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 3/20/19 between David W. Fitzgerald referred to here as "Landowner", and Houff Corporation, 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 Augusta County, 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
84-101C			

☐ 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	Mailing Address	Landowner Signature
David W. Fitzgerald By:	147 Wayne Avenue, Stuarts Draft, VA 24477	
Title*	Phone No. 540-234-9246	

*☐ I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc.
*☐ 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:
Houff Corporation, 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	Mailing Address	Permittee- Authorized Representative Signature
Timothy J. Grove	97 Railside Drive, Weyers Cave, VA 24486	
Title Biosolids Manager	Phone No. 540-234-9246	

Permittee: Houff Corporation **County or City: Augusta**

Landowner: David W. Fitzgerald

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 3-20-19 Date

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 3/20/19 between Ellen B. Fitzgerald referred to here as "Landowner", and Houff Corporation, 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 Augusta County, 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
84-101C			

☐ 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	Mailing Address	Landowner Signature
Ellen B. Fitzgerald By:	147 Wayne Avenue, Stuarts Draft, VA 24477	Ellen B Fitzgerald
Title*	Phone No. 540-234-9246	

*☐ I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc.
*☐ 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:
Houff Corporation, 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	Mailing Address	Permittee- Authorized Representative Signature
Timothy J. Grove	97 Railside Drive, Weyers Cave, VA 24486	
Title Biosolids Manager	Phone No. 540-234-9246	

Permittee: Houff Corporation **County or City: Augusta**

Landowner: Ellen B. Fitzgerald

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).

Ellen B Fitzgerald 3-20-19

Landowner's Signature Date

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 6/27/19 between RAE Enterprises, LLC referred to here as "Landowner", and Houff Corporation, 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 Augusta County, 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
84-101A			

☐ 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	Mailing Address	Landowner Signature
RAE Enterprises, LLC By: RAE ENTERPRISES, LLC REBECCA F GLASS	1806 West Midland Trail, Lexington, VA 24450 [redacted]	Rebecca F Glass
Title* 1/3 OWNER	Phone No. 540-234-9246	

*☐ I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc.
*☒ 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:
Houff Corporation, 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	Mailing Address	Permittee- Authorized Representative Signature
Timothy J. Grove	97 Railside Drive, Weyers Cave, VA 24486	
Title Biosolids Manager	Phone No. 540-234-9246	

Permittee: Houff Corporation **County or City: Augusta**

Landowner: RAE Enterprises, 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.
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   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;

