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BEFORE THE OHIO POWER SITING BOARD

In the Matter of the Application)
of Black Fork Wind Energy, LLC for)
a Certificate to Install Numerous)
Electricity Generating Wind Turbines in)
Crawford and Richland Counties, Ohio)

Case No. 10-2865-EL-BGN

**NOTICE OF FILING APPLICANT'S MAY 2, 2011 AND JUNE 3, 2011
RESPONSES TO STAFF'S DATA REQUESTS**

On May 2, 2011 and May 24, 2011, the Staff of the Ohio Power Siting Board submitted data requests to Black Fork Wind Energy, LLC ("Black Fork" or "the Applicant"). On May, 11, 2011, the Applicant responded to Staff's May 2, 2011 data requests. On June 3, 2011, the Applicant responded to Staff's May 24, 2011 data requests. Copies of the Applicant's May 11, 2011 and June 3, 2011 responses to Staff are attached hereto for filing on the docket.

Respectfully submitted,



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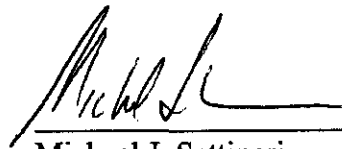
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MAY 11, 2011

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May 11, 2011

VIA HAND DELIVERY

Jon Pawley
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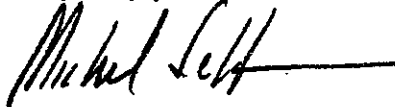
Re: Case No. 10-2865-EL-BGN
Black Fork Wind Energy Project

Dear Mr. Pawley:

Please find enclosed Black Fork Wind Energy, LLC's (the "Applicant") responses to the Staff's May 2, 2011 data requests, including a revised oversized map of the project, a revised Figure 5-2, applicable sections of the revised Figure 5-10 and a revised Figure 8-5. Also enclosed is a disc with updated mapping data as a result of the revised maps.

Please call me or Scott Hawken, the Black Fork Wind Energy Project manager, if you have any questions regarding the enclosed responses or require additional information.

Very truly yours,



Michael J. Settineri

MJS/drd
Enclosures

cc: John Jones
Scott Hawken

**Black Fork Wind Project
Staff Completeness Review Questions/Clarifications
Submitted to Applicant May 2, 2011
Responses submitted on May 11, 2011**

Case No. 10-2865-EL-BGN

1. On Page 9 of the application is the statement: "Currently, the Project is designed to utilize up to 91 Vestas V100 turbines, each with a 1.8 MW nameplate capacity." And, "While the Vestas V100 turbine is the currently preferred turbine model, the Applicant is considering a variety of other turbine models, including the General Electric 1.6 XLE and Siemens SWT-2.3-101 models as well as others, ranging from 1.6 MW up to 3.0 MW."

The Figures (maps) in the rear of the application show turbine footprint locations labeled V100 w/ 80 m Hub and V100 w/ 95 m hub, and include access roads and collector line locations. Are these locations the same for the General Electric 1.6 XLE, Siemens SWT-2.3-101 models, or any other technology model under consideration? If not, please provide Staff updated Figures showing turbine locations and associated facilities for all technologies to be considered in this application.

The turbine locations depicted in the Application figures for the Vestas V100 will also be utilized for the General Electric 1.6 XLE, Siemens SWT-2.3-101, or any other alternative turbine model that is considered.

2. On Page 13 of the application is the statement: "a temporary concrete batch plant and temporary laydown area will be established within the Project area in order to provide concrete necessary for the construction of the turbine and substation foundations, and to serve as a staging area for materials and equipment necessary for construction of the wind energy facility." Additionally, the Figures in the application, including the Project Overview map, indicate a "laydown yard and batch plant."

On Pages 54 and 55 of the application is the statement: "The Applicant intends to use an existing concrete batch plant facility for construction of the Project. Because the batch plant has been used previously, the Ohio General Batch Plant Permit has already been approved and issued by OEPA for the batch plant facility."

Please clarify whether a new concrete batch plant will be placed in the project area, or if an existing concrete batch plant will be utilized. If a new batch plant will be built, what permits are expected to be needed for that facility, and what is the status of these permits?

The Applicant intends to utilize an existing, portable concrete batch plant that will be temporarily erected in the Project area, at the location depicted in the Application figures. Although a portable batch plant supplier has not been selected, it is not anticipated that new permits will be required for the portable batch plant as applicable OEPA permits should be in place for the portable batch plant. The Applicant will obtain copies of all applicable OEPA permits from the selected batch

plant supplier for submittal to the Staff prior to construction. In the event the batch plant supplier utilizes a new portable batch plant, the Applicant will coordinate with the batch plant supplier to ensure all required permits are obtained prior to the commencement of construction.

3. On Page 15 of the Application is a section entitled: "Associated Transmission Line." Please provide the location extents of this proposed transmission line on the Project Area Location (Oversized map) and Project Site maps.

The existing AEP transmission line that the Project intends to utilize is provided on the revised Figures 5-2 and 5-10 and the oversized map. While only a portion of the existing AEP transmission line will be re-conducted by AEP to accommodate the Project, the entire length of the existing transmission line as it runs through the Project area is depicted.

4. On Page 143 of the Application is the statement: "At the end of its useful life, the Applicant will decommission the Project facilities. This will include following a formal decommissioning plan for the removal of Project components."

Please provide any decommissioning studies performed for the Applicant for Staff to review, including a discussion of any financial arrangements designed to assure the requisite financial resources.

At this time, the Applicant has not conducted decommissioning studies. Thus, no financial assurance mechanism is in place, although the Applicant anticipates that the form of financial assurance will be a bond or letter of credit.

What specific type of financial security / bond is proposed to fund decommissioning?

As indicated above, no financial arrangements, such as a bond or letter of credit are in place. Lease agreements with landowners require decommissioning and a form of financial assurance. The Applicant's lease agreements with landowners provide that within 12 months following the expiration or earlier termination of this Agreement, Black Fork Wind Energy, LLC at its sole cost and expense, shall decommission the windpower facilities, which shall include the removal of all towers and turbines, the removal of all other above-grade facilities and the burying of all tower foundations and the reseeding of areas where the tower pads were located with native grasses and/or natural vegetation. The leases also provide that within 180 days after the 20th anniversary of the Operations Date, Black Fork Wind Energy, LLC shall implement a financial instrument to honor the decommissioning obligation. The Applicant anticipates that the form of financial assurance will be a bond or letter of credit.

Has the Applicant obtained an estimate for decommissioning costs, less the salvage value of equipment? If so, what is the forecasted cost, and what is the forecasted salvage amount of the equipment and who provided the estimate?

At this time an estimate has not been calculated for decommissioning cost or salvage value. The forecasted values and final decommissioning security will be developed following Element Power's company guidelines in conjunction with the development of our corporate Decommissioning Plan for this Project (see attached example "Element Power, Black Fork Wind Energy Center Decommissioning Plan").

5. Please clarify or update the following as related to Appendix H (RSG Sound Study):

On Page 9 – This page states that there were 8 sampling locations and the L_{EQ} averages were 43 dBA (night) and 53 dBA (day). Page 71 of the Application states that there were 6 sampling locations and that the L_{EQ} averages were 43 dBA (night) and 52 dBA (day). Which is correct? Please update as necessary.

As clarification for the sampling information provided on Page 71 of the Application, six "Noise Zones" were evaluated in the Project area but monitoring was conducted at eight discrete sampling locations. The day time L_{EQ} reported on Page 71 of the Application was incorrect, the correct day time L_{EQ} should be 53 dBA (day), as reported in Appendix H.

On Page 9 – "...the nighttime L_{EQ} is 43 dBA..." Footnote #1 states that the L_{EQ} is 44 dBA. Which is correct? Please explain.

Both levels are correct. The average nighttime L_{eq} across all monitoring locations was 43 dBA. Footnote #1 refers specifically to the nighttime L_{eq} for Location D after some unusual spikes were removed from the data. With the spikes included in the dataset, the nighttime L_{eq} at Location D is 57 dBA as shown in Table 3 on Page 9.

Were periods of rain/precipitation excluded from the data sets?

Precipitation was not excluded from the data sets because it rained for less than one hour on June 6, 2009 with an accumulation of approximately 0.05 inches. In addition, no increases in sound levels were noticed during this time period with the exception of Monitor D and E, but it is not clear whether this increase was due to rain or another source and thus the rain period was not excluded.

On Page 20, 6.2 – Please provide the "standard margin of error".

The GE 1.6 XLE has a maximum sound power level of 106 dBA with an uncertainty level of ± 2 dB. The Vestas V100 is rated at 105 dBA with an uncertainty level of ± 2 dB. The Siemens SWT 2.3 is rated at 106 dBA with an uncertainty level of ± 1.5 dB. The upper end of the uncertainty levels were taken into account in the

Black Fork Noise Study so that the GE turbine was modeled at 108 dBA, the Vestas at 107 dBA, and the Siemens at 107.5 dBA.

6. On Figure 8-5 "Land Use Map" – The land use map has symbology for land use and land cover that are very close in appearance. Please separate these maps, so Staff can clearly identify land use and land cover.

Revised Figure 8-5 "Land Use Map" is provided with a better distinction for the symbology used for land use and that used for land cover.



elementpower

Black Fork Wind Energy Center

Richland and Crawford Counties, Ohio

Decommissioning Plan

1/21/2011

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1 Introduction

Element Power has proposed its ~~Black Fork Wind Energy Center~~, a [insert number] megawatt (MW) wind energy project in [insert location].

This project decommissioning plan outlines the approach Element Power will implement when ceasing operation at the end of the project's useful life. The decommissioning plan identifies the specific project components that will be removed, the appropriate removal methods and standards, the associated removal costs, and relevant salvage or resale values.

During decommissioning and site restoration, Element Power will follow the applicable conditions, guidelines, and standards set by relevant and applicable government authorities by lease documents with participating landowners, and the turbine manufacturer.

1.1 Facility Components

The project consists of the following primary components:

Item	Number	Unit Measure
Wind turbines (nacelle, hubs, blades, & towers)		Each
Wind turbine foundations		Each
Step-up transformers		Each
Collection system		Lineal Feet
Access roads		Lineal Feet
Medium voltage cable		Lineal Feet
Substation		Each
Operation & Maintenance building		Each
<i>Note: The exact number of turbines and lengths of access roads and medium voltage cables may change prior to construction. The lengths provided here are based on a preliminary layout. If required, as-built plans will be provided to the [counties] following construction.</i>		

Technical data for the wind turbines used by the project includes:

Turbine Manufacturer:	
Turbine Model & Rating:	
Turbine Structure:	e.g., painted monopole tubular steel
Hub height (m):	
Rotor Diameter (m):	

1.2 Anticipated Operational Life

Properly maintained, wind turbines have a minimum life of 20 years (Ton van de Wekken 2007). At the end of the project life, depending on market conditions and project viability, the wind turbines may be "re-powered" with new nacelles, towers, and/or blades. Alternatively, the wind turbines may be decommissioned and removed. The major components of the wind turbines (i.e., tower, nacelle, hubs, and blades) are modular items that allow for relatively easy disassembly during decommissioning or replacement.

2 Decommissioning Process

In the event the project requires decommissioning and removal, Element Power will follow the sequence for removal of projects components below:

- Remove above-ground components:
 - Turbines (towers, nacelles, hub, blades, and internal auxiliary equipment)
 - Step-up transformers (if applicable) - may be inside nacelle or tower
 - Overhead collection lines/transmission systems
 - Project substation
 - Operations & Maintenance building
 - Meteorological towers
- Remove below-ground components (to a depth of 3 feet below grade):
 - Turbine foundations and associated components
 - Underground collector lines
- Regrade to match surrounding contours
- Site restoration and re-seeding (in consultation with the landowner)

The decommissioning process involves the evaluation and categorization of all project components and materials into the following categories:

- Repurpose
- Salvage/Recycle
- Dispose

In order to mitigate impacts due to transportation and increase cost efficiency, Element Power may elect to store disassembled turbine components on-site temporarily until similar components are available from other turbines for bulk transport to appropriate facilities.

Dismantling of project components requires the use of cranes and heavy equipment, and may involve land clearing, crane pad reconstruction and material removal, laydown area reconstruction and removal, and access road modification and removal. After the removal of all equipment and excess materials from the area, Element Power will regrade and restore topsoil. Element Power will consult with the landowner during the decommissioning process to determine the appropriate level and type of restoration work (e.g., cultivated fields, croplands vs. grazing lands) performed on their land to the extent that is commercially reasonable.

2.1 Turbines

The primary sections of the wind turbines (i.e., tower, nacelle, and hubs) are potentially salvageable modular items that allow for ease of construction and disassembly during decommissioning or replacement. Wind turbines are bolted to the foundation and pedestal and can be removed relatively easily using appropriately sized cranes and equipment. Components of both the nacelle and interior generator are also potentially salvageable. If components cannot be sold intact and removed by the buyer from the site, Element Power will transport them to an off-site location for further processing.

2.2 Pad-Mounted, Step-Up Transformers (may be part of nacelle for some WTG models)

Element Power will disconnect each step-up transformer, remove them from their foundations and from the site for either refurbishment, resale, or appropriate disposal. Element Power will remove any foundation material to three feet below grade.

2.3 Foundations

Element Power will remove turbine foundations and associated components, including anchor bolts, rebar, conduits, and concrete, to a depth of three feet below grade. Off-site removal and disposal of the removed portions of the foundations will be determined by any applicable standards set by relevant government agencies.

2.4 Underground Collector Systems

Unless otherwise determined by landowners and/or relevant government authorities, Element Power will remove only those portions of the underground collection system that impose an obstacle to the former use of the land. Components of the underground system that do not impose an obstacle to land use will be kept in place to prevent disruption to agricultural or disturbance of habitat (where site is not use for agriculture) activities. The cables and conduits included in the underground collection systems contain no materials known to be harmful to the environment. Typically, this involves the removal of collector system components to a depth of three feet below grade (i.e., below plow depth).

2.5 Overhead Collector/ System

Element Power will disassemble overhead electrical collection lines, poles and associated components and remove the materials from the site for further reprocessing, sale or salvage as determined at the time of decommissioning.

2.6 Substation Facilities

Project substation components including steel, conductors, switches, transformers, fencing, control houses, and other materials, will be removed for rehabilitation, sale and/or salvage. Element Power will remove the concrete foundation and underground components to the depth of three feet or as required by lease agreements and agency permitting.

2.7 Operations and Maintenance Building

Element Power will consult with landowners and evaluate alternative uses or potential resale value of the operation and maintenance building and its components. It may be left in place if the landowner wishes to re-use the building. If the building and associated components are to be removed, Element Power will salvage, recycle, or repurpose building components as possible. The concrete foundation and underground components will be removed to a depth of three feet.

2.8 Meteorological (Met) Towers

Element Power will remove all project meteorological towers and associated components, and will salvage, recycle, or repurpose tower or otherwise appropriately dispose of the components, as possible.

2.9 Access Roads

During decommissioning, access roads may need to be upgraded for heavy equipment and delivery vehicles. If necessary, Element Power will remove topsoil from the access road edge and apply gravel from locally sourced materials. The surface will be graded to facilitate drainage. Once dismantling of wind turbines and other facilities is complete, Element Power will remove the access roads unless otherwise desired by the landowner.

Access road decommissioning may involve the removal and transportation of the aggregate materials from the site to a nearby site where the aggregate can be processed for salvage. It is possible that landowners, local townships, or farmers may accept this material without processing to use on their local roads. However, for the purpose of this plan, it is assumed that Element Power will remove the materials and haul them to a reprocessing site.

If appropriate, the decommissioning may also involve the removal and proper disposal of geotextile fabric sometimes used in road construction. It is anticipated that during excavation of the aggregate a large portion of the geotextile will be "picked up" and sorted out of the aggregate at the aggregate reprocessing site. Element Power will dispose of any geotextile fabric that is remaining or readily removable large pieces off-site at a licensed local/regional landfill.

3 Site Restoration Process

Element Power will restore disturbed areas after decommissioning is completed. Temporary use areas, such as access roads used for structure placement and/or removal, will be restored by recontouring (if necessary) and reseeding. Topsoil from excavations and construction activities will be segregated as much as commercially reasonable from sub-soil and reapplied to the surface of the ground during reclamation. Appropriate seed mixes will be identified in consultation with the landowner and/or local resource agencies (e.g., Natural Resource Conservation Service). Additional reclamation measures will be developed to address site-specific conditions as necessary. Element Power (or its decommissioning contractor) will also develop and implement a project-specific stormwater pollution prevention plan (SWPPP) in accordance with state guidelines to minimize erosion during the decommissioning and restoration process.

Element Power will address areas at risk for erosion by using techniques such as leveling, terracing, mulching, or the use of an erosion control seed mix, as appropriate and in accordance with landowner desires, and relevant state or local regulatory requirements.

Element Power will monitor the site restoration process immediately following the completion of any decommissioning and restoration activities. The monitoring period will allow Element Power to monitor the effects of climatic cycles such as frost action, precipitation and growing seasons in order to make any necessary corrective action to appropriately restore the project area. Element Power can identify any remaining agriculture impacts during this period and implement follow-up restoration efforts if necessary.

4 Estimated Salvage Value of Facility Components

Element Power conservatively has assumed that the removed project components will only be valuable as scrap at the time of decommission, and has based all cost estimates on this assumption. Any additional value gained through resale at the time of decommission will further offset decommissioning costs.

Based on the details available for the [insert turbine make and model] and associated tower and components, one can assume that both the tower and nacelle will yield approximately 80 percent salvageable materials. Since the hub assembly and bed plate are of manufactured steel, it is anticipated that these will yield 100 percent salvageable metallic materials. Salvage estimates for internal electric wiring were derived by assuming 5 percent of the total tower and nacelle weight consists of salvageable materials. Since the rotor/blades are constructed of predominantly non-metallic materials (e.g., fiberglass reinforced epoxy and carbon fibers), no salvage value for the rotor/blades was used to develop the decommissioning cost estimate. However, there may be disposal costs associated with their removal from the site.

Salvage value for the road materials assumes that 75 percent of the aggregate surface course can ultimately be salvaged for future use as aggregate base course; it is also assumed that 50 percent of the aggregate base course could be reused as aggregate base course; the remaining materials would be viable for general fill in

Black Fork Wind Energy Center
Decommissioning Plan
Element Power, LLC

non-structural fill areas. Any geotextile fabric that may be extricated from the project site will not likely be salvagable.

Element Power determined current salvage values by obtaining current market values from recycling facilities and/or scrap dealers located in the state of Ohio. Given that market values for scrap metal recycling have historically been volatile, these values represent only a snapshot of the current market environment like all commodities and are not intended to be predictive of future values. The total estimated salvage value for the project is less the cost of material breakdown to optimal size and condition for highest cost recovery from salvage, and transportation to recycling facilities.

Current Salvage Value of Steel Components Near the Project

Source	Current Market Value (\$/ton)	Load and Preparation Cost (\$/ton)	Transportation Cost (\$/ton)	NET SALVAGE VALUE (\$/ton)
	\$ /ton	(\$ /ton)	(\$ /ton)	\$ /ton
	\$ /ton	(\$ /ton)	(\$ /ton)	\$ /ton
	\$ /ton	(\$ /ton)	(\$ /ton)	\$ /ton

Current Salvage Value of Copper Components Near the Project

Source	Current Market Value (\$/ton)	Load and Preparation Cost (\$/ton)	Transportation Cost (\$/ton)	NET SALVAGE VALUE (\$/ton)
	\$ /ton	(\$ /ton)	(\$ /ton)	\$ /ton
	\$ /ton	(\$ /ton)	(\$ /ton)	\$ /ton
	\$ /ton	(\$ /ton)	(\$ /ton)	\$ /ton

Current Salvage Value of Aluminum Components Near the Project

Source	Current Market Value (\$/ton)	Load and Preparation Cost (\$/ton)	Transportation Cost (\$/ton)	NET SALVAGE VALUE (\$/ton)
	\$ /ton	(\$ /ton)	(\$ /ton)	\$ /ton
	\$ /ton	(\$ /ton)	(\$ /ton)	\$ /ton
	\$ /ton	(\$ /ton)	(\$ /ton)	\$ /ton

Current Salvage Value of Components Near the Project

Source	Current Market Value (\$/each)	Load and Preparation Cost (\$/each)	Transportation Cost (\$/each)	NET SALVAGE VALUE (\$/ton)
	\$ /each	(\$ /each)	\$ /each	\$ /each
	\$ /each	(\$ /each)	\$ /each	\$ /each
	\$ /each	(\$ /each)	\$ /each	\$ /each

Estimated Net Salvage Value for the Project

Material	Amount (ton)	Total Net Salvage Value
Steel	tons	\$ /ton
Copper	tons	\$ /ton
	tons	\$ /ton
TOTAL NET PROJECT SALVAGE VALUE:		

5 Summary of Estimated Decommissioning/Restoration Cost

The estimated total net project cost (less the salvage value) for the decommissioning of the project is \$[insert value] (\$[insert value] per turbine). A more detailed breakdown of costs can be found in Appendix A.

Element Power developed this estimate using available information from a variety of credible industry cost resources, including those listed below:

- R.S. Means
- Vendor Quotes
- Current/Historic Commodity Prices
- Estimator Judgment

6 Financial Assurance

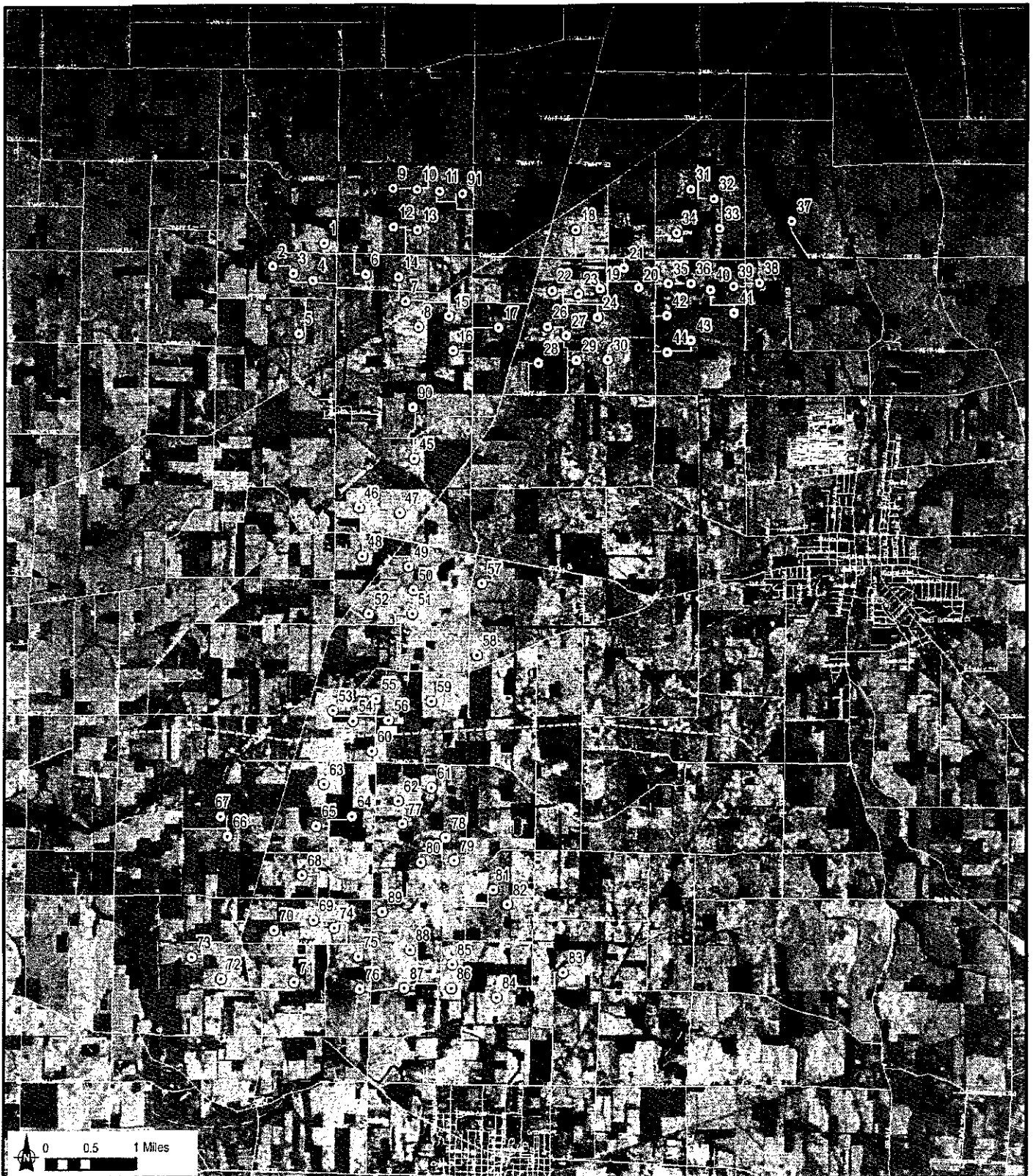
In the event that: (a) Element Power is not required to post a bond, letter of credit or similar financial assurance for decommissioning facilities as a condition of approval from any governmental agency with jurisdiction over the project; or (b) such a condition is imposed, but is then removed and any bond, letter of credit or similar financial assurance is actually released; then Element Power will, on the fifteenth (15th) anniversary of the first day of the operations period or within one hundred and twenty days after release of the bond, letter of credit or similar financial assurance, whichever is later, post a bond, letter of credit or similar financial assurance to secure the cost of decommissioning the facilities located on the premises, in form and substance reasonably satisfactory to the landowner (the "Removal Security"). The Removal Security will be equal to the estimated amount, if any (the "Net Removal Costs"), by which the cost of removing the facilities exceeds the salvage value of such facilities, to be determined by Element Power in its reasonable discretion. To the extent that the Net Removal Costs are zero (or negative), the Removal Security will not be required; provided, however that Element Power will re-evaluate the need for the Removal Security at least every two years after the fifteenth (15th) anniversary of the first day of the operations period. Element Power will not be required to deliver such Removal Security to the landowner if Element Power is in the process of repowering or otherwise redeveloping the project components on the property with new components (or commits in writing with notice to the landowner to do so within two (2) years after the fifteenth (15th) anniversary of the operations date). Once in place, Element Power will keep the Removal Security in force throughout the remainder of the term, provided that Element Power will have the option at any time to obtain a single Removal Security in favor of the landowner and other the landowners in the project to secure the decommissioning of project Facilities. The landowner may resort to the Removal Security to recover any reasonable and actual costs of removing the facilities and restoring the premises incurred by the landowner.

