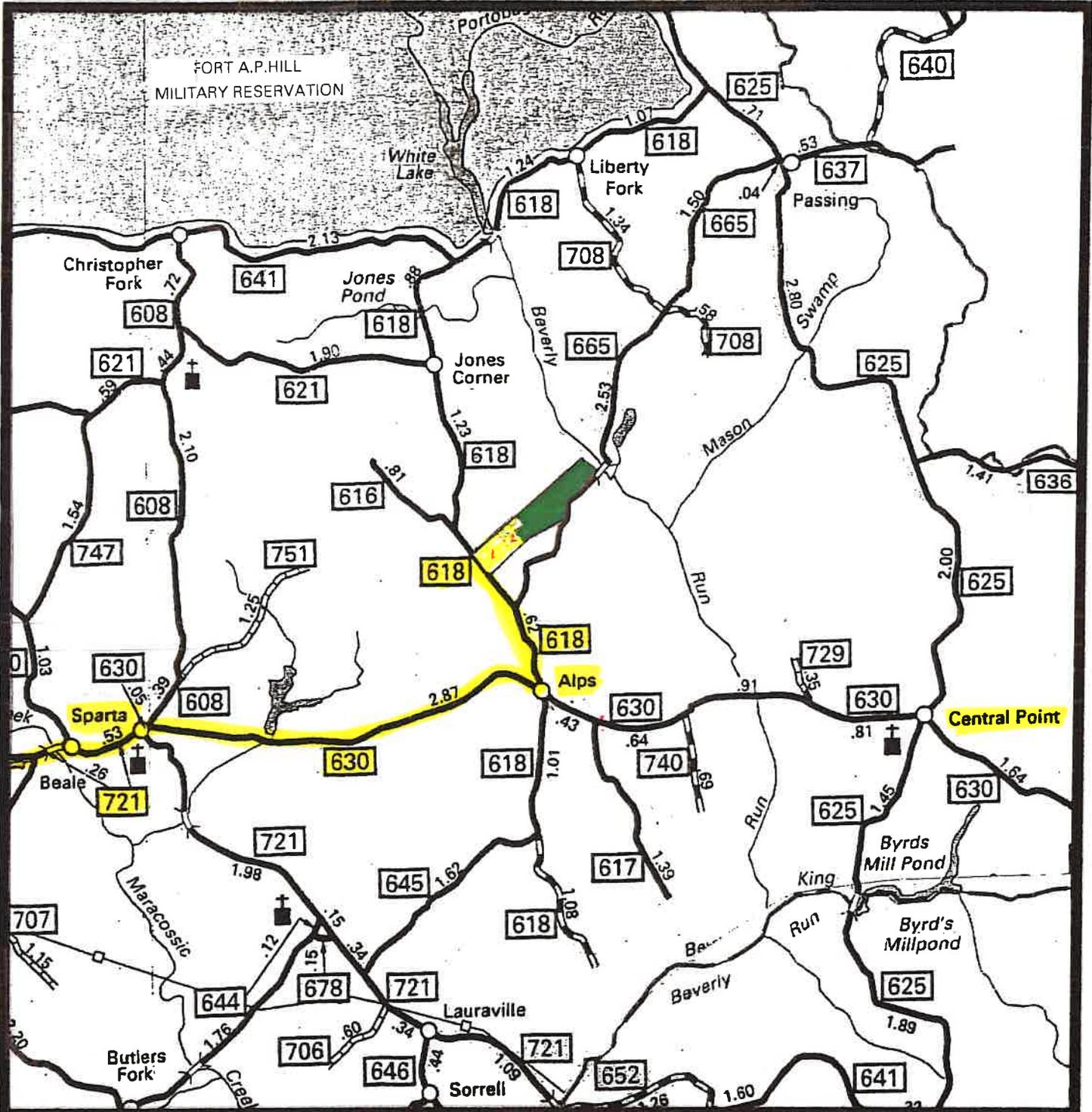
140.0 bushel(s)

Corn (grain) - No Till

# MAPS

# Recyc Systems™ Inc.

(Biosolids Land Application)