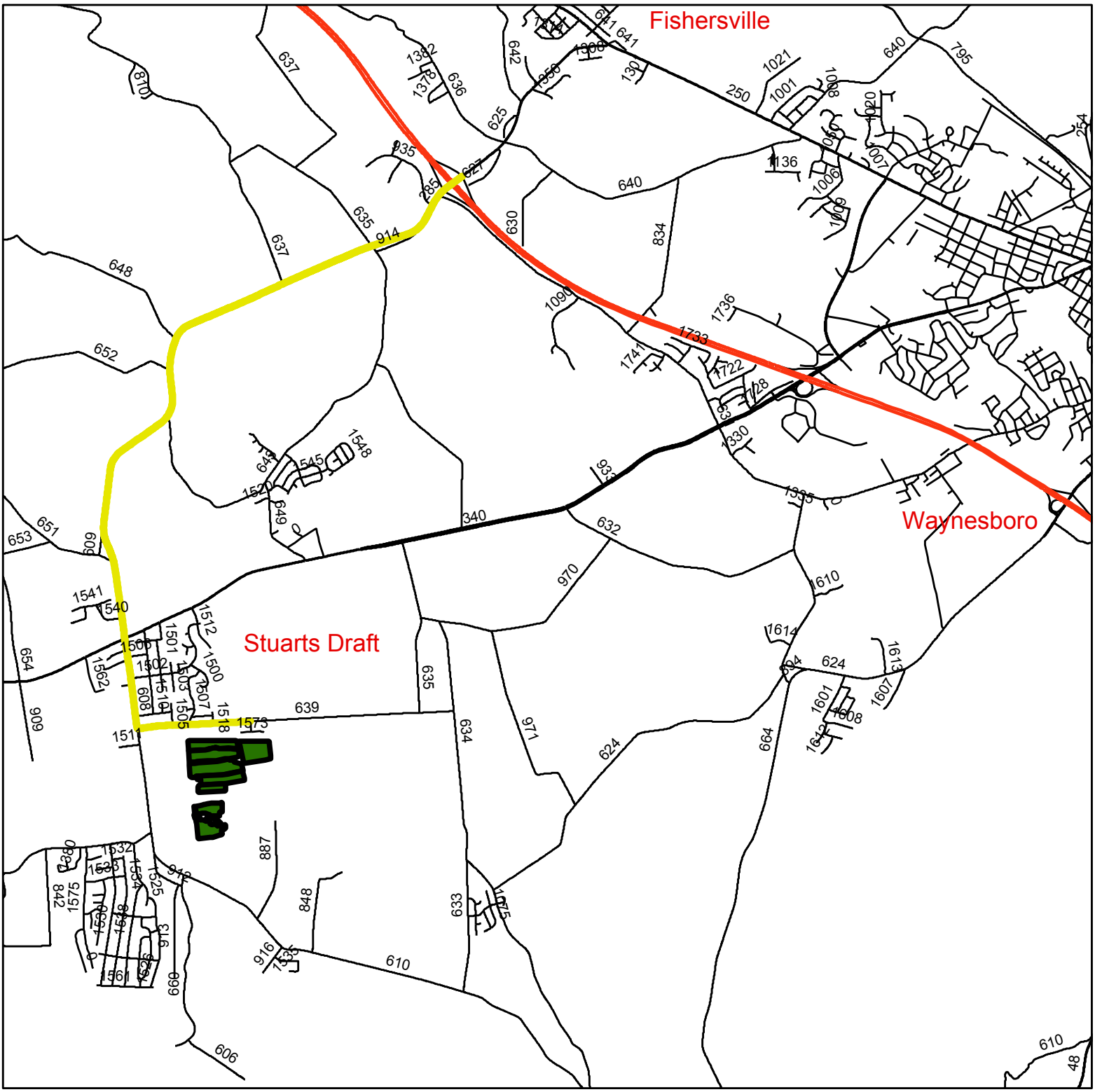
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Rebecca F Glass 6/27/2019

Landowner's Signature Date

Site: FITZ
Owner: David and Ellen Fitzgerald,
RAE Enterprises, LLC
Operator: David Fitzgerald

General Location Map
(with common haul route)



