

	Field	Acres	Buffer	Net Ac.	Latitude	Long.	FSN#	Tract	Field	Tax ID #	RPC#
Holly Willoughby	RO83-1	10.1	3.9	6.2	37.286	-79.682	2756	4410	8	160 A 5A	16000410
										160 A 6	16000500
	RO83-2	8.5	0.1	8.4	37.287	-79.683	2756	4410	7	160 A 5A	16000410
										160 A 6	16000500
	RO83-3	4.2	0.3	3.9	37.288	-79.685	2894	5793	1, 4	160 A 6	16000500
	RO83-4	55.8	0.2	55.6	37.29	-79.675	2756	4410	3-6	142 A 45B	14204301
	RO83-5	12.6	8.5	4.1	37.288	-79.675	2756	4410	2, 4	142 A 45B	14204301
	RO83-6	7.2	5.2	2.0	37.289	-79.678	2756	4410	2	142 A 45B	14204301
	RO83-7	2.8	0.1	2.7	37.288	-79.677	2756	4410	2	142 A 45B	14204301
	RO83-8	3.7	0.1	3.6	37.286	-79.676	2756	4410	2	142 A 45B	14204301
	RO83-9	8.9	2.6	6.3	37.285	-79.674	1321	4552	3	160 A 25A	14204300
	RO83-10	13.5	0.9	12.6	37.287	-79.670	1321	4552	4-5	160 A 25A	14204300
	RO83-11	8.6	2.4	6.2	37.283	-79.676	1321	4552	2	160 A 25A	14204300
	RO83-12	4.4	1.9	2.5	37.283	-79.673	1321	4552	2	160 A 25A	14204300
	RO83-13	13.5	3.2	10.3	37.283	-79.671	1321	4552	6	160 A 25A	14204300
	RO83-14	60.5	14.2	46.3	37.281	-79.672	1321	4552	7-11	160 A 25A	14204300
RO83-15	15.8	1.3	14.5	37.281	-79.667	1132	4315	13	161 A 14	16101400	
RO83-16	41.6	13.0	28.6	37.277	-79.671	1132	4315	1-4	161 A 14	16101400	
	TOTALS	271.7		213.8							

**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 3/28/2016 between LINWOOD J. Willoughby referred to here as "Landowner", and Bio-Nomic Svc. 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 MONETA, VA, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) 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
160 A 5A	16000410		
160 A 6	16000500		
142 A 45B	14204301		

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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

LINWOOD J. Willoughby Landowner - Printed Name, Title
L. J. Willoughby Signature
2749 SANDERS GR. DR. Mailing Address
MONETA, VA.
24121

Permittee:

Bio-Nomic Services, 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.

I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Jaughn Buck Stevenson Permittee - Authorized Representative
Vaughn Buck Signature
516 Rowntree Rd Mailing Address
Charlotte, NC 28217

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

Permittee: Bio-Domic Services County or City: Bedford County
Landowner: LINWOOD WILLOUGHBY

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).

Linwood J. Willoughby
Landowner's Signature

3-28-16
Date

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

Permittee: Bio-Domic Services County or City: Bedford County
Landowner: Amelia Willoughby

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).

Amelia Willoughby _____ 04-19-2016
Landowner's Signature Date

Printer-Friendly

View in Map

Tax Map #	Link	Parcel Number(RPC)	Address
160 A 5A	160 A 5A	16000410	

[Link to Real Estate Lookup/Sketch](#)

Parcel Information

Valuation

Improvements

Ownership History

General Information

Owner:	WILLOUGHBY LINWOOD J & PAMELA H	Legal Acreage:	139.3200
Additional Owner:		PCDesc:	6 Agricultural/Undevl(100+ac)
Owner Address:	2749 SAUNDERS GROVE DR MONETA, VA 241214733	Legal Description:	SAUNDERS GROVE DR PB 44/2
		Document Number:	

Land Use

- Tax Year:
- 1997
 - 1998
 - 1999
 - 2000
 - 2001
 - 2002
 - 2003
 - 2004
 - 2005
 - 2006
 - 2007
 - 2008
 - 2009
 - 2010
 - 2011
 - 2012
 - 2013
 - 2014
 - 2015
 - 2016

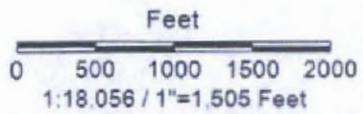
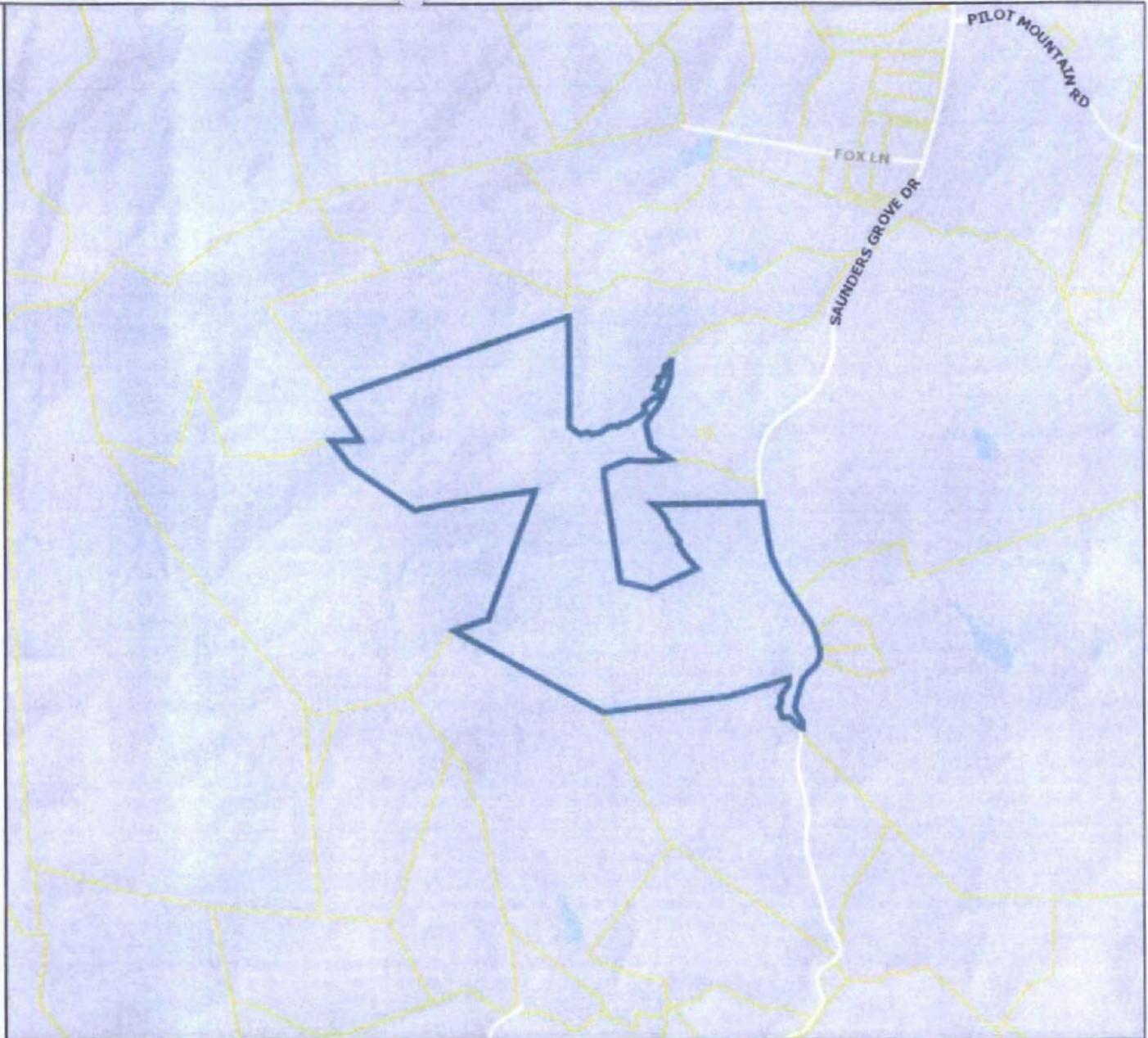
PART R083-1
 PART R083-2

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town

PART R083-1
PART R083-2



Title: Willoughby Linwood J&Pamela H 160 A 5A

Date: 3/16/2016

~~16000410~~
DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Printer-Friendly

View In Map

Tax Map #

Link

Parcel Number(RPC).