Scale: 1" = 1 mile

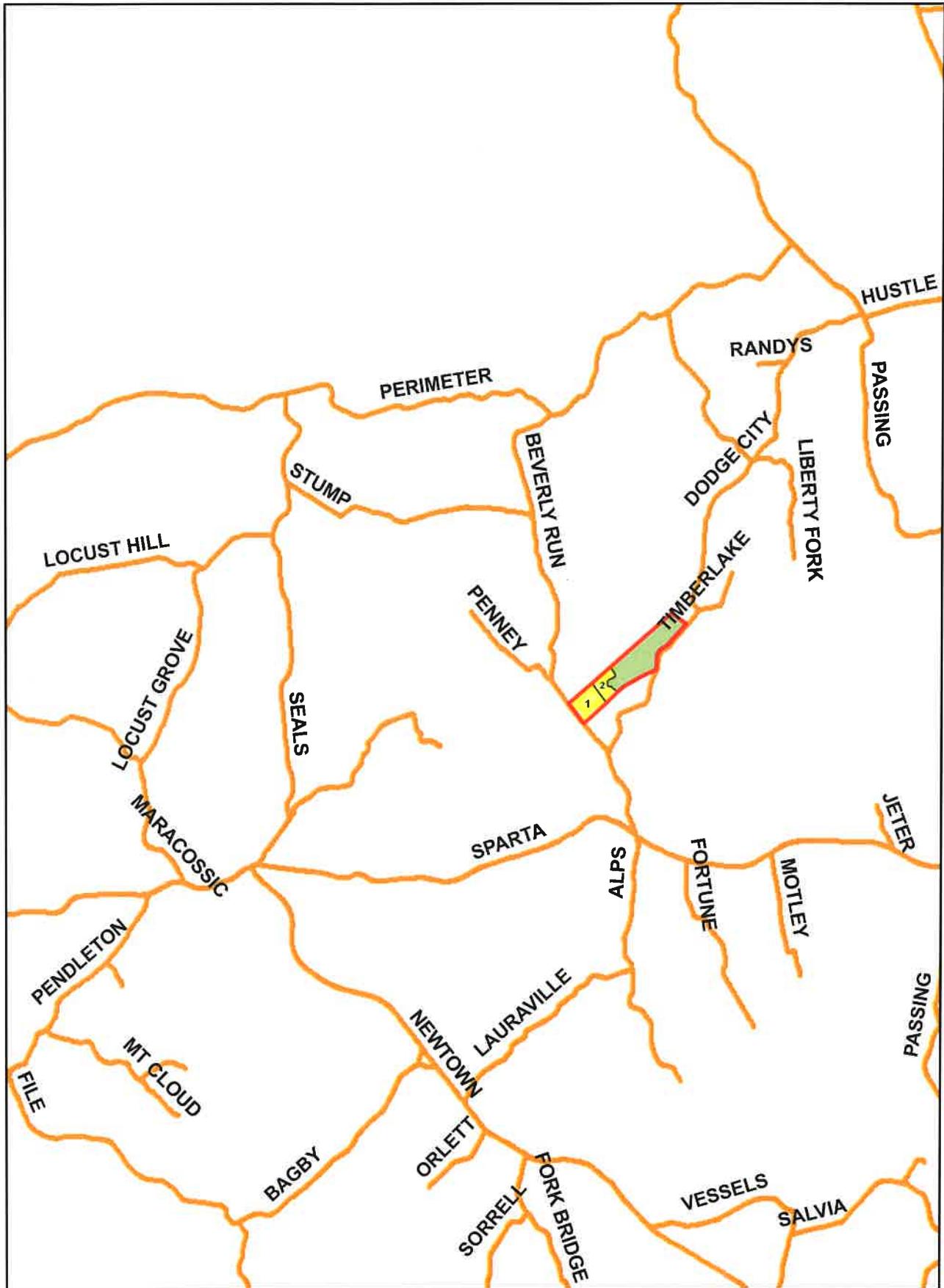
CRKJT 1, 2

5-28-19

## VICINITY MAP

Truck Route marked in Yellow



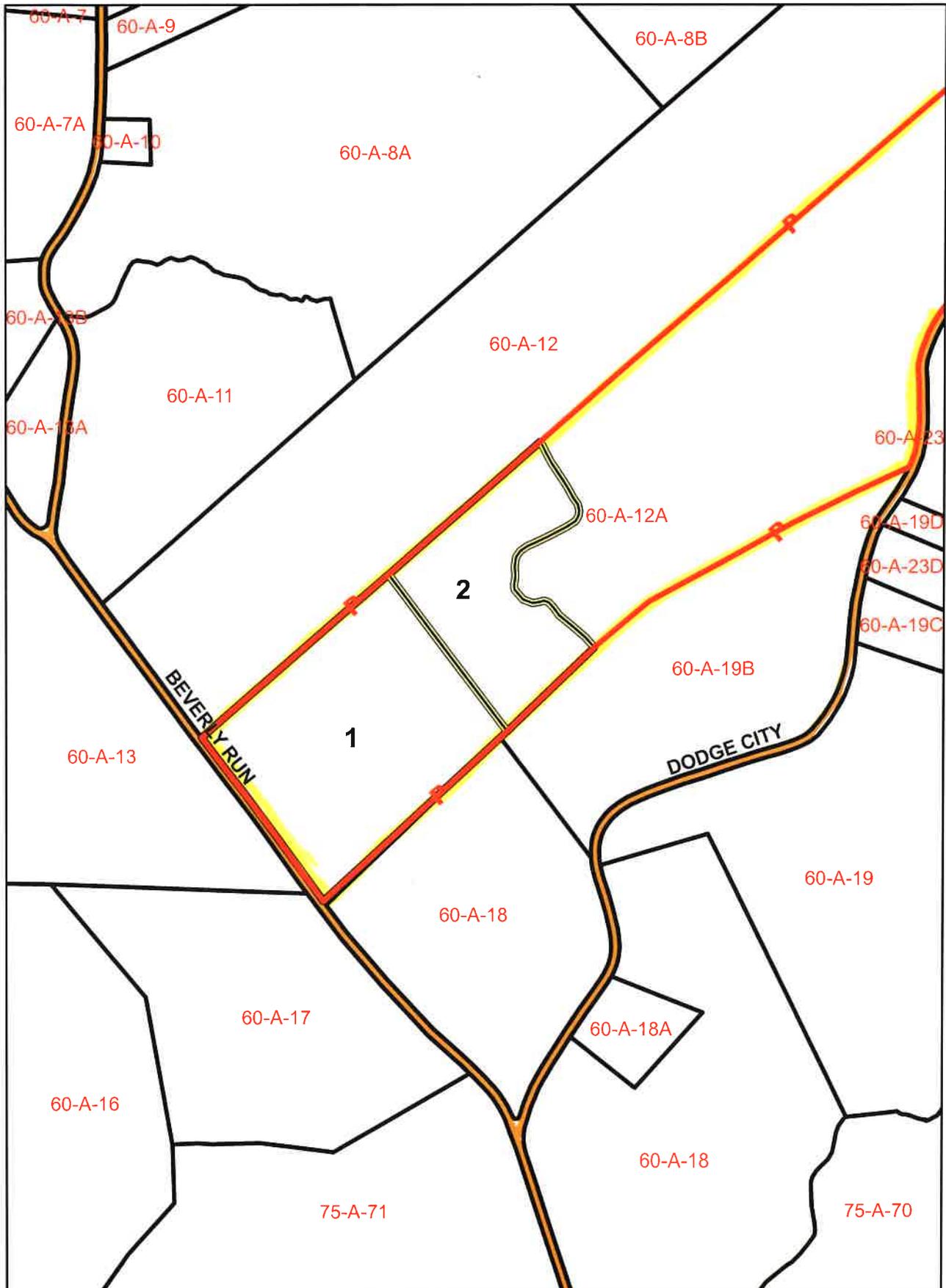


5-28-19

VICINITY MAP

1 in = 1 mile

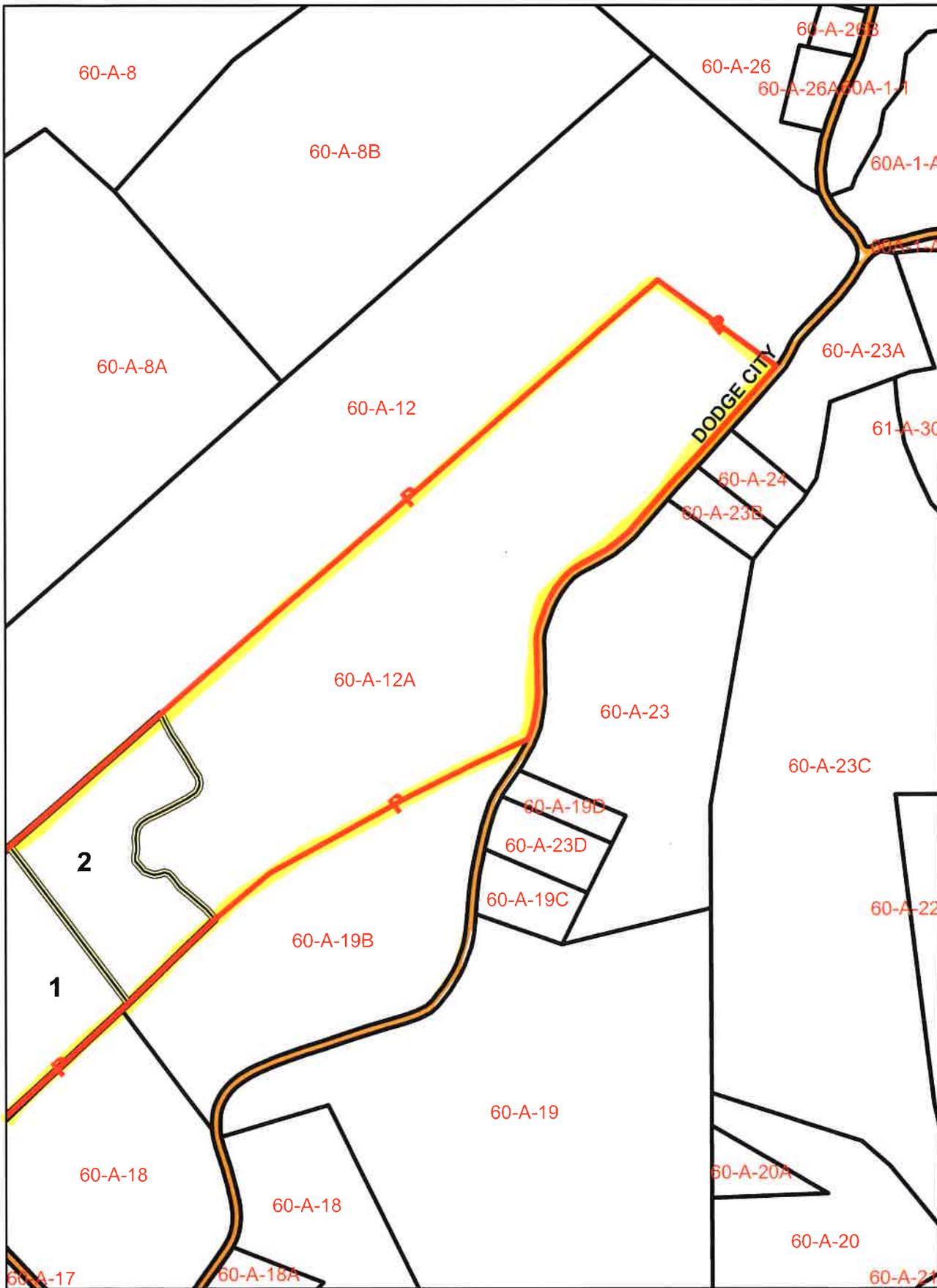




5-28-19

**TAX MAP**

1 in = 660 feet



5-28-19

**TAX MAP**

1 in = 660 feet