N
W E
S

0 7,500 15,000 30,000 Feet

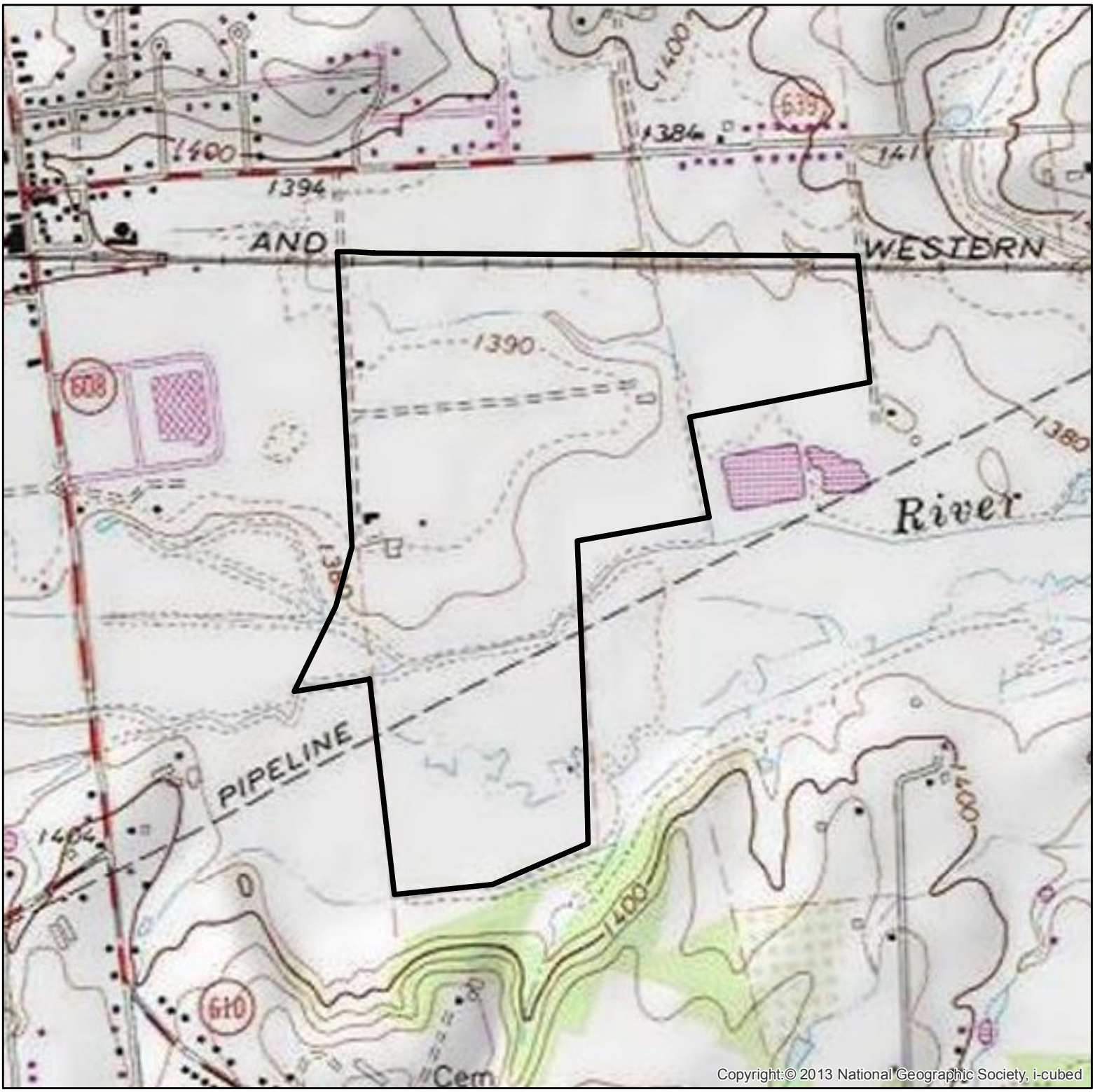
Date: 08/21/2018

FITZ Haul Route
FITZ Fields

Houff CORPORATION

Site: FITZ
Owner: David and Ellen Fitzgerald,
RAE Enterprises, LLC
Operator: David Fitzgerald