7 Sources

R.S. Means. Online Cost Books. <http://www.meanscostworks.com/>

Ton van de Wekken, KEMA Nederland B.V. 2007. Distribution Generation and Renewables. Wind Farm Case Study.

Black Fork Wind Energy, LLC One-Mile Radius Figure



© Ecology & Environment, Inc. GIS Department, Project #003071 ET09.02
 M:\Chicago\Black_Fork\Map\MXD\OP5B_Application\Topo_Geo_Aerial.mxd 5/10/2011

Turbines (01-14-11)

Vestas V100

• V100 w/ 80 m Hub (130m tip height)

• V100 w/ 95 m Hub (145m tip height)

Access Roads (01-14-11)

Existing Transmission Line

--- Existing Re-conducted Transmission Line

▬ Laydown Yard & Batch Plant (01-13-11)

▨ O&M Building (01-13-11)

▬ Switchyard (01-13-11)

▬ Substation (01-13-11)

▬ 1 Mile Buffer of Project Area

▬ Project Area (01-03-11)

Figure 5-2

Black Fork Wind Energy, LLC One-Mile Radius
 Crawford and Richland Counties, Ohio

Source: ESRI 2010; OH DNR 2009; EP 2011.



Black Fork Wind Energy, LLC Project Site Index Map

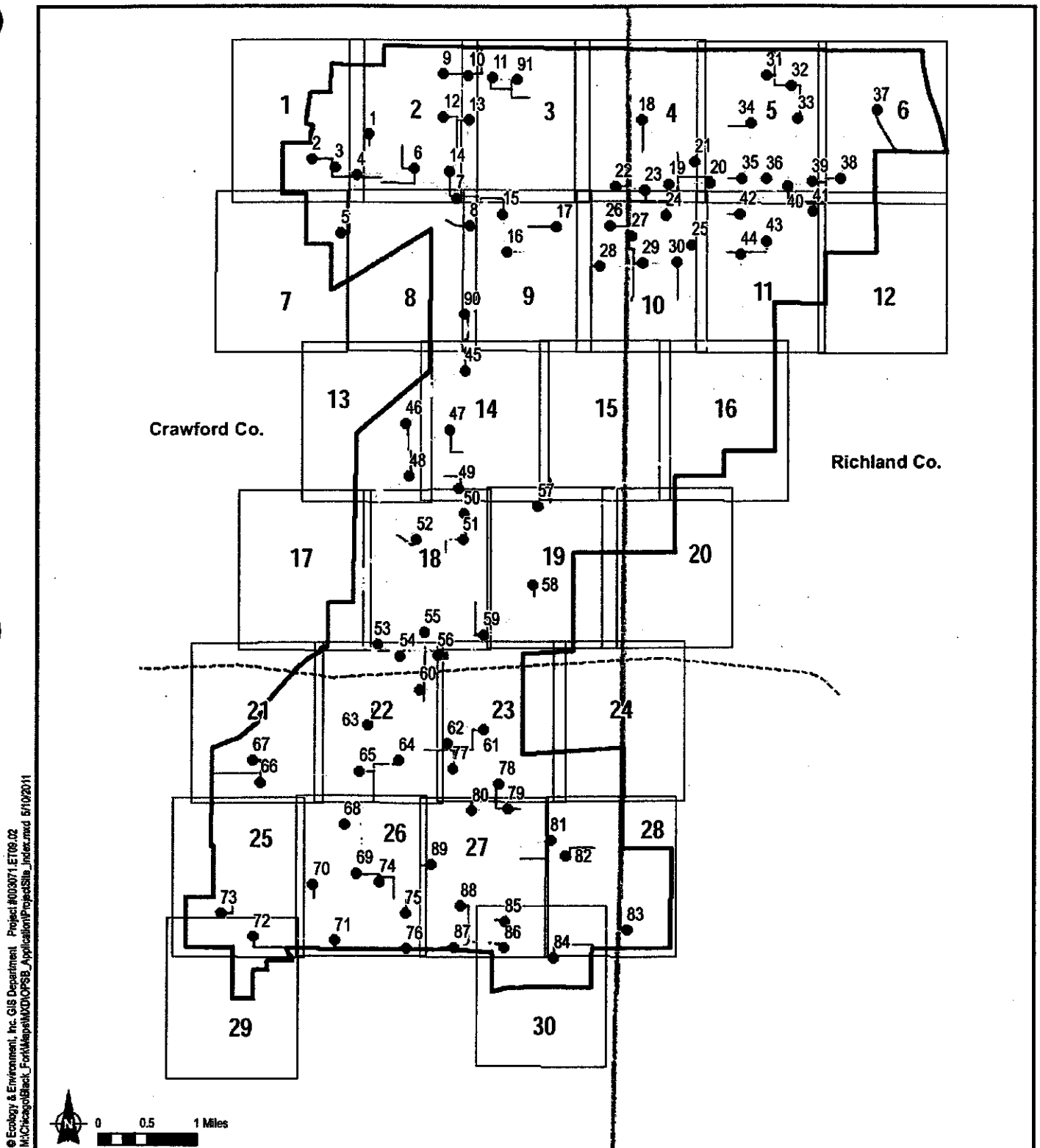


Figure 5-10
Black Fork Wind Energy, LLC Project Site Index Map
Crawford and Richland Counties, Ohio

Black Fork Wind Energy, LLC Project Site



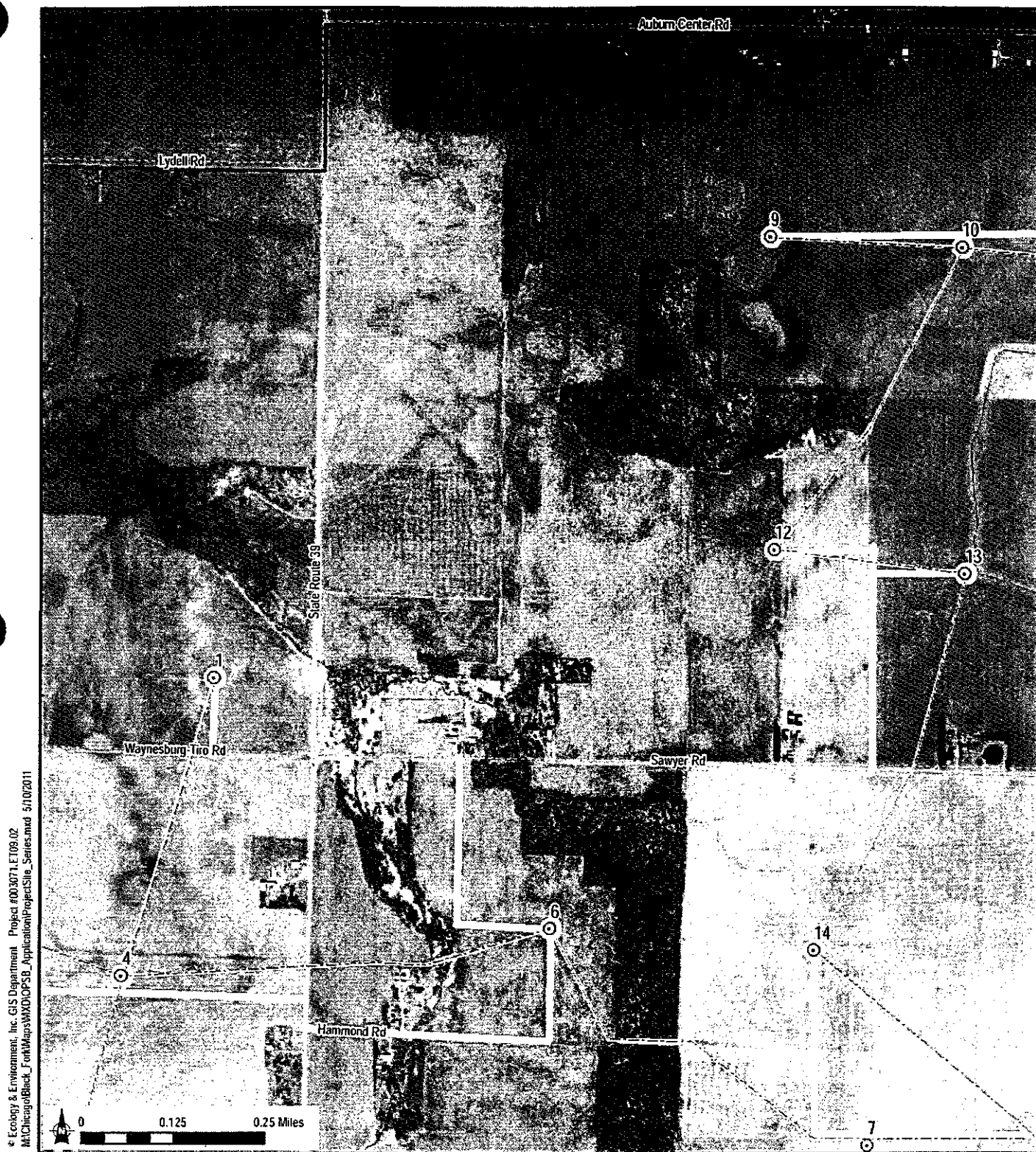
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- | | | |
|--------------------------------------|---|-----------------------|
| Turbines (01-14-11) | Project Area (01-03-11) | Permanent Impact Area |
| Vestas V100 | Substation (01-13-11) | Temporary Impact Area |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) | • School |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) | • Church |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) | • Hospital |
| --- Collection Line (01-14-11) | Existing Transmission Line | • Industrial Building |
| — Major Road | Existing Re-conducted Transmission Line | |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 1 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site



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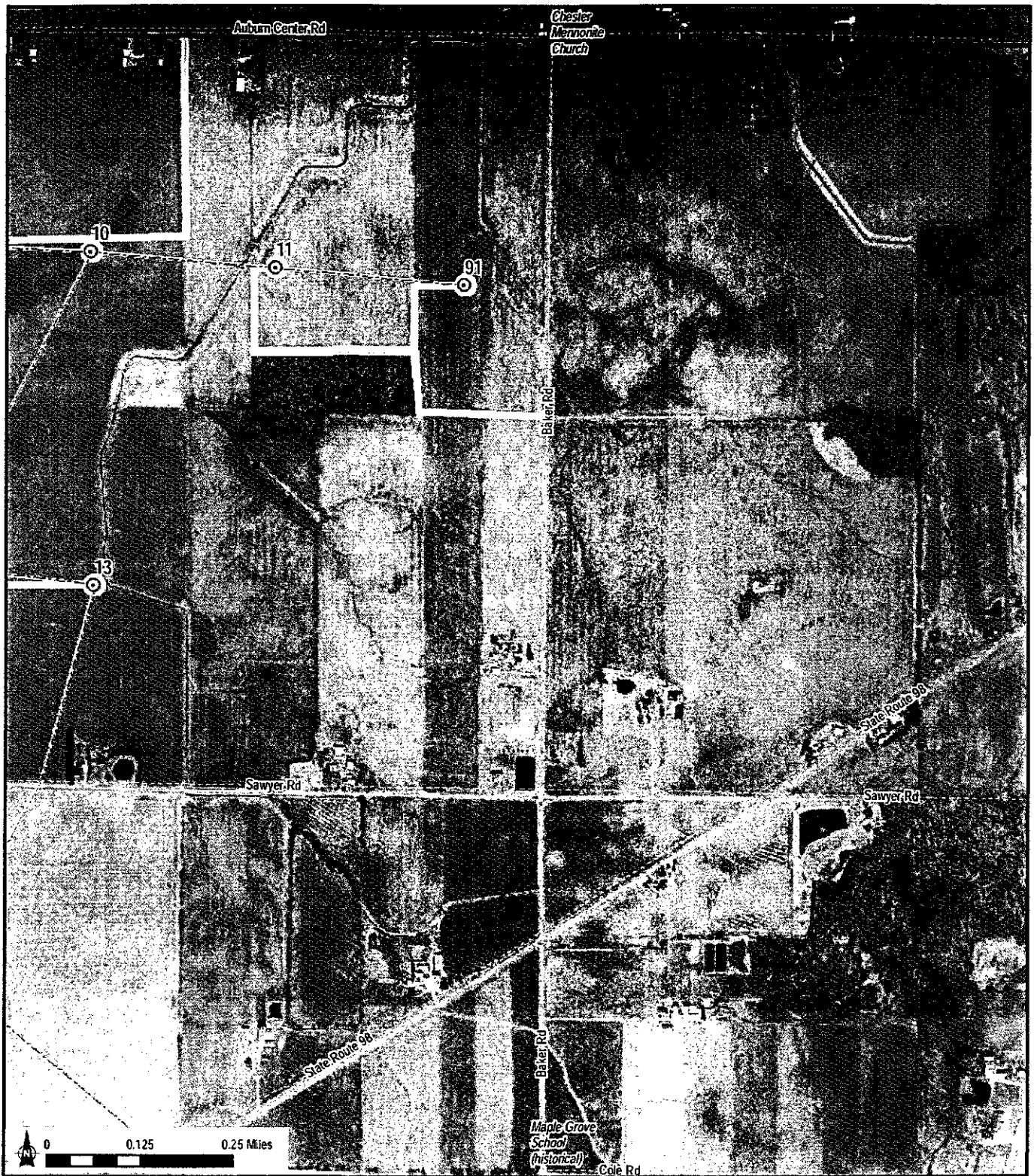
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|------------------------------------|---|-----------------------|
| Turbines (01-14-11) | Project Area (01-03-11) | Permanent Impact Area |
| Vestas V100 | Substation (01-13-11) | Temporary Impact Area |
| V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) | School |
| V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) | Church |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) | Hospital |
| Collection Line (01-14-11) | Existing Transmission Line | Industrial Building |
| Major Road | Existing Re-conducted Transmission Line | |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 2 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site

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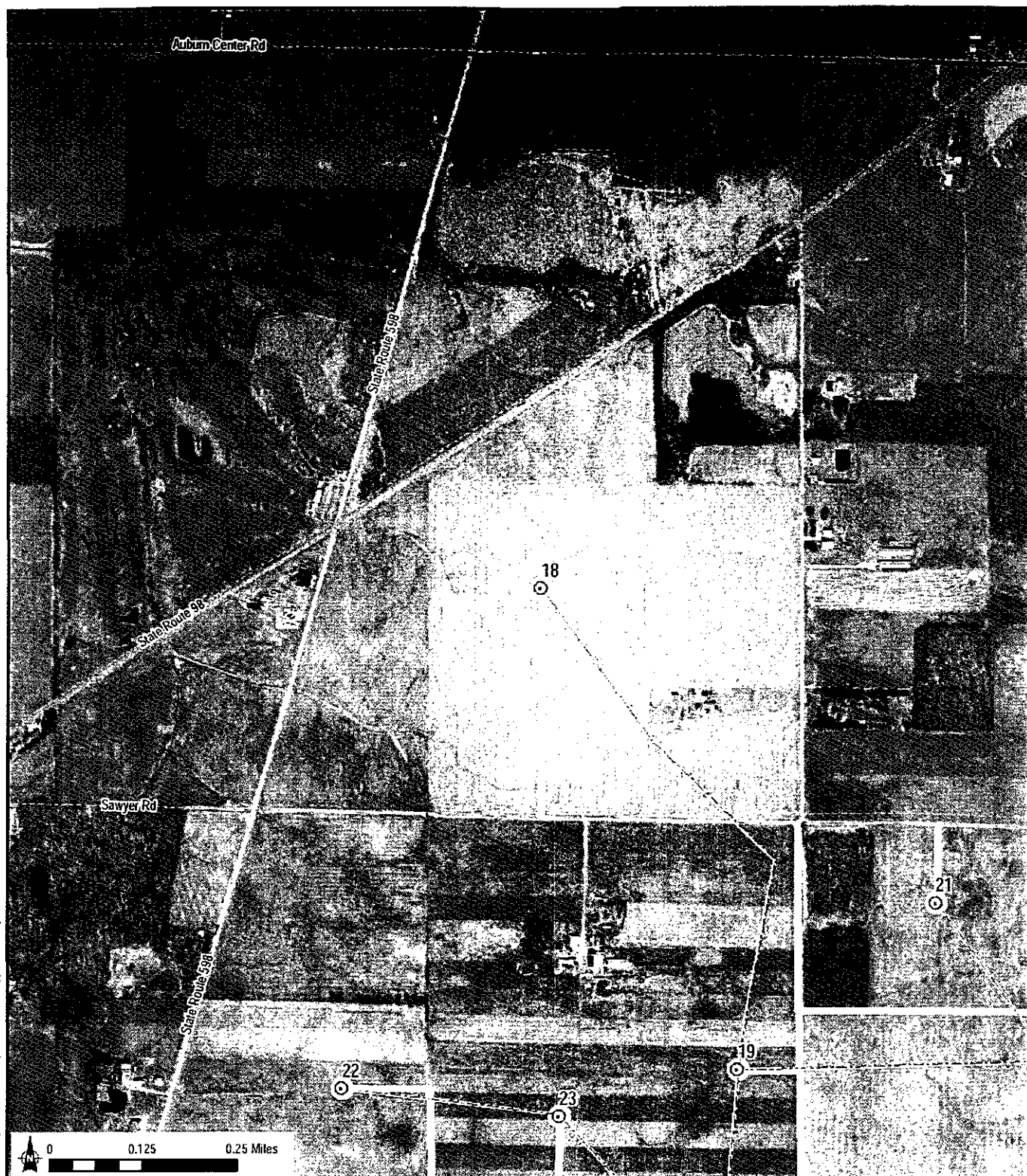


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|------------------------------------|---|-----------------------|
| Turbines (01-14-11) | Project Area (01-03-11) | Permanent Impact Area |
| Vestas V100 | Substation (01-13-11) | Temporary Impact Area |
| V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) | School |
| V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) | Church |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) | Hospital |
| Collection Line (01-14-11) | Existing Transmission Line | Industrial Building |
| Major Road | Existing Re-conducted Transmission Line | |

Figure 5-10
Black Fork Wind Energy, LLC Project Site
Crawford and Richland Counties, Ohio
Map 3 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC - Project Site



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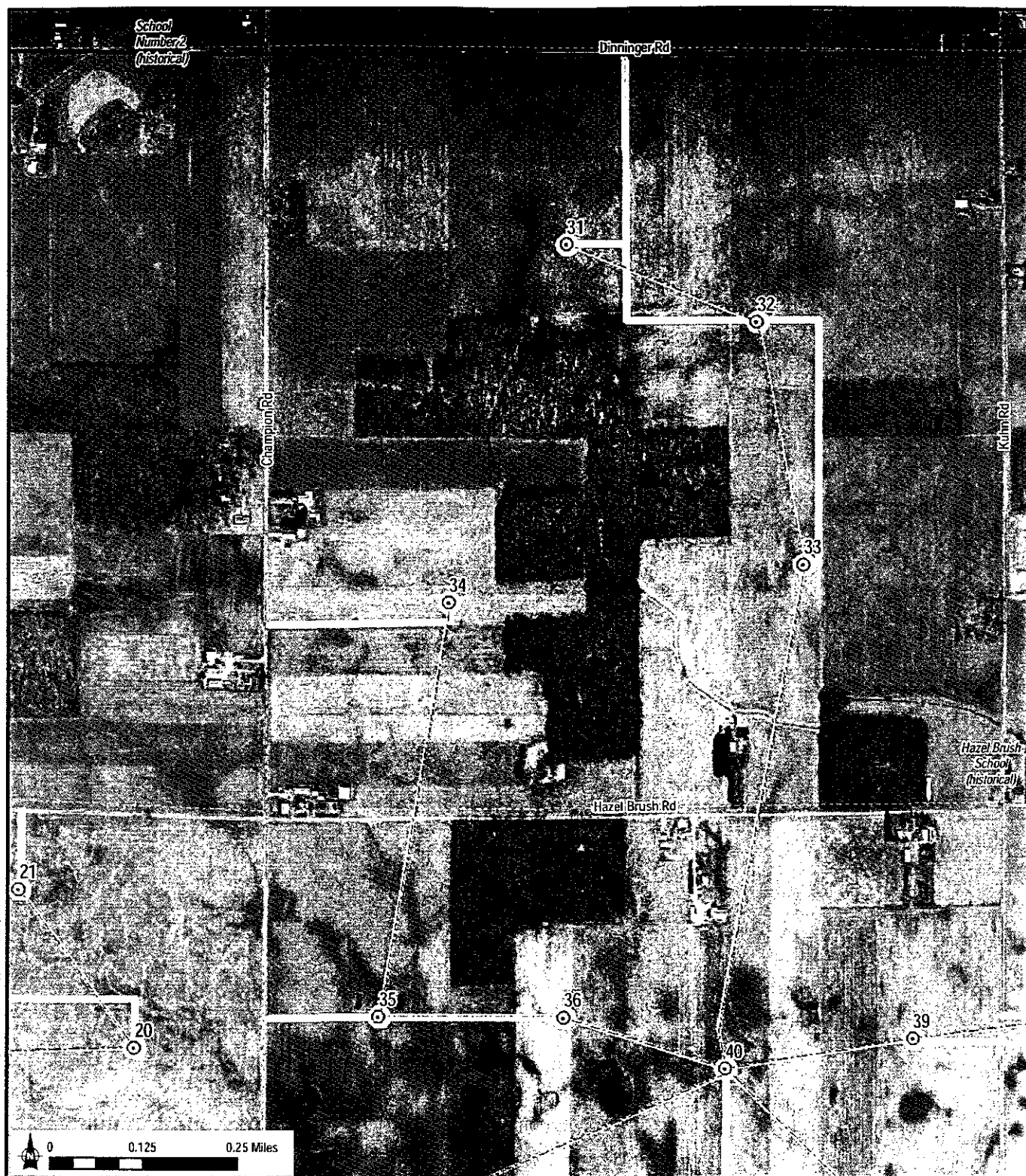
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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| ○ V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| ● V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

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|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| ○ School |
| ○ Church |
| ○ Hospital |
| ○ Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 4 of 30

Source: ESRI 2010; E & E 2008; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC - Project Site



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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| ○ V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| ○ V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

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|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| ⌵ School |
| ⌵ Church |
| ⌵ Hospital |
| ⌵ Industrial Building |

Figure 5-10
Black Fork Wind Energy, LLC Project Site
Crawford and Richland Counties, Ohio
Map 5 of 30