# ADJOINING LANDOWNERS

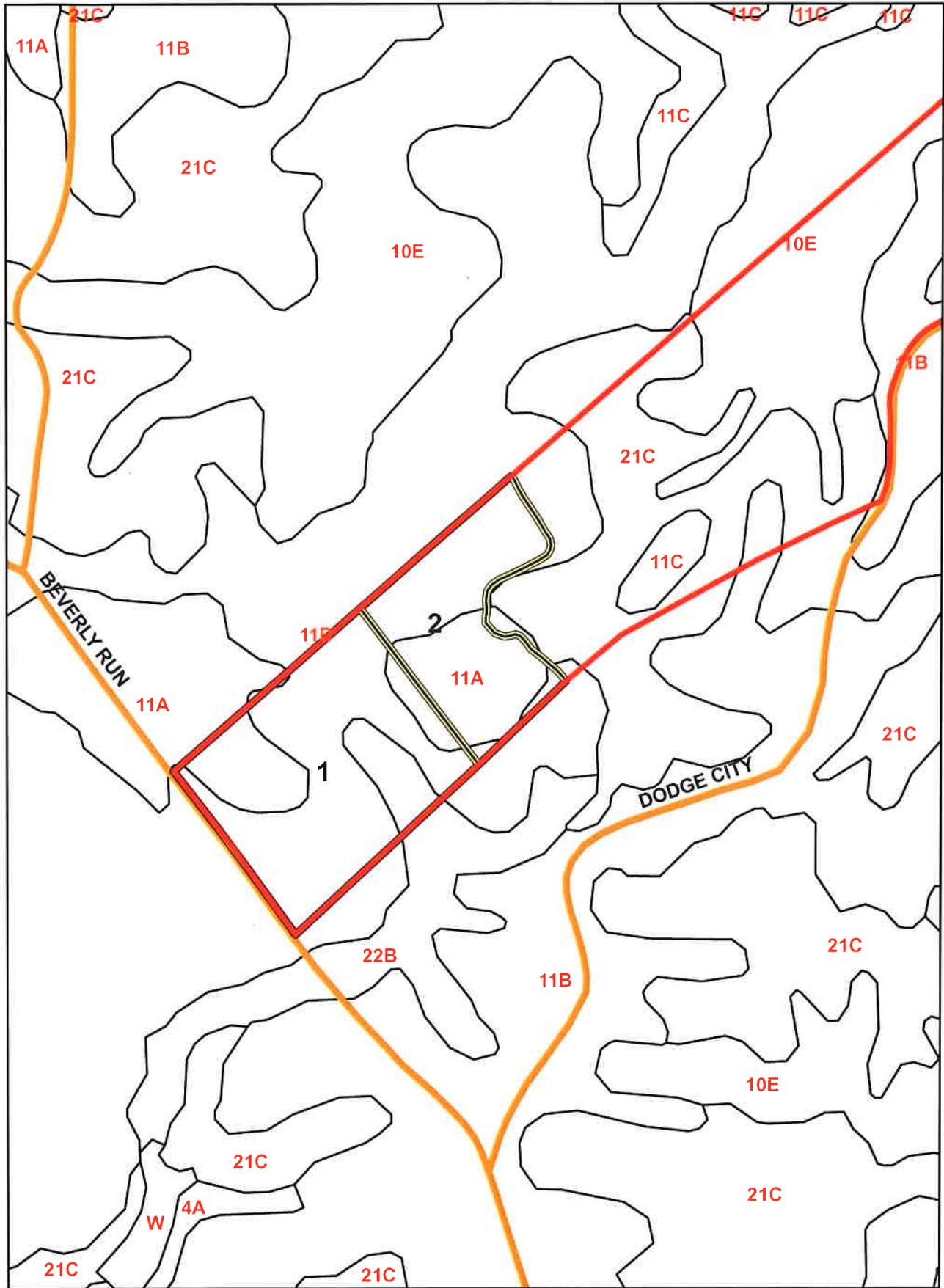
## K and J TIMBERLANDS

---

### CAROLINE COUNTY

---

<b>Tax Map</b>	<b>Parcel #</b>	<b>Owner Name(s)</b>
<b>60</b>	12	Alps Farm LLC
	12A	K & J Timberlands LLC
	13	Broaddus Properties LLC
	17	Franklin Gee
	18	Donald Penney
	19B	Fredrick and Kenneth Taormina
	19D	Sloane R. Page
	23	Marjorie A. Heath et. als.
	23A	Edward A. Nelson, Sr.
	23B	Edward A. Nelson, Sr.
	23C	Broaddus Properties LLC
	23D	Rebecca Jean Doggett
	24	Shawn K. Pitts
	26	Maxie Broaddus Estate
26A	Keith and Lelia Fortune	
<b>60A-1</b>	1	James D. and Talitha Powell
<b>60A</b>	1A	Timberlake Owners Group LLC
<b>61</b>	30	Paul D. Pitts

