North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

October 1, 2014

Trc Farms Inc
TRC Farms, Inc.
403 Loop Rd
Cove City, NC 28523

Subject: Certificate of Coverage No. AWS250010
TRC Farms, Inc.
Swine Waste Collection, Treatment,
Storage and Application System
Craven County

Dear Trc Farms Inc:

In accordance with your renewal request, we are hereby forwarding to you this Certificate of Coverage (COC) issued to Trc Farms Inc, authorizing the operation of the subject animal waste management system in accordance with General Permit AWG100000.

This approval shall consist of the operation of this system including, but not limited to, the management and land application of animal waste as specified in the facility's Certified Animal Waste Management Plan (CAWMP) for TRC Farms, Inc., located in Craven County, with a swine animal capacity of no greater than the following annual averages:

Wean to Finish:	Feeder to Finish: **3520**	Boar/Stud:
Wean to Feeder:	Farrow to Wean:	Gilts:
Farrow to Finish:	Farrow to Feeder:	Other:

If this is a Farrow to Wean or Farrow to Feeder operation, there may be one boar for each 15 sows. Where boars are unnecessary, they may be replaced by an equivalent number of sows. Any of the sows may be replaced by gilts at a rate of 4 gilts for every 3 sows.

This COC shall be effective from the date of issuance until September 30, 2019, and shall hereby void Certificate of Coverage Number AWS250010 that was previously issued to this facility. Pursuant to this COC, you are authorized and required to operate the system in conformity with the conditions and limitations as specified in the General Permit, the facility's CAWMP, and this COC. An adequate system for collecting and maintaining the required monitoring data and operational information must be established for this facility. Any increase in waste production greater than the certified design capacity or increase in number of animals authorized by this COC (as provided above) will require a modification to the CAWMP and this COC and must be completed prior to actual increase in either wastewater flow or number of animals.

Please read this COC and the enclosed State General Permit carefully. Please pay careful attention to the record keeping and monitoring conditions in this permit. Record keeping forms are unchanged with this General Permit. Please continue to use the same record keeping forms.

SLUDGE SURVEY METHODS FOR ANAEROBIC LAGOONS

APPENDIX 1: LAGOON SLUDGE SURVEY FORM — REVISED AUGUST 2008

A. Farm Permit or DWQ Identification Number _____

B. Lagoon Identification TLC

C. Person(s) Taking Measurements Dennis Daley

D. Date of Measurements 12/29/23

E. Methods/Devices Used for Measurement of:

a. Distance from the lagoon liquid surface to the top of the sludge layer: DSK

b. Distance from the lagoon liquid surface to the bottom (soil) of the lagoon: PVC

c. Thickness of the sludge layer if making a direct measurement with "core sampler": _____

F. Lagoon Surface Area (using dimensions at inside top of bank): _____(acres)

(Draw a sketch of the lagoon on a separate sheet, list dimensions, and calculate surface area. The lagoon may have been built differently than designed, so measurements should be made.)

G. Estimate number of sampling points:

a. Less than 1.33 acres: Use 8 points.

b. If more than 1.33 acres, _____ acres × 6 = 14, with maximum of 24.

(Using sketch and dimensions, develop a uniform grid that has the same number of intersections as the estimated number of sampling points needed. Number the intersection points on the lagoon grid so that data recorded at eac can be easily matched.)

H. Conduct sludge survey and record data on "Sludge Survey Data Sheet" (Appendix 2). Also, at the location of the pump intake, take measurement of distance from liquid surface to top of sludge layer and record it on the Data Shee (last row); this must be at least 2.5 ft when irrigating.

I. At the time of the sludge survey, also measure the distance from the Maximum Liquid Level to the Present Liquid Lev (measure at the lagoon gauge pole): 0

J. Determine the distance from the top of bank to the Maximum Liquid Level: 19

(Use lagoon management plan or other lagoon records.)

K. Determine the distance from the Maximum Liquid Level to the Minimum Liquid Level: 24

(Use lagoon management plan or other lagoon records.)

L. Calculate the distance from the present liquid surface level to the Minimum Liquid Level: 1.5

(Item K minus Item I, assuming the present liquid level is below the Maximum Liquid Level.)

M. Record from the Sludge Survey Data Sheet the distance from the present liquid surface level to the lagoon bottom (average for all the measurement points): 8.43

N. Record from the Sludge Survey Data Sheet the distance from the present liquid surface level to the top of the sludge layer (average for all the measurement points): 5.13

O. Record from the Sludge Survey Data Sheet the average thickness of the sludge layer: 3.13

P. Calculate the thickness of the existing Liquid Treatment Zone (Item N minus Item L): 3.80

Q. If Item O is greater than Item P, proceed to the Worksheet for Sludge Volume and Treatment Volume. If Item O is equal to or less than Item P, you do not have to determine volumes.