Black Fork Wind Energy, LLC - Project Site



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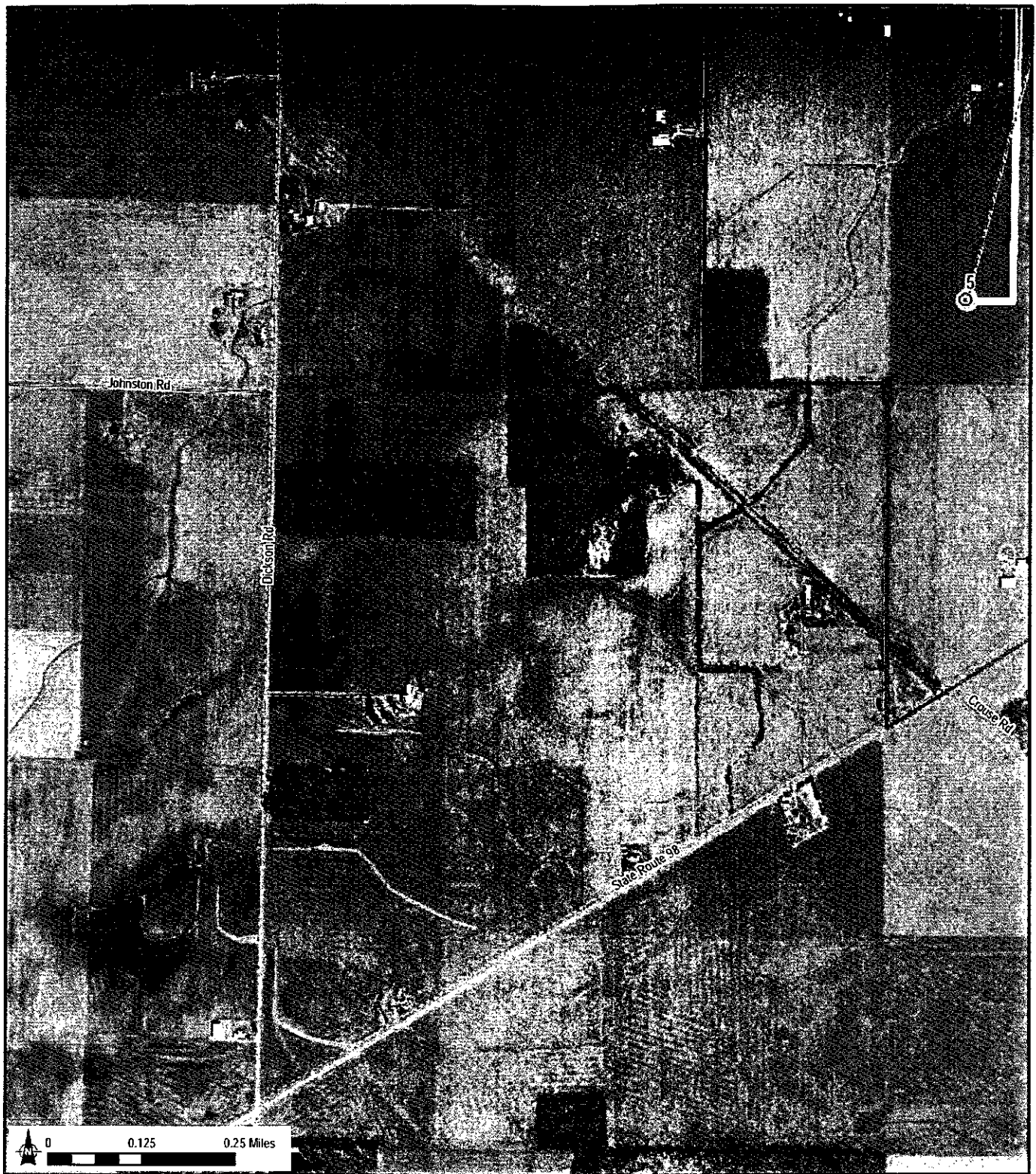
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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

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|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| • School |
| • Church |
| • Hospital |
| • Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 6 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site



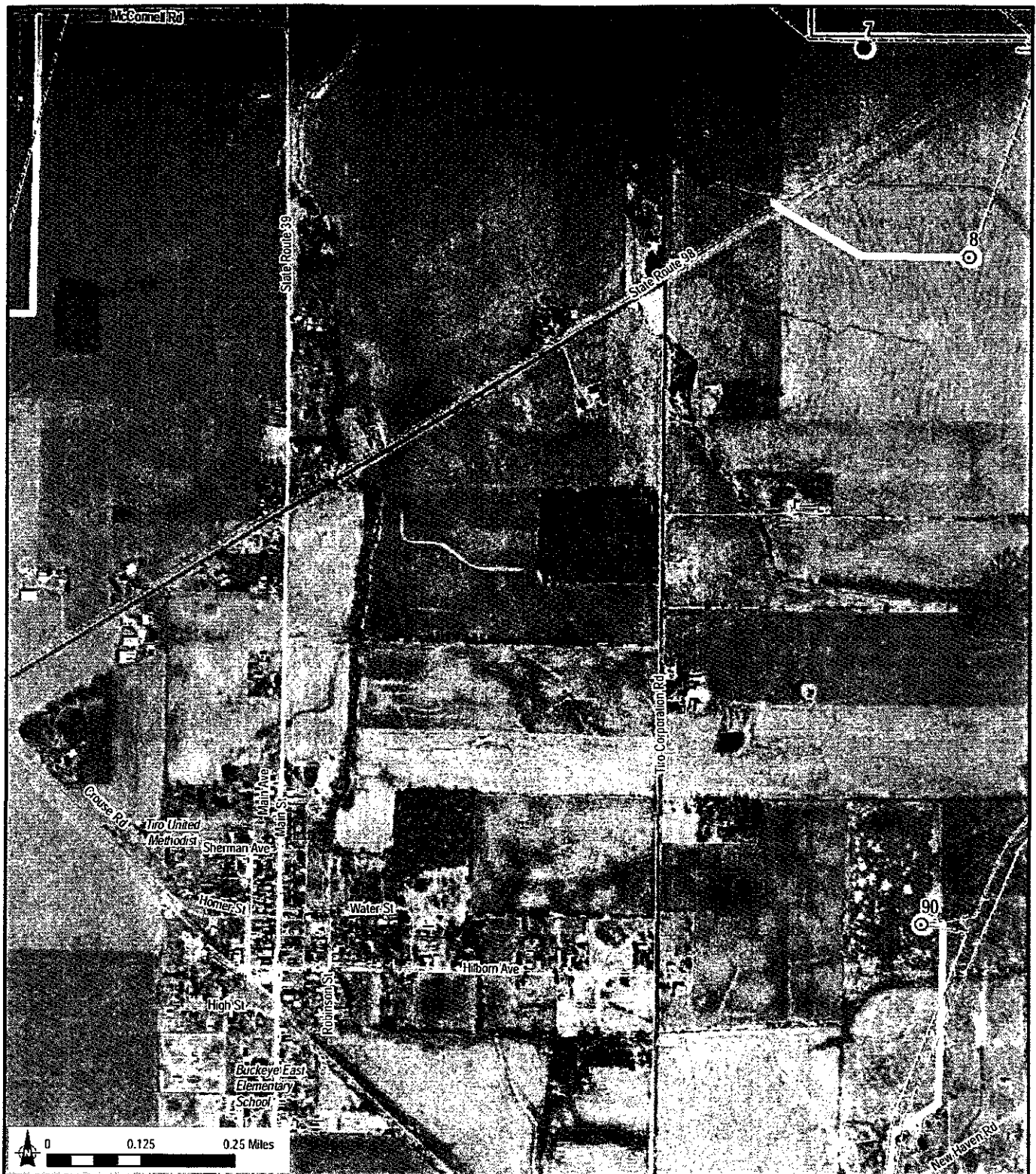
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|--------------------------------------|---|-----------------------|
| Turbines (01-14-11) | Project Area (01-03-11) | Permanent Impact Area |
| Vestas V100 | Substation (01-13-11) | Temporary Impact Area |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) | School |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) | Church |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) | Hospital |
| --- Collection Line (01-14-11) | Existing Transmission Line | Industrial Building |
| — Major Road | Existing Re-conducted Transmission Line | |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 7 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy LLC - Project Site

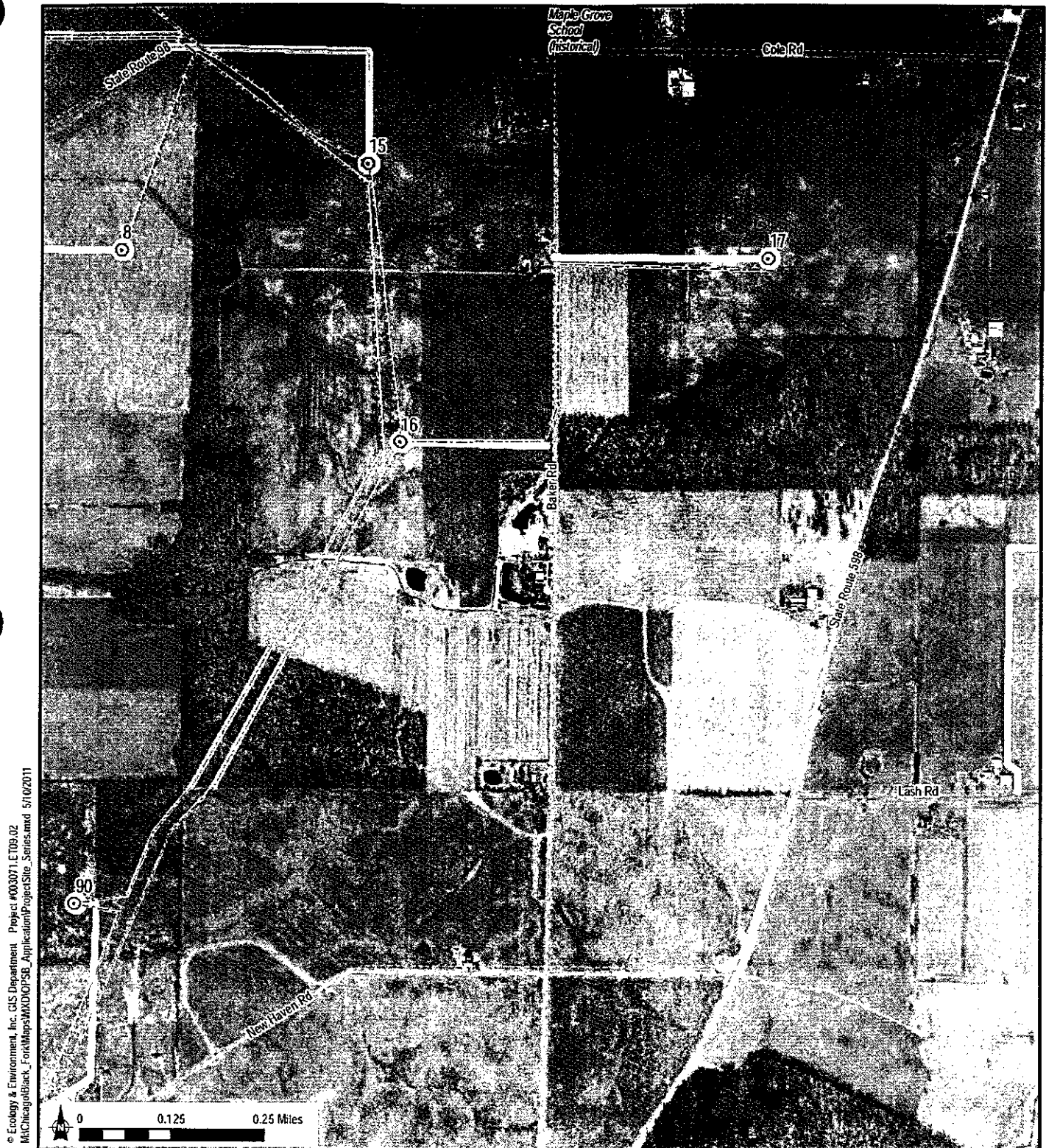


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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

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|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| • School |
| • Church |
| • Hospital |
| • Industrial Building |

Figure 5-10
Black Fork Wind Energy, LLC Project Site
Crawford and Richland Counties, Ohio
Map 8 of 30

Black Fork Wind Energy, LLC - Project Site



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|--------------------------------------|---|-----------------------|
| Turbines (01-14-11) | Project Area (01-03-11) | Permanent Impact Area |
| Vestas V100 | Substation (01-13-11) | Temporary Impact Area |
| ⊙ V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) | ⌘ School |
| ⊙ V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) | ⌘ Church |
| --- Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) | ⌘ Hospital |
| --- Collection Line (01-14-11) | Existing Transmission Line | ⌘ Industrial Building |
| --- Major Road | Existing Re-conducted Transmission Line | |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 9 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC - Project Site

















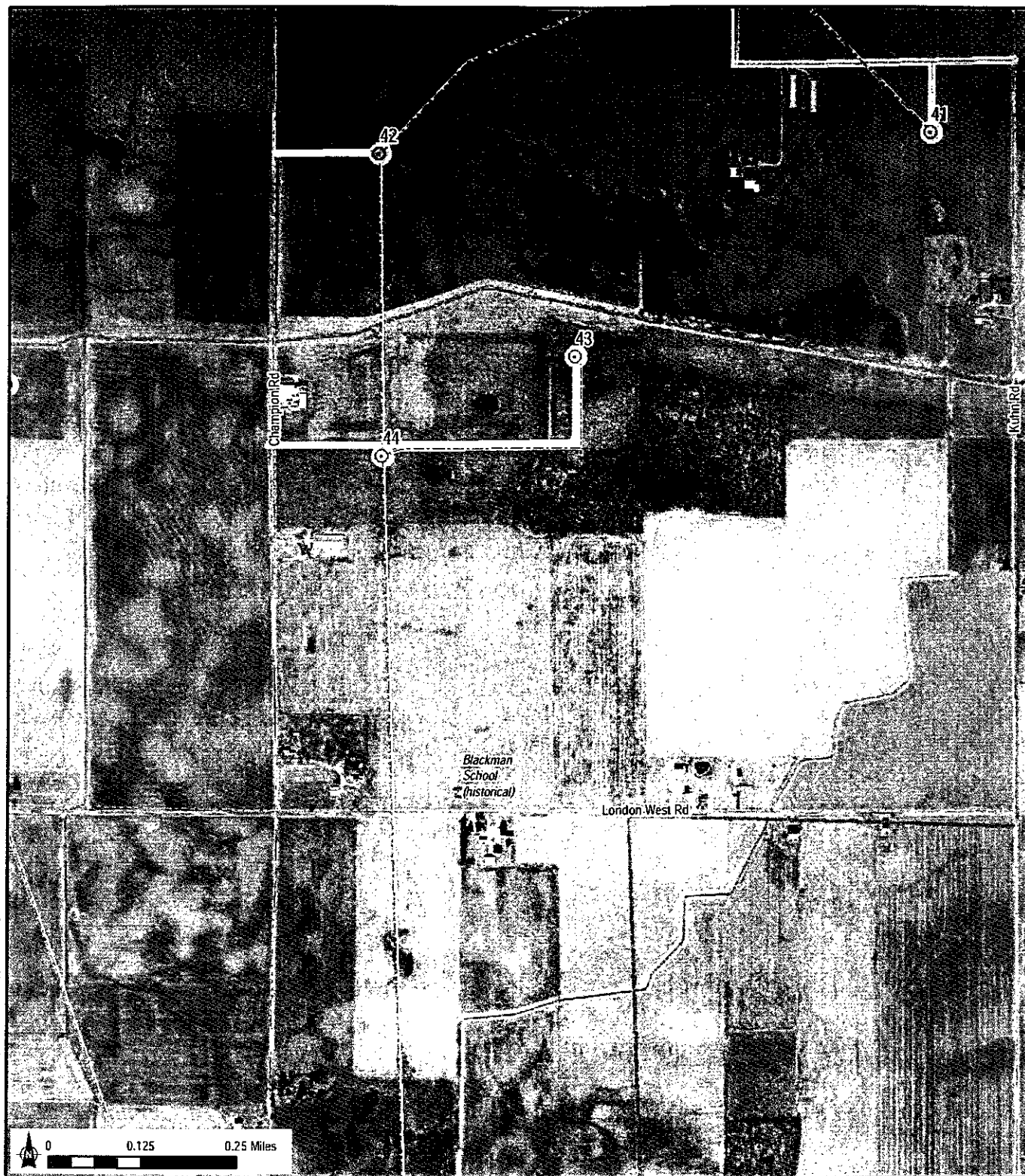
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| Turbines (01-14-11) |  | Project Area (01-03-11) |  | Permanent Impact Area |
| Vestas V100 |  | Substation (01-13-11) |  | Temporary Impact Area |
| • V100 w/ 80 m Hub (130m tip height) |  | Switchyard (01-13-11) |  | • School |
| • V100 w/ 95 m Hub (145m tip height) |  | O&M Building (01-13-11) |  | • Church |
| Access Roads (01-14-11) |  | Laydown Yard & Batch Plant (01-13-11) |  | • Hospital |
| --- Collection Line (01-14-11) |  | Existing Transmission Line |  | • Industrial Building |
| — Major Road |  | Existing Re-constructed Transmission Line |  | |

Figure 5-10
Black Fork Wind Energy, LLC Project Site
Crawford and Richland Counties, Ohio
Map 10 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC - Project Site



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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

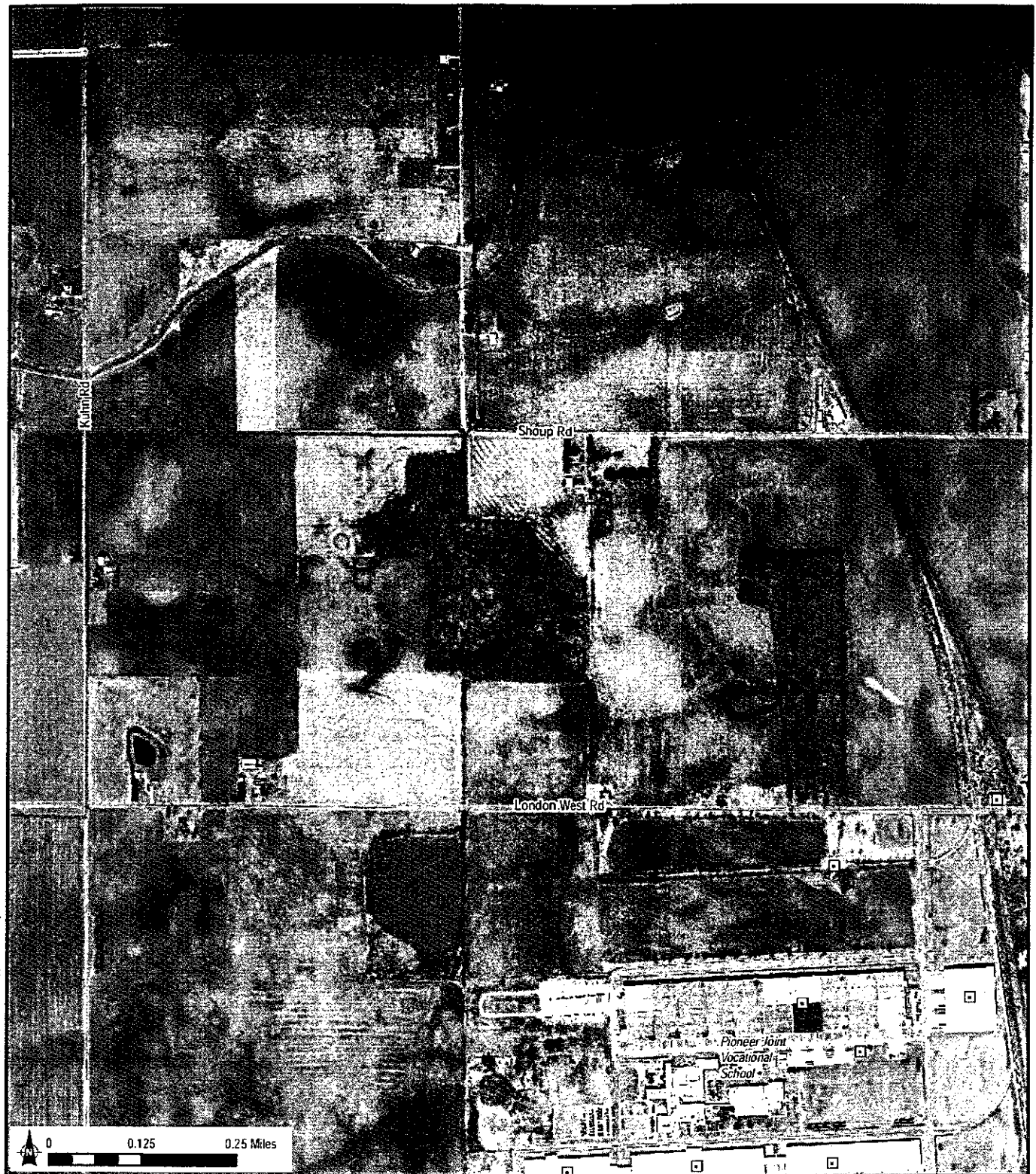
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|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| • School |
| • Church |
| • Hospital |
| • Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 11 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site

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|------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| Collection Line (01-14-11) | Existing Transmission Line |
| Major Road | Existing Re-conducted Transmission Line |

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|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| School |
| Church |
| Hospital |
| Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 12 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy LLC - Project Site

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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

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|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| • School |
| • Church |
| • Hospital |
| • Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 13 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site



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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

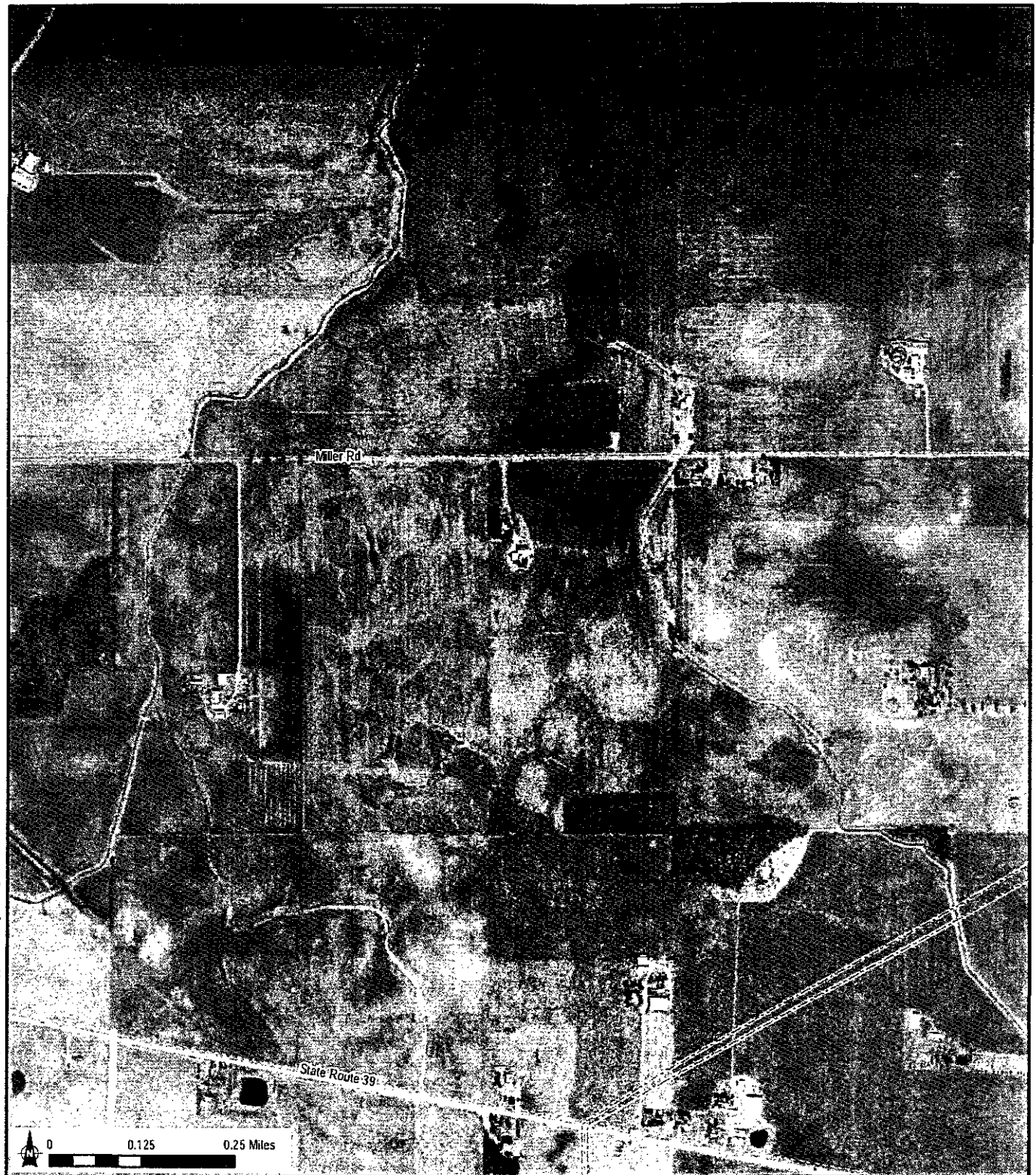
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| Permanent Impact Area |
| Temporary Impact Area |
| • School |
| • Church |
| • Hospital |
| • Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 14 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site