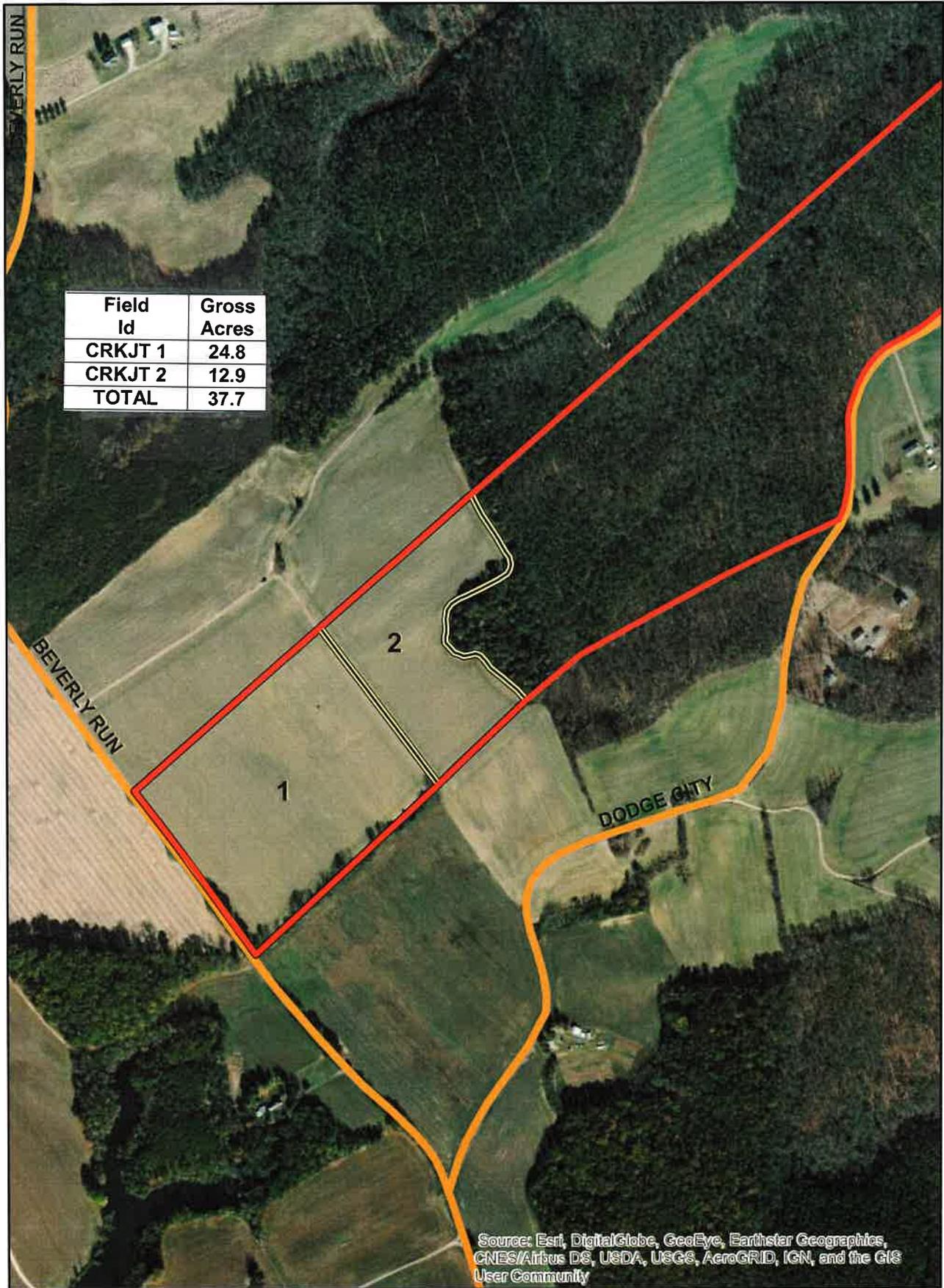


5-28-19

SOIL MAP

1 in = 660 feet

Frequent Flooding  
marked in Orange



5-28-19

AERIAL MAP

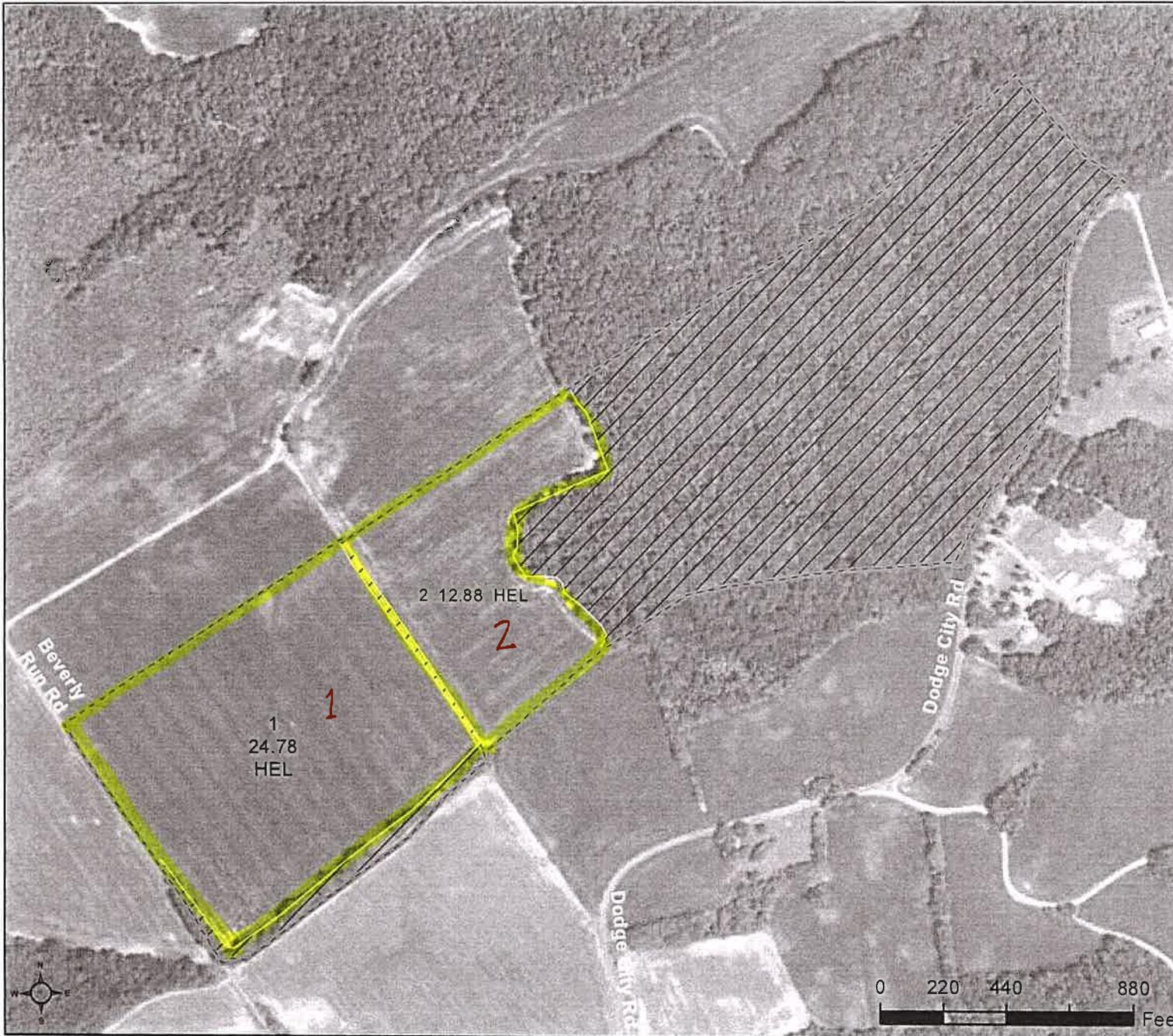
1 in = 660 feet

Farm 2031

Tract 3109

2019 Program Year