Topographic Map



N
W E
S

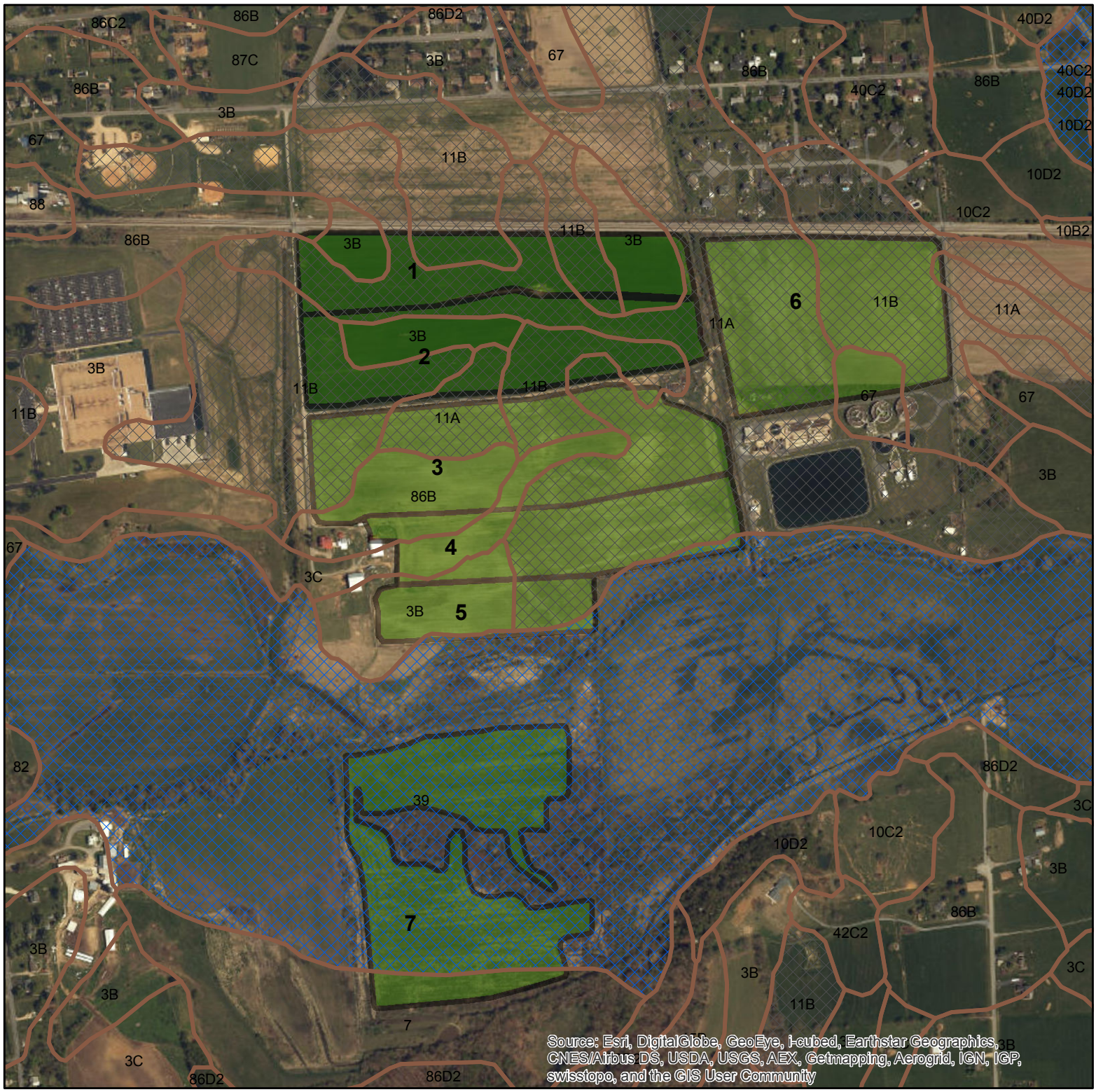
0 1,250 2,500 5,000 Feet

Date: 08/21/2018

Houff CORPORATION

Site: FITZ
Owner: David and Ellen Fitzgerald,
RAE Enterprises, LLC
Operator: David Fitzgerald