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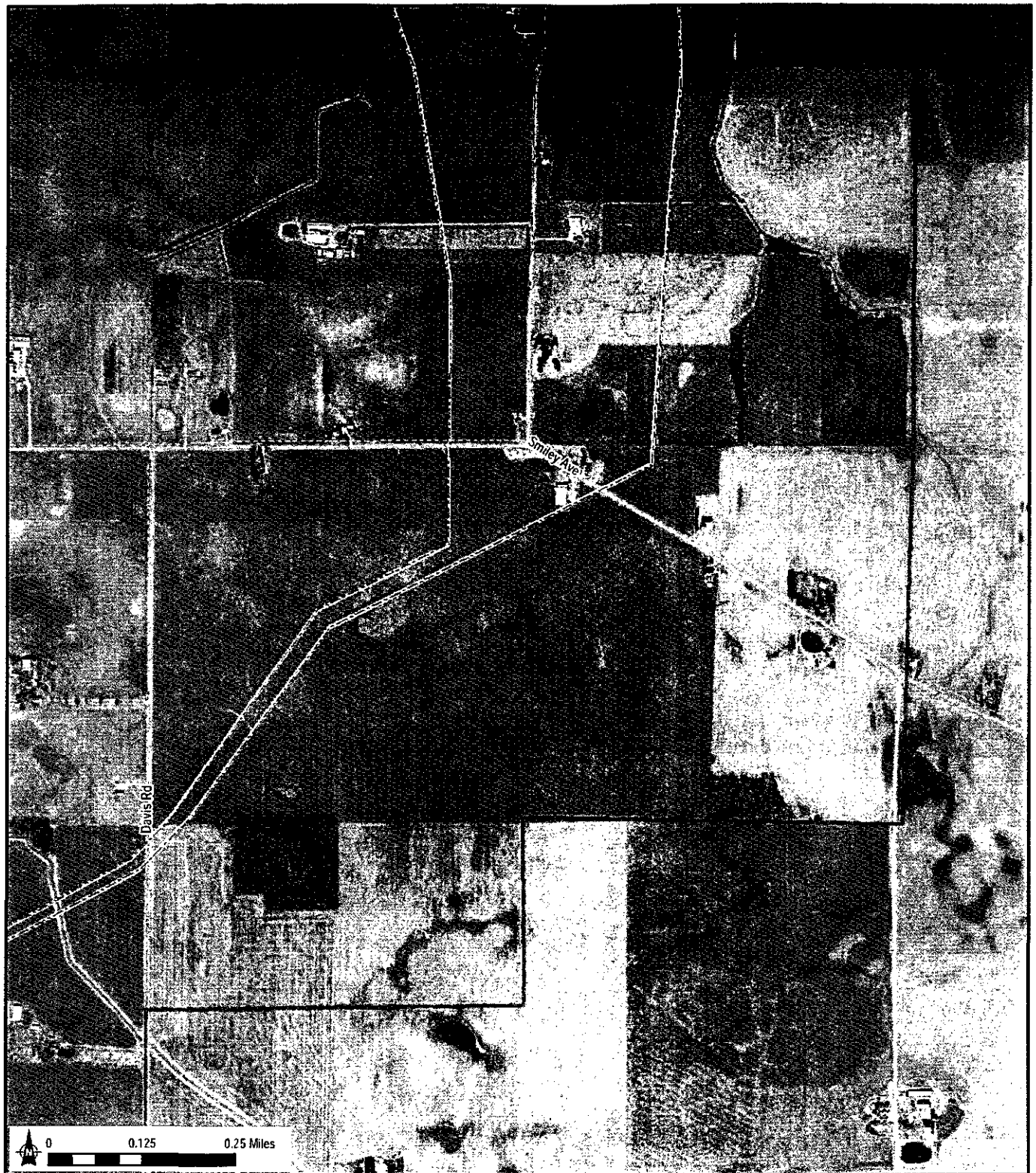
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| Turbines (01-14-11) | Project Area (01-03-11) | Permanent Impact Area |
| Vestas V100 | Substation (01-13-11) | Temporary Impact Area |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) | School |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) | Church |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) | Hospital |
| --- Collection Line (01-14-11) | Existing Transmission Line | Industrial Building |
| — Major Road | Existing Re-conducted Transmission Line | |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 15 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site

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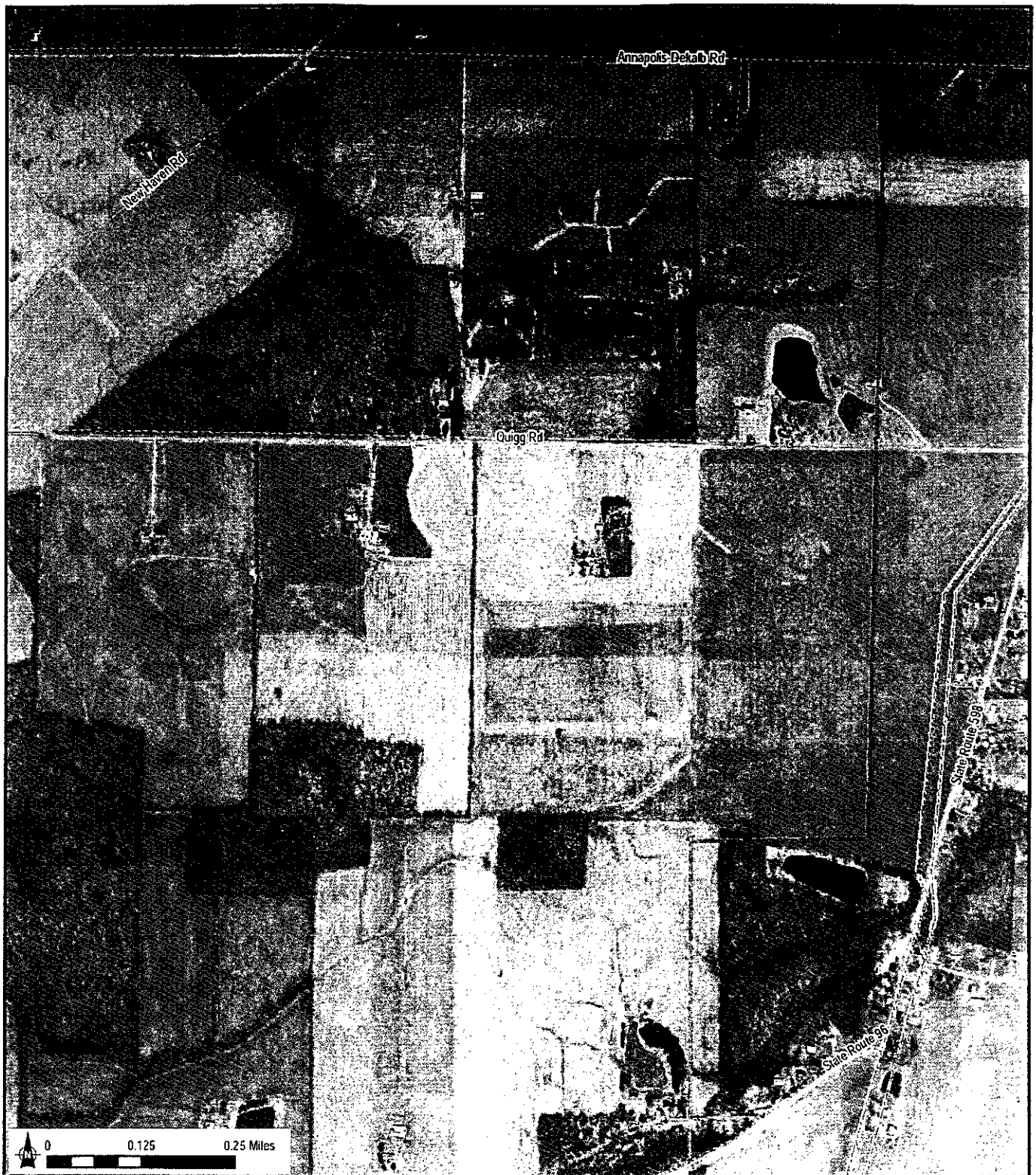


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| Turbines (01-14-11) | Project Area (01-03-11) | Permanent Impact Area |
| Vestas V100 | Substation (01-13-11) | Temporary Impact Area |
| <ul style="list-style-type: none"> V100 w/ 80 m Hub (130m tip height) V100 w/ 95 m Hub (145m tip height) | Switchyard (01-13-11) | School |
| Access Roads (01-14-11) | O&M Building (01-13-11) | Church |
| Collection Line (01-14-11) | Laydown Yard & Batch Plant (01-13-11) | Hospital |
| Major Road | Existing Transmission Line | Industrial Building |
| | Existing Re-conducted Transmission Line | |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 16 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site



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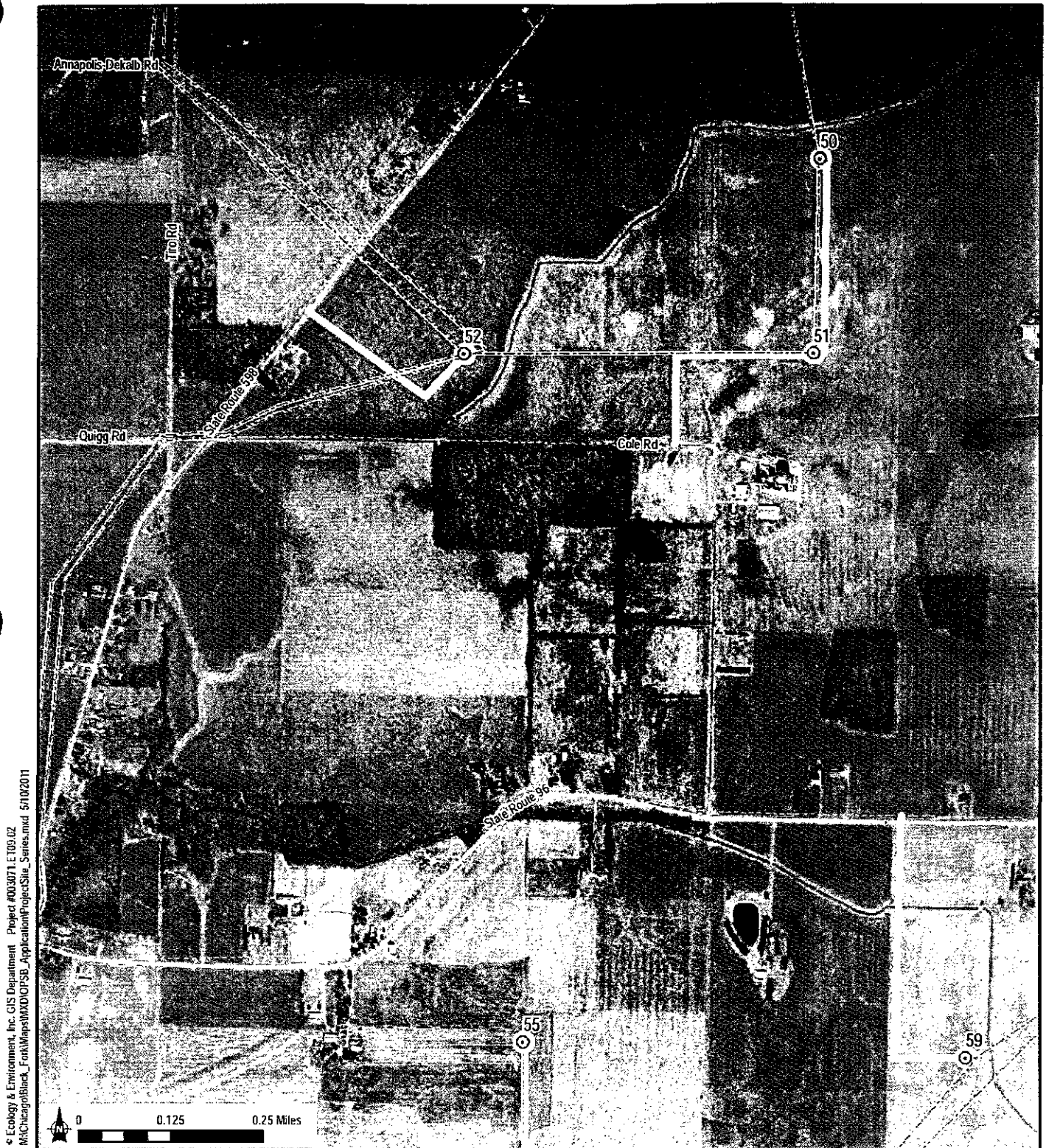
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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| Collection Line (01-14-11) | Existing Transmission Line |
| Major Road | Existing Re-conducted Transmission Line |

- | |
|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| School |
| Church |
| Hospital |
| Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 17 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site



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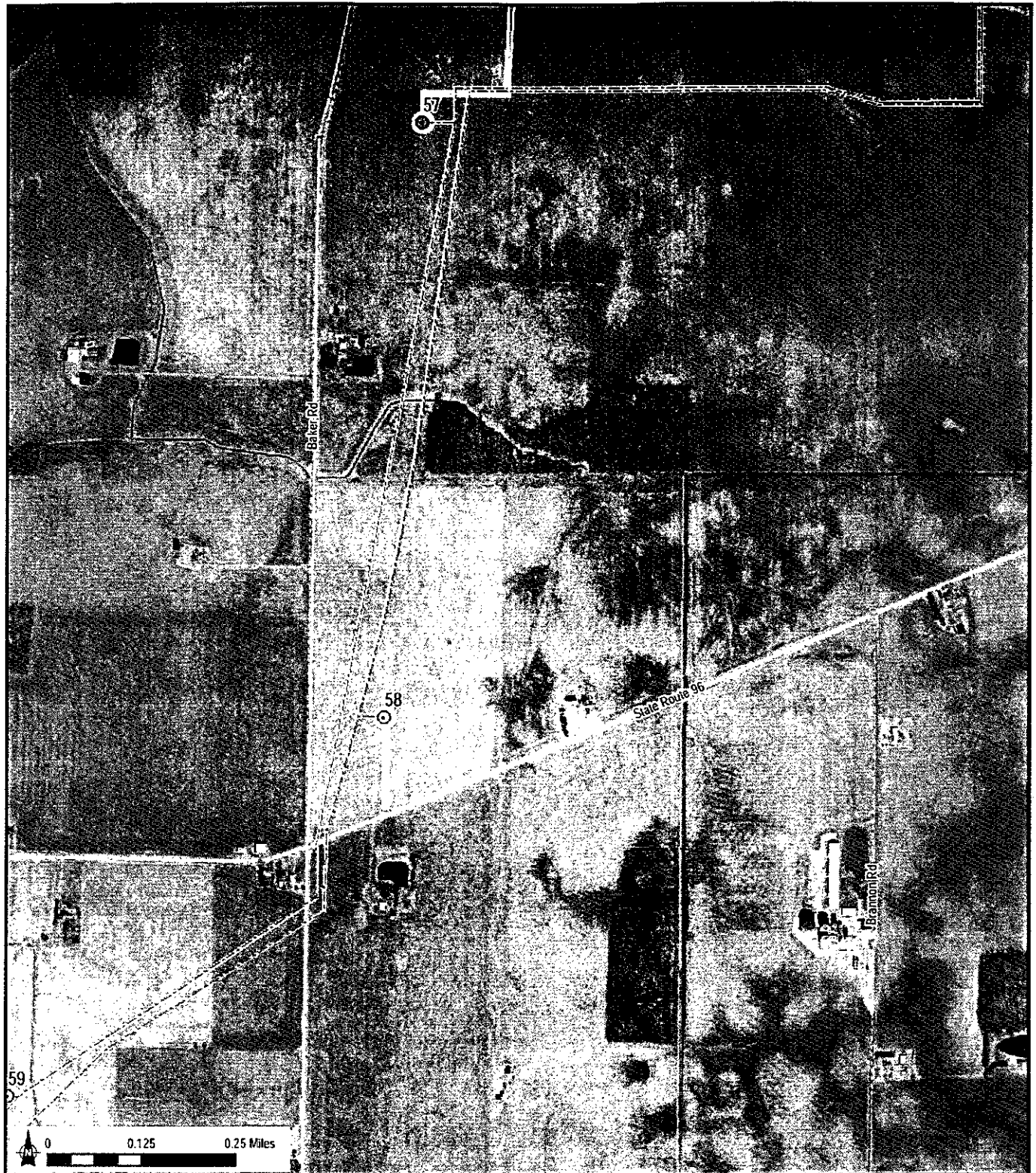
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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

- | |
|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| • School |
| • Church |
| • Hospital |
| • Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 18 of 30

Black Fork Wind Energy, LLC Project Site

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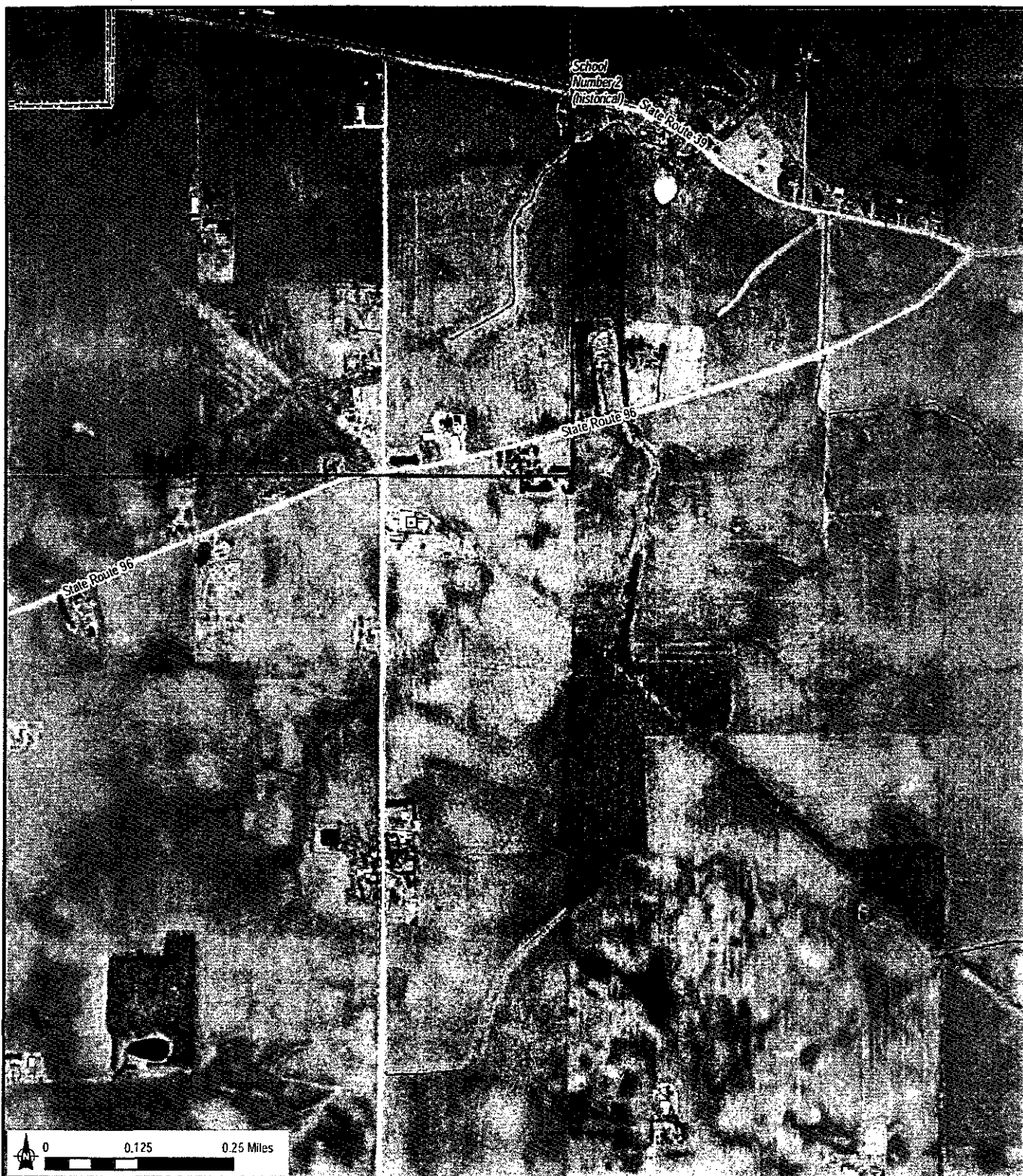


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|--------------------------------------|---|-----------------------|
| Turbines (01-14-11) | Project Area (01-03-11) | Permanent Impact Area |
| Vestas V100 | Substation (01-13-11) | Temporary Impact Area |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) | • School |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) | • Church |
| --- Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) | • Hospital |
| --- Collection Line (01-14-11) | Existing Transmission Line | • Industrial Building |
| --- Major Road | Existing Re-conducted Transmission Line | |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 19 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC - Project Site



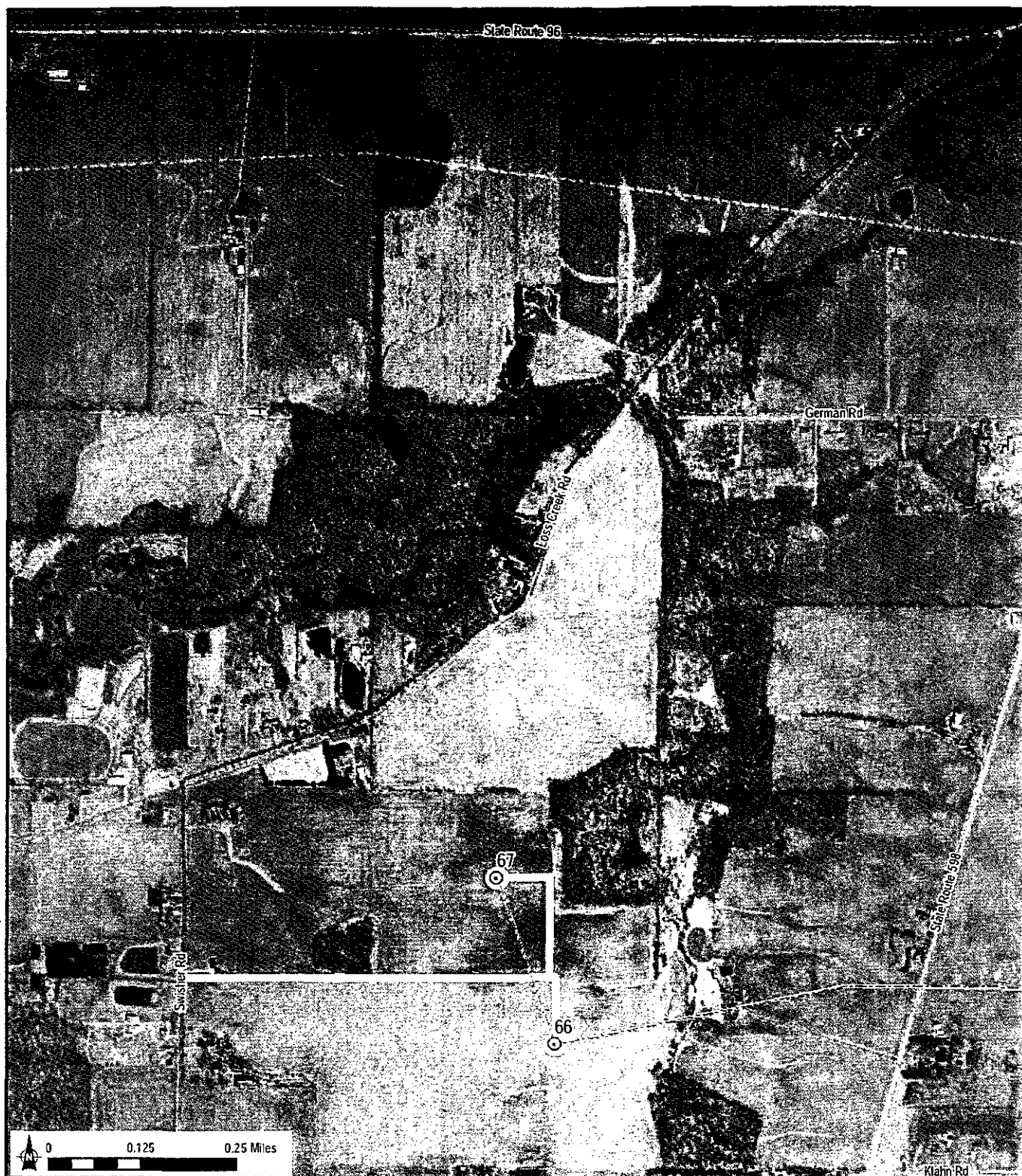
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|------------------------------------|---|-----------------------|
| Turbines (01-14-11) | Project Area (01-03-11) | Permanent Impact Area |
| Vestas V100 | Substation (01-13-11) | Temporary Impact Area |
| V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) | School |
| V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) | Church |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) | Hospital |
| Collection Line (01-14-11) | Existing Transmission Line | Industrial Building |
| Major Road | Existing Re-conducted Transmission Line | |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 20 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy LLC Project Site