Map Created April 02, 2019



**Common Land Unit**

- /// Non-Cropland
- Cropland
- rcl\_l\_va033
- Tract Boundary

**Wetland Determination Identifiers**

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

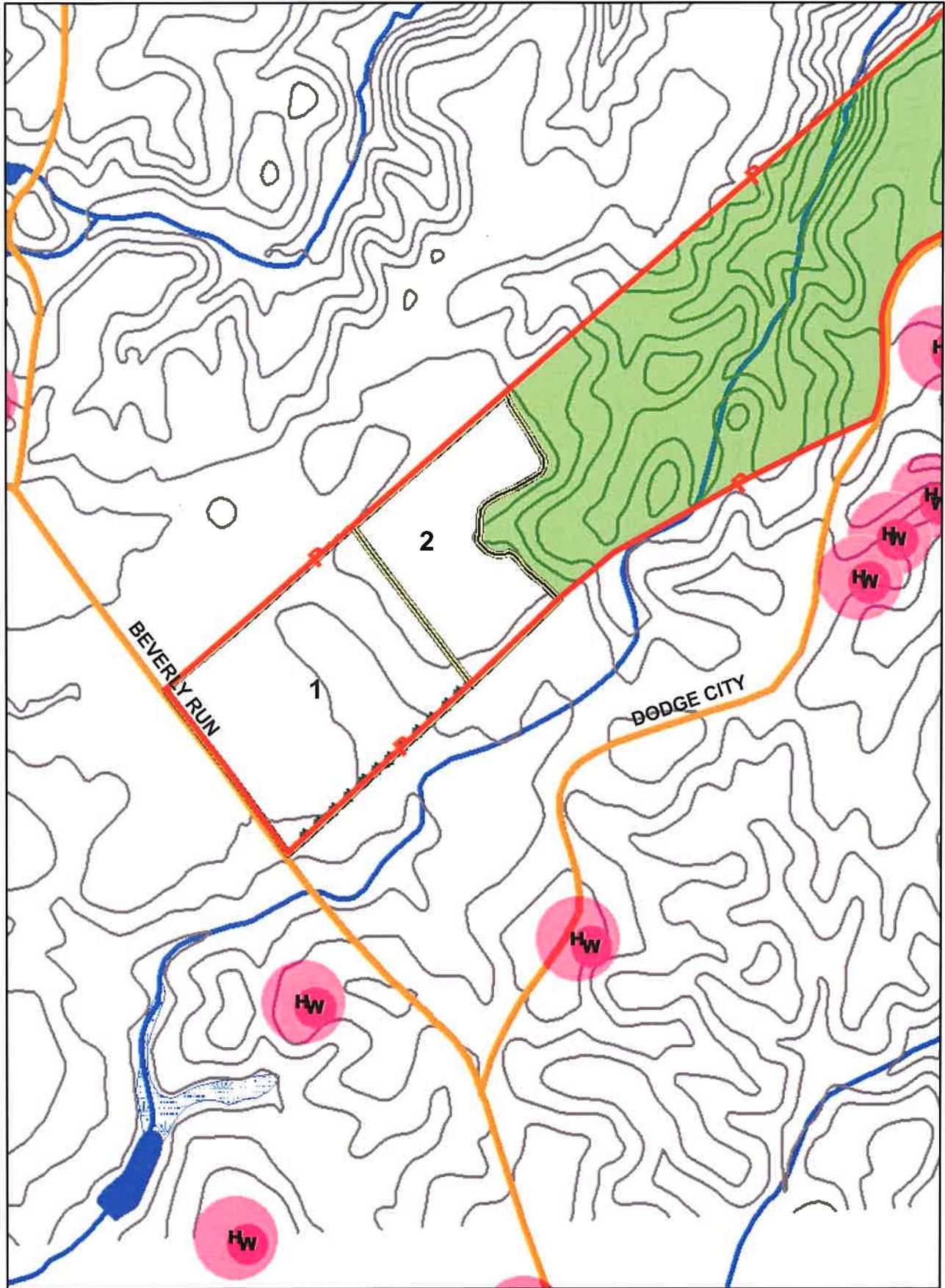