Completed by: Dennis Daley (Print Name) _____ (Signature) Date: 12/29/23

APPENDIX 2. SLUDGE SURVEY DATA SHEET* REVISED AUGUST 2008

Lagoon Identification: TLC

Completed by: 6 Print Name C-C Signature Date: 12/29/23

(A) Grid Point No.	(B) Distance from liquid surface to top of sludge		(C) Distance from liquid surface to lagoon bottom (soil)		(C) minus (B) Thickness of sludge layer	
	ft & in.	ft (tenths)	ft & in.	Ft (tenths)	ft & in.	ft (tenths)
1	5.25		8.5		3.25	
2	5.25		8.25		3	
3	5.25		8		2.75	
4	5		8.5		3.5	
5	5		8.25		3.25	
6	5.5		8.5		3	
7	5.75		8.25		2.5	
8	5.5		8.5		3	
9	5.75		8.75		3	
10	4.25		8.5		4.25	
11	5.75		8.5		2.75	
12	5.25		8.25		3	
13	5		8.25		3.25	
14	5.25		8.5		3.25	
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
Number of points with readings			X		X	
Average of points	5.3		8.43		3.13	
At pump intake	5.25	8.25	X	X	X	X

*All Grid Points and corresponding sludge layer thicknesses must be shown on a sketch attached to this Sludge Survey Data Sheet. See Appendix 4 for conversion from inches to tenths of a foot.

Map cc

Nutrient Management Plan For Animal Waste Utilization

04-04-2007

This plan has been prepared for:

TRC Farms Incorporated
Timmy Ray Cox
P.O. Box 460
Cove City, NC 28523
252-633-3302

This plan has been developed by:

Patrick K. Baker
Craven Soil & Water Conservation District
302 Industrial Drive
New Bern, NC 28562
252-637-2547, ext. 3

_____
Developer Signature

Type of Plan: Nutrient Management with Manure Only

Owner/Manager/Producer Agreement

I (we) understand and agree to the specifications and the operation and maintenance procedures established in this nutrient management plan which includes an animal waste utilization plan for the farm named above. I have read and understand the Required Specifications concerning animal waste management that are included with this plan.

TRC FARMS INC. By T. Cox
Signature (owner)

4-9-07
Date

_____
Signature (manager or producer)

_____
Date

This plan meets the minimum standards and specifications of the U.S. Department of Agriculture - Natural Resources Conservation Service or the standard of practices adopted by the Soil and Water Conservation Commission.

Plan Approved By: [signature]
Technical Specialist Signature

4-9-07
Date

Nutrients applied in accordance with this plan will be supplied from the following source(s):

Commercial Fertilizer is not included in this plan.

S7	Swine Feeder-Finish Lagoon Liquid waste generated 3,263,040 gals/year by a 3,520 animal Swine Finishing Lagoon Liquid operation. This production facility has waste storage capacities of approximately 180 days.				
Estimated Pounds of Plant Available Nitrogen Generated per Year					
Broadcast	7515				
Incorporated	12907				
Injected	14214				
Irrigated	8169				
	Max. Avail. PAN (lbs) *	Actual PAN Applied (lbs)	PAN Surplus/ Deficit (lbs)	Actual Volume Applied (Gallons)	Volume Surplus/ Deficit (Gallons)
Year 1	8,169	8503	-334	3,396,347	-133,307

Note: In source ID, S means standard source, U means user defined source.

* Max. Available PAN is calculated on the basis of the actual application method(s) identified in the plan for this source.

The table shown below provides a summary of the crops or rotations included in this plan for each field. Realistic Yield estimates are also provided for each crop, as well as the crop's P2O5 Removal Rate. The Leaching Index (LI) and the Phosphorous Loss Assessment Tool (PLAT) Rating are also provided for each field, where available.

If a field's PLAT Rating is High, any planned manure application is limited to the phosphorous removal rate of the harvested plant biomass for the crop rotation or multiple years in the crop sequence. Fields with a Very High PLAT Rating should receive no additional applications of manure. Regardless of the PLAT rating, starter fertilizers may be recommended in accordance with North Carolina State University guidelines or recommendations. The quantity of P2O5 applied to each crop is shown in the following table if the field's PLAT rating is High or Very High.

