

LAND APPLICATION SITE

R M SODERQUIST

MARMS 7 - 11

MADISON 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 7-23-19 between Randy Soderquist 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 Madison City 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>52 4A</u>	<u>50 29</u>	<u>50 27A</u>	<u>52 4E</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.

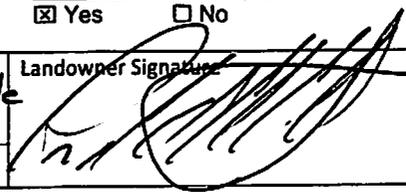
In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

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.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

Printed name <u>Randy Soderquist</u>	Mailing Address <u>7209 Locust Dale Rd Locust Dale VA 22948</u>	Landowner Signature 
By: <u>Owner</u>	Phone No. <u>703 919 0459</u>	
* <input 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 
Title <u>Technical Manager</u>	Phone No. <u>540-547-3300</u>	

Permittee: Recyc Systems, Inc

County or City: Madison

Landowner: Randy Soderquist

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.

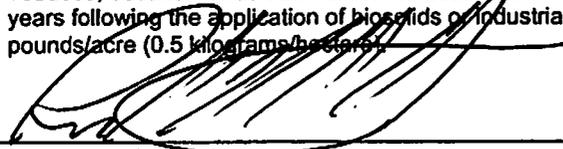
I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

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).


Landowner's Signature

7-23-2019
Date

Operator's Signature

mailing address & phone

Date

NUTRIENT MANAGEMENT PLAN IDENTIFICATION

Operator
R M Soderquist
7209 Locust Dale Road
Locust Dale, VA 22948
703-919-0459

Integrator:None

Farm Coordinates
Easting: 0, Northing: 0, zone: 17

Watershed Summary
watershed: RA34
county: Madison

Nutrient Management Planner
Susan Trumbo
Recyc Systems, Inc
PO Box 562
Remington Virginia 22734
540.547.3300
540.547.3300

Certification Code: 103

Acreage Use Summary
Total Acreage in this plan: 89.8
Cropland: 0.
Hayland: 0.
Pasture: 89.8
Specialty: 0.

Livestock Summary
Beef Cattle 0
Dairy Cattle 0
Poultry 0
Swine 0
Other 0

Manure Production Balance

	Imported	Produced	Exported	Used	Net
kgals	0.	0.	0.	0.	0.
tons	0.	0.	0.	0.	0.

Plan written 9/6/2019
Valid until 9/6/2019

Signature: _____
Planner date

Nutrient Management Plan Balance Sheet
(Fall, 2020-Winter, 2024)
R M Soderquist
Planner: Susan Trumbo (cert. No. 103)

Tract: 1135 Location: Madison
(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 2/RMS-07(N)	15/15	2020	Grass Pasture	50-30-40	0/0			50-30-40	N/A			
		2021	50-30-40	0/0			50-60-80	N/A			
2/RMS-08(N)	8/8	2020	Grass Pasture	50-30-40	0/0			50-30-40	N/A			
		2021	50-30-40	0/0			50-60-80	N/A			
02/RMS-09(N)	8/8	2020	Grass Pasture	50-30-40	0/0			50-30-40	N/A			
		2021	50-30-40	0/0			50-60-80	N/A			
4 9 10/RMS-10(N)	31/31	2020	Grass Pasture	50-30-40	0/0			50-30-40	N/A			
		2021	50-30-40	0/0			50-60-80	N/A			
3/RMS-11(N)	29/29	2020	Grass Pasture	50-80-80	0/0			50-80-80	N/A			
		2021	50-80-80	0/0			50-160-160	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
1135	1135/1 2	RMS-07*	15	Hazel	IVa	II	III	III	Shallow soil, High Slope
	1135/2	RMS-08*	8	Lloyd	IIIb	II	II	III	Shallow soil, High Slope
	1135/02	RMS-09	8	Lloyd	IIIa	II	II	II	
	1135/4 9 10	RMS-10*	31	Lloyd	IVa	II	III	III	Shallow soil, High Slope
	1135/3	RMS-11	29	Lloyd	IIb	I	II	II	

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

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, 2020 - Winter, 2024

Farm Name: R M Soderquist

Location: Madison

Specialist: Susan Trumbo

N-based Acres: 89.8

P-based Acres: 0.0

Tract Name: 1135

FSA Number: 1135

Location: Madison

Field Name: RMS-07

Total Acres: 15.00 **Usable Acres:** 15.00

FSA Number: 12

Tract: 1135

Location: Madison

Slope Class: C **Hydrologic Group:** D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

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
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5	EIB2	Elioak
5	GID2	Glenelg2
10	HaC	Hazel
25	HaD	Hazel
30	LfC2	Lloyd
25	MvB	Meadowville

Field Warnings:

Environmentally Sensitive Soils due to:

Shallow soils less than 41 inches deep likely to be located over fractured or limestone bedrock

Soils with perent slope in excess of 15%

Crop Rotation:

PLANTED	YIELD	CROP NAME
2020-Fa	2.4 * acres/AU	Orchard grass/fescue pastures<=25% legume, maint. - No Till
2021-Sp	2.4 * acres/AU	Orchard grass/fescue pastures<=25% legume, maint. - No Till

Field Name: RMS-08
Total Acres: 8.00 **Usable Acres:** 8.00
FSA Number: 2
Tract: 1135
Location: Madison
Slope Class: C **Hydrologic Group:** D

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

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
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[NO TEST]

Soils:

PERCENT	SYMBOL	SOIL SERIES
20	HaD	Hazel
25	LfB	Lloyd
50	LfC2	Lloyd
5	MvB	Meadowville

Field Warnings:

Environmentally Sensitive Soils due to:

Shallow soils less than 41 inches deep likely to be located over fractured or limestone bedrock

Soils with perent slope in excess of 15%

Crop Rotation:

PLANTED	YIELD	CROP NAME
2020-Fa	2.0 * acres/AU	Orchard grass/fescue pastures<=25% legume, maint. - No Till
2021-Sp	2.0 * acres/AU	Orchard grass/fescue pastures<=25% legume, maint. - No Till