Address

160 A 6

160 A 6

16000500

2749 SAUNDERS GROVE DRIVE

[Link to Real Estate Lookup/Sketch](#)

Parcel Information

Valuation

Improvements

Ownership History

General Information

Owner:

WILLOUGHBY LINWOOD J & PAMELA H

Legal Acreage:

16.5400

Additional Owner:

PCDesc:

2 Single Family Res(1-19.99ac)

Owner Address:

2749 SAUNDERS GROVE DR
MONETA, VA 241214733

Legal Description:

SAUNDERS GROVE DR PB 44/2

Document Number:

Land Use

Tax Year: 1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

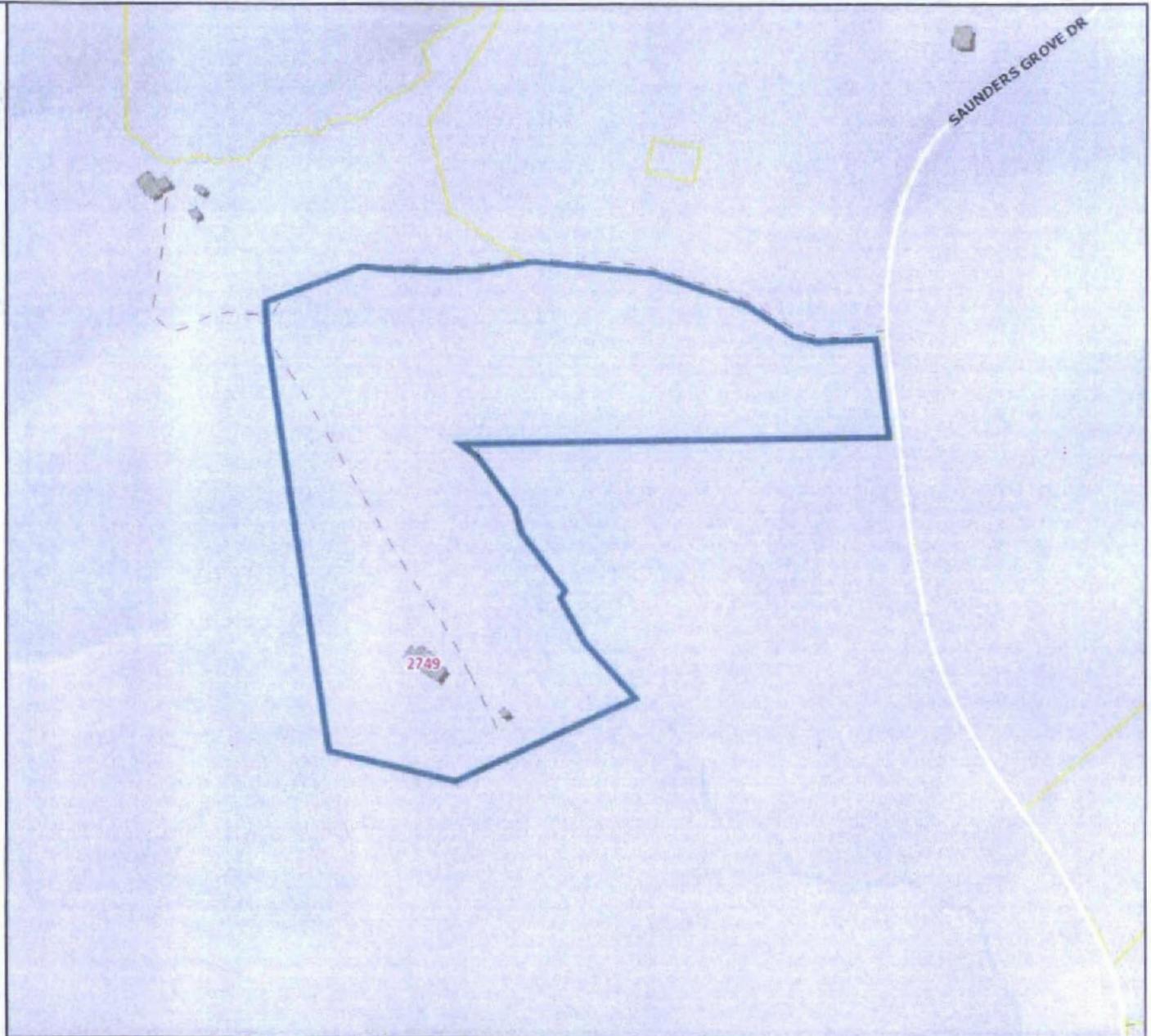
PART R083-2
R083-3

Bedford, VA

Legend

- E911 Address
- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Driveway
- Parcels - County
- Parcels - Town
- Public School Boundary

PART RO83-2
RO83-3

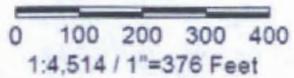


Title: Willoughby Linwood J&Pamela H 160 A 6

Date: 3/16/2016

16000500
DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Feet



Printer-Friendly

View In Map

Tax Map #	Link	Parcel Number(RPC)	Address
142 A 45B	142 A 45B	14204301	

[Link to Real Estate Lookup/Sketch](#)

Parcel Information

Valuation Improvements Ownership History

General Information

Owner:	WILLOUGHBY LINWOOD J & PAMELA H	Legal Acreage:	147.9700
Additional Owner:		PCDesc:	6 Agricultural/Undevl(100+ac)
Owner Address:	2749 SAUNDERS GROVE DR MONETA, VA 241214733	Legal Description:	ENOCH CR
		Document Number:	

Land Use

Tax Year: 1997

- 1998
- 1999
- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016

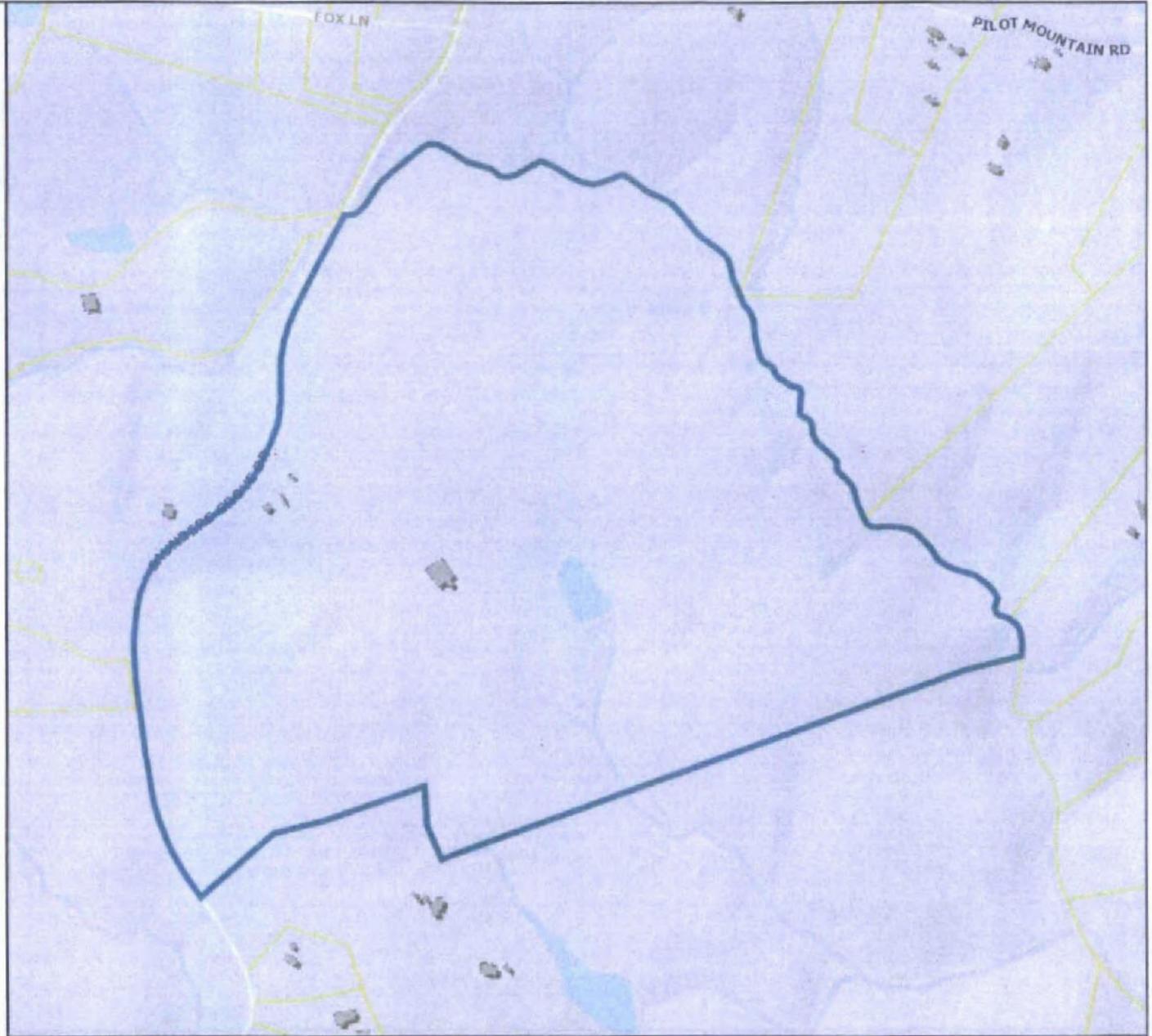
PART R083-4
R083-5
R083-6
R083-7
R083-8

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

R083-4
R083-5
R083-6
R083-7
R083-8



Title: Willoughby Linwood J&Pamela H 142 A 45B

Date: 3/16/2016

14204301
DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

**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 3/31/2016 between Holly Willoughby referred to here as "Landowner", and Bio-Nomic Svc, 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 Bedford Cty, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) 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>160 A 25A</u>	<u>142-04300</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

Holly Willoughby Holly Willoughby 3036 Saunders Gr Dr Manassas VA
 Landowner - Printed Name, Title Signature Mailing Address 24121

Permittee:

Bio-Nomic Svc., 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.

I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Vaughn "Buck" Stevenson Ronald J. Yonkers vs. 516 Rountree Rd
 Permittee - Authorized Representative Signature Mailing Address Charlotte, NC 28217
 Printed Name

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

Permittee: Bio-Nomic Services County or City: Bedford County
Landowner: Holly W. Houghby

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).