Planned Crops Summary

Tract	Field	Total Acres	Useable Acres	Plat Rating	LI	Soil Series	Crop Sequence	RYE	P2O5 Removal (lbs/acre)	P2O5 Applied (lbs/acre)
334	1	7.00	6.29	Low	17.0	Goldsboro	Small Grain Overseed	1.0 Tons	15	N/A
							Hybrid Bermudagrass Hay	6.5 Tons	80	N/A
334	2a	14.00	10.24	Low	17.0	Rains	Small Grain Overseed	1.0 Tons	15	N/A
							Hybrid Bermudagrass Hay	4.5 Tons	55	N/A
334	2b	14.33	10.24	Low	13.0	Lynchburg	Small Grain Overseed	1.0 Tons	15	N/A
							Hybrid Bermudagrass Hay	5.5 Tons	68	N/A
PLAN TOTALS:		35.33	26.77							

LI	Potential Leaching	Technical Guidance
< 2	Low potential to contribute to soluble nutrient leaching below the root zone.	None
>= 2 & <= 10	Moderate potential to contribute to soluble nutrient leaching below the root zone.	Nutrient Management (590) should be planned.
> 10	High potential to contribute to soluble nutrient leaching below the root zone.	Nutrient Management (590) should be planned. Other conservation practices that improve the soils available water holding capacity and improve nutrient use efficiency should be considered. Examples are Cover Crops (340) to scavenge nutrients, Sod-Based Rotations (328), Long-Term No-Till (778), and edge-of-field practices such as Filter Strips (393) and Riparian Forest Buffers (391).

PLAT Index	Rating	P Management Recommendation
0 - 25	Low	No adjustment needed; N based application
25 - 50	Medium	No adjustment needed; N based application
51 - 100	High	Application limited to crop P removal
> 100	Very High	Starter P application only

The Waste Utilization table shown below summarizes the waste utilization plan for this operation. This plan provides an estimate of the number of acres of cropland needed to use the nutrients being produced. The plan requires consideration of the realistic yields of the crops to be grown, their nutrient requirements, and proper timing of applications to maximize nutrient uptake.

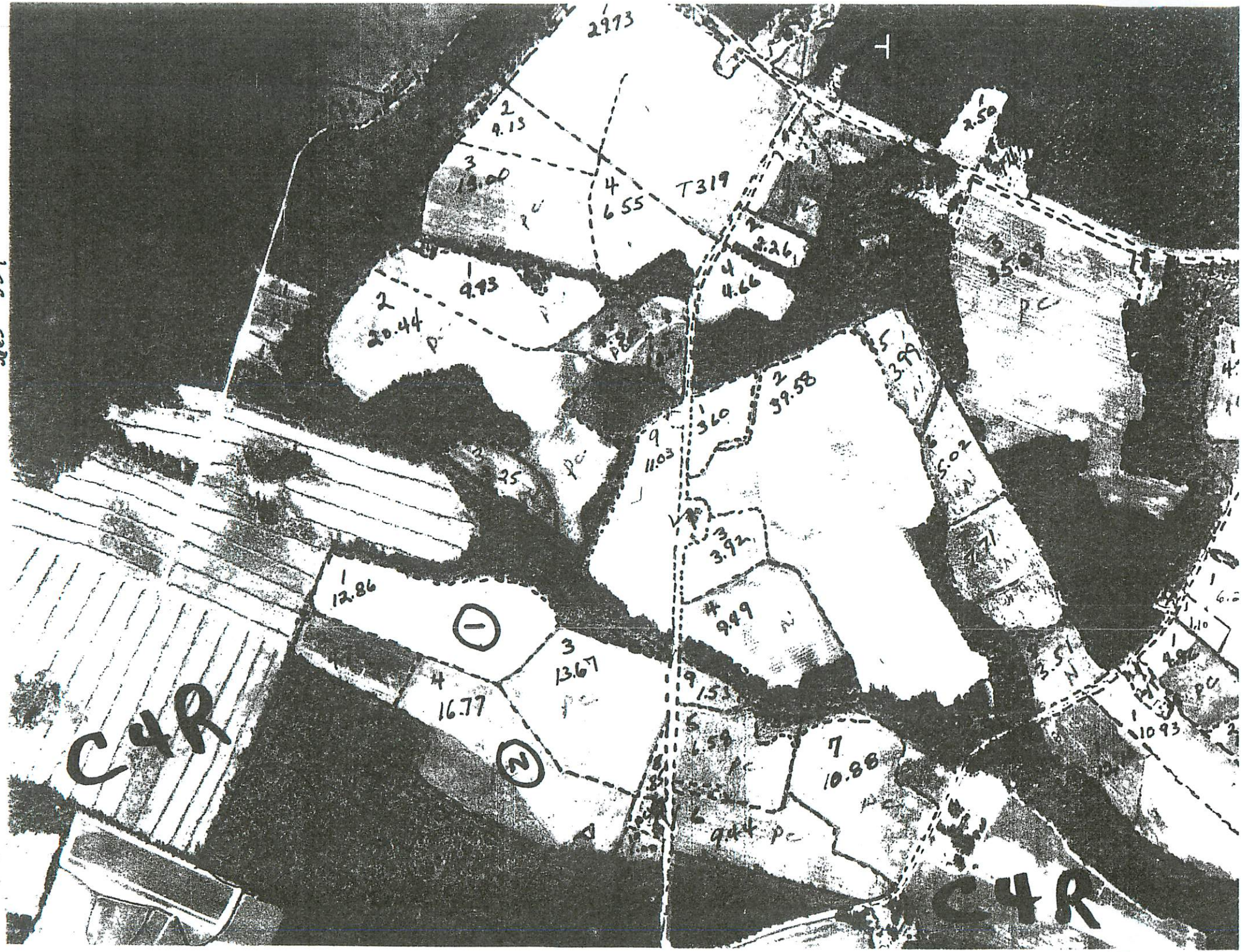
This table provides an estimate of the amount of nitrogen required by the crop being grown and an estimate of the nitrogen amount being supplied by manure or other by-products, commercial fertilizer and residual from previous crops. An estimate of the quantity of solid and liquid waste that will be applied on each field in order to supply the indicated quantity of nitrogen from each source is also included. A balance of the total manure produced and the total manure applied is included in the table to ensure that the plan adequately provides for the utilization of the manure generated by the operation.