Field Name: RMS-09

Total Acres: 7.60 Usable Acres: 7.60

FSA Number: 02

Tract: 1135

Location: Madison

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

[NO TEST]

Soils:

PERCENT	SYMBOL	SOIL SERIES
10	CfB	Cecil
15	EIC2	Elioak
25	HaD	Hazel
10	LfB	Lloyd
25	LfC2	Lloyd
15	MvB	Meadowville

Field Warnings:

Environmentally Sensitive Soils due to:

Shallow soils less than 41 inches deep likely to be located over fractured or limestone bedrock

Soils with perent slope in excess of 15%

Crop Rotation:

PLANTED	YIELD	CROP NAME
2020-Fa	2.1 acres/AU	Orchard grass/fescue pastures<=25% legume, maint. - No Till
2021-Sp	2.1 acres/AU	Orchard grass/fescue pastures<=25% legume, maint. - No Till

Field Name: RMS-11

Total Acres: 28.50 Usable Acres: 28.50

FSA Number: 3

Tract: 1135

Location: Madison

Slope Class: B Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

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
10	EIB	Elioak
30	LfB	Lloyd
30	LfC2	Lloyd
30	MvB	Meadowville

Field Warnings:

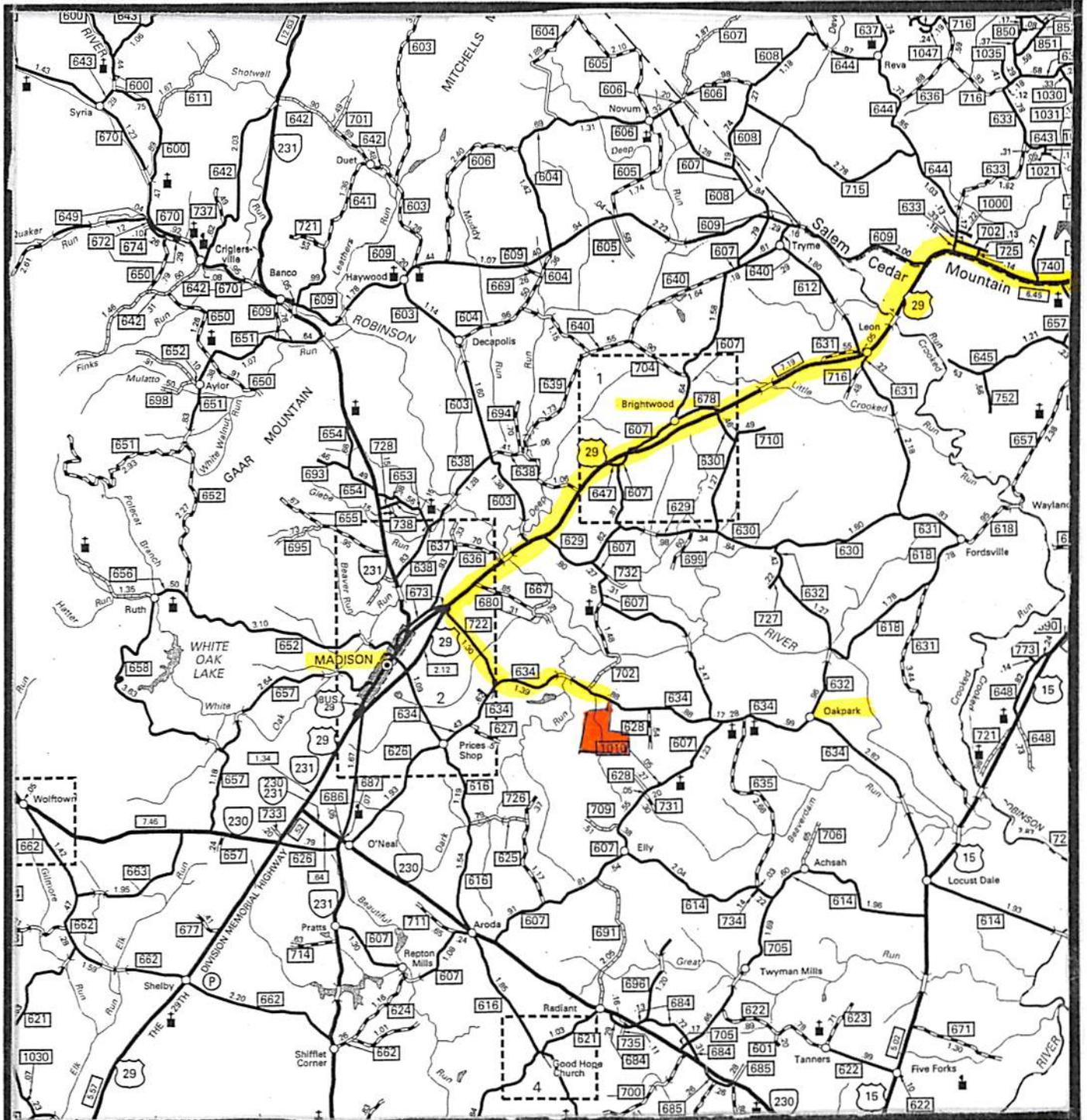
Crop Rotation:

PLANTED	YIELD	CROP NAME
2020-Fa	1.2 acres/AU	Orchard grass/fescue pastures<=25% legume, maint. - No Till
2021-Sp	1.2 acres/AU	Orchard grass/fescue pastures<=25% legume, maint. - No Till

MAPS

Recyc Systems™ Inc.