Holly W. Houghby
Landowner's Signature

03/11/12
Date

Printer-Friendly

View in Map

Tax Map #	Link	Parcel Number(RPC)	Address
160 A 25A	160 A 25A	14204300	3036 SAUNDERS GROVE DRIVE

[Link to Real Estate Lookup/Sketch](#)

Parcel Information Valuation Improvements Ownership History

General Information

Owner:	WILLOUGHBY HOLLY LYNN	Legal Acreage:	204.9500
Additional Owner:		PCDesc:	6 Agricultural/Undevl(100+ac)
Owner Address:	3036 SAUNDERS GROVE DR MONETA, VA 24121	Legal Description:	ENOCH CR
		Document Number:	980012147

Land Use

Tax Year: 1997

- 1998
- 1999
- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016

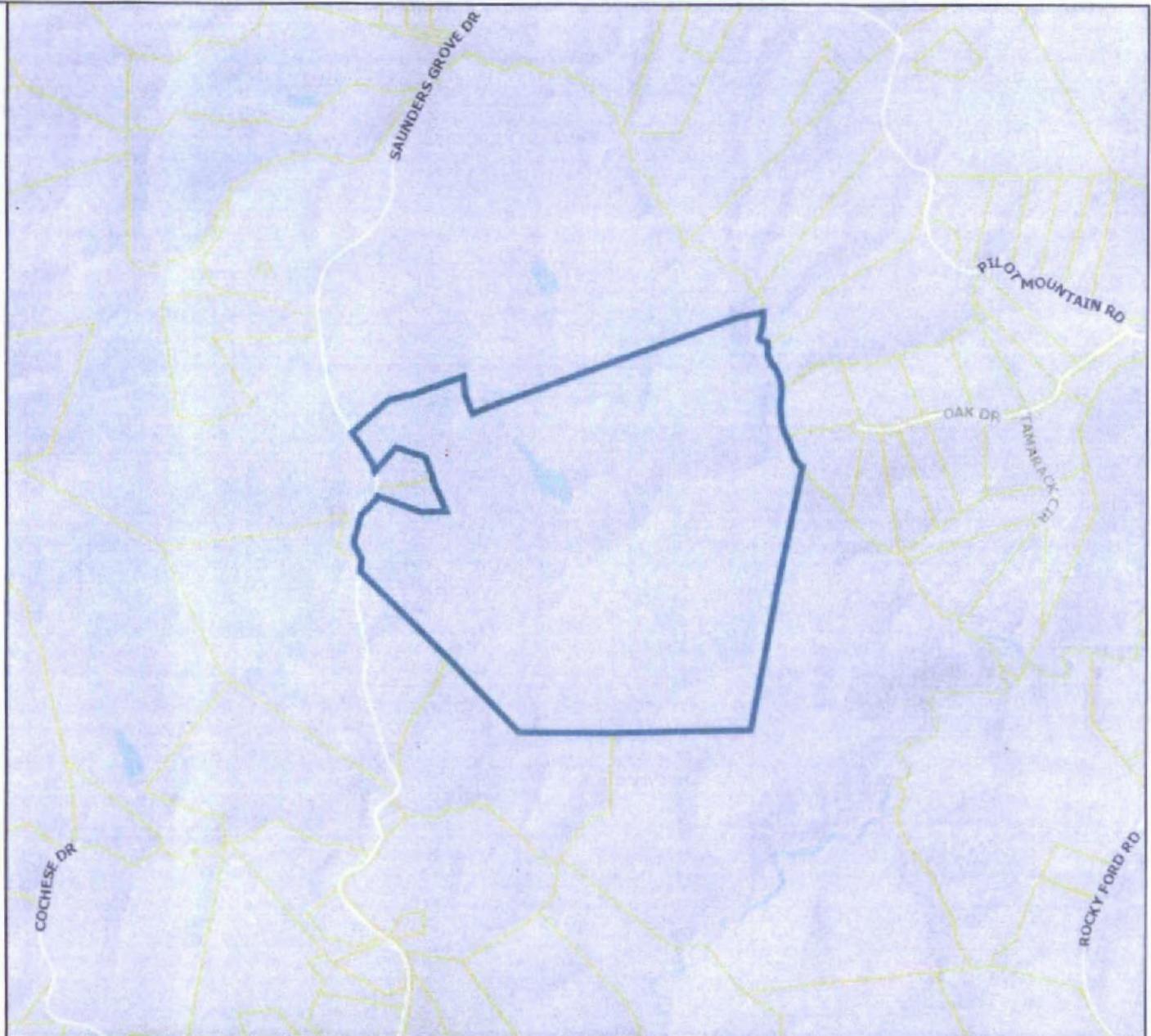
R083-9
R083-10
R083-11
R083-12
R083-13
R083-14

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town

R083-9
R083-10
R083-11
R083-12
R083-13
R083-14



Title: Willoughby Holly Lynn 160 A 25A 14204300

Date: 3/16/2016



DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

**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 3/28/2016 between J.T. Huddleston referred to here as "Landowner", and Bio-Domic Serv. 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 Bedford Cty, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) 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>161 A 14</u>	<u>16101400</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

J.T. Huddleston J.T. Huddleston 8353 Pickett Road
 Landowner - Printed Name, Title Signature Mailing Address
Moneta, Va 24121

Permittee:
Bio-Domic Services 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.

I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Vaughn "Buck" Stevenson Vaughn "Buck" St 516 Rountree Rd
 Permittee - Authorized Representative Signature Mailing Address
Charlotte, N.C. 28217

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

Permittee: Rio-Nomic Services County or City: Bedford County
Landowner: J. T. Huddleston

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).

J. T. Huddleston 3-28-16
Landowner's Signature Date

Printer-Friendly

View In Map

Tax Map #	Link	Parcel Number(RPC)	Address
161 A 14	161 A 14	16101400	

[Link to Real Estate Lookup/Sketch](#)

Parcel Information

Valuation

Improvements

Ownership History

General Information

Owner:	HUDDLESTON JAMES T	Legal Acreage:	172.3000
Additional Owner:		PCDesc:	6 Agricultural/Undevl(100+ac)
Owner Address:	8353 ROCKY FORD RD MONETA, VA 24121	Legal Description:	GOOSE CR
		Document Number:	150000343

Land Use

- Tax Year: 1997
 1998
 1999
 2000
 2001
 2002
 2003
 2004
 2005
 2006
 2007
 2008
 2009
 2010
 2011
 2012
 2013
 2014
 2015
 2016

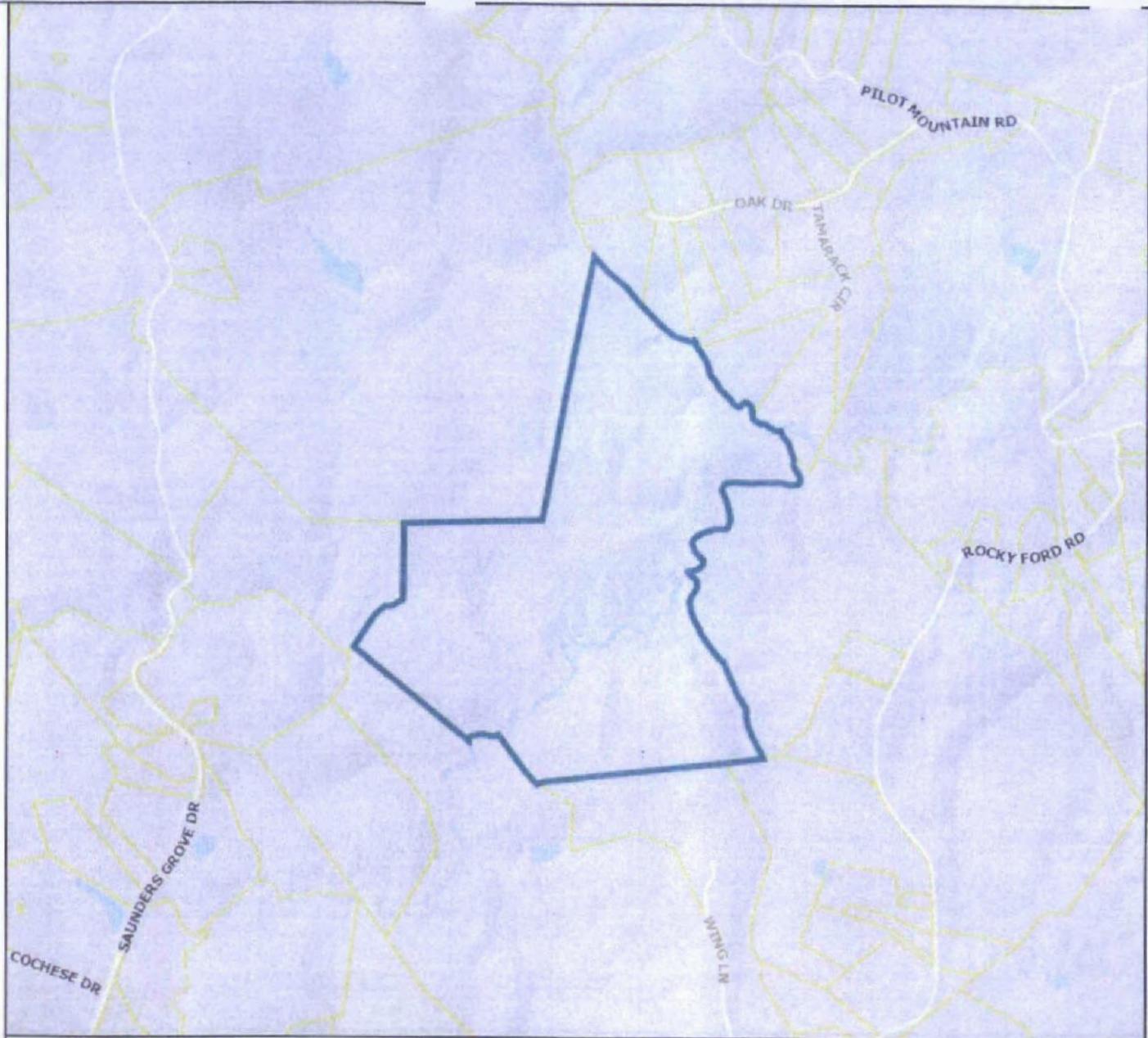
R083-15
R083-16

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town

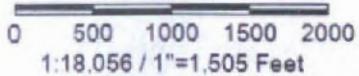
R083-15
R083-16



Title: Huddleston James T 161 A 14 16101400

Date: 3/16/2016

Feet



DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

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

Landowner Coordination Form

Willoughby

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* form with original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee: Bio-Nomic Services
 County or City: Bedford County

Please Print

(Signatures not required on this page)

Tax Parcel ID(s)	Landowner(s)
160 A 5A 16000410	Linwood and Pamela Willoughby
160 A 6 16000500	" " "
142 A 45B 14204301	" " "
160 A 25A 14204300	Holly Willoughby
161 A 14 16101400	J.T. Huddleston

Holly Willoughby Farm

Bio-Nomic Services, Inc. is filing this application to apply approved (VA0025020) Class B biosolids to this designated farm land in Bedford County, Virginia.