Tract Cropland Total: 37.66 acres

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).

# 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

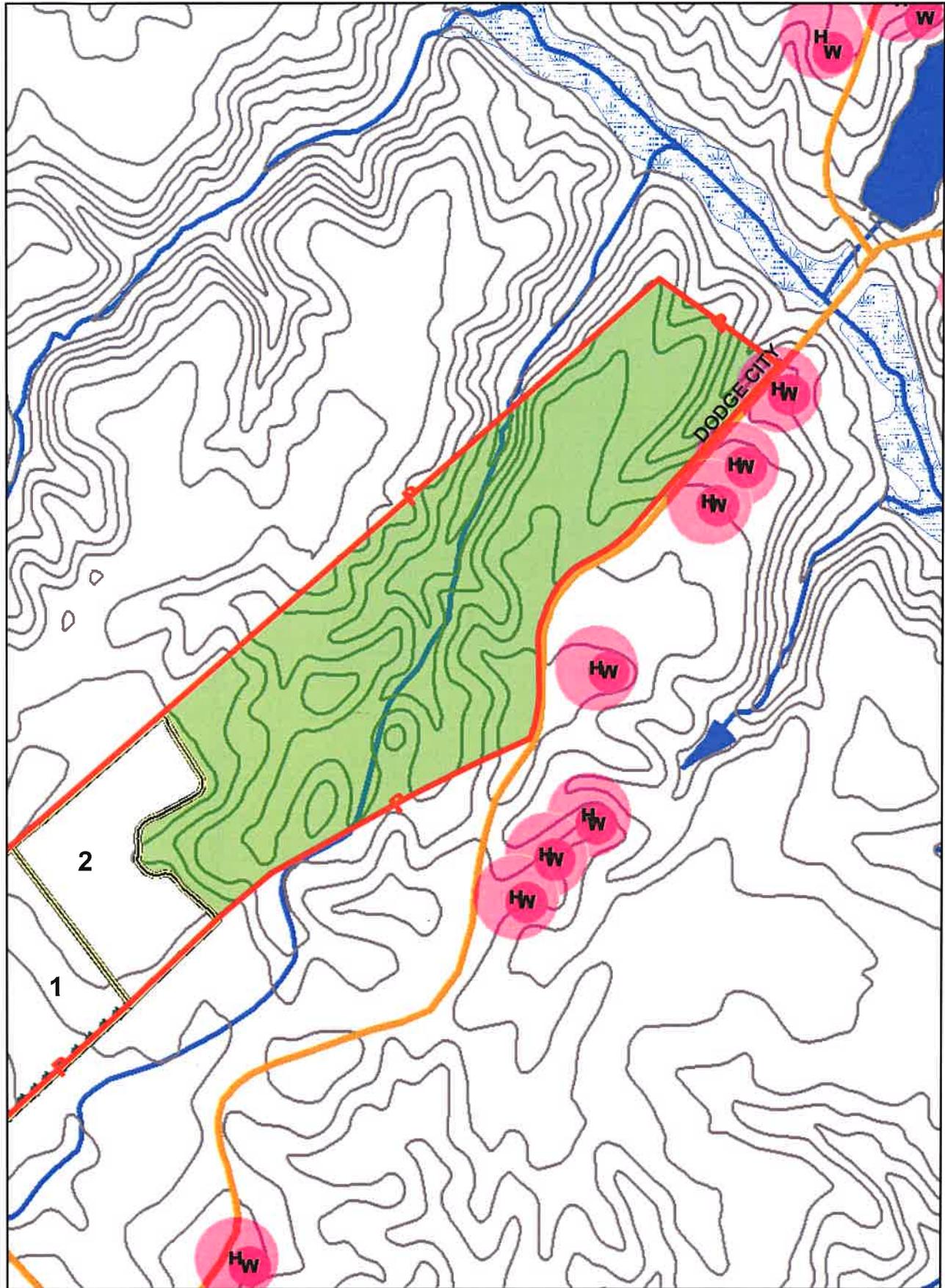
\*Buffer can be reduced or waived upon written consent from landowner.