(Biosolids Land Application)

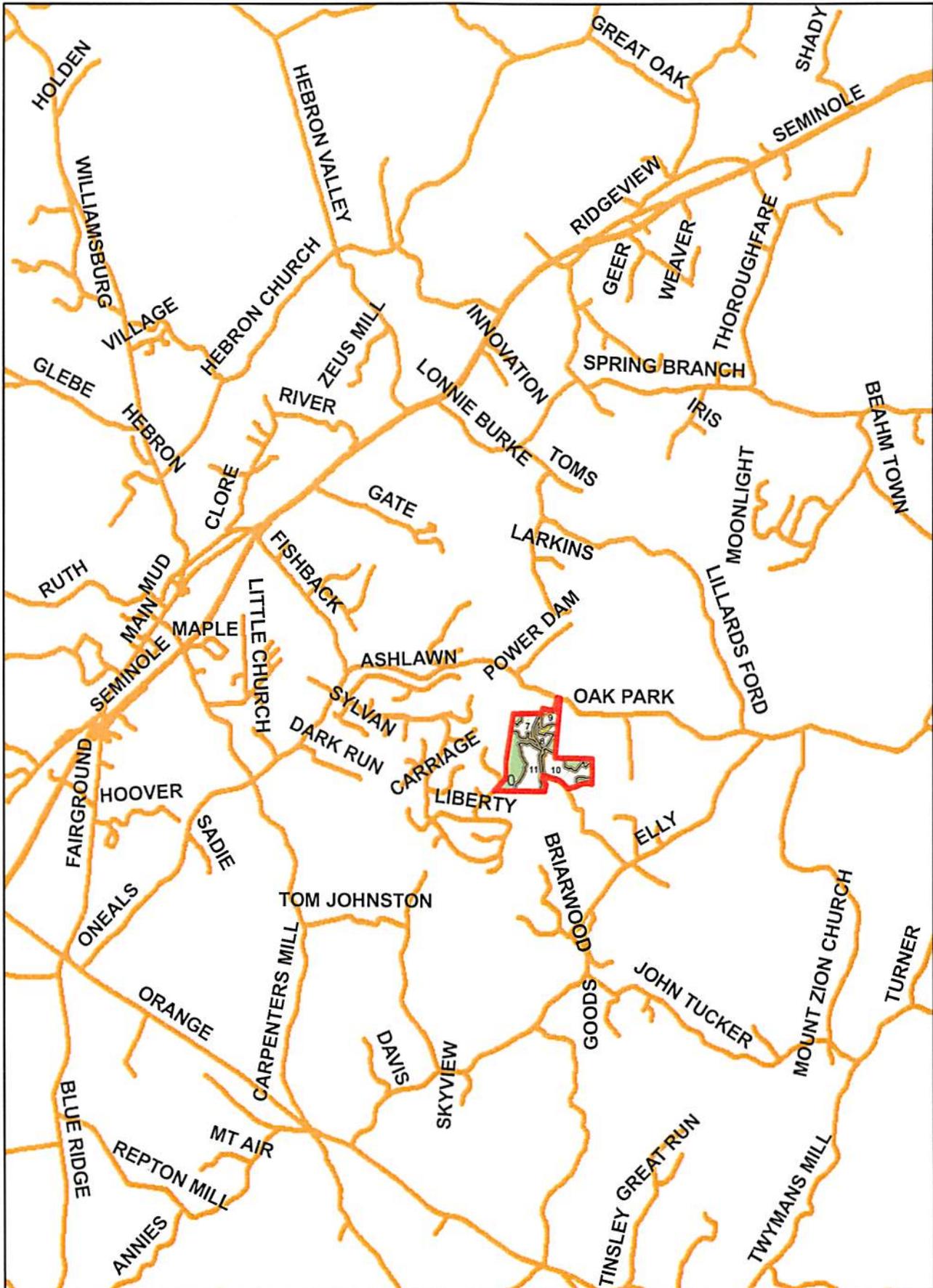


Scale: 1" = 2 Miles

VICINITY MAP

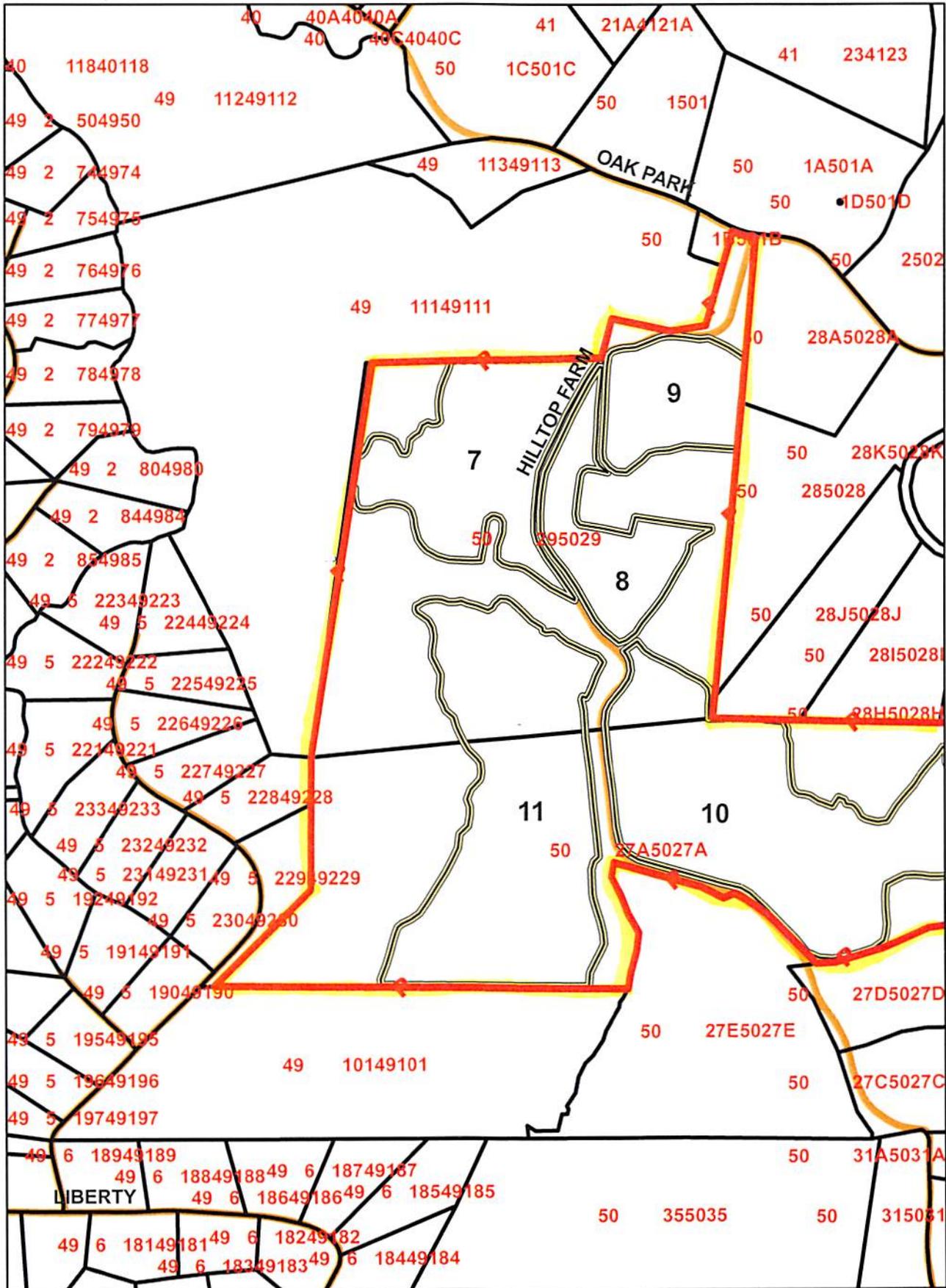
Truck Route marked
in Yellow





VICINITY MAP

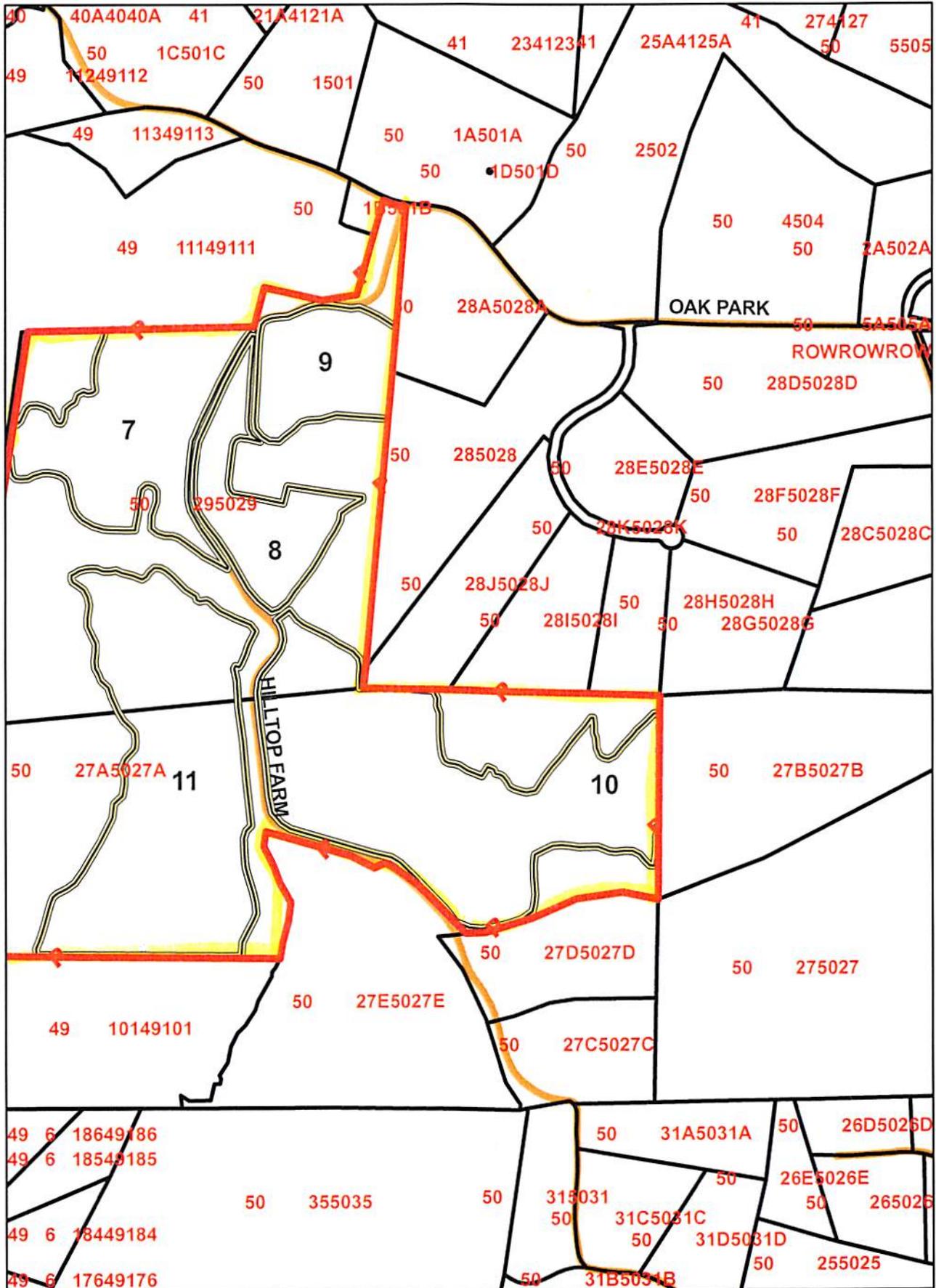
1 in = 1 miles



TAX MAP

1 in = 660 feet



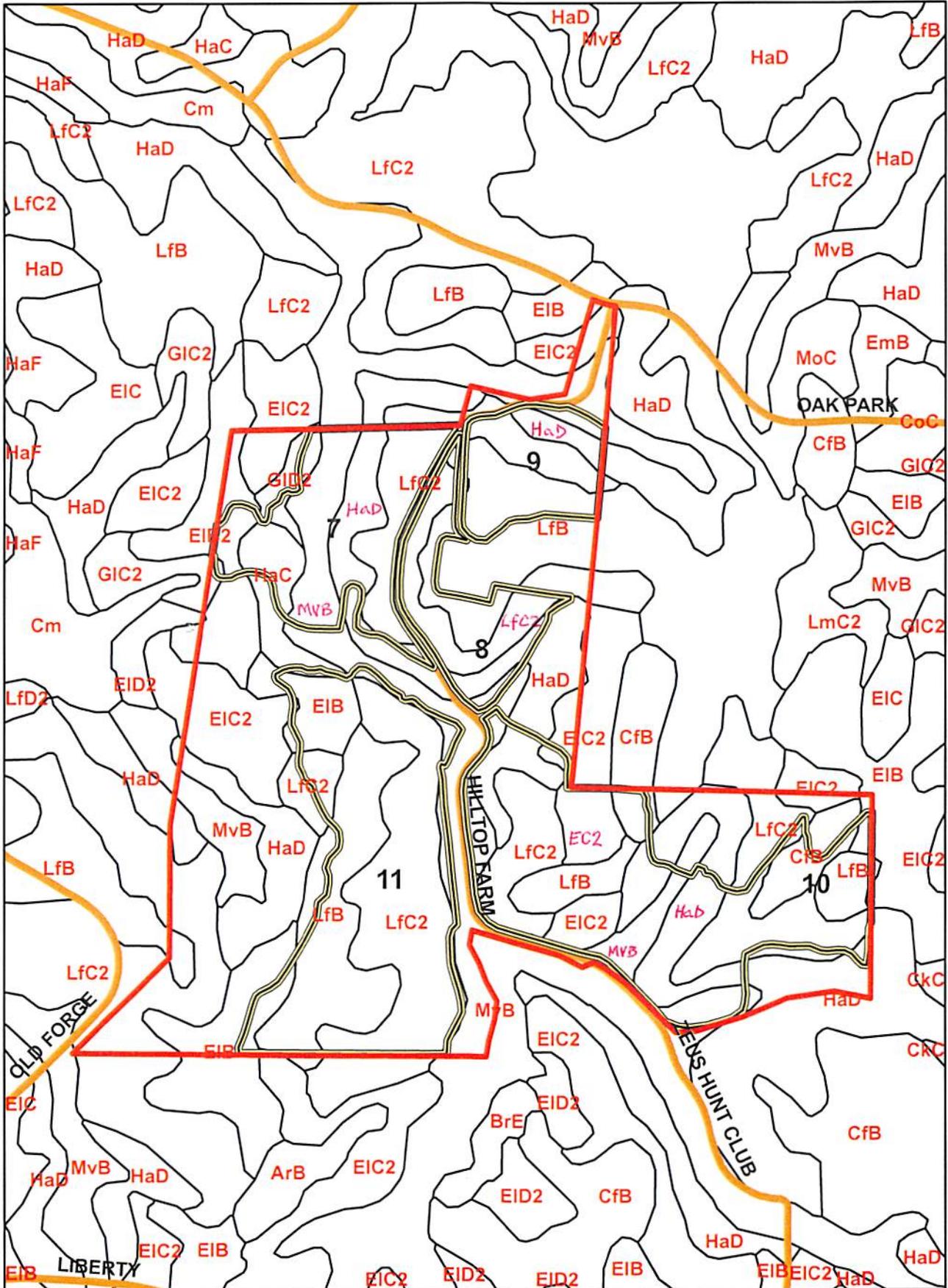


ADJOINING LANDOWNERS

MADISON COUNTY

R. M. SODERQUIST

Tax Map	Parcel #	Owner Name(s)
49	101	Everette Lee Kline Jr. and Judith Ann
	111	Sadie L. Utz Est.
49-5	30	Joseph E. Titman and Brett C.
	31	David W. Davis Sr. and Pamela S. Wilson
	190	Wells Fargo Bank
	191	James T. Gill III and Sarah D.
	227	John and Diana Wright
	228	Corbett B. and Patricia K. Messa
	229	William R. Moore and Erin B.
50	1A	Roger W. and Jill W. Schreiner
	1B	Margaret W. Carter
	27	James R. Berry II and Brenda T.
	27A	Randy R. Soderquist
	27B	Peter L. and Elizabeth D. Thompson
	27D	John E. and Joyce G. Lynch
	27E	Clarke D. and Wendy G. Bargerstock
	28	Springhaven Farm LLC
	28A	Mark D. and Vicky P. Mitchell
	28G	Springhaven Farm LLC
	28H	Springhaven Farm LLC
	28I	Springhaven Farm LLC
	28J	Springhaven Farm LLC
29	Randy R. Soderquist	