Soils Map



N W E S

0 1,000 2,000 4,000 Feet

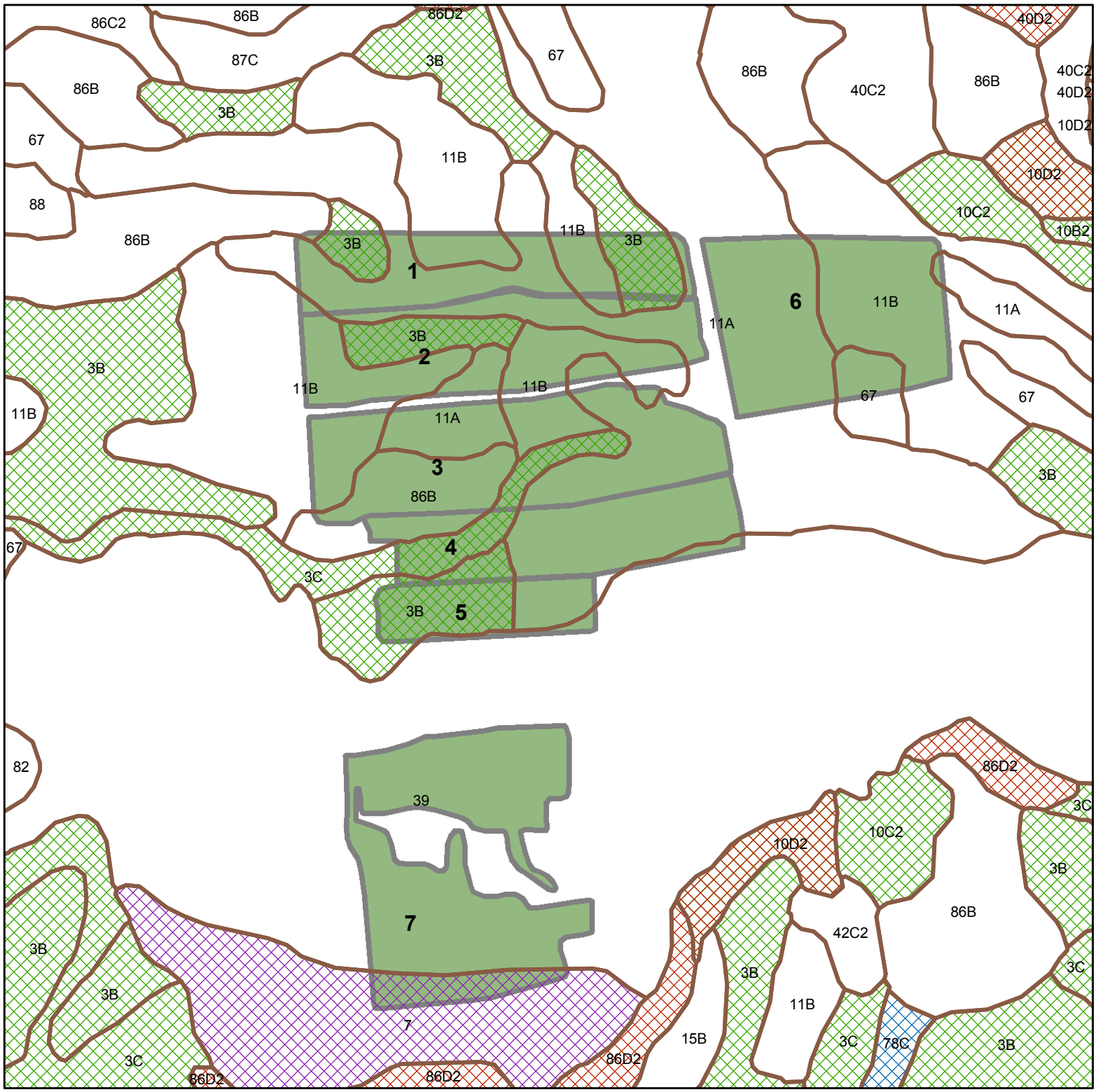
Date: 08/21/2018

- Augusta Soils
- Augusta Soils shallow to bedrock
- Augusta Soils shallow to fragipan
- Augusta Soils frequently flooded

Houff CORPORATION

Site: FITZ
Owner: David and Ellen Fitzgerald,
RAE Enterprises, LLC
Operator: David Fitzgerald