5-28-19

**SITE PLAN**

1 in = 660 feet

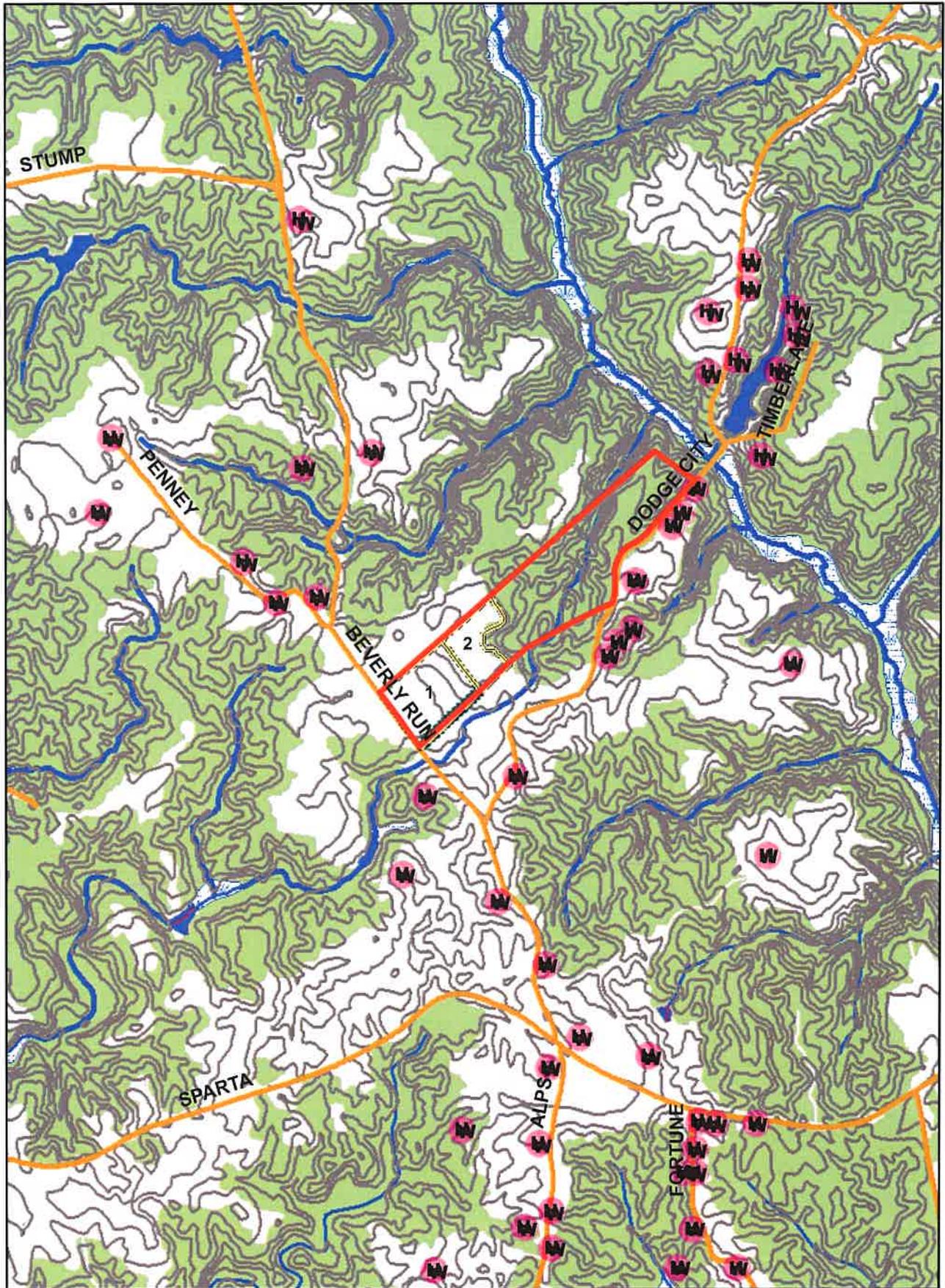


5-28-19

**SITE PLAN**

1 in = 660 feet





**TOPOGRAPHIC MAP**

1 in = 2,000 feet