Waste Utilization Table

Year 1

Tract	Field	Source ID	Soil Series	Total Acres	Use. Acres	Crop	RYE	Applic. Period	Nitrogen PA Nutrient Req'd (lbs/A) N	Comm. Fert. Nutrient Applied (lbs/A) N	Res. (lbs/A) N	Applic. Method	Manure PA NutrientApplied (lbs/A) N	Liquid ManureApplied (acre) 1000 gal/A	Solid Manure Applied (acre) Tons	Liquid Manure Applied (Field) 1000 gals	Solid Manure Applied (Field) tons
334	1	S7	Goldsboro	7.00	6.29	Small Grain Overseed	1.0 Tons	10/1-3/31	50	0	0	Irrig.	50	19.97	0.00	125.62	0.00
334	1	S7	Goldsboro	7.00	6.29	Hybrid Bermudagrass Hay	6.5 Tons	3/1-9/30	*325	0	0	Irrig.	325	129.82	0.00	816.56	0.00
334	2a	S7	Rains	14.00	10.24	Small Grain Overseed	1.0 Tons	10/1-3/31	50	0	0	Irrig.	50	19.97	0.00	204.51	0.00
334	2a	S7	Rains	14.00	10.24	Hybrid Bermudagrass Hay	4.5 Tons	3/1-9/30	*225	0	0	Irrig.	225	89.87	0.00	920.31	0.00
334	2b	S7	Lynchburg	14.33	10.24	Small Grain Overseed	1.0 Tons	10/1-3/31	50	0	0	Irrig.	50	19.97	0.00	204.51	0.00
334	2b	S7	Lynchburg	14.33	10.24	Hybrid Bermudagrass Hay	5.5 Tons	3/1-9/30	*275	0	0	Irrig.	275	109.85	0.00	1,124.83	0.00
															Total Applied, 1000 gallons	3,396.35	
															Total Produced, 1000 gallons	3,263.04	
															Balance, 1000 gallons	-133.31	
															Total Applied, tons		0.00
															Total Produced, tons		0.00
															Balance, tons		0.00

Notes: 1. In the tract column, ~ symbol means leased, otherwise, owned. 2. Symbol * means user entered data.


2973
T319
C4R
C4R
1
12.86
2
4.15
3
13.00
4
6.55
1
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2
20.44
1
2.50
2
2.26
4
4.66
2
39.58
3
3.92
4
9.49
3
13.67
4
16.77
7
10.88
9.44
1
10.93