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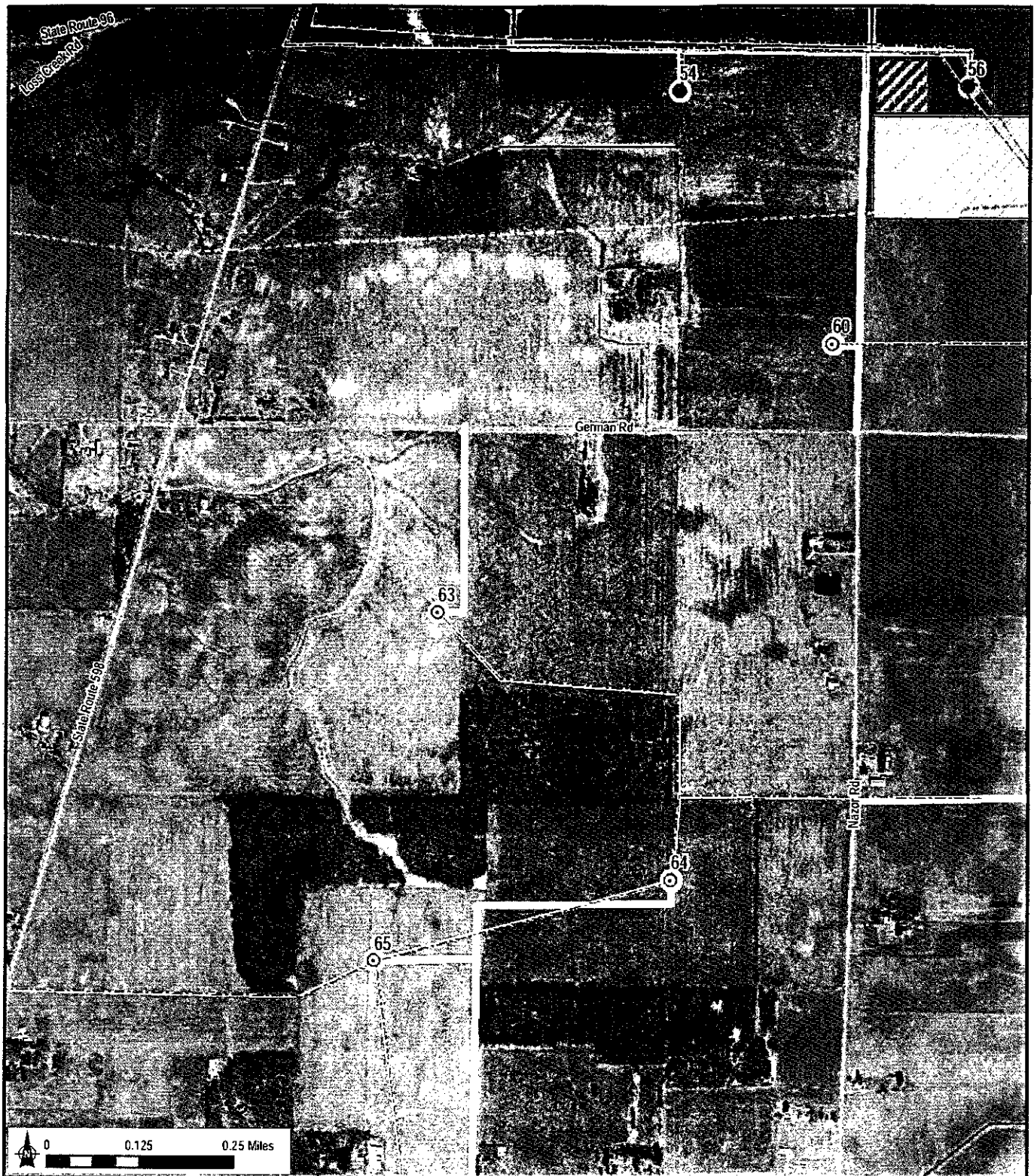
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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | --- Existing Re-conducted Transmission Line |

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|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| • School |
| • Church |
| • Hospital |
| • Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 21 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site



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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| ○ V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| ⋄ V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| — Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

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|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| School |
| Church |
| Hospital |
| Industrial Building |

Figure 5-10
Black Fork Wind Energy, LLC Project Site
Crawford and Richland Counties, Ohio
Map 22 of 30

Black Fork Wind Energy, LLC Project Site



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|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| ○ V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| ● V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

- | |
|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| ⌄ School |
| ⌄ Church |
| ⌄ Hospital |
| • Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 23 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC - Project Site

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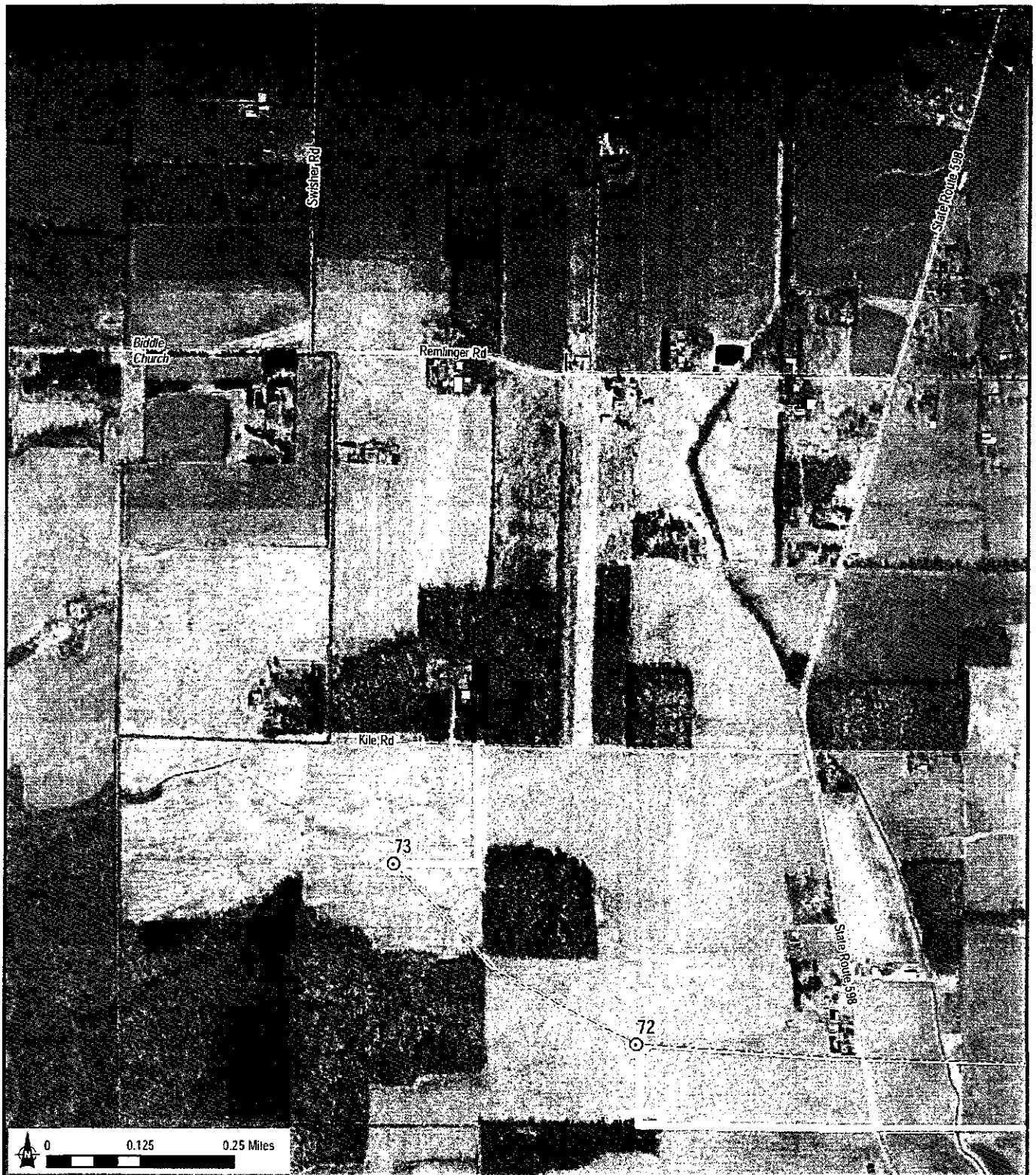
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|------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| Collection Line (01-14-11) | Existing Transmission Line |
| Major Road | Existing Re-conducted Transmission Line |

- | |
|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| School |
| Church |
| Hospital |
| Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 24 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC - Project Site



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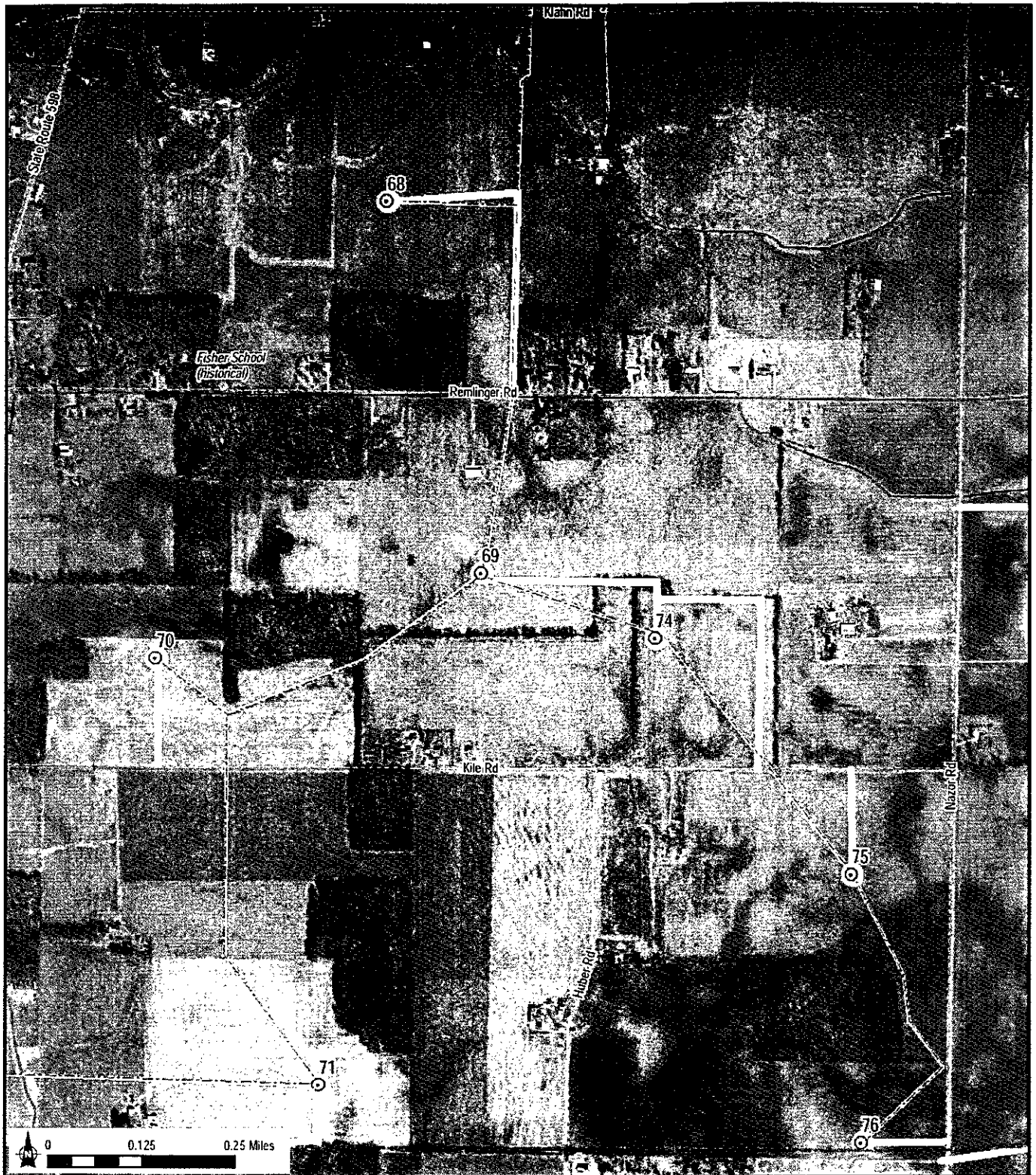
- | | |
|------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| Collection Line (01-14-11) | Existing Transmission Line |
| Major Road | Existing Re-conducted Transmission Line |

- | |
|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| School |
| Church |
| Hospital |
| Industrial Building |

Figure 5-10
Black Fork Wind Energy, LLC Project Site
Crawford and Richland Counties, Ohio
Map 25 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site



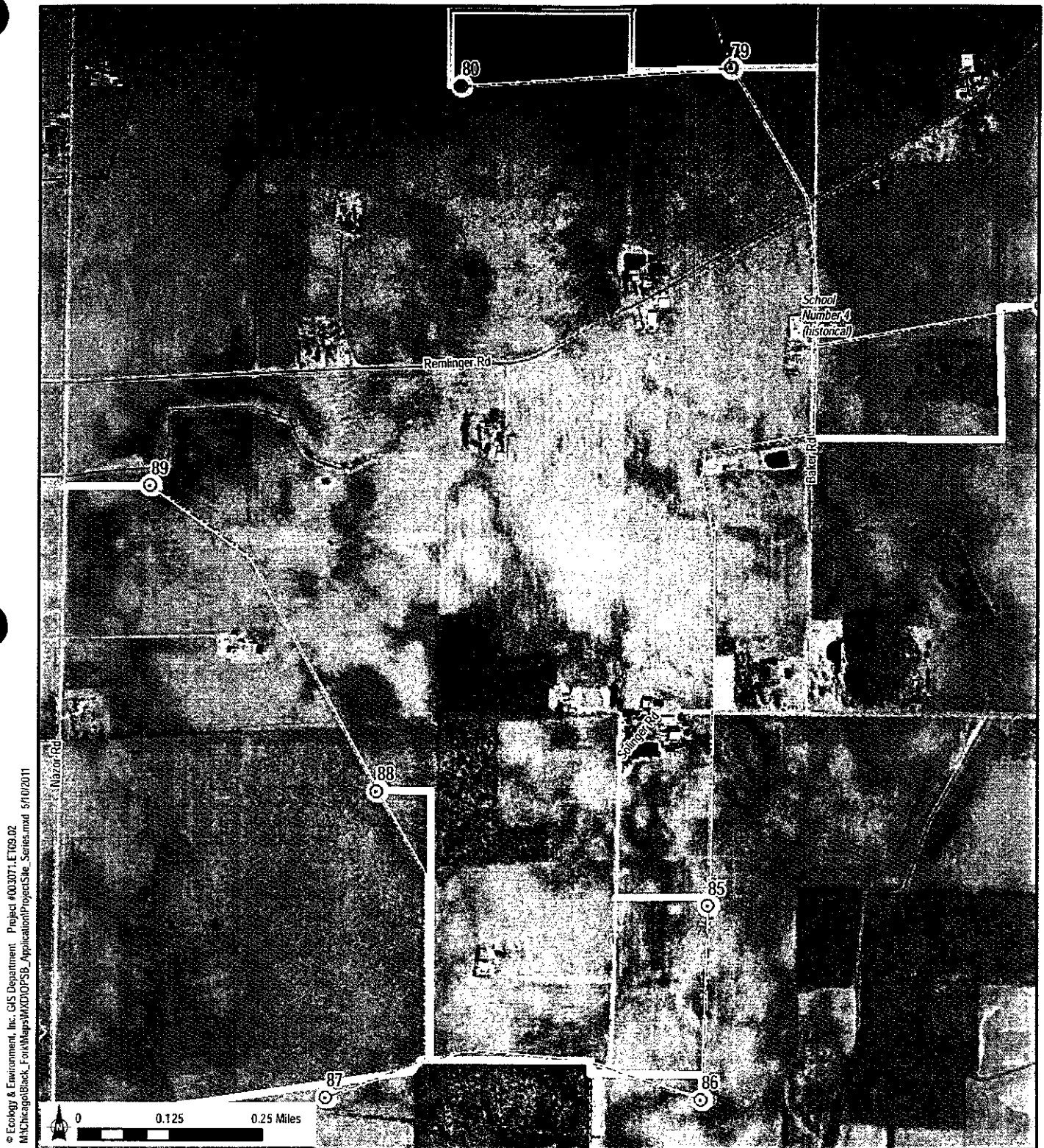
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- | | |
|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| ○ V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| ○ V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

- | |
|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| ⌵ School |
| ⌵ Church |
| ⌵ Hospital |
| ⌵ Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 26 of 30

Black Fork Wind Energy, LLC Project Site



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- | | |
|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| — Major Road | Existing Re-conducted Transmission Line |

- | |
|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| • School |
| • Church |
| • Hospital |
| • Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 27 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site



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Turbines (01-14-11)

Vestas V100

• V100 w/ 80 m Hub (130m tip height)

• V100 w/ 95 m Hub (145m tip height)

Access Roads (01-14-11)

--- Collection Line (01-14-11)

— Major Road

Project Area (01-03-11)

Substation (01-13-11)

Switchyard (01-13-11)

O&M Building (01-13-11)

Laydown Yard & Batch Plant (01-13-11)

Existing Transmission Line

Existing Re-conducted Transmission Line

Permanent Impact Area

Temporary Impact Area

• School

• Church

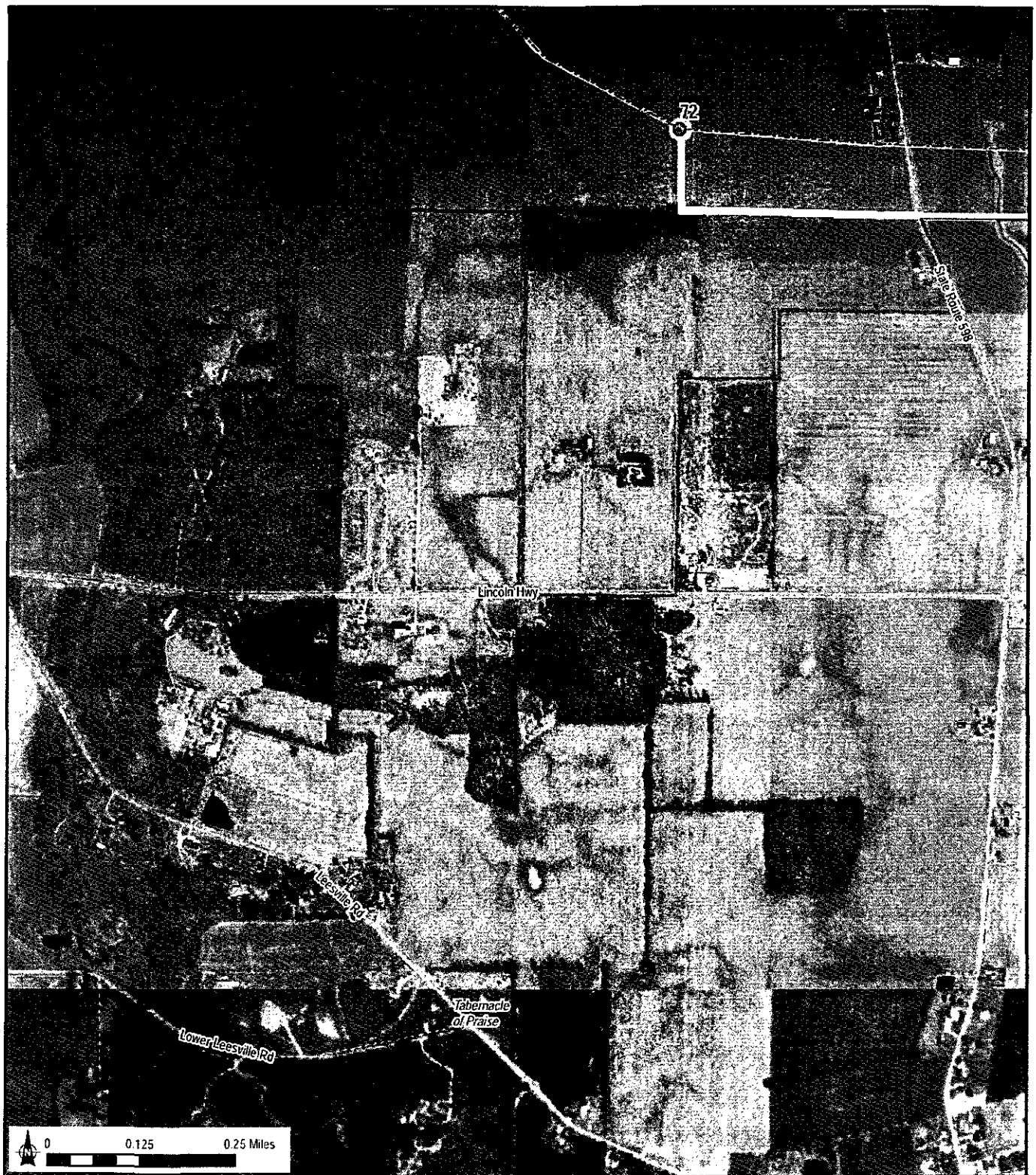
• Hospital

• Industrial Building

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 28 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC Project Site



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Turbines (01-14-11)

Vestas V100

- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Access Roads (01-14-11)
- Collection Line (01-14-11)
- Major Road

Project Area (01-03-11)

- Substation (01-13-11)
- ▨ Switchyard (01-13-11)
- O&M Building (01-13-11)
- Laydown Yard & Batch Plant (01-13-11)
- Existing Transmission Line
- Existing Re-constructed Transmission Line

Permanent Impact Area

- Temporary Impact Area
- School
- Church
- Hospital
- Industrial Building

Figure 5-10
Black Fork Wind Energy, LLC Project Site
Crawford and Richland Counties, Ohio
Map 29 of 30

Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.