The farm is located in the Goodview community on the east side of Saunders Grove Road. All fields are located in a predominately agricultural areas. All streams, drainage features, rock outcrops, structures, dwellings, property lines, roadways and wells are designated and buffered as required. There is one public contact site in the vicinity of RO 83-11. See the attached buffer maps for more details. Biosolids are currently being used as crop nutrients on close by farms, and have been used on this farm by another biosolids contractor.

Mrs. Willoughby operates his acreage for hay production or pasture. The grass cover in the hayfields/ pastures is predominately fescue.

The current fescue hay fields are: RO 83-3, 83-4 & 83-14.

The current fescue pastures are: RO 83-1, 83-2, 83-5, 83-6, 83-7, 83-8, 83-9, 83-10, 83-11, 83-12, 83-13, 83-15 & 83-16.

Nutrient Management Plans will be written by a certified plan writer to address the application of biosolids to the designated fields that will address the most recent planned use of the fields should any changes occur in agricultural practices.



- A** Brownlee Ave SE, Roanoke, VA 24014
B 2749 Saunders Grove Dr, Moneta, VA 24121

36 min, 17.7 mi

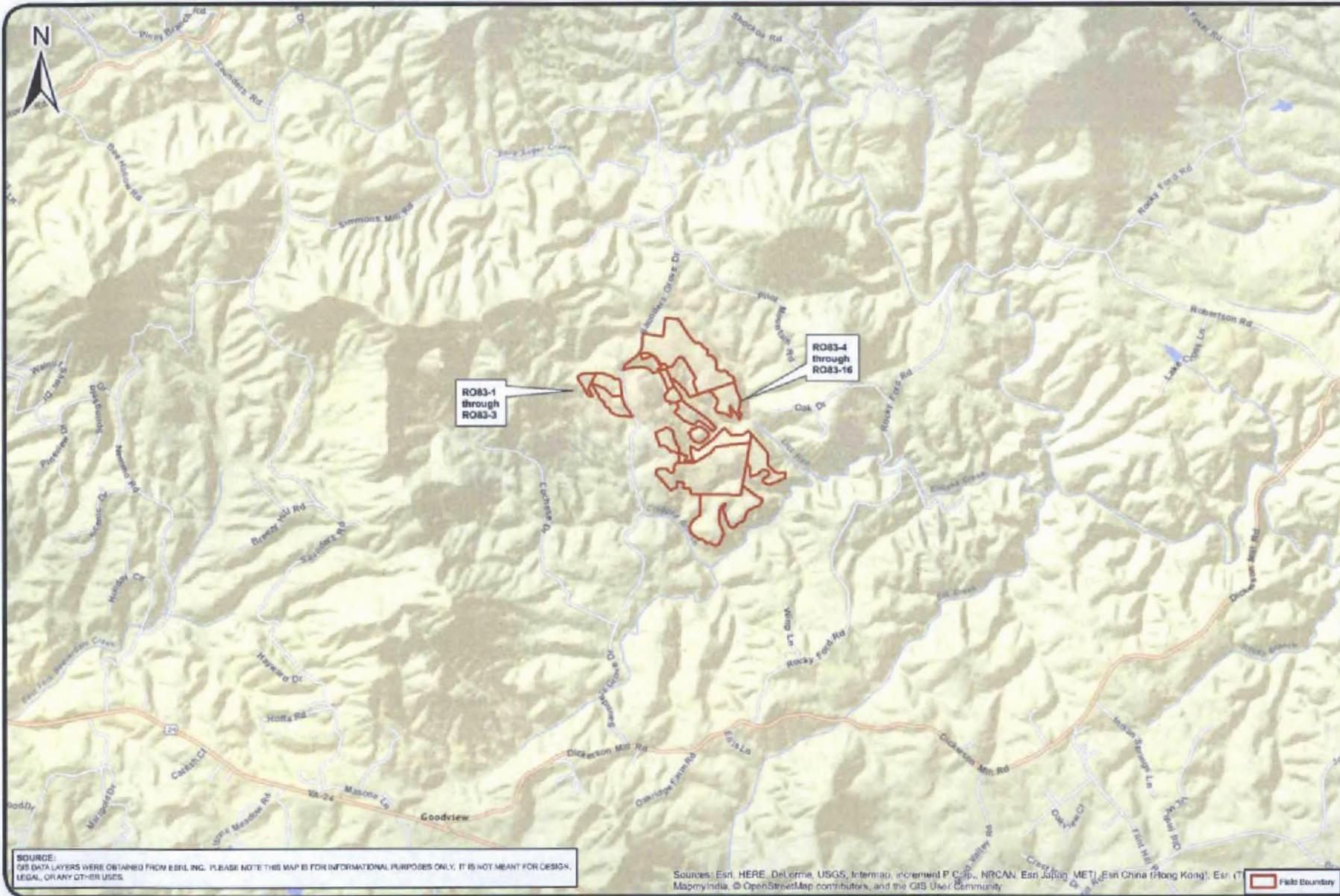
Light traffic (32 min without traffic)
 Via VA-24, VA-24 E

Willoughby
 RO 83

- A** Brownlee Ave SE, Roanoke, VA 24014

↑	1. Depart Brownlee Ave SE toward Kindred St SE	161 ft
↘	2. Turn right onto Kindred St SE	479 ft
↘	3. Turn right onto Carlisle Ave SE , and then immediately turn right onto Bennington St SE	0.8 mi
↘	4. Turn right onto VA-24 Pass Hess in 1.0 mi	2.2 mi
↑	5. Keep left to stay on VA-24 E / Bypass Rd	0.4 mi
↘	6. Turn right to stay on VA-24 E Pass Exxon in 4.4 mi	10.9 mi, 16 min
↙	7. Turn left onto Dickerson Mill Rd	0.7 mi
↑	8. Keep left to stay on Dickerson Mill Rd	0.5 mi
↙	9. Turn left onto Saunders Grove Dr	2.1 mi
	Arrive at Saunders Grove Dr	
	10. The last intersection is Cochese Dr If you reach Pilot Mountain Rd, you've gone too far	

- B** 2749 Saunders Grove Dr, Moneta, VA 24121



SOURCE:
 GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN,
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Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), Swisstopo, Mapbox India, © OpenStreetMap contributors, and the GIS User Community

Field Boundary

DATE: 03.01.2016
 DRAWN BY: MEM
 CHECKED BY: MEM

SCALE: 1" = 0.5 miles
 PROJECT NO.: 15-18 Ph: 01
 ENGINEERING LICENSE NO.:



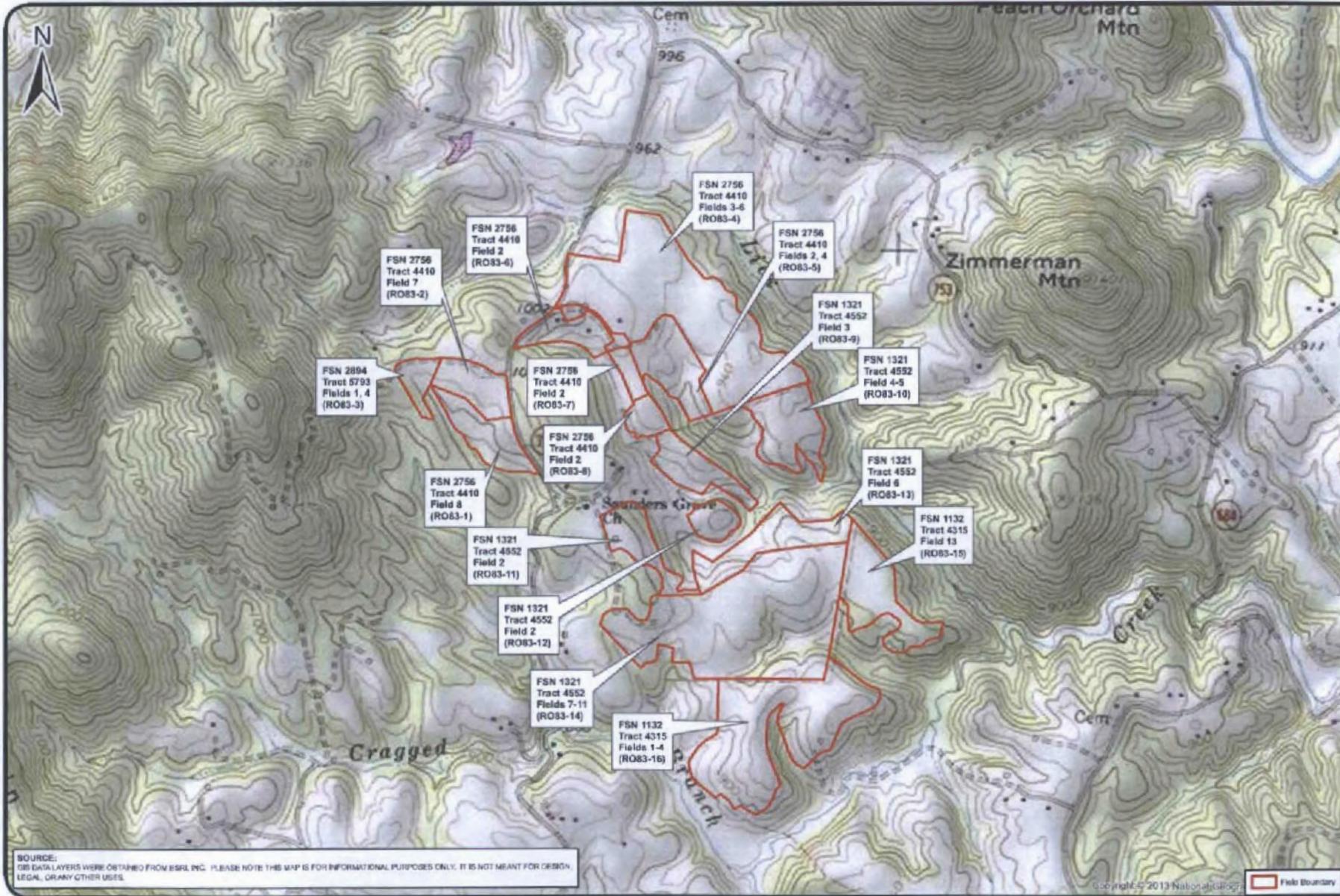
BIO-NOMIC SERVICES, INC.