SOIL SURVEY OF CRAVEN COUNTY, NORTH CAROLINA

SOIL MAP - TRC FARMS INCORPORATED

Meters
0 50 100 200

Feet
0 150 300 600 900 1,200

NC STATE

Eve Honeycutt <ehhoneyc@ncsu.edu>

Pine Tree Applicator for Study

Pine Rates

1 message

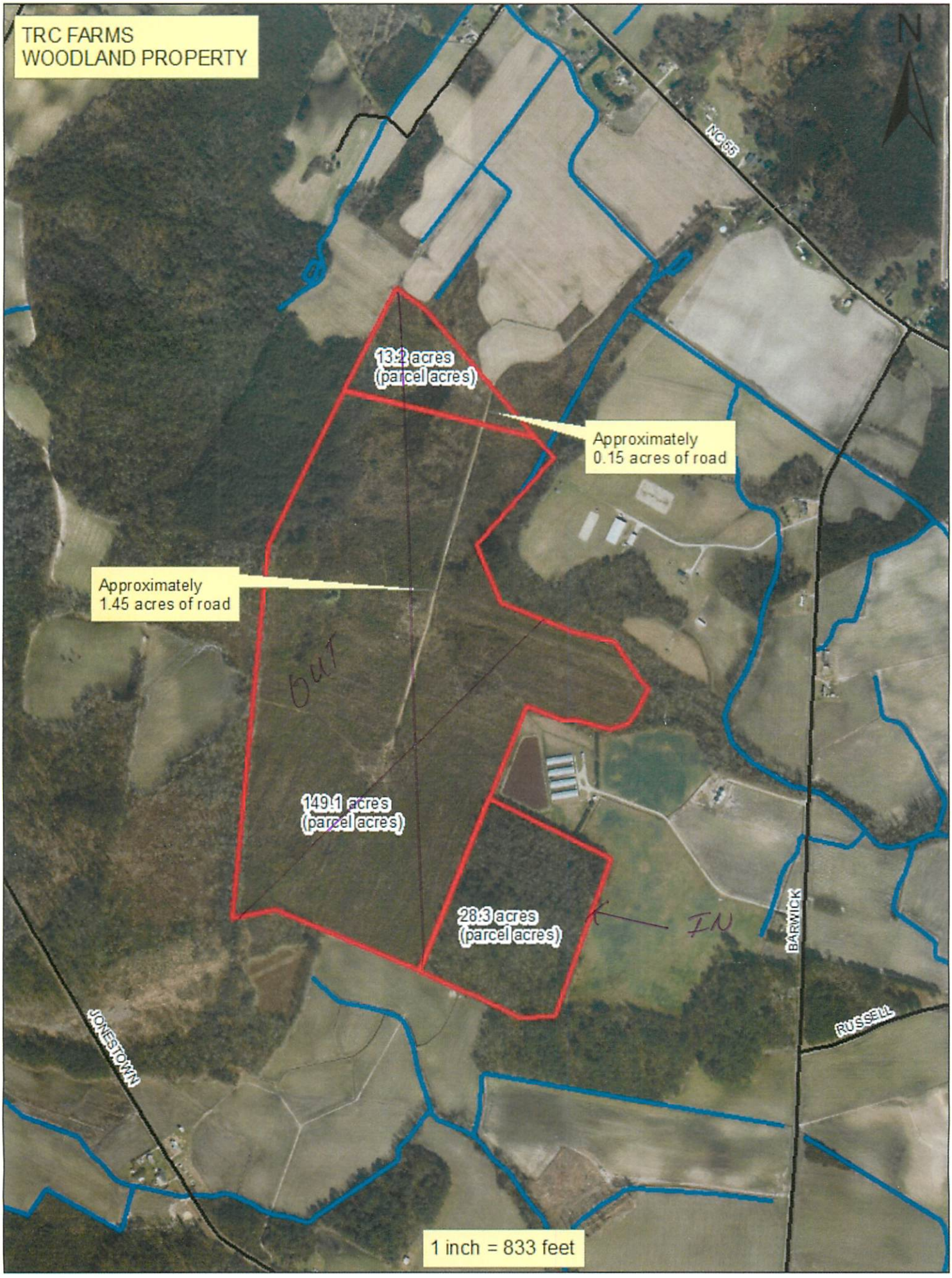
Jernigan, Chris <chris.jernigan@ncagr.gov> Thu, Oct 12, 2017 at 7:19 AM
To: "eve_honeycutt@ncsu.edu" <eve_honeycutt@ncsu.edu>