Sensitive Soils Map for NMP



0 1,000 2,000 4,000 Feet

N W E S

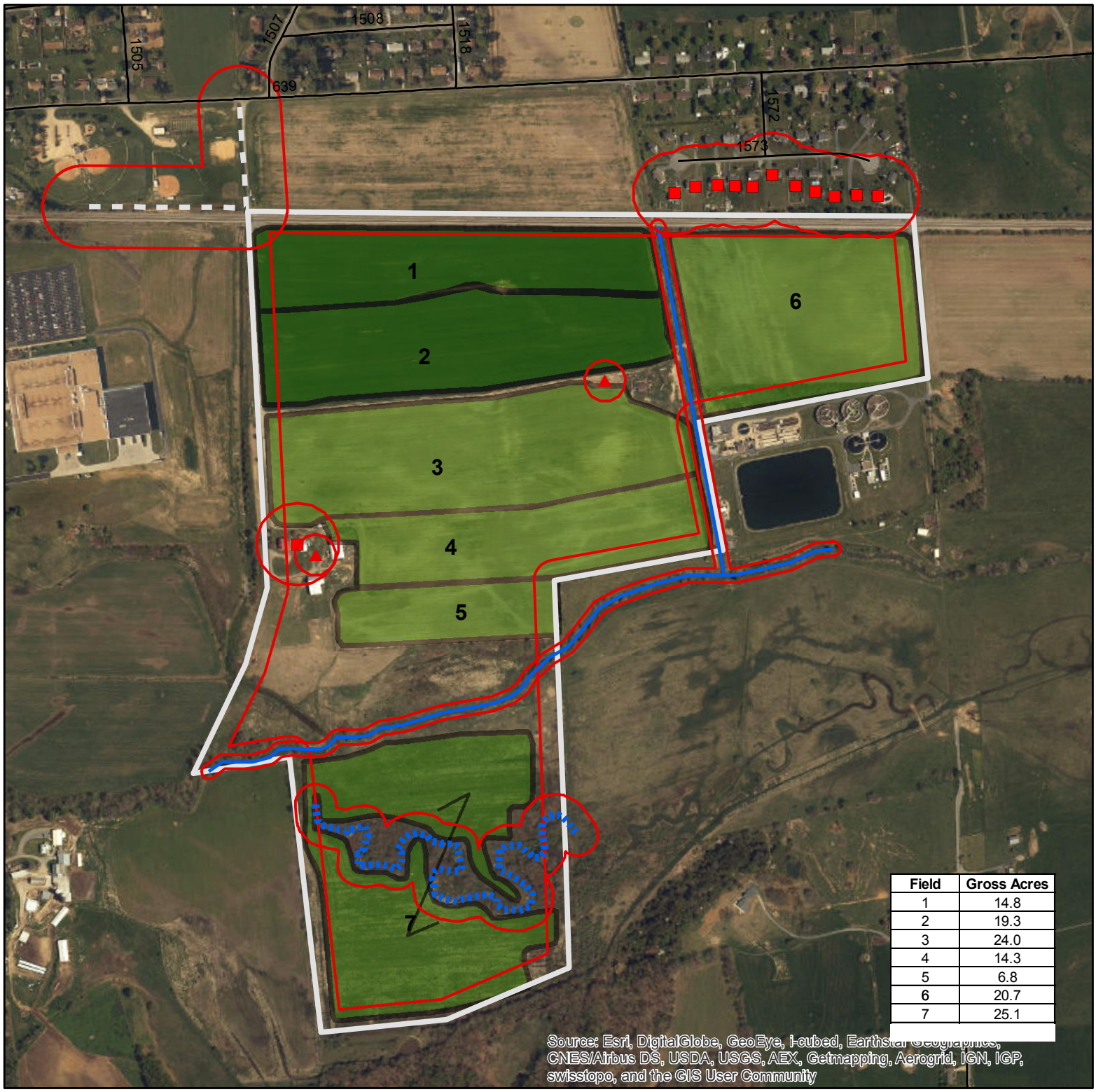
Date: 08/21/2018

- Augusta Soils
- Augusta ES Soils - Drainage
- Augusta ES Soils - Frequent Flooding
- Augusta ES Soils - Leaching
- Augusta ES Soils - Slope
- Augusta ES Soils - Shallow

Houff CORPORATION

Site: FITZ
Owner: David and Ellen Fitzgerald,
RAE Enterprises, LLC
Operator: David Fitzgerald

Site Map



Field	Gross Acres
1	14.8
2	19.3
3	24.0
4	14.3
5	6.8
6	20.7
7	25.1

N W E S

0 950 1,900 3,800 Feet

- FITZ Houses (200 ft buffer)
- FITZ Wells (100 ft buffer)
- FITZ Public Property Lines (200 ft buffer)
- Public Roads (10 ft buffer)
- FITZ Streams (100 ft buffer, 35 ft vegetated)
- FITZ Public Water Supply (100 ft buffer)
- FITZ Property Line (100 ft buffer)
- FITZ Fields

Date: 08/22/2019

Houff CORPORATION

Site: FITZ
Owner: David and Ellen Fitzgerald,
RAE Enterprises, LLC
Operator: David Fitzgerald

Tax Map

N
W E
S

0 1,000 2,000 4,000 Feet

Date: 08/21/2018

Houff CORPORATION

Site: FITZ
Owner: David and Ellen Fitzgerald,
RAE Enterprises, LLC
Operator: David Fitzgerald