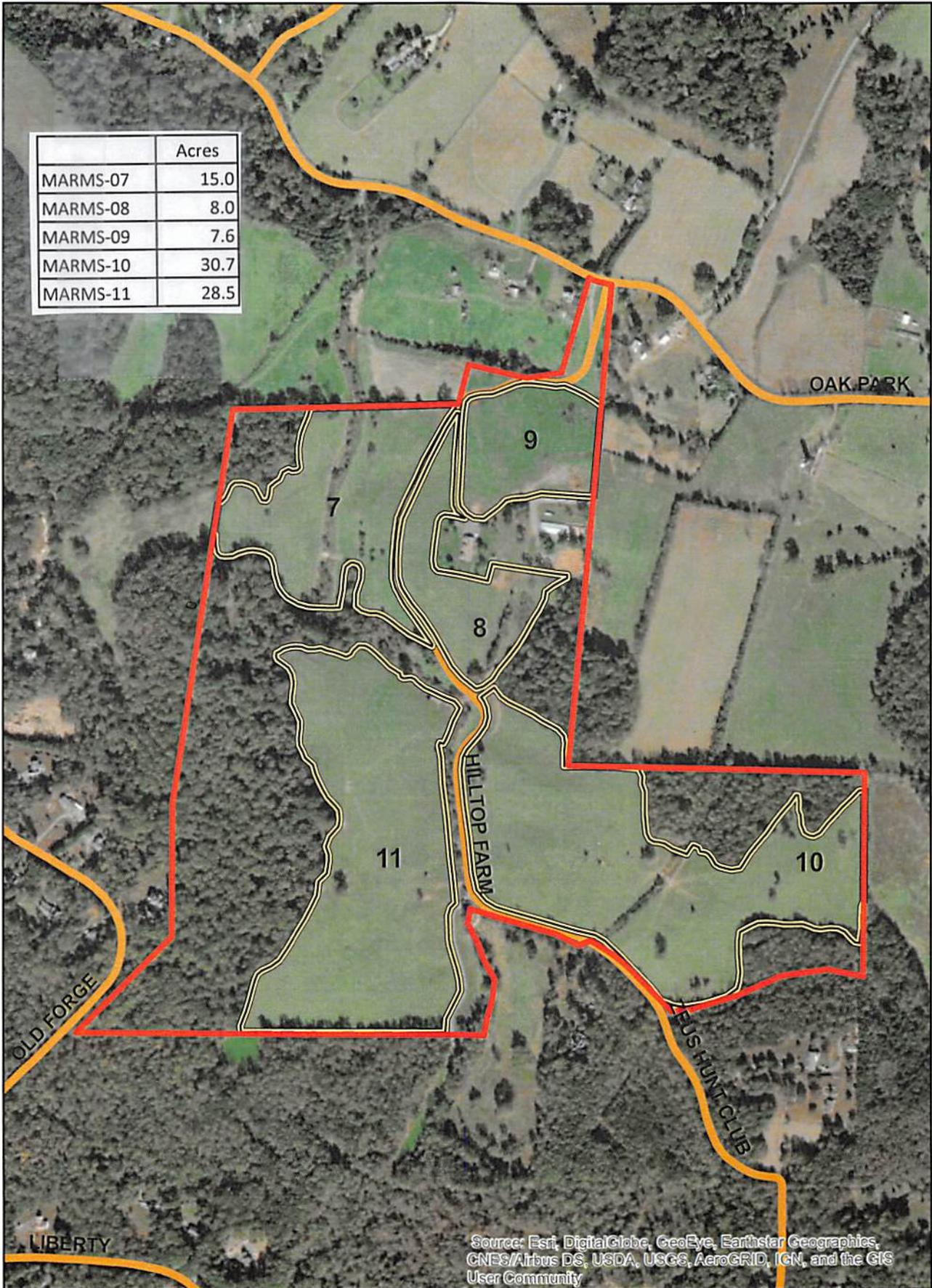
SOIL MAP

1 in = 660 feet





	Acres
MARMS-07	15.0
MARMS-08	8.0
MARMS-09	7.6
MARMS-10	30.7
MARMS-11	28.5



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

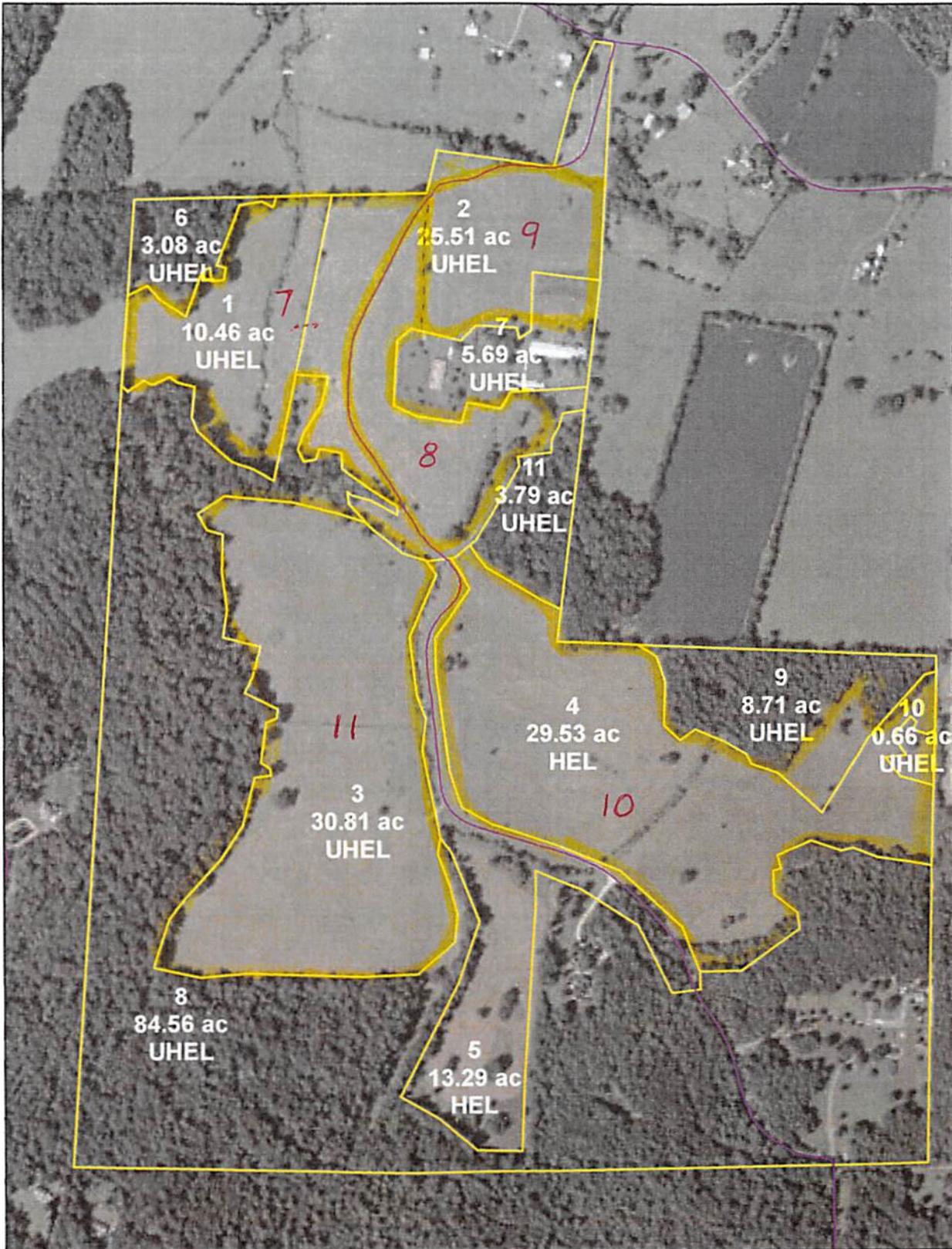


AERIAL MAP