Black Fork Wind Energy, LLC - Project Site

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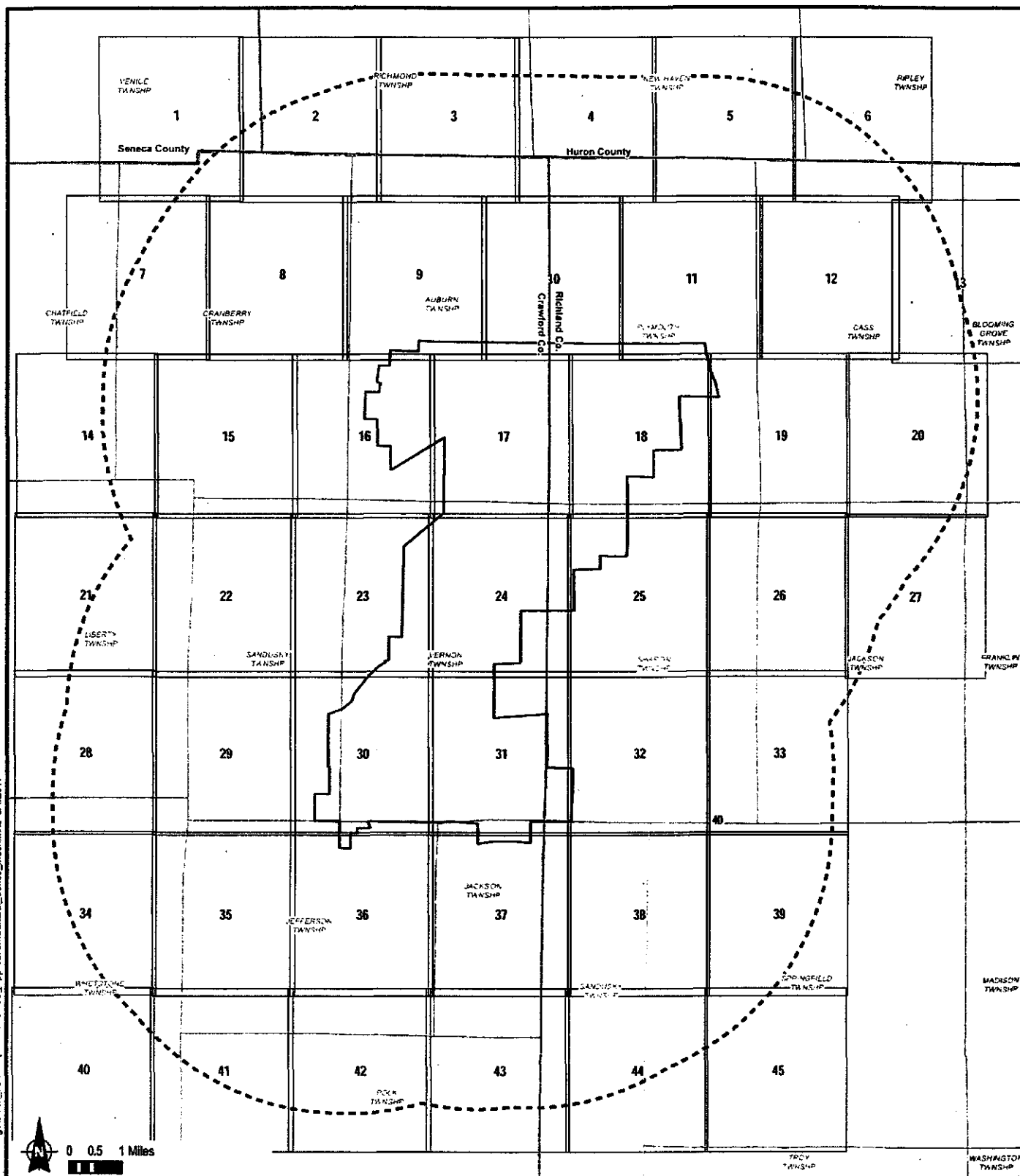
- | | |
|--------------------------------------|---|
| Turbines (01-14-11) | Project Area (01-03-11) |
| Vestas V100 | Substation (01-13-11) |
| • V100 w/ 80 m Hub (130m tip height) | Switchyard (01-13-11) |
| • V100 w/ 95 m Hub (145m tip height) | O&M Building (01-13-11) |
| --- Access Roads (01-14-11) | Laydown Yard & Batch Plant (01-13-11) |
| --- Collection Line (01-14-11) | Existing Transmission Line |
| --- Major Road | Existing Re-conducted Transmission Line |

- | |
|-----------------------|
| Permanent Impact Area |
| Temporary Impact Area |
| • School |
| • Church |
| • Hospital |
| • Industrial Building |

Figure 5-10
 Black Fork Wind Energy, LLC Project Site
 Crawford and Richland Counties, Ohio
 Map 30 of 30

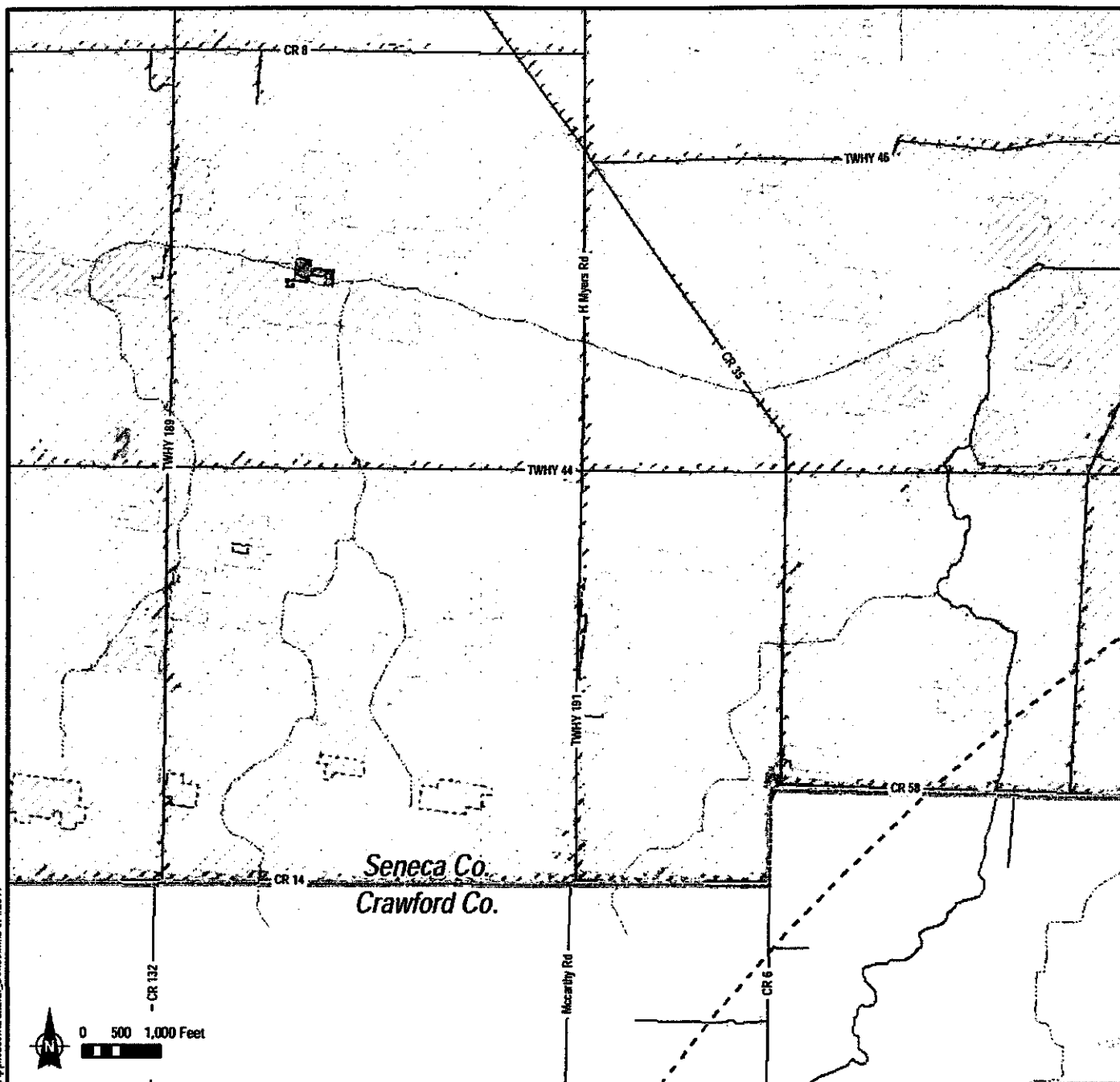
Source: ESRI 2010; E & E 2009; ODNR 2008; EP 2011.





- Project Area (01-03-11)
- Five Mile Buffer
- Township boundary
- County boundary

Figure 8-5
Black Fork Wind Energy, LLC Index Map 1:24,000 Scale
Crawford, Richland, Huron & Seneca Counties, Ohio



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

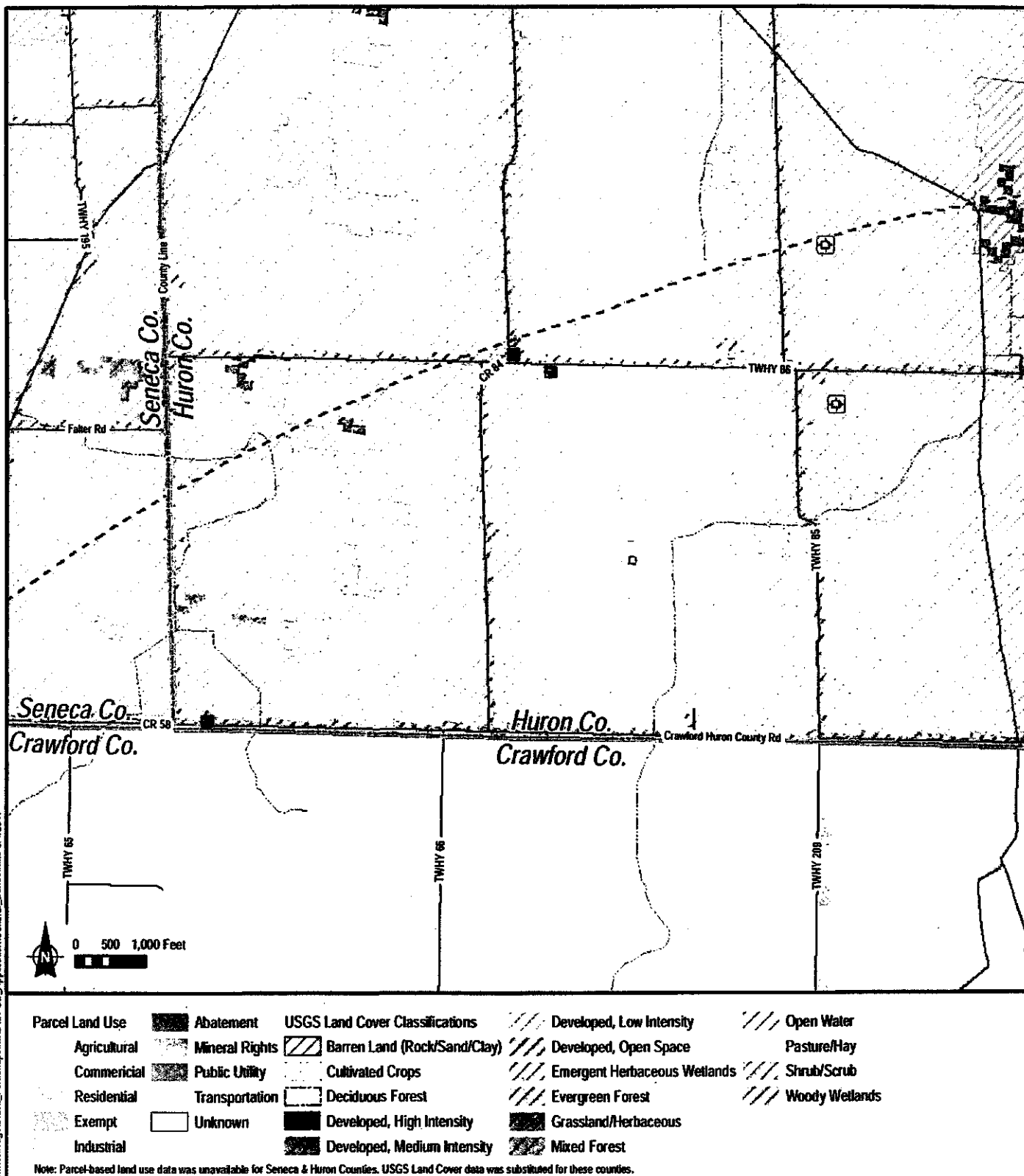
- Turbines (01-14-11)**
- Vestas V100**
- V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
 - Collection Line (01-14-11)
 - Access Roads (01-14-11)
 - Substation (01-13-11)
 - ▨ O&M Building (01-13-11)
 - ▨ Switchyard (01-13-11)

- ⊕ Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

- ▲ Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 1 of 45

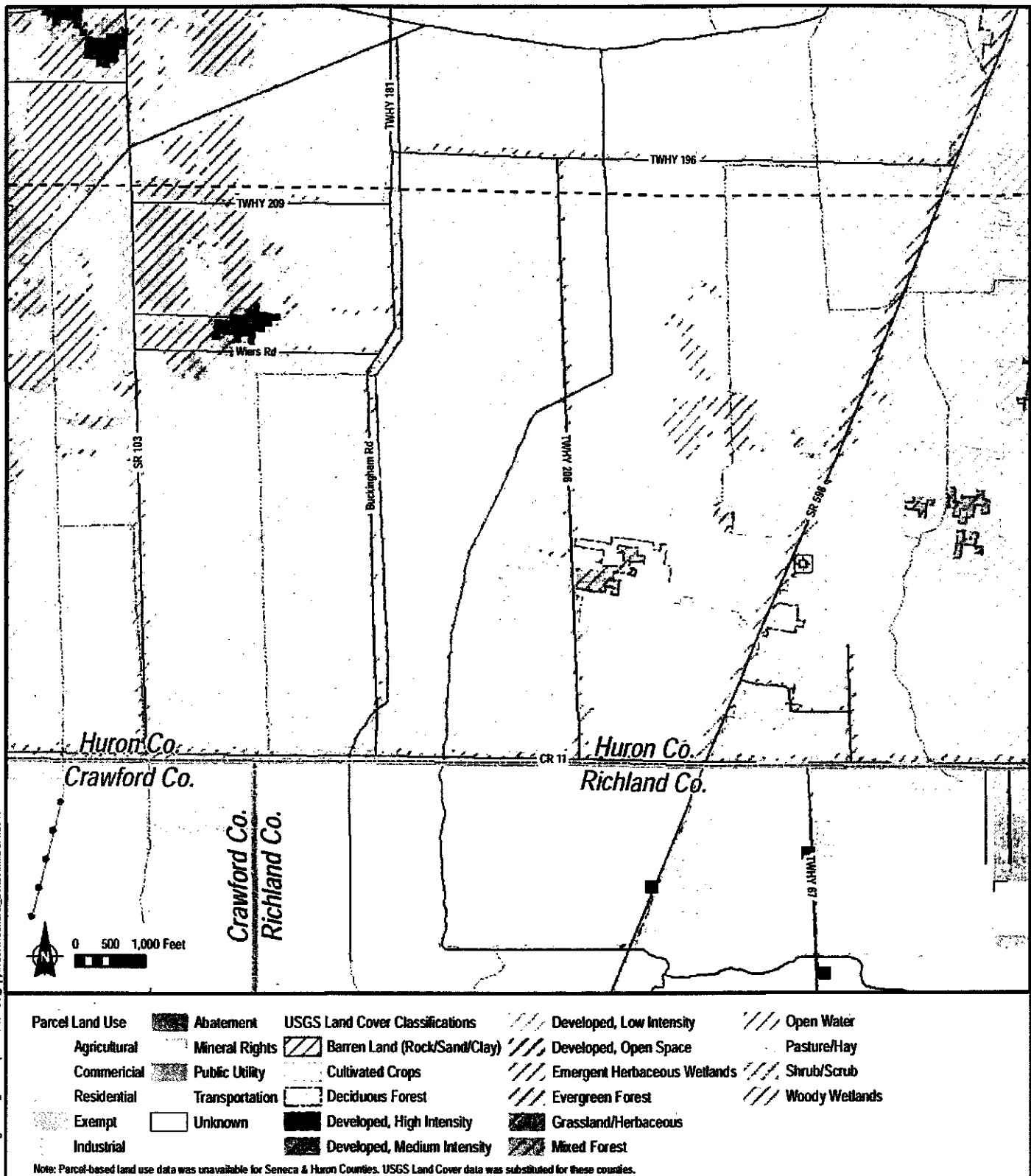
Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



- Turbines (01-14-11)**
- Vestas V100
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 - V100 w/ 95 m Hub (145m tip height)
 - Collection Line (01-14-11)
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 - Substation (01-13-11)
 - O&M Building (01-13-11)
 - Switchyard (01-13-11)
- Archaeological Resources**
- Determinations of Eligibility
 - NRHP Listed Cultural Resources
 - Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
 - Project Area (01-03-11)
 - Laydown Yard & Batch Plant (01-13-11)
 - Five Mile Buffer
- Parks**
- Gas/Oil Well
 - Road
 - Artificial Path
 - Canal/Ditch
 - Perennial Stream/River
 - Intermittent

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 2 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



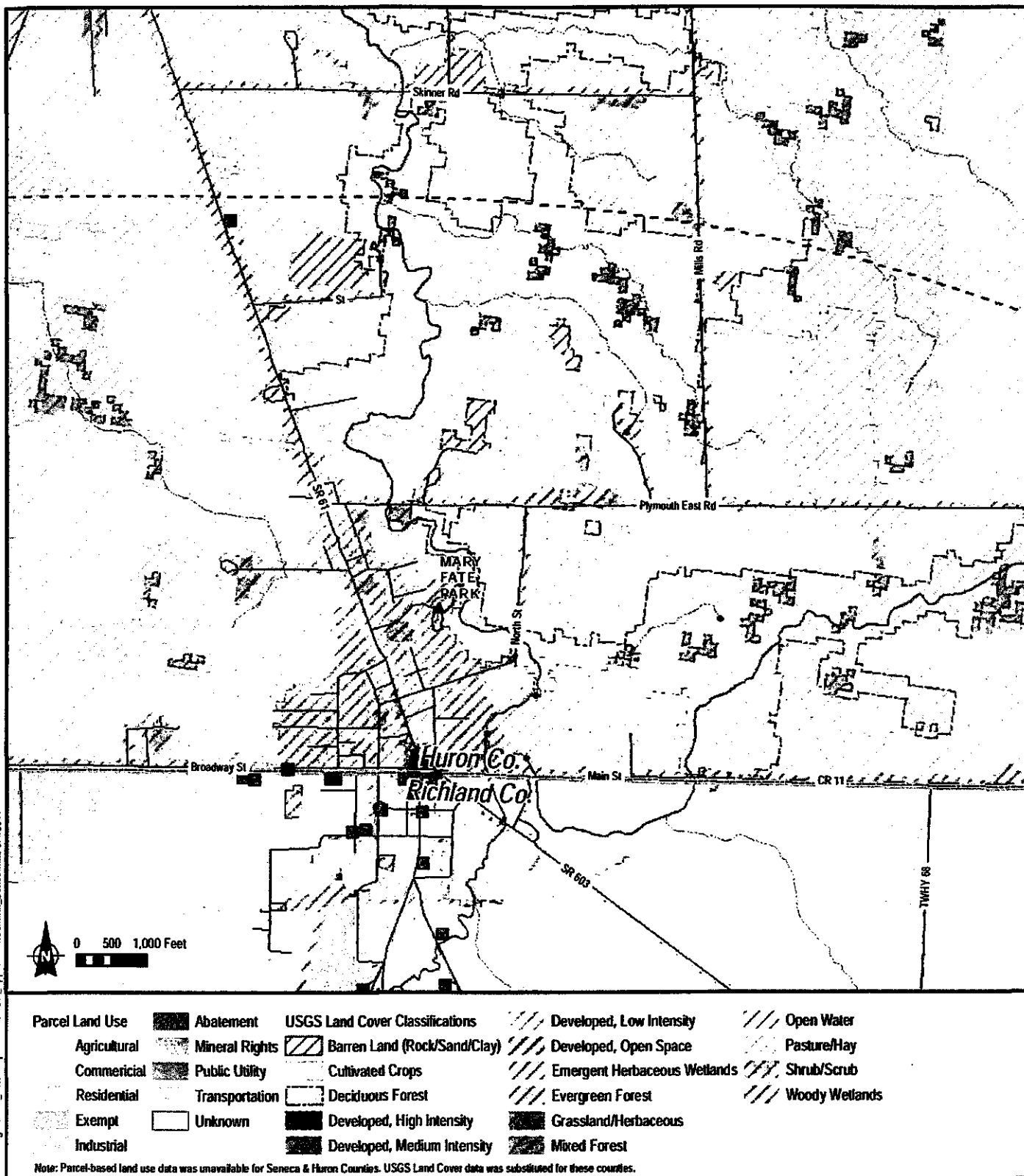
- Turbines (01-14-11)**
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
- Access Roads (01-14-11)**
- Access Roads (01-14-11)
- Substation (01-13-11)**
- Substation (01-13-11)
- O&M Building (01-13-11)**
- O&M Building (01-13-11)
- Switchyard (01-13-11)**
- Switchyard (01-13-11)

- ⊕ Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

- ▲ Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 4 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
 --- Access Roads (01-14-11)
 ■ Substation (01-13-11)
 ■ O&M Building (01-13-11)
 ■ Switchyard (01-13-11)

- ⊕ Archaeological Resources
 ● Determinations of Eligibility
 ● NRHP Listed Cultural Resources
 ■ Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
 ■ Project Area (01-03-11)
 ■ Laydown Yard & Batch Plant (01-13-11)
 ■ Five Mile Buffer

- ▲ Parks
 ● Gas/Oil Well
 --- Road
 --- Artificial Path
 --- Canal/Ditch
 --- Perennial Stream/River
 --- Intermittent

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 5 of 45

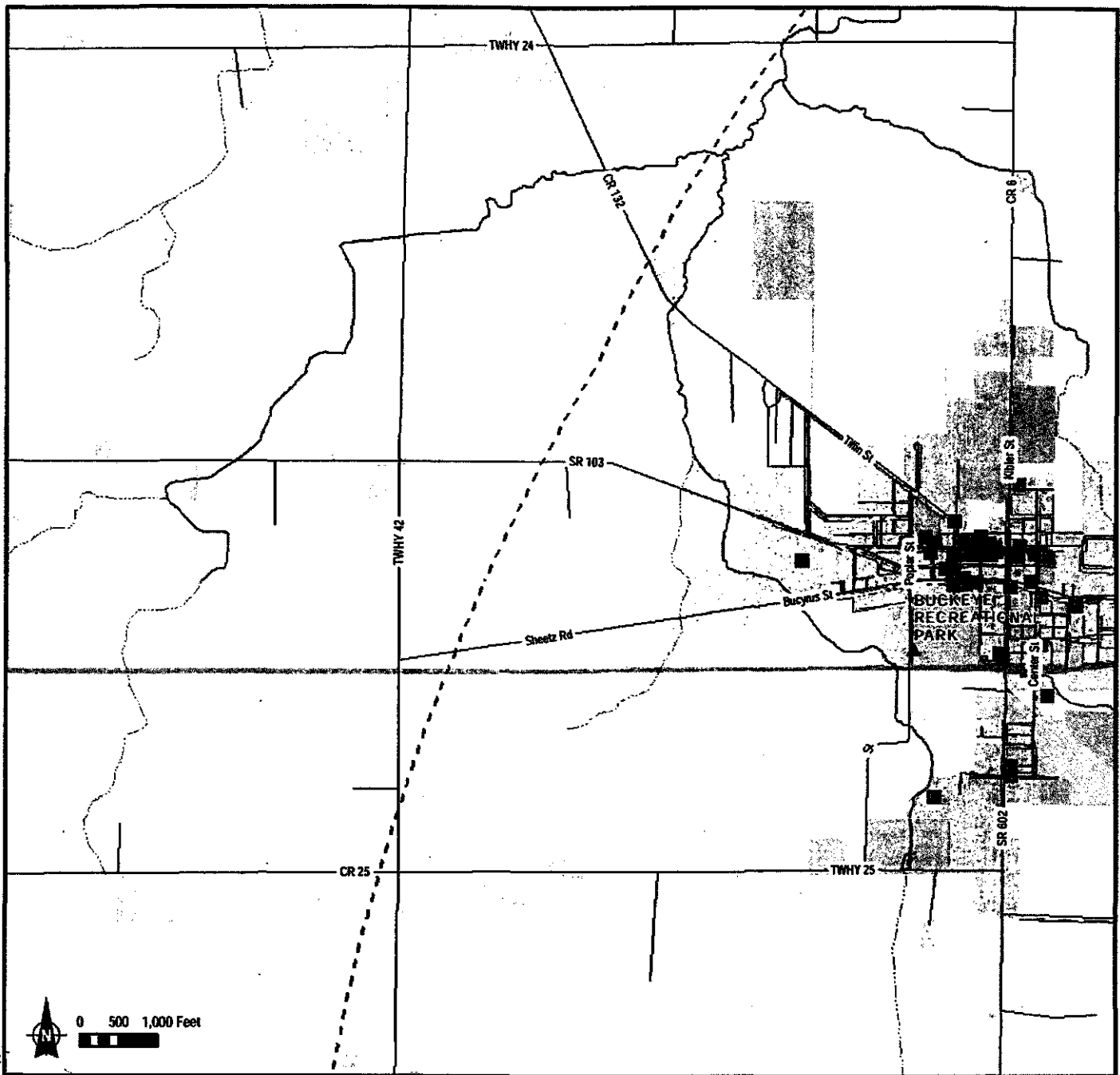
Source: ESRI 2010; USGS NCLD 2001;
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 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

- ▲ Parks
 ● Gas/Oil Well
 — Road
 ● Artificial Path
 --- Canal/Ditch
 — Perennial Stream/River
 - - - Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 6 of 45

Source: ESRI 2010; USGS NCLD 2001;
OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