VICINITY MAP - HOLLY WILLOUGHBY
 CITY OF ROANOKE
 LAND APPLICATION PROGRAM
 BEDFORD COUNTY, VIRGINIA

FIGURE NO.

1

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Field Boundary

DATE	03.01.2016
SCALE	1" = 1,000'
PROJECT NO.	15-18 Ph:01
ENGINEERING LICENSE NO.	
DRAWN BY	MEM
CHECKED BY	MEM



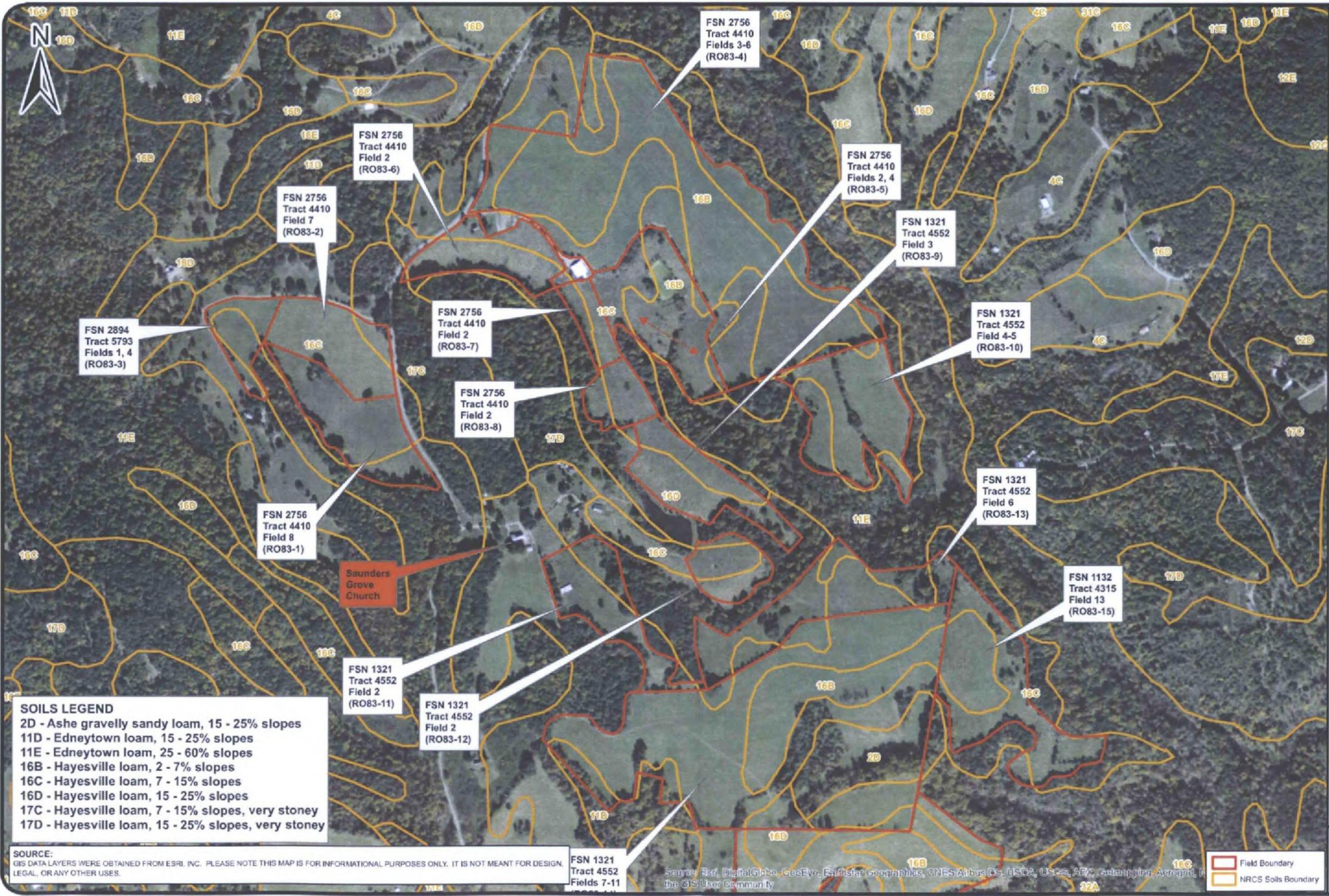
**BIO-NOMIC
 SERVICES,
 INC.**

USGS TOPOGRAPHY MAP - HOLLY WILLOUGHBY
 FSN 1321, 1132, 2756, 2894 TRACT 4315, 4410, 4552, 5793
 CITY OF ROANOKE
 LAND APPLICATION PROGRAM
 BEDFORD COUNTY, VIRGINIA

FIGURE NO.

2

Copyright © 2013 National Geographic



SOILS LEGEND
 2D - Ashe gravelly sandy loam, 15 - 25% slopes
 11D - Edneytown loam, 15 - 25% slopes
 11E - Edneytown loam, 25 - 60% slopes
 16B - Hayesville loam, 2 - 7% slopes
 16C - Hayesville loam, 7 - 15% slopes
 16D - Hayesville loam, 15 - 25% slopes
 17C - Hayesville loam, 7 - 15% slopes, very stoney
 17D - Hayesville loam, 15 - 25% slopes, very stoney

SOURCE:
 GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.

FSN 1321
 Tract 4552
 Fields 7-11

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

Field Boundary
 NRCS Soils Boundary

DATE: 03.01.2016
 DRAWN BY: MEM
 CHECKED BY: MEM

SCALE: 1" = 600'
 PROJECT NO.: 15-18 Ph:01
 ENGINEERING LICENSE NO.: MEM

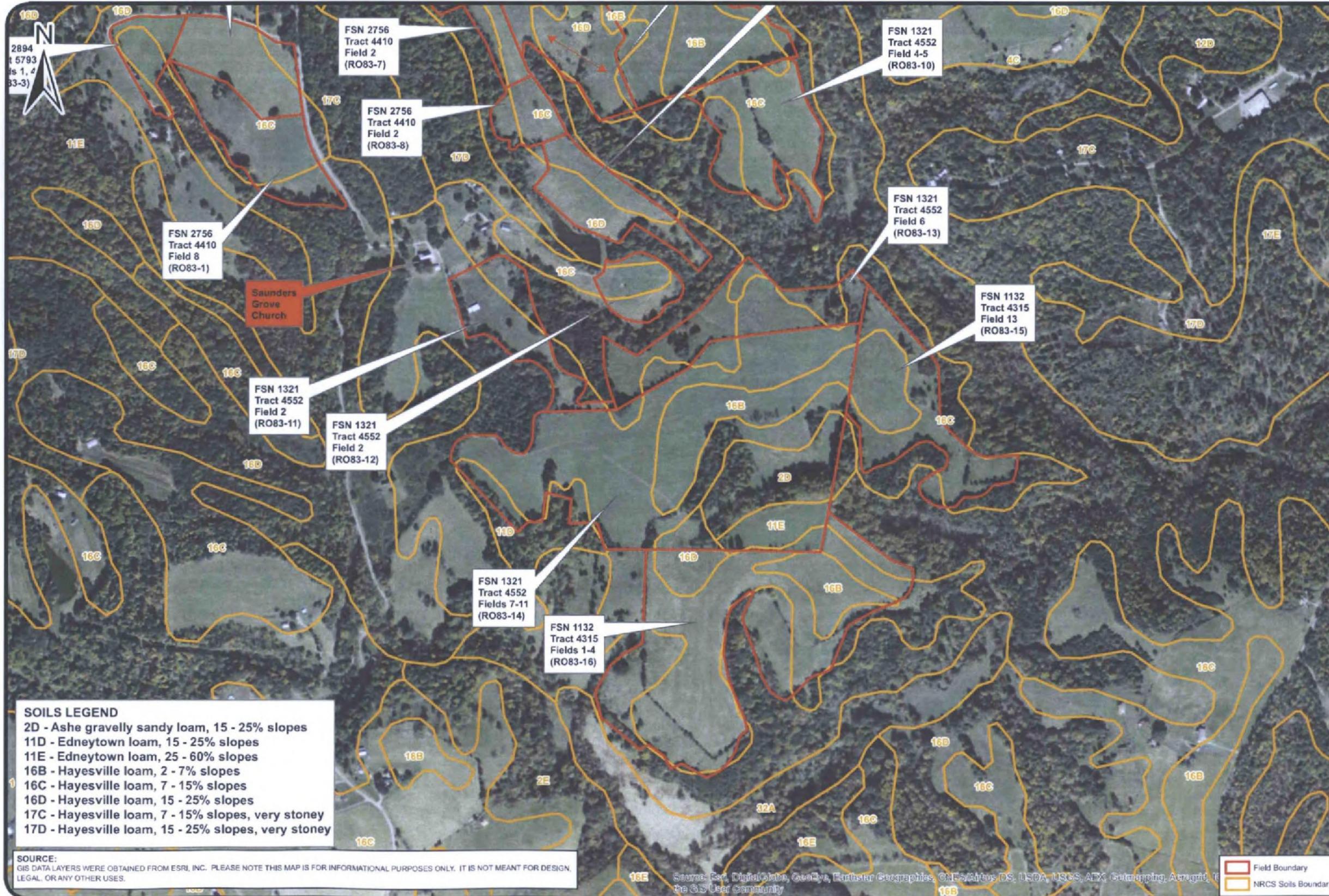


BIO-NOMIC SERVICES, INC.