Tax Map
north detail

N
W E
S

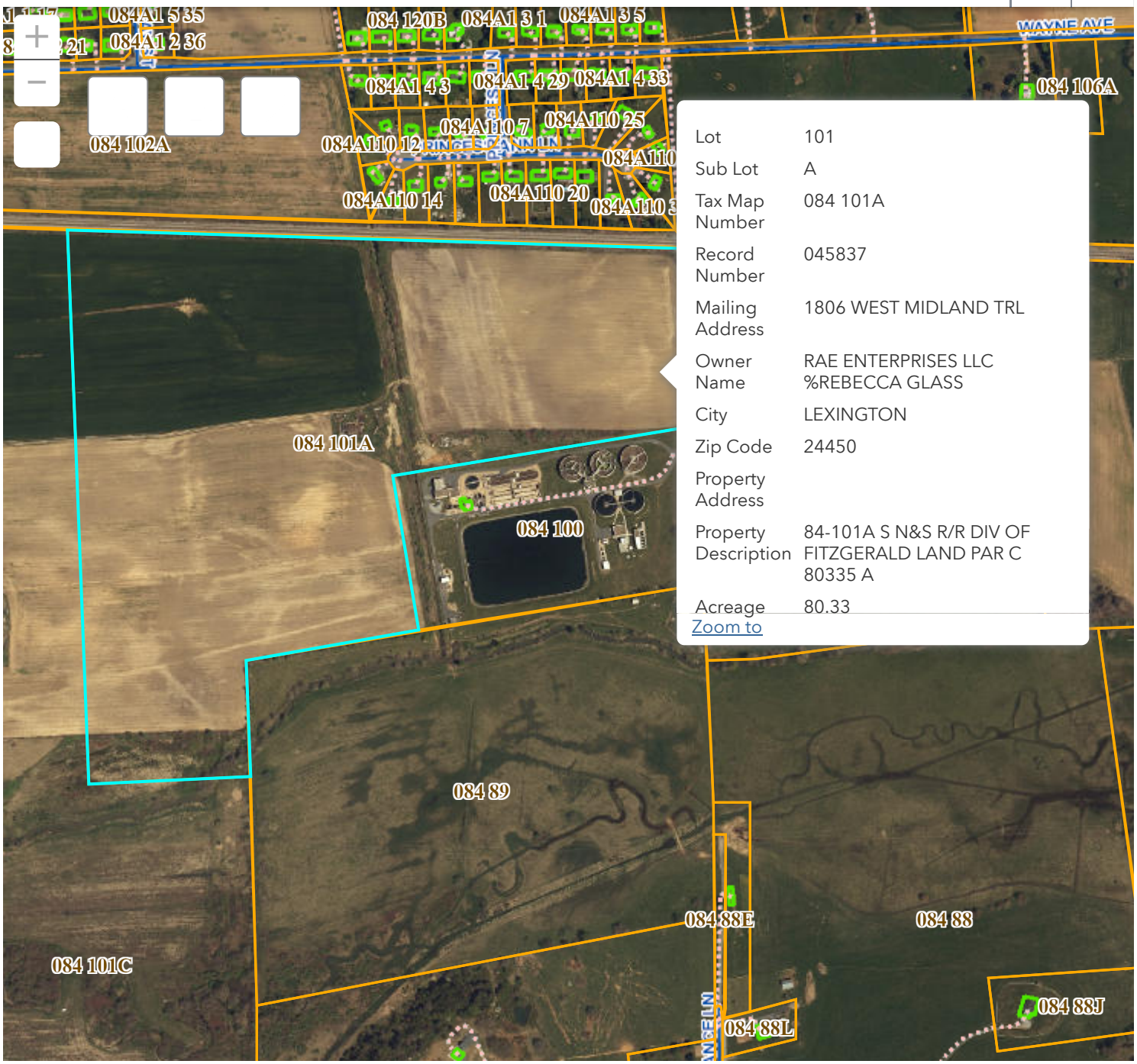
0 475 950 1,900 Feet

Date: 08/21/2018

Houff CORPORATION

AUGUSTA COUNTY, VA

Address and Parcel Viewer



Lot	101
Sub Lot	A
Tax Map Number	084 101A
Record Number	045837
Mailing Address	1806 WEST MIDLAND TRL
Owner Name	RAE ENTERPRISES LLC %REBECCA GLASS
City	LEXINGTON
Zip Code	24450
Property Address	
Property Description	84-101A S N&S R/R DIV OF FITZGERALD LAND PAR C 80335 A
Acreage	80.33