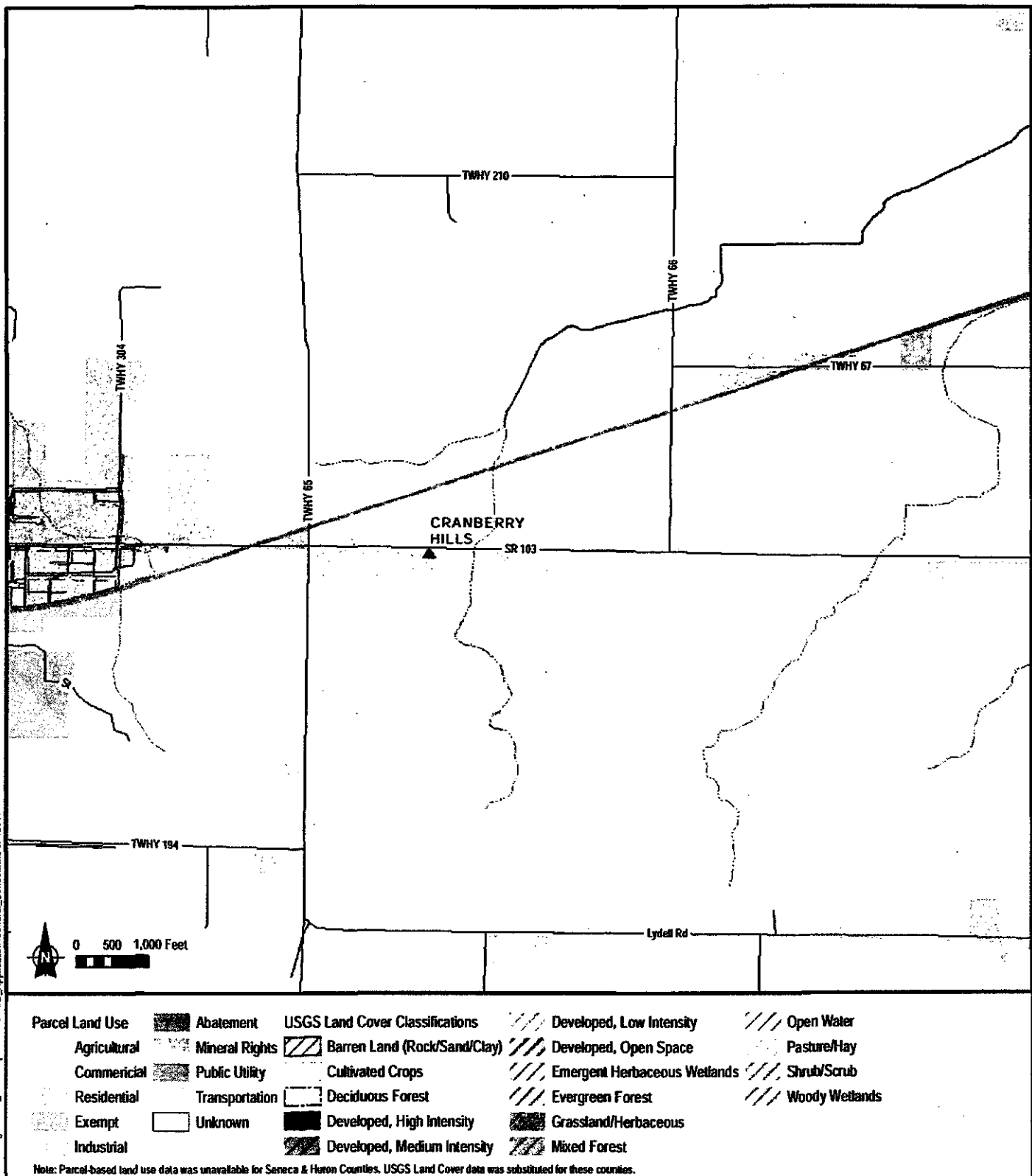
Parcel Land Use	USGS Land Cover Classifications		
Agricultural	Abatement	Developed, Low Intensity	Open Water
Commercial	Mineral Rights	Developed, Open Space	Pasture/Hay
Residential	Public Utility	Emergent Herbaceous Wetlands	Shrub/Scrub
Exempt	Transportation	Evergreen Forest	Woody Wetlands
Industrial	Unknown	Grassland/Herbaceous	
		Mixed Forest	
	Barren Land (Rock/Sand/Clay)		
	Cultivated Crops		
	Deciduous Forest		
	Developed, High Intensity		
	Developed, Medium Intensity		

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)	Archaeological Resources	Parks
Vestas V100	Determinations of Eligibility	Gas/Oil Well
● V100 w/ 80 m Hub (130m tip height)	NRHP Listed Cultural Resources	Road
● V100 w/ 95 m Hub (145m tip height)	Ohio Historic Inventory of Structures	Artificial Path
--- Collection Line (01-14-11)	(Potentially Eligible for NRHP)	Canal/Ditch
--- Access Roads (01-14-11)	Project Area (01-03-11)	Perennial Stream/River
■ Substation (01-13-11)	Laydown Yard & Batch Plant (01-13-11)	Intermittent
■ O&M Building (01-13-11)	Five Mile Buffer	
■ Switchyard (01-13-11)		

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 7 of 45

Source: ESRI 2010; USGS NCLD 2001;
OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



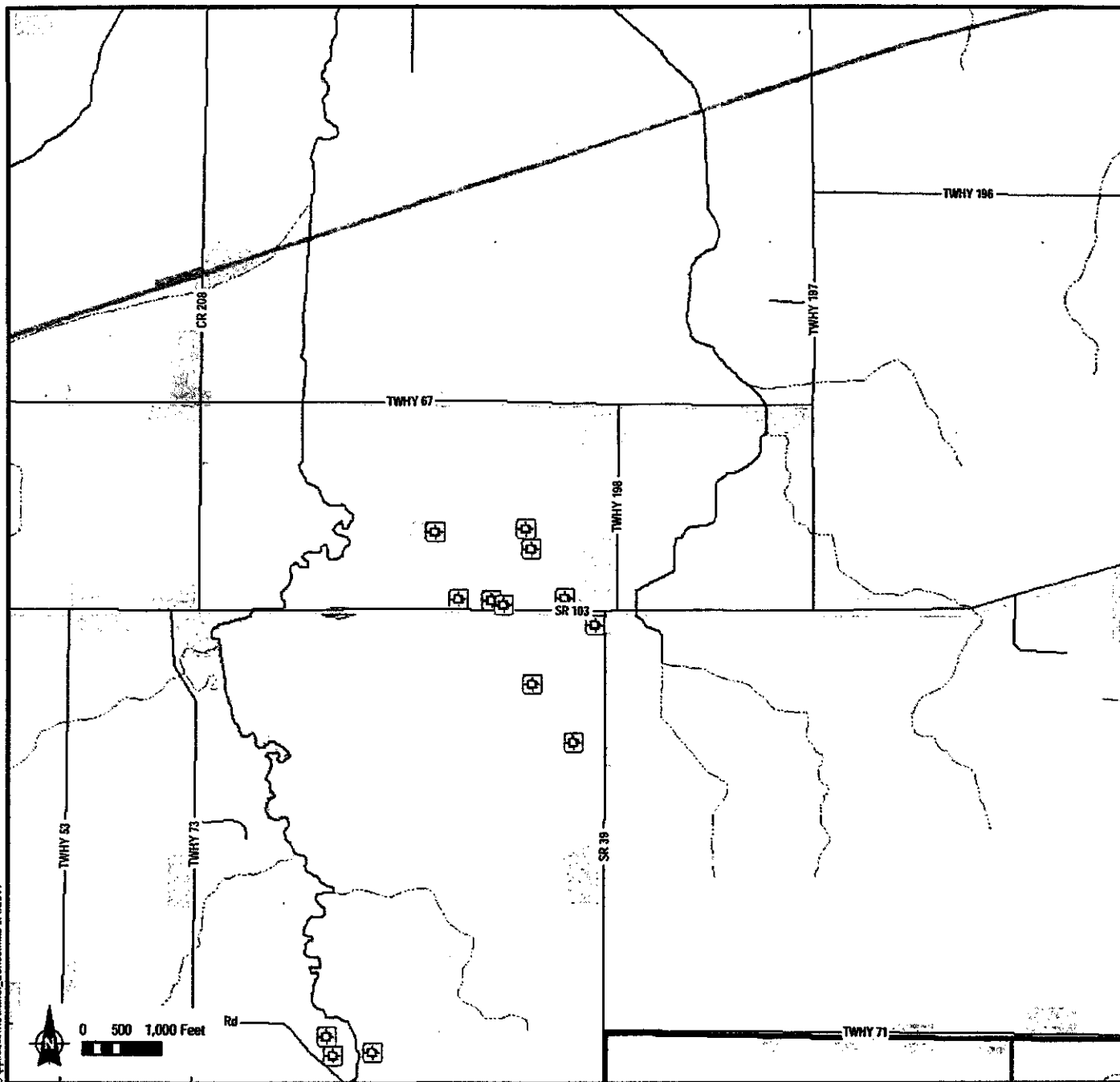
- Turbines (01-14-11)**
- Vestas V100**
- V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
- Switchyard (01-13-11)

- ⊕ Archaeological Resources
- Determinations of Eligibility
 - NRHP Listed Cultural Resources
 - Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
 - Project Area (01-03-11)
 - Laydown Yard & Batch Plant (01-13-11)
 - Five Mile Butler

- ▲ Parks
- Gas/Oil Well
 - Road
 - Artificial Path
 - Canal/Ditch
 - Perennial Stream/River
 - Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 8 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)

Vestas V100

● V100 w/ 80 m Hub (130m tip height)

● V100 w/ 95 m Hub (145m tip height)

--- Collection Line (01-14-11)

--- Access Roads (01-14-11)

Substation (01-13-11)

O&M Building (01-13-11)

Switchyard (01-13-11)

Archaeological Resources

● Determinations of Eligibility

● NRHP Listed Cultural Resources

● Ohio Historic Inventory of Structures

(Potentially Eligible for NRHP)

Project Area (01-03-11)

Laydown Yard & Batch Plant (01-13-11)

Five Mile Buffer

▲ Parks

● Gas/Oil Well

— Road

— Artificial Path

— Canal/Ditch

— Perennial Stream/River

— Intermittent

Figure 8-5

Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 9 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

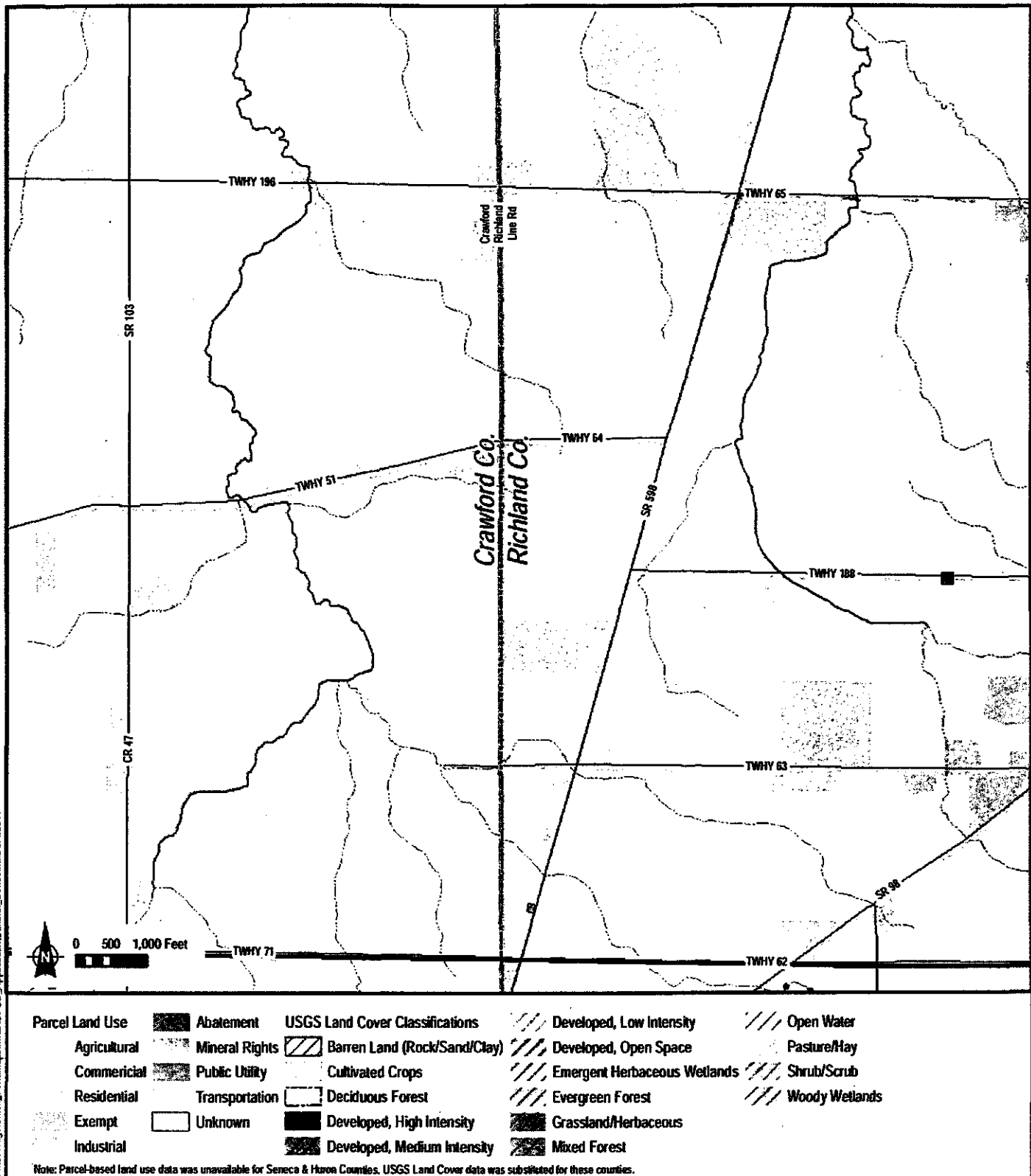
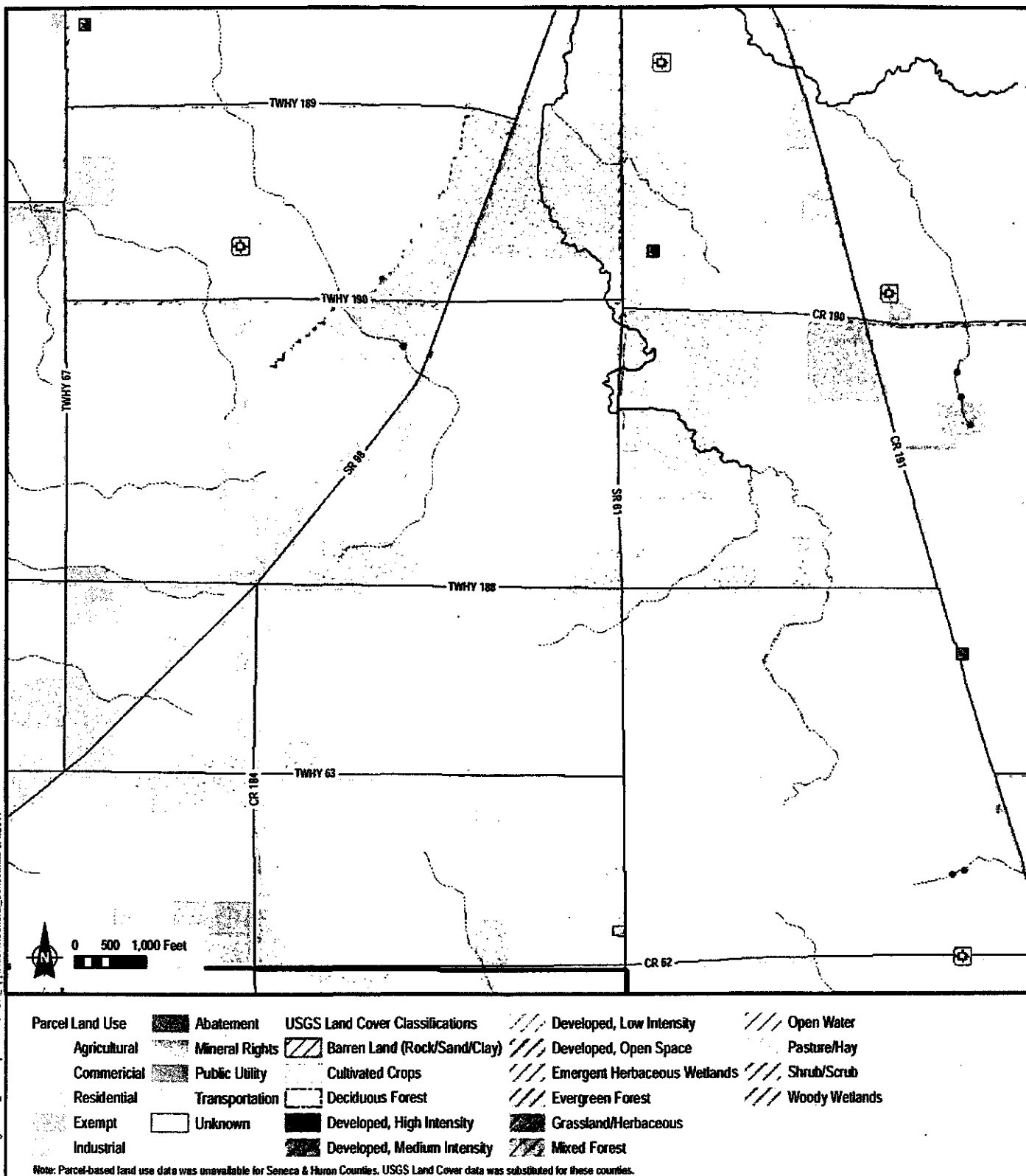


Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 10 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



Turbines (01-14-11)

Vestas V100

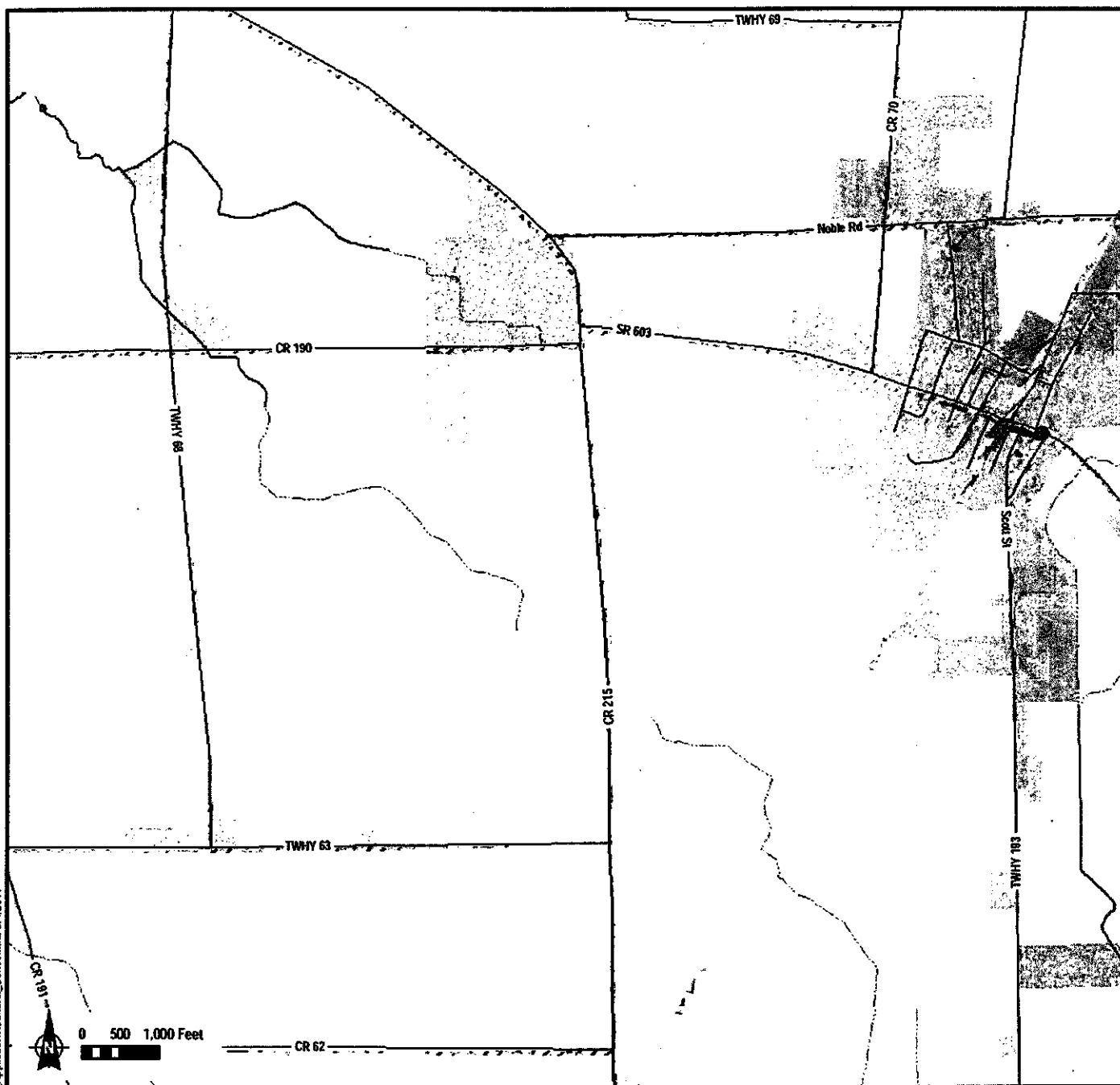
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- ⊕ Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
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- Five Mile Buffer

- ▲ Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 11 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; MHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2008; EP 2011.



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
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Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)

Vestas V100

- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
- Switchyard (01-13-11)



Archaeological Resources

- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

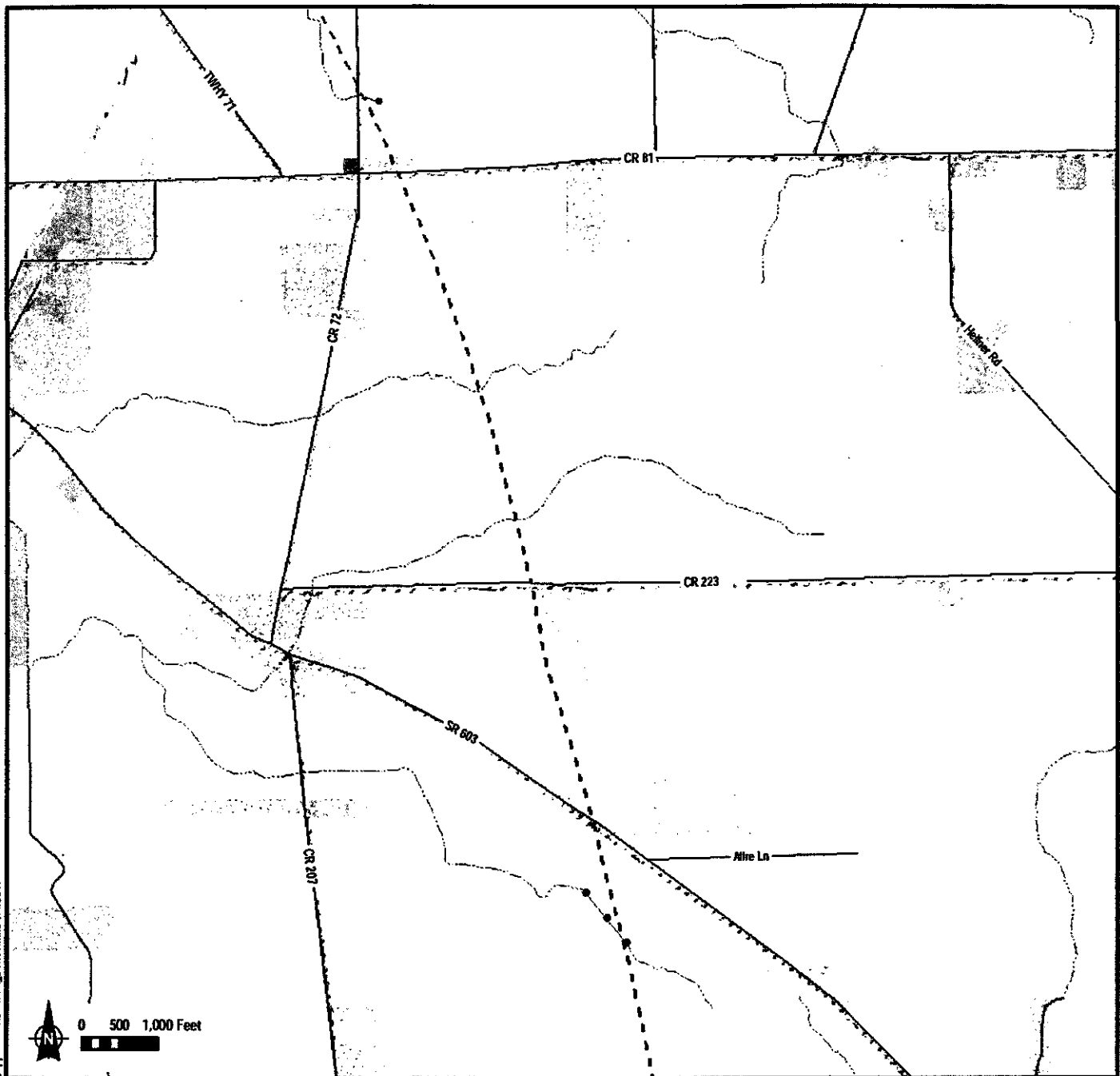


Parks

- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 12 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