NRCS SOILS MAP - HOLLY WILLOUGHBY
 FSN 1321, 1132, 2756, 2894 TRACT 4315, 4410, 4552, 5793
 CITY OF ROANOKE
 LAND APPLICATION PROGRAM
 BEDFORD COUNTY, VIRGINIA

FIGURE NO.
3

C:\engr\2008\1586-09-058 Bio-nomics\Holly Willoughby\Map\NRCS.mxd



2894
5793
1, 4
33-3)

FSN 2756
Tract 4410
Field 8
(RO83-1)

FSN 1321
Tract 4552
Field 2
(RO83-11)

FSN 1321
Tract 4552
Field 2
(RO83-12)

FSN 2756
Tract 4410
Field 2
(RO83-7)

FSN 2756
Tract 4410
Field 2
(RO83-8)

FSN 1321
Tract 4552
Fields 7-11
(RO83-14)

FSN 1132
Tract 4315
Fields 1-4
(RO83-16)

FSN 1321
Tract 4552
Field 4-5
(RO83-10)

FSN 1321
Tract 4552
Field 6
(RO83-13)

FSN 1132
Tract 4315
Field 13
(RO83-15)

SOILS LEGEND

- 2D - Ashe gravelly sandy loam, 15 - 25% slopes
- 11D - Edneytown loam, 15 - 25% slopes
- 11E - Edneytown loam, 25 - 60% slopes
- 16B - Hayesville loam, 2 - 7% slopes
- 16C - Hayesville loam, 7 - 15% slopes
- 16D - Hayesville loam, 15 - 25% slopes
- 17C - Hayesville loam, 7 - 15% slopes, very stoney
- 17D - Hayesville loam, 15 - 25% slopes, very stoney

SOURCE:
GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.

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

Field Boundary
NRCS Soils Boundary

DATE	03.01.2016
DRAWN BY	MEM
CHECKED BY	MEM

SCALE	1" = 600'
PROJECT NO.	15-18 Ph:01
ENGINEERING LICENSE NO.	



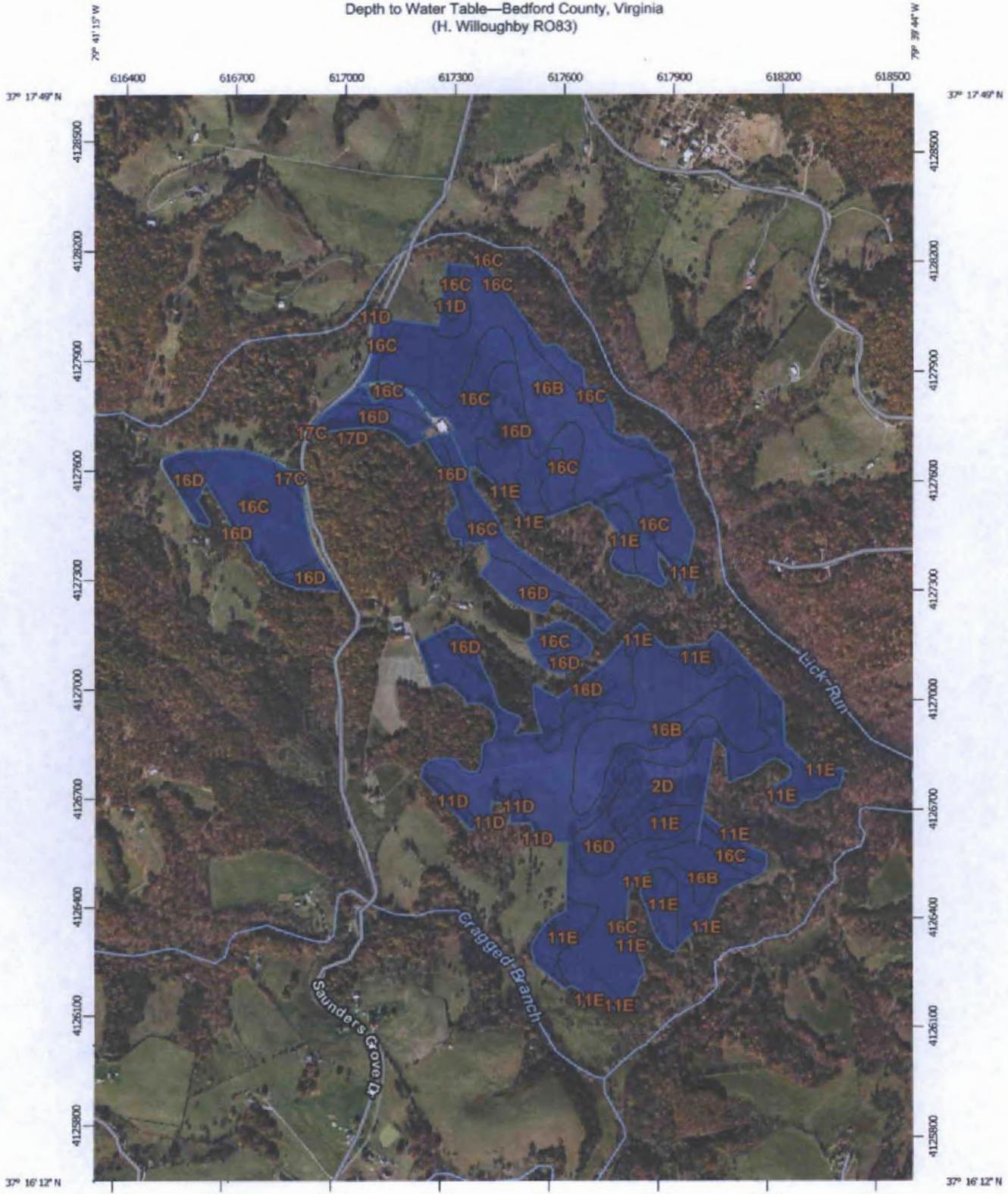
BIO-NOMIC SERVICES, INC.

NRCS SOILS MAP - HOLLY WILLOUGHBY
FSN 1321, 1132, 2756, 2894 TRACT 4315, 4410, 4552, 5793
 CITY OF ROANOKE
 LAND APPLICATION PROGRAM
 BEDFORD COUNTY, VIRGINIA

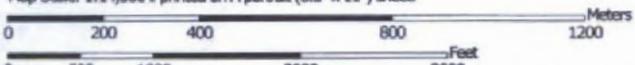
FIGURE NO.
4

C:\aragis\2009\1568-08-059 Bio-nomics Holly Willoughby\Map\NRCS1.rmd

Depth to Water Table—Bedford County, Virginia
(H. Willoughby RO83)



Map Scale: 1:14,500 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ties: UTM Zone 17N WGS84

Depth to Water Table—Bedford County, Virginia
(H. Willoughby RO83)

MAP LEGEND

Area of Interest (AOI)	 Not rated or not available
 Area of Interest (AOI)	
Soils	Water Features
Soil Rating Polygons	 Streams and Canals
 0 - 25	Transportation
 25 - 50	 Rails
 50 - 100	 Interstate Highways
 100 - 150	 US Routes
 150 - 200	 Major Roads
 > 200	 Local Roads
 Not rated or not available	Background
	 Aerial Photography
Soil Rating Lines	
 0 - 25	
 25 - 50	
 50 - 100	
 100 - 150	
 150 - 200	
 > 200	
 Not rated or not available	
Soil Rating Points	
 0 - 25	
 25 - 50	
 50 - 100	
 100 - 150	
 150 - 200	
 > 200	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000. Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bedford County, Virginia
Survey Area Data: Version 11, Dec 11, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2010—Mar 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Water Table

Depth to Water Table— Summary by Map Unit — Bedford County, Virginia (VA019)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
2D	Ashe gravelly sandy loam, 15 to 25 percent slopes, very stony	>200	9.2	3.4%
11D	Edneytown loam, 15 to 25 percent slopes	>200	3.6	1.3%
11E	Edneytown loam, 25 to 60 percent slopes	>200	21.1	7.8%
16B	Hayesville loam, 2 to 7 percent slopes	>200	52.3	19.3%
16C	Hayesville loam, 7 to 15 percent slopes	>200	140.0	51.5%
16D	Hayesville loam, 15 to 25 percent slopes	>200	44.6	16.4%
17C	Hayesville loam, 7 to 15 percent slopes, very stony	>200	1.0	0.4%
17D	Hayesville loam, 15 to 25 percent slopes, very stony	>200	0.0	0.0%
Totals for Area of Interest			271.7	100.0%