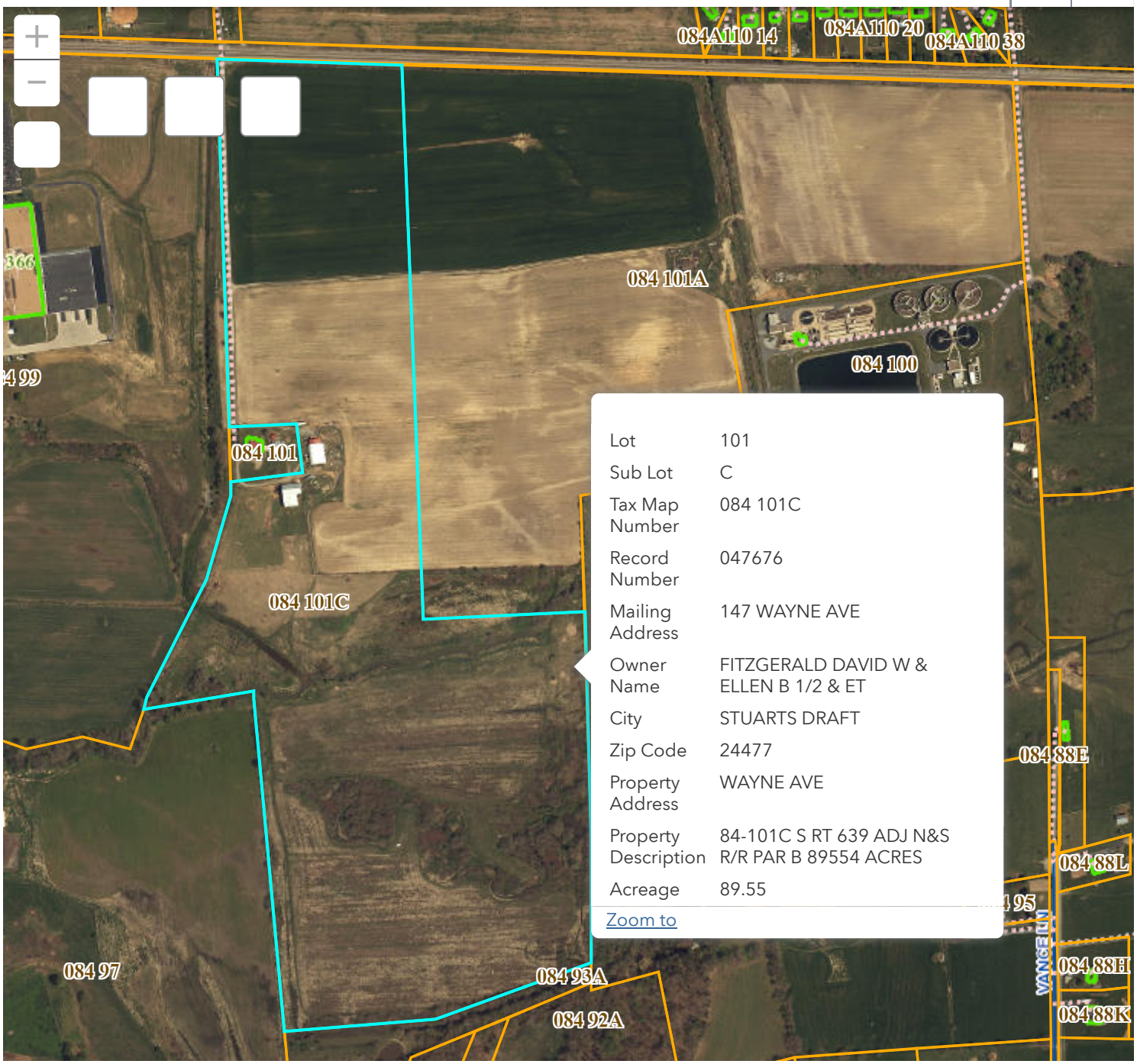
Zoom to

600ft

38.024 -78.997 Degrees

AUGUSTA COUNTY, VA

Address and Parcel Viewer



Lot	101
Sub Lot	C
Tax Map Number	084 101C
Record Number	047676
Mailing Address	147 WAYNE AVE
Owner Name	FITZGERALD DAVID W & ELLEN B 1/2 & ET
City	STUARTS DRAFT
Zip Code	24477
Property Address	WAYNE AVE
Property Description	84-101C S RT 639 ADJ N&S R/R PAR B 89554 ACRES
Acreage	89.55

Zoom to

600ft

38.022 -79.001 Degrees