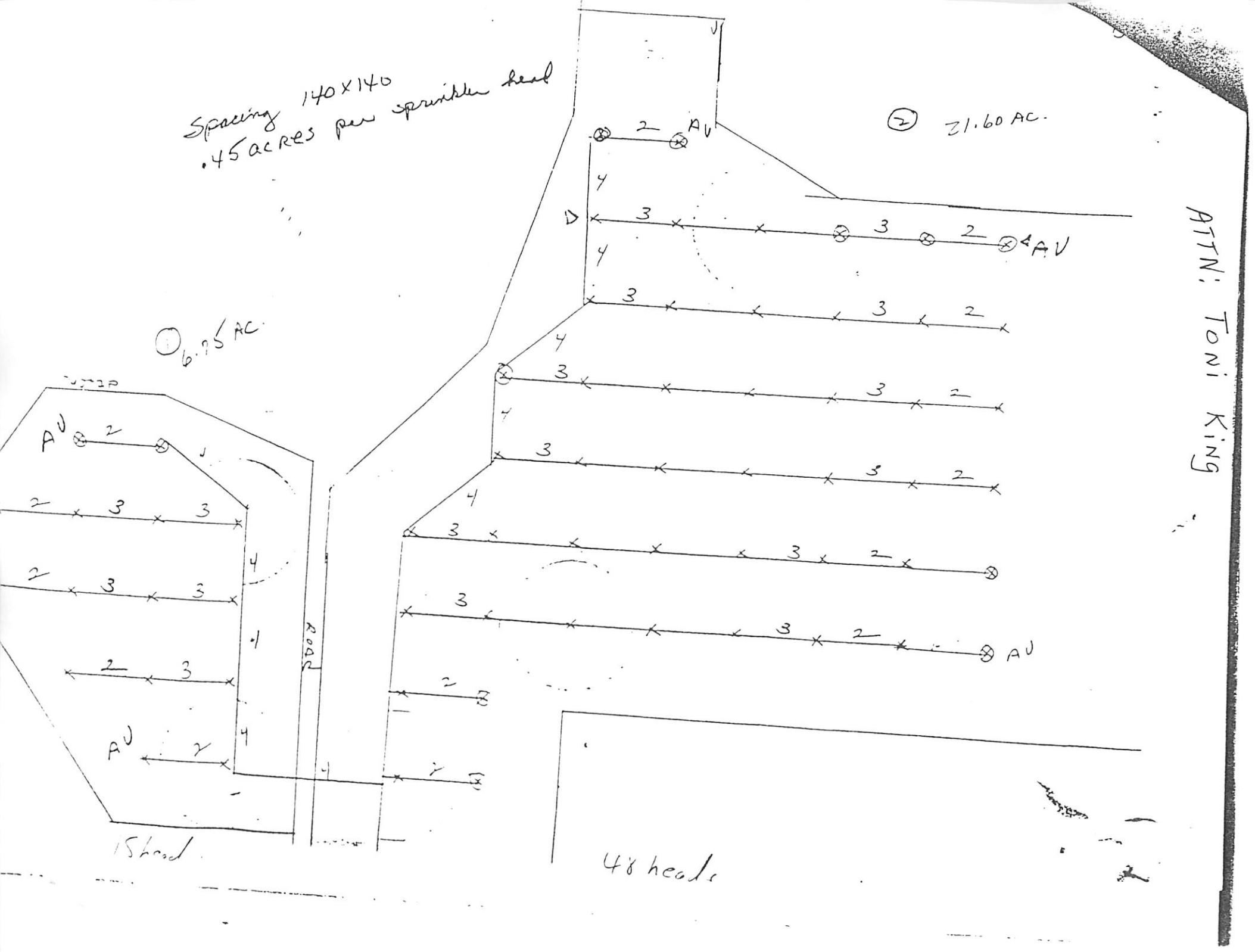
Since there are no PAN rates in the system I suppose we can look to the Orange Book for recommended nitrogen rates. For pine establishment the PAN rate would 0 lbs/ac. For pine maintenance the Orange Book recommends a nitrogen rate of 100-150 lbs/ac. For a PAN rate I would use 125 lbs/ac base upon this information. See link below.