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

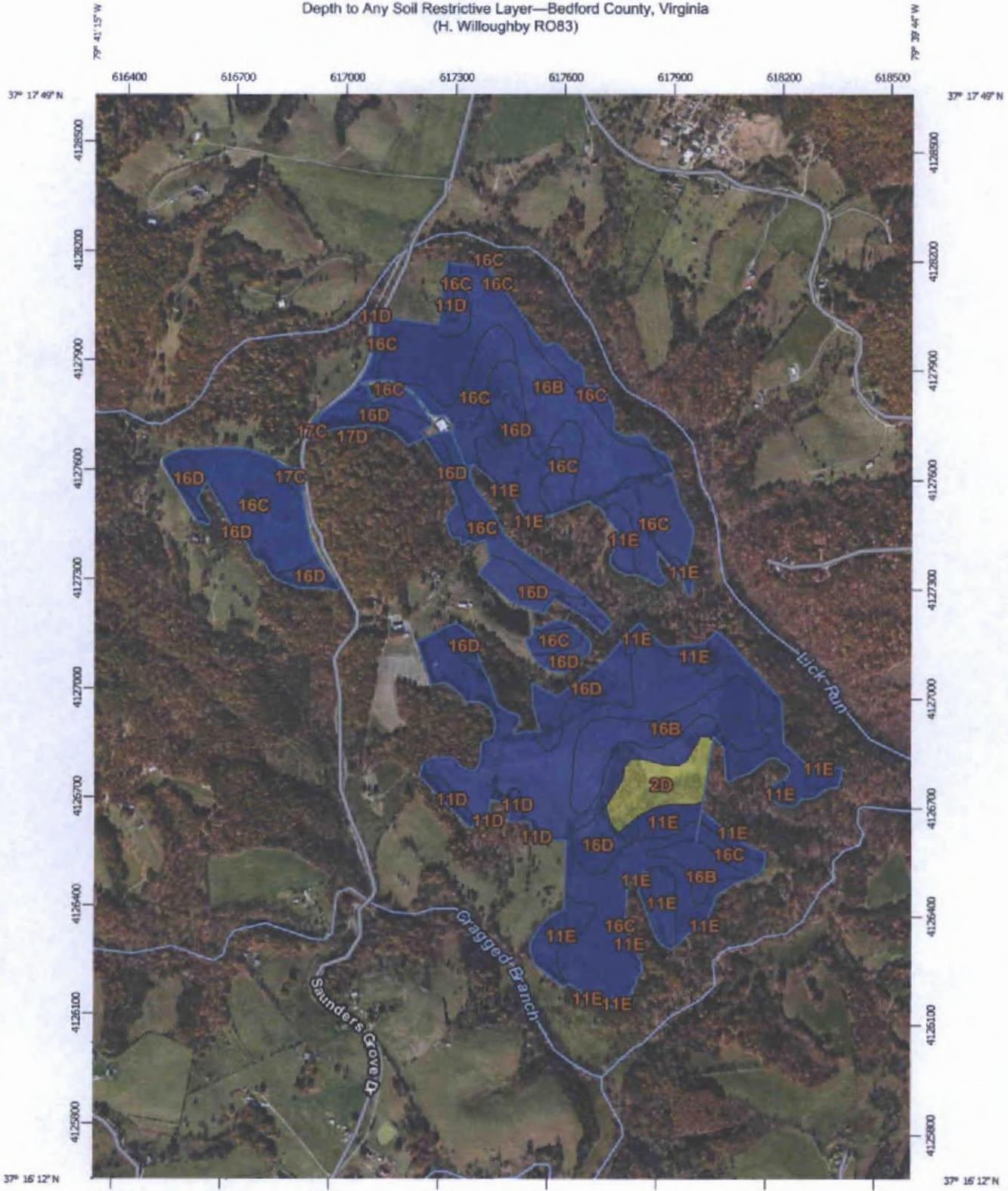
Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Depth to Any Soil Restrictive Layer—Bedford County, Virginia
(H. Willoughby RO83)



Map Scale: 1:14,500 if printed on A portrait (8.5" x 11") sheet.

0 200 400 800 1200 Meters

0 500 1000 2000 3000 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 17N WGS84

Depth to Any Soil Restrictive Layer—Bedford County, Virginia
(H. Willoughby RO83)

MAP LEGEND

Area of Interest (AOI)	 Area of Interest (AOI)	 Not rated or not available
Soils		Water Features
Soil Rating Polygons		 Streams and Canals
 0 - 25		Transportation
 25 - 50		 Rails
 50 - 100		 Interstate Highways
 100 - 150		 US Routes
 150 - 200		 Major Roads
 > 200		 Local Roads
 Not rated or not available		Background
		 Aerial Photography
Soil Rating Lines		
 0 - 25		
 25 - 50		
 50 - 100		
 100 - 150		
 150 - 200		
 > 200		
 Not rated or not available		
Soil Rating Points		
 0 - 25		
 25 - 50		
 50 - 100		
 100 - 150		
 150 - 200		
 > 200		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bedford County, Virginia
Survey Area Data: Version 11, Dec 11, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2010—Mar 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Any Soil Restrictive Layer

Depth to Any Soil Restrictive Layer— Summary by Map Unit — Bedford County, Virginia (VA019)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
2D	Ashe gravelly sandy loam, 15 to 25 percent slopes, very stony	58	9.2	3.4%
11D	Edneytown loam, 15 to 25 percent slopes	>200	3.6	1.3%
11E	Edneytown loam, 25 to 60 percent slopes	>200	21.1	7.8%
16B	Hayesville loam, 2 to 7 percent slopes	>200	52.3	19.3%
16C	Hayesville loam, 7 to 15 percent slopes	>200	140.0	51.5%
16D	Hayesville loam, 15 to 25 percent slopes	>200	44.6	16.4%
17C	Hayesville loam, 7 to 15 percent slopes, very stony	>200	1.0	0.4%
17D	Hayesville loam, 15 to 25 percent slopes, very stony	>200	0.0	0.0%
Totals for Area of Interest			271.7	100.0%

Description

A "restrictive layer" is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers.

This theme presents the depth to any type of restrictive layer that is described for each map unit. If more than one type of restrictive layer is described for an individual soil type, the depth to the shallowest one is presented. If no restrictive layer is described in a map unit, it is represented by the "> 200" depth class.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

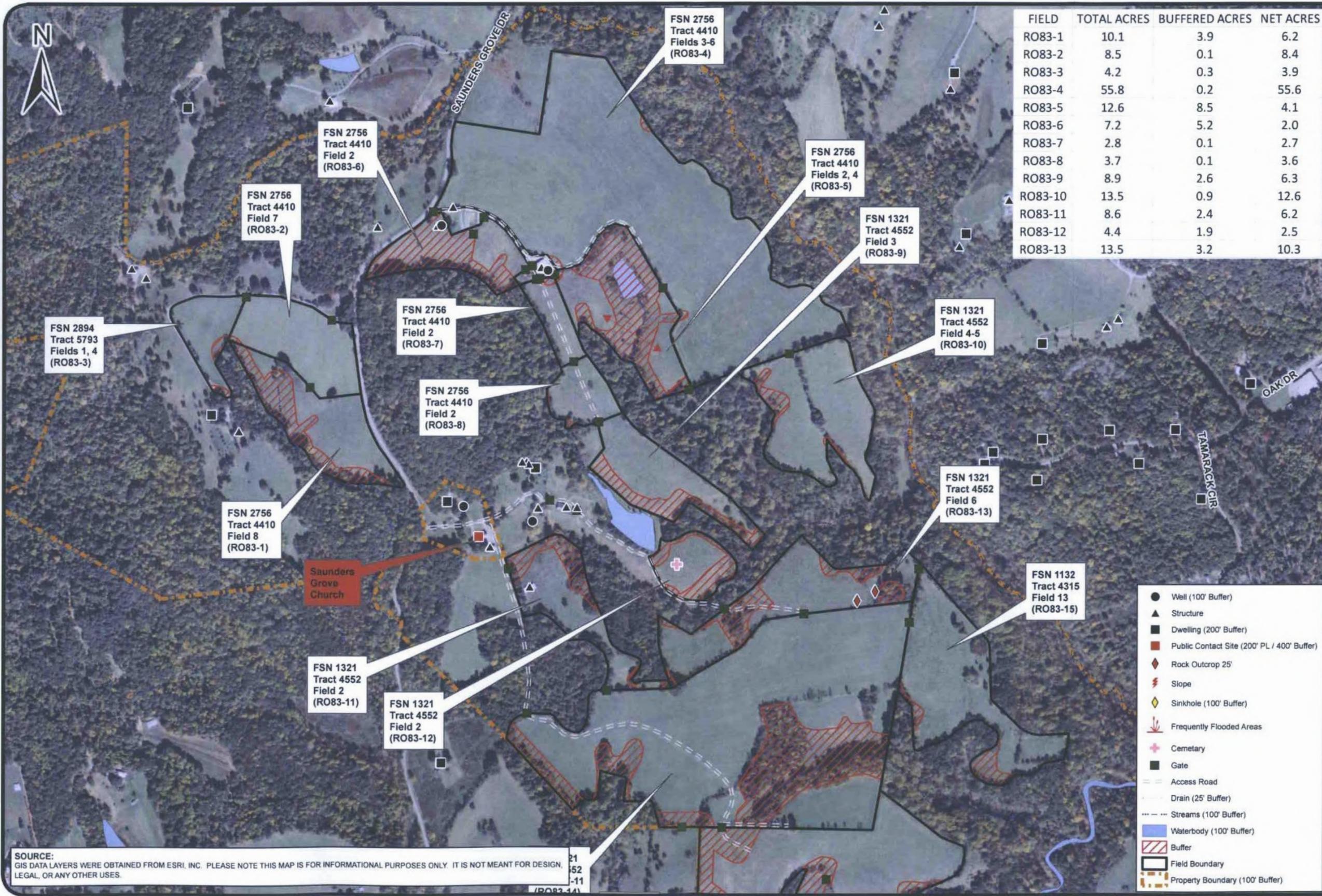
Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No



FIELD	TOTAL ACRES	BUFFERED ACRES	NET ACRES
RO83-1	10.1	3.9	6.2
RO83-2	8.5	0.1	8.4
RO83-3	4.2	0.3	3.9
RO83-4	55.8	0.2	55.6
RO83-5	12.6	8.5	4.1
RO83-6	7.2	5.2	2.0
RO83-7	2.8	0.1	2.7
RO83-8	3.7	0.1	3.6
RO83-9	8.9	2.6	6.3
RO83-10	13.5	0.9	12.6
RO83-11	8.6	2.4	6.2
RO83-12	4.4	1.9	2.5
RO83-13	13.5	3.2	10.3

DATE	08.31.2016
DRAWN BY	MEM
CHECKED BY	MEM
SCALE	1" = 600'
PROJECT NO.	15-18 Ph:01
ENGINEERING LICENSE NO.	