1 in = 660 feet



UNITED STATES DEPARTMENT OF
AGRICULTURE



FSN 1194 Tract 1135
Randy Soderquist

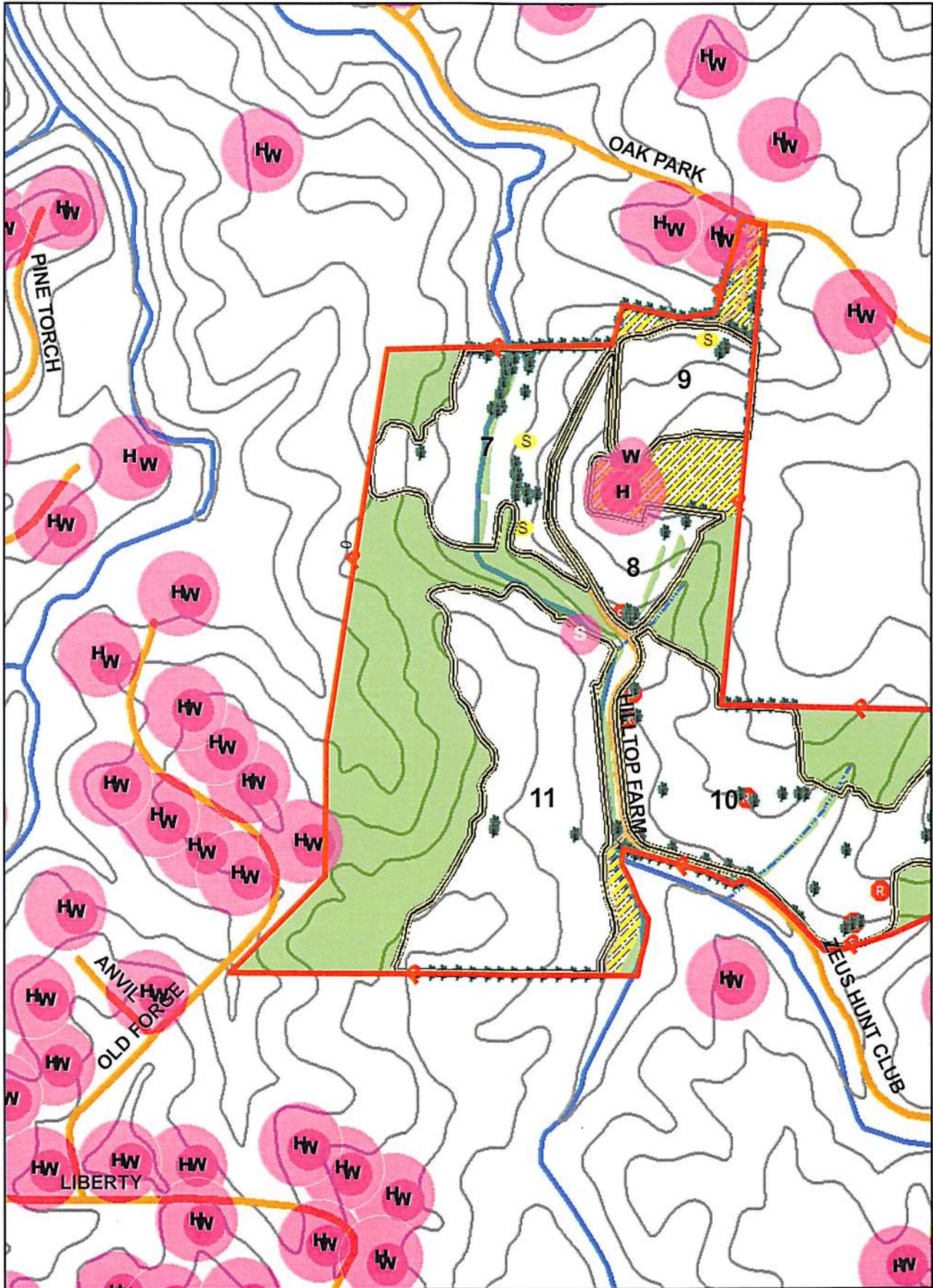


Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

Legend For Site Plan

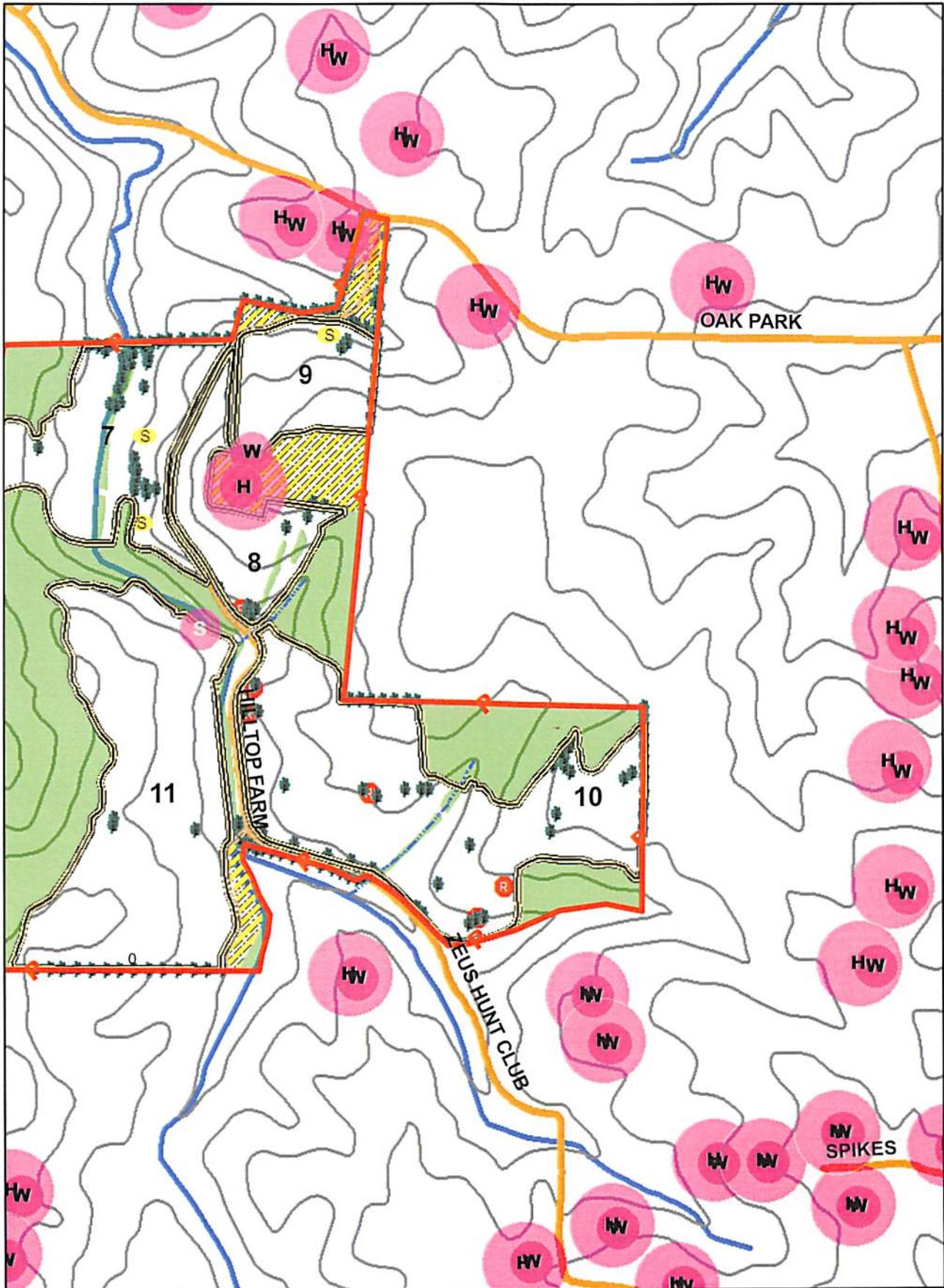
Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees 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.



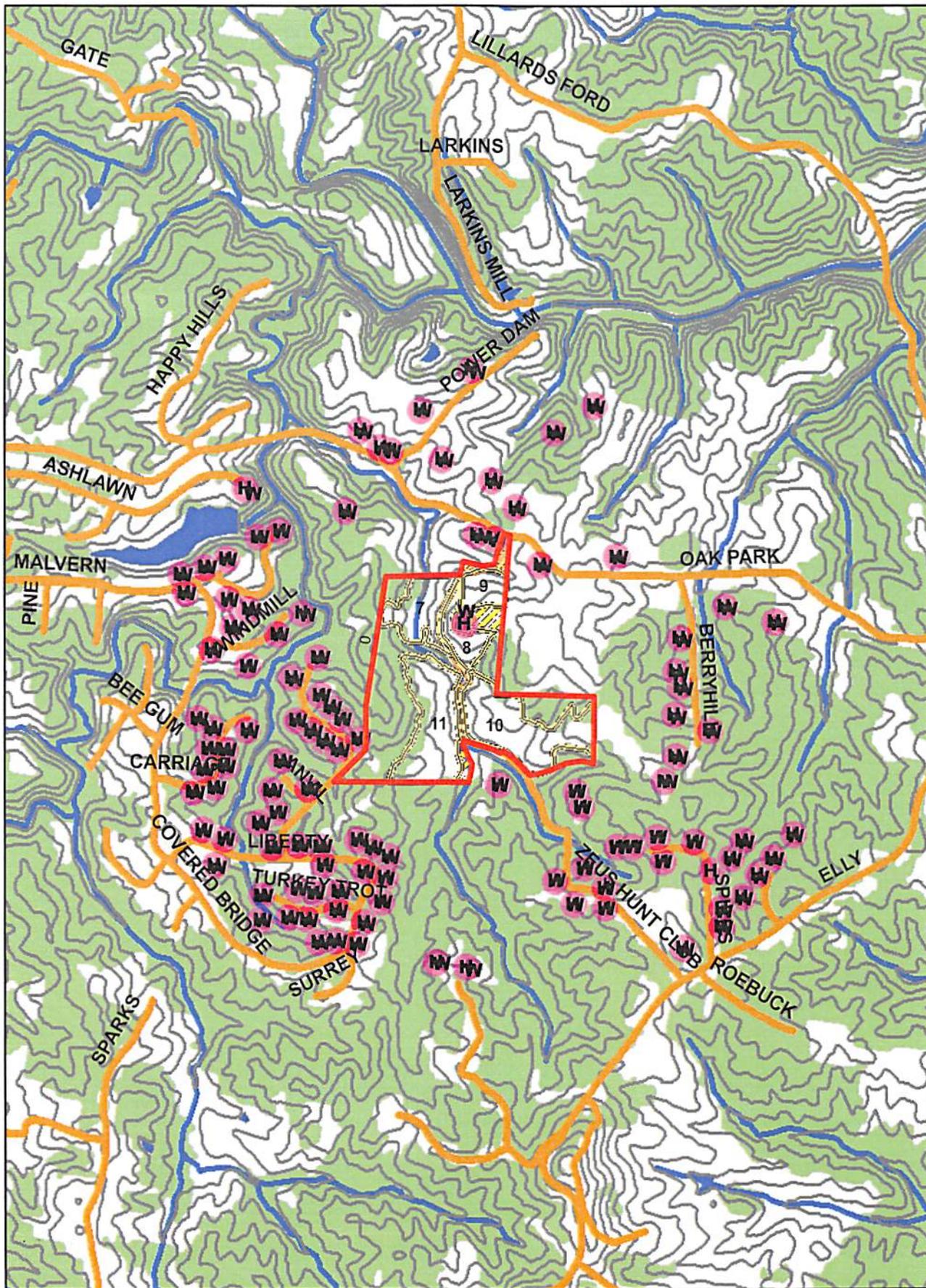
SITE PLAN

1 in = 660 feet



SITE PLAN

1 in = 660 feet



TOPOGRAPHIC MAP

1 in = 2,000 feet