http://www.ncagr.gov/agronomi/obt23tree.htm

Hope this helps,
Chris

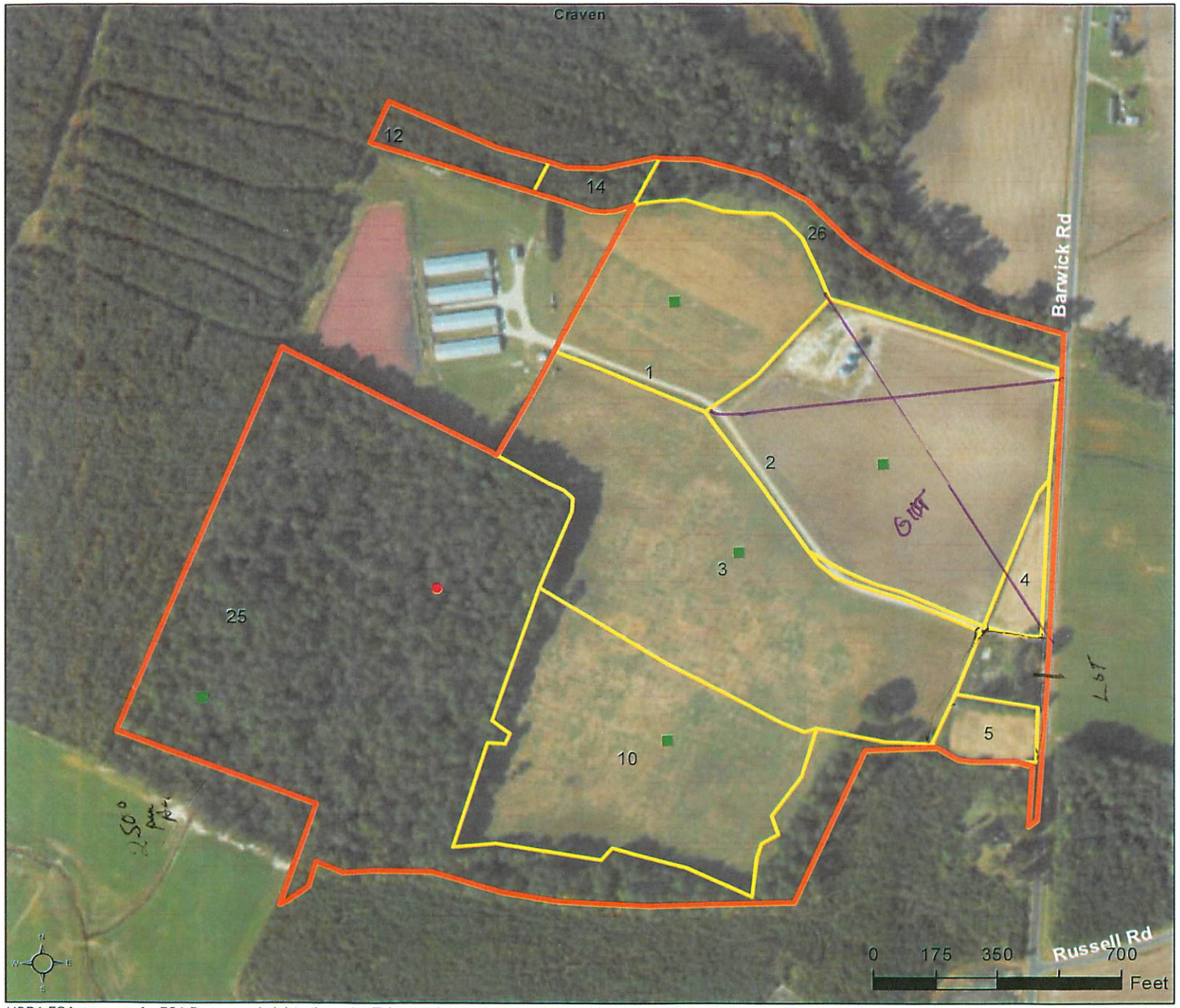
Sent from my Verizon 4G LTE Droid


TRC FARMS
WOODLAND PROPERTY
N
NC 55
13.2 acres
(parcel acres)
Approximately
0.15 acres of road
Approximately
1.45 acres of road
OUT
149.1 acres
(parcel acres)
28.3 acres
(parcel acres)
IN
BARWICK
RUSSELL
JONESTOWN
1 inch = 833 feet


Spacing 140 x 140
.45 acres per sprinkler head
① 6.75 AC.
② 21.60 AC.
AV
ROAD
15 head
48 heads
ATTN: TONI KING

USDA United States Department of Agriculture

Craven County, North Carolina



Farm 8279
Tract 7339
2024 Program Year

CLU	Acres	HEL	Crop
1	7.0	NHEL	
2	13.53	NHEL	
3	16.67	NHEL	
4	0.97	NHEL	
5	1.07	NHEL	
10	11.66	NHEL	
12	1.19	UHEL	Noncropland
14	0.81	UHEL	Noncropland
25	31.08	UHEL	Noncropland
26	5.26	UHEL	Noncropland

Page Cropland Total: 50.9 acres

Map Created February 14, 2024

Base Image Layer flown in 2022

Common Land Unit
- Cropland
- Non-Cropland
- Tract Boundary

Wetland Determination Identifiers
- Restricted Use
- Limited Restrictions
- Exempt from Conservation Compliance Provisions