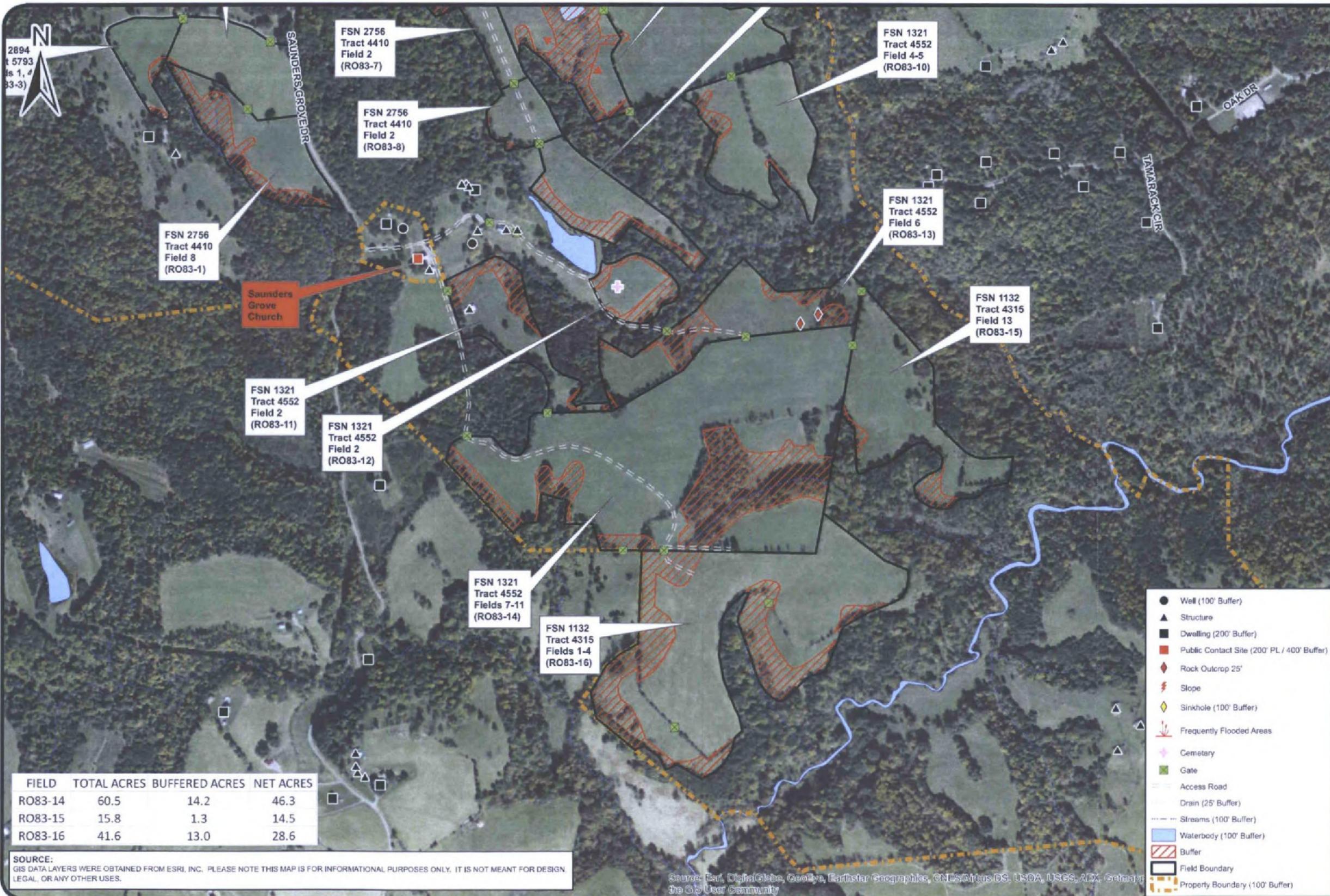
BIO-NOMIC SERVICES, INC.

BUFFER MAP - HOLLY WILLOUGHBY
FSN 1321, 1132, 2756, 2894 TRACT 4315, 4410, 4552, 5793
 CITY OF ROANOKE
 LAND APPLICATION PROGRAM
 BEDFORD COUNTY, VIRGINIA

FIGURE NO.
5

SOURCE:
 GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.

C:\arcgis\2006\1588-08-059 Bio-nomics\Holly_Willoughby\MapaBuffer.mxd



FIELD	TOTAL ACRES	BUFFERED ACRES	NET ACRES
RO83-14	60.5	14.2	46.3
RO83-15	15.8	1.3	14.5
RO83-16	41.6	13.0	28.6

SOURCE:
 GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroX, Getmap, the GIS User Community

DATE: 03.01.2016
 DRAWN BY: MEM
 CHECKED BY: MEM

SCALE: 1" = 600'
 PROJECT NO.: 15-18 Ph:01
 ENGINEERING LICENSE NO.:

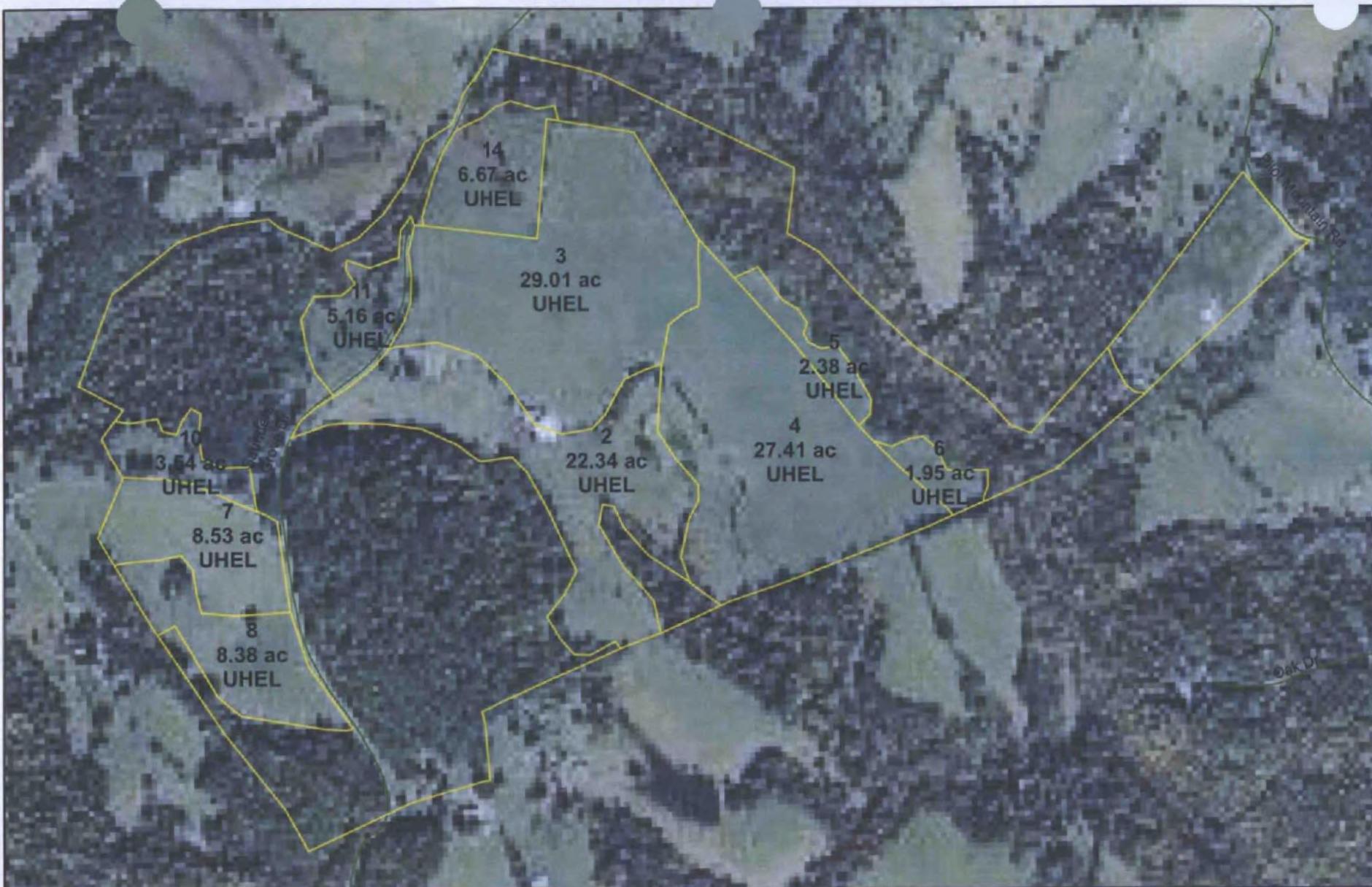


BIO-NOMIC SERVICES, INC.

BUFFER MAP - HOLLY WILLOUGHBY
FSN 1321, 1132, 2756, 2894 TRACT 4315, 4410, 4552, 5793
 CITY OF ROANOKE
 LAND APPLICATION PROGRAM
 BEDFORD COUNTY, VIRGINIA

FIGURE NO.
6

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1 inch = 614 feet

Farm: 2756
Tract: 4410



Bedford County, VA

Wetland Identification Map
 Wetland
 Wetland
 Wetland

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.

Jan 5, 2015



1 inch = 701 feet

Farm: 1132
Tract: 4315



Bedford County, VA

Wetland Identification Data:

- Wetland Line
- Wetland Boundary
- Wetland Area

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.

Jan 4, 2016



1 inch = 570 feet

Farm: 1321
Tract: 4552



Bedford County, VA

- Wetland Determination Methods
- Restricted Use
 - Limited Wetlands
 - Deep Water/Conservation/Outstanding Resource

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.

Jan 4, 2016



1 inch = 534 feet

Farm: 2894
Tract: 5793



Bedford County, VA

- Wetland Determination Map Symbols
- Protected Area
 - Limited Public Access
 - Conceptual Wetland Determination

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.

Jan 5, 2015