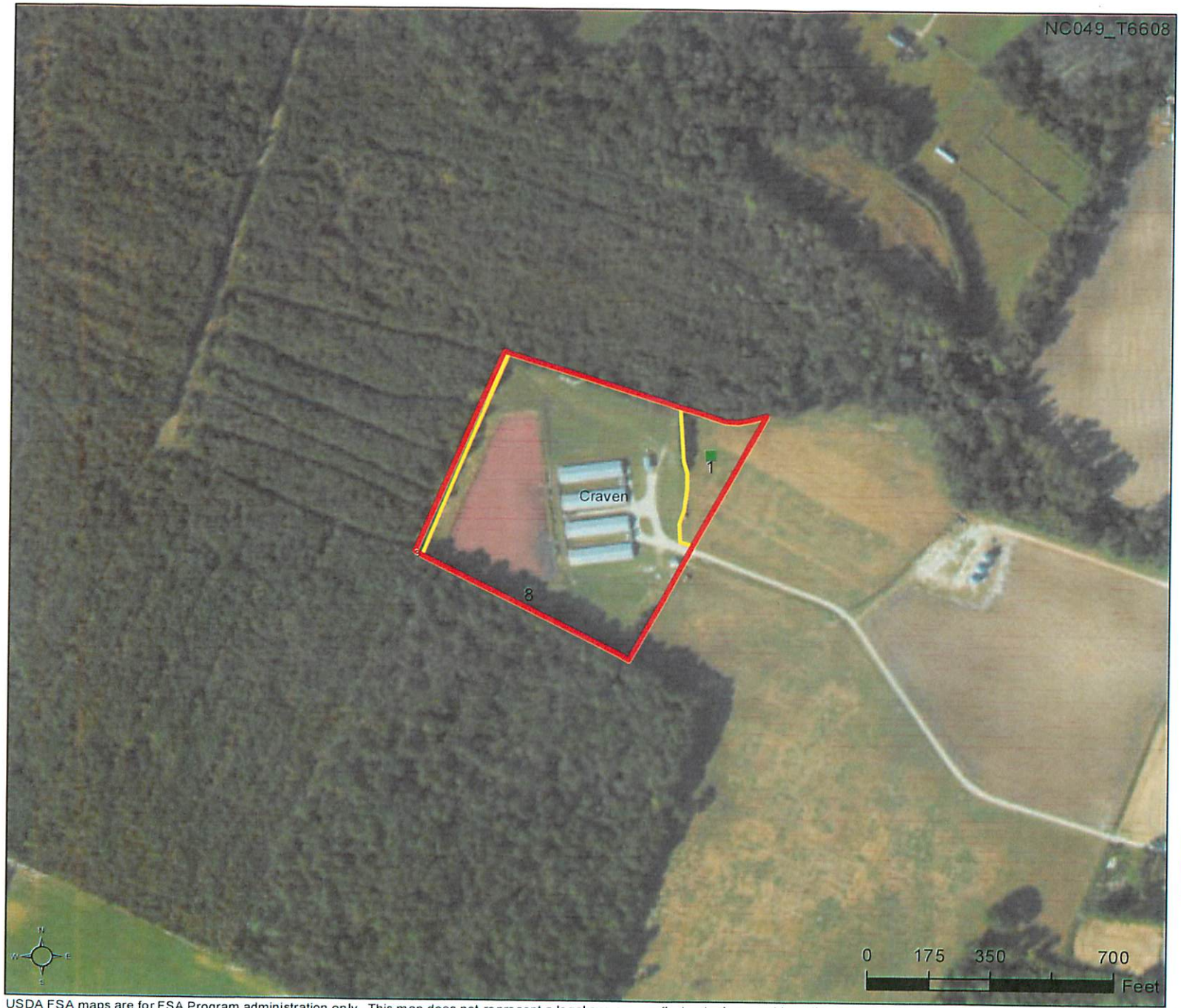
USDA United States Department of Agriculture

Craven County, North Carolina

Farm 8186
Tract 6608
2024 Program Year

CLU	Acres	HEL	Crop
1	1.14	NHEL	
3	0.27	UHEL	Noncropland
8	10.21	UHEL	Noncropland

Page Cropland Total: 1.14 acres



Map Created November 08, 2023

Base Image Layer flown in 2022

Common Land Unit
- Cropland
- Non-Cropland
- Tract Boundary

Wetland Determination Identifiers
- Restricted Use
- Limited Restrictions
- Exempt from Conservation Compliance Provisions

Craven County GIS Cox Parcel 4

Craven County does NOT warrant the information shown on this map and should be used ONLY for tax assessment purposes. Printed on June 18, 2020 at 5:00:33 PM

1 inch = 392 feet

N

Craven County GIS Cox Parcel 2

 Printed on June 17, 2020 at 3:52:39 PM

1 inch = 177 feet

N