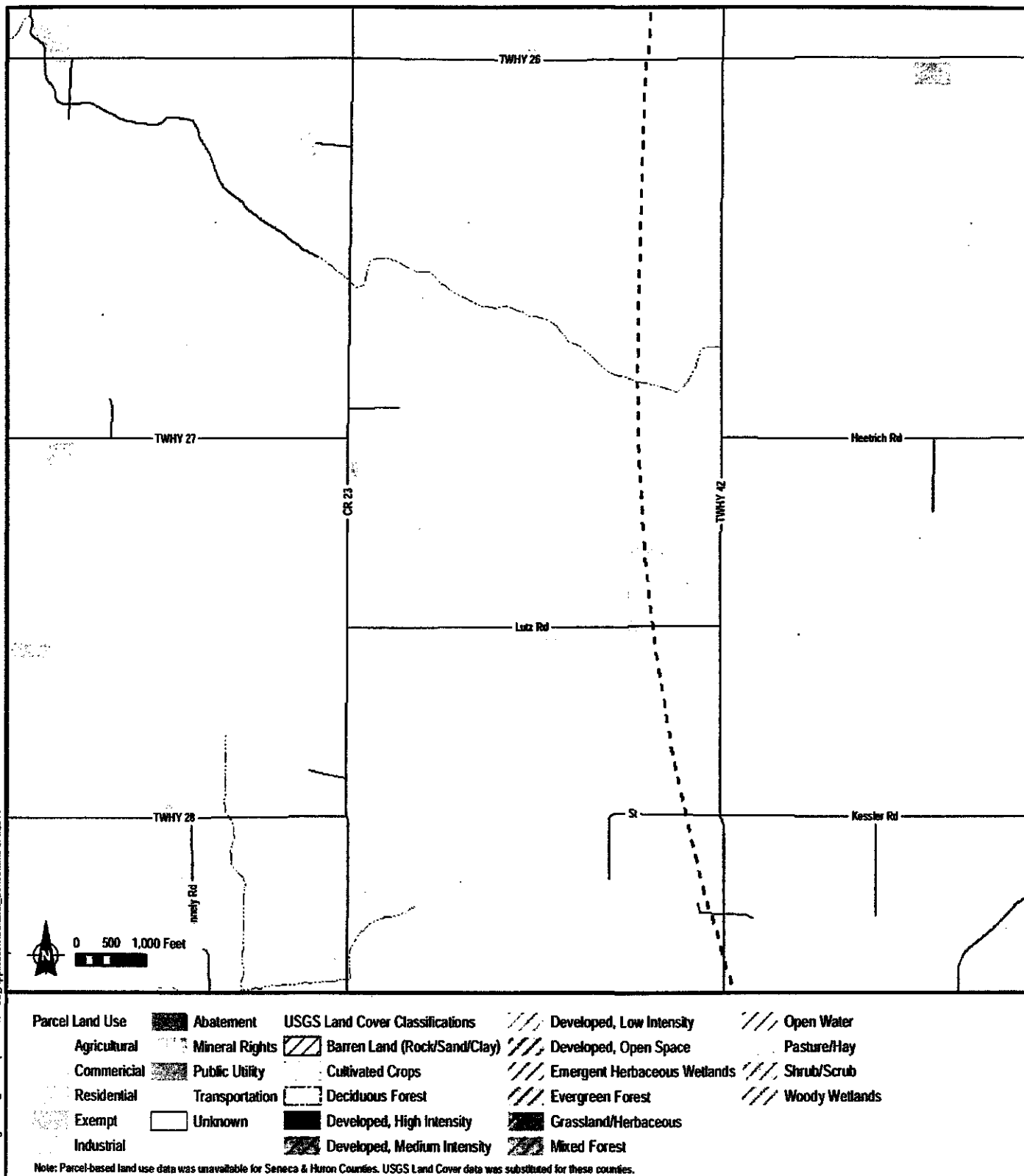
Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)	Archaeological Resources	Parks
Vestas V100	Determinations of Eligibility	Gas/Oil Well
V100 w/ 80 m Hub (130m tip height)	NRHP Listed Cultural Resources	Road
V100 w/ 95 m Hub (145m tip height)	Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)	Artificial Path
Collection Line (01-14-11)	Project Area (01-03-11)	Canal/Ditch
Access Roads (01-14-11)	Laydown Yard & Batch Plant (01-13-11)	Perennial Stream/River
Substation (01-13-11)	Five Mile Buffer	Intermittent
O&M Building (01-13-11)		
Switchyard (01-13-11)		

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 13 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



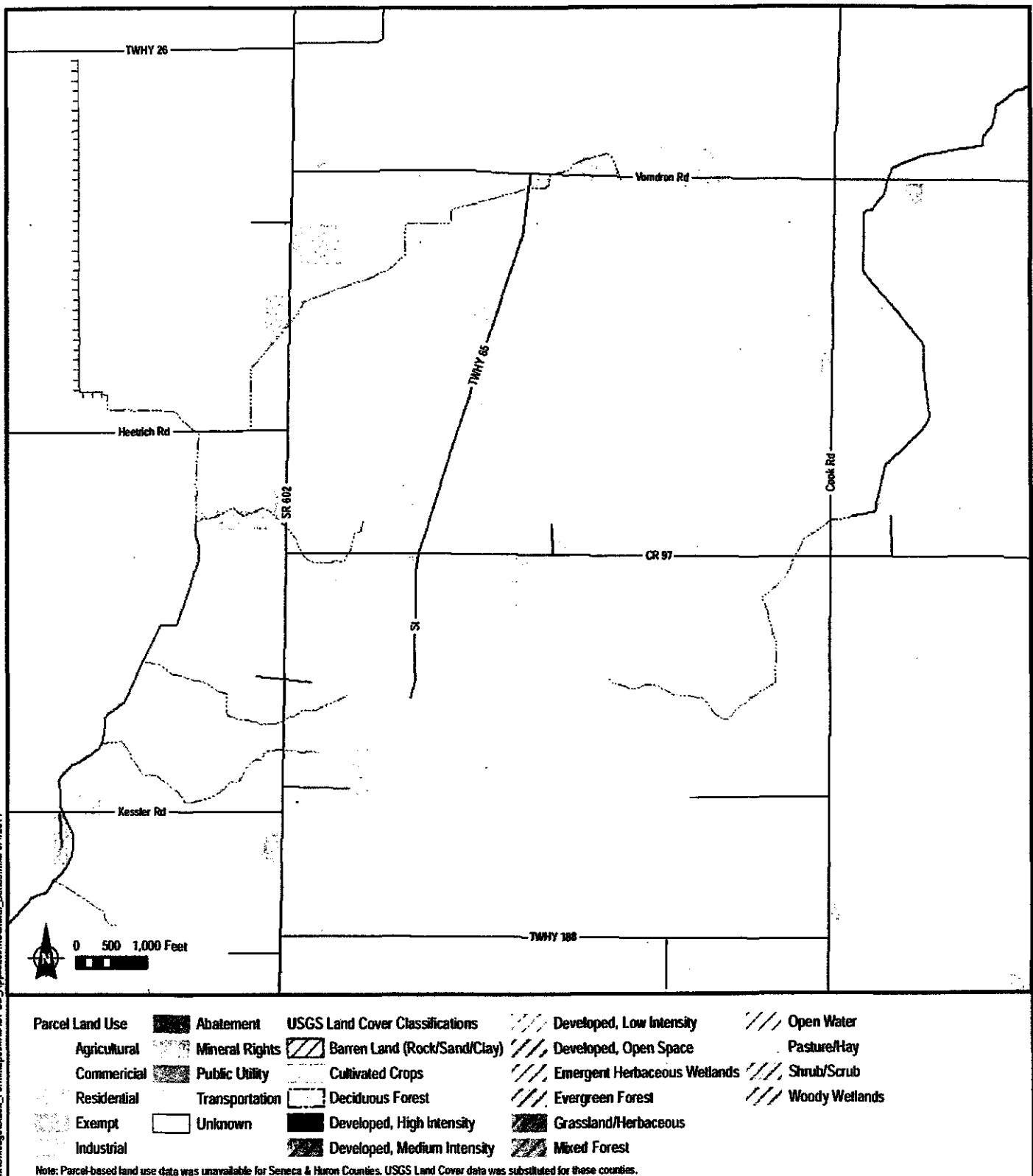
- Turbines (01-14-11)**
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
 - Collection Line (01-14-11)
 - Access Roads (01-14-11)
 - Substation (01-13-11)
 - O&M Building (01-13-11)
 - Switchyard (01-13-11)

- Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

- Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 14 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2008; EP 2011.



- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
 --- Access Roads (01-14-11)
 ■ Substation (01-13-11)
 ■ O&M Building (01-13-11)
 ■ Switchyard (01-13-11)

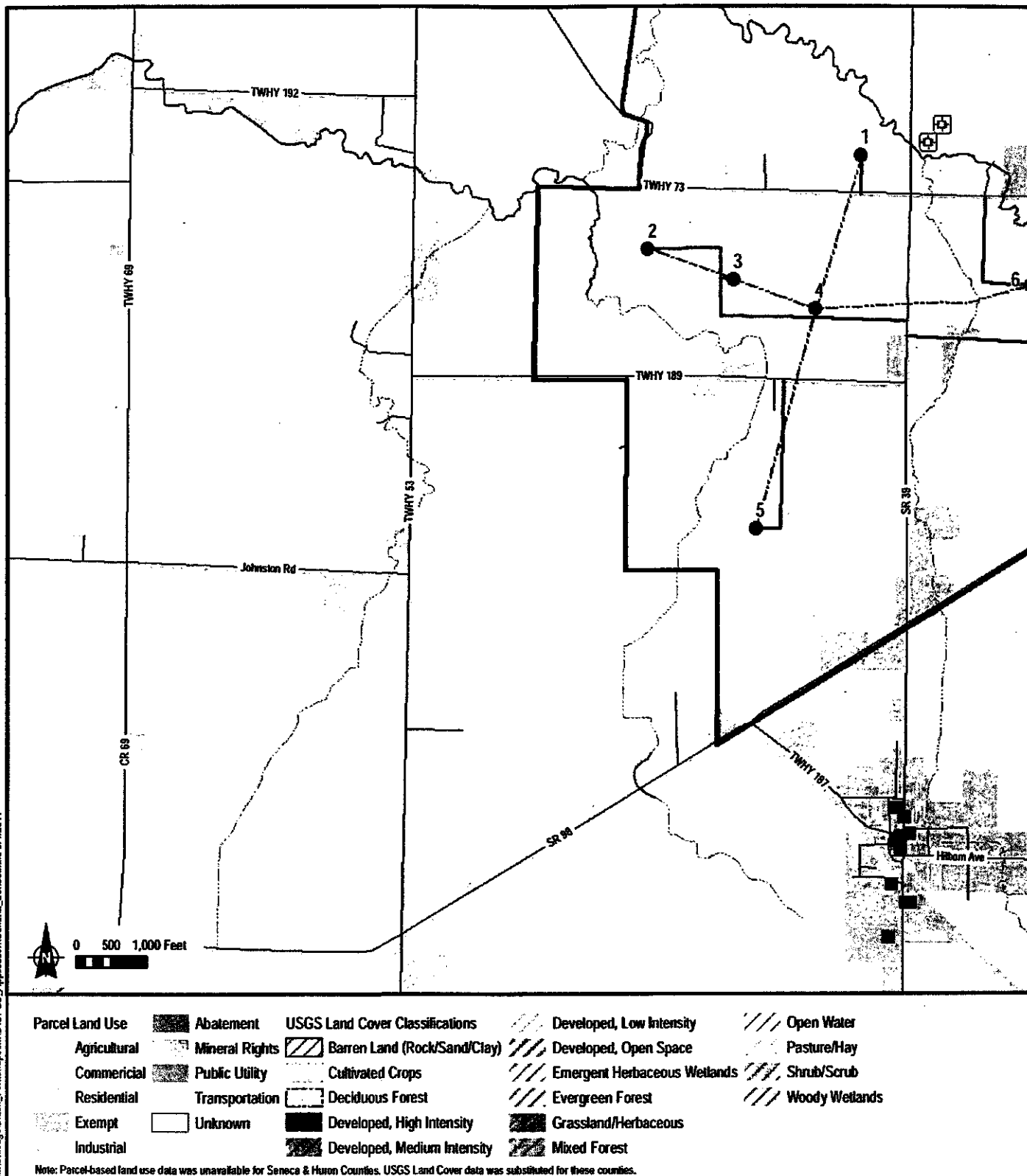
- ⊕ Archaeological Resources
 ● Determinations of Eligibility
 ● NRHP Listed Cultural Resources
 ■ Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
 ■ Project Area (01-03-11)
 ■ Laydown Yard & Batch Plant (01-13-11)
 ■ Five Mile Buffer

- ▲ Parks
 ● Gas/Oil Well
 --- Road
 --- Artificial Path
 --- Canal/Ditch
 --- Perennial Stream/River
 --- Intermittent

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 15 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

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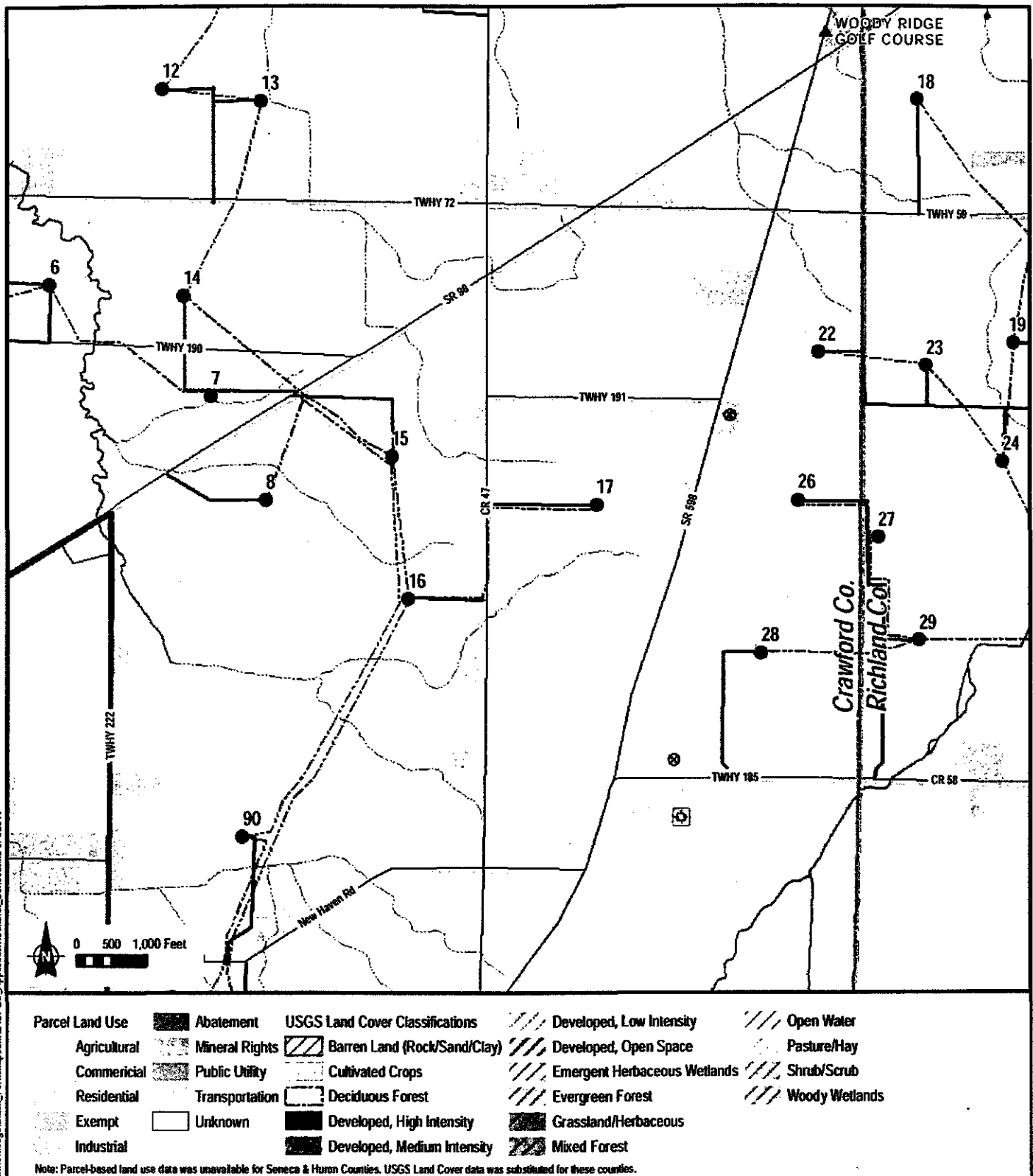
- Turbines (01-14-11)**
 Vestas V100
- V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
- Switchyard (01-13-11)

- ⊕ Archaeological Resources
- Determinations of Eligibility
 - NRHP Listed Cultural Resources
 - Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

- ▲ Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 16 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
 --- Access Roads (01-14-11)
 ■ Substation (01-13-11)
 ■ O&M Building (01-13-11)
 ■ Switchyard (01-13-11)

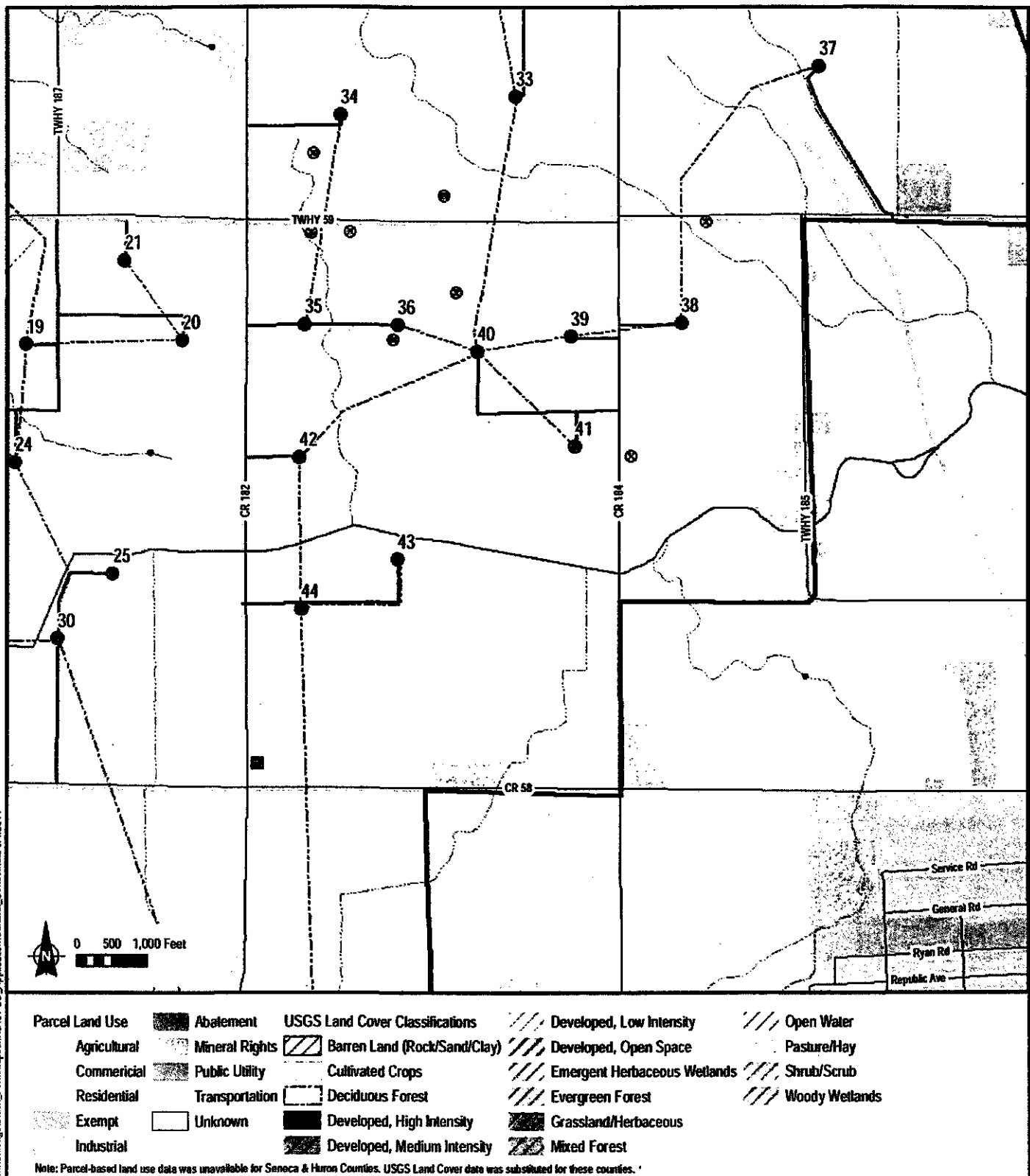
- ⊕ Archaeological Resources
 ● Determinations of Eligibility
 ● NRHP Listed Cultural Resources
 ■ Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
 ■ Project Area (01-03-11)
 ■ Laydown Yard & Batch Plant (01-13-11)
 ■ Five Mile Buffer

- ▲ Parks
 ● Gas/Oil Well
 --- Road
 --- Artificial Path
 --- Canal/Ditch
 --- Perennial Stream/River
 --- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 17 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

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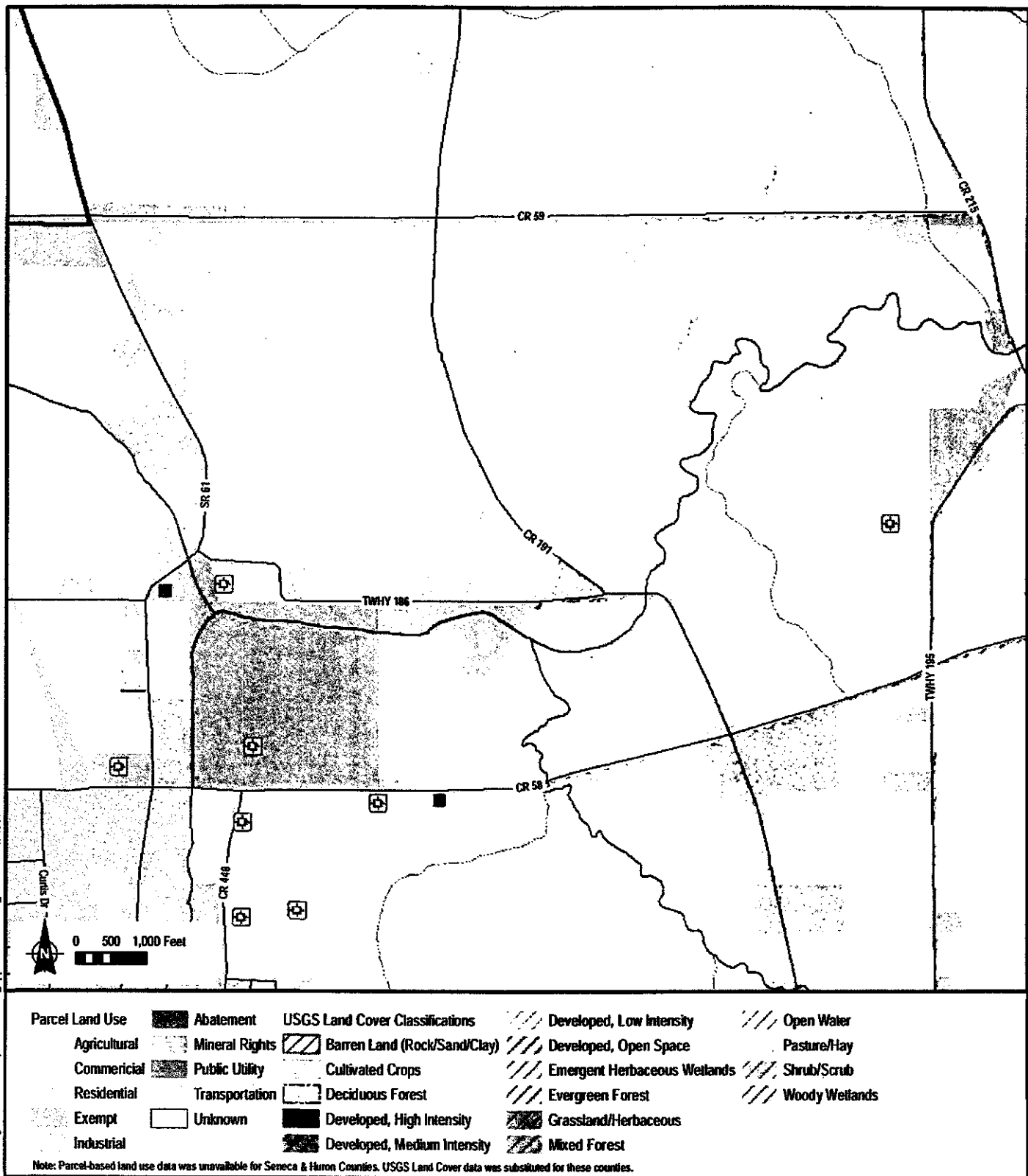
- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
 --- Access Roads (01-14-11)
 ■ Substation (01-13-11)
 ■ O&M Building (01-13-11)
 ■ Switchyard (01-13-11)

- ⊕ Archaeological Resources
 ● Determinations of Eligibility
 ● NRHP Listed Cultural Resources
 ■ Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
 ■ Project Area (01-03-11)
 ■ Laydown Yard & Batch Plant (01-13-11)
 ■ Five Mile Buffer

- ▲ Parks
 ● Gas/Oil Well
 --- Road
 --- Artificial Path
 --- Canal/Ditch
 --- Perennial Stream/River
 --- Intermittent

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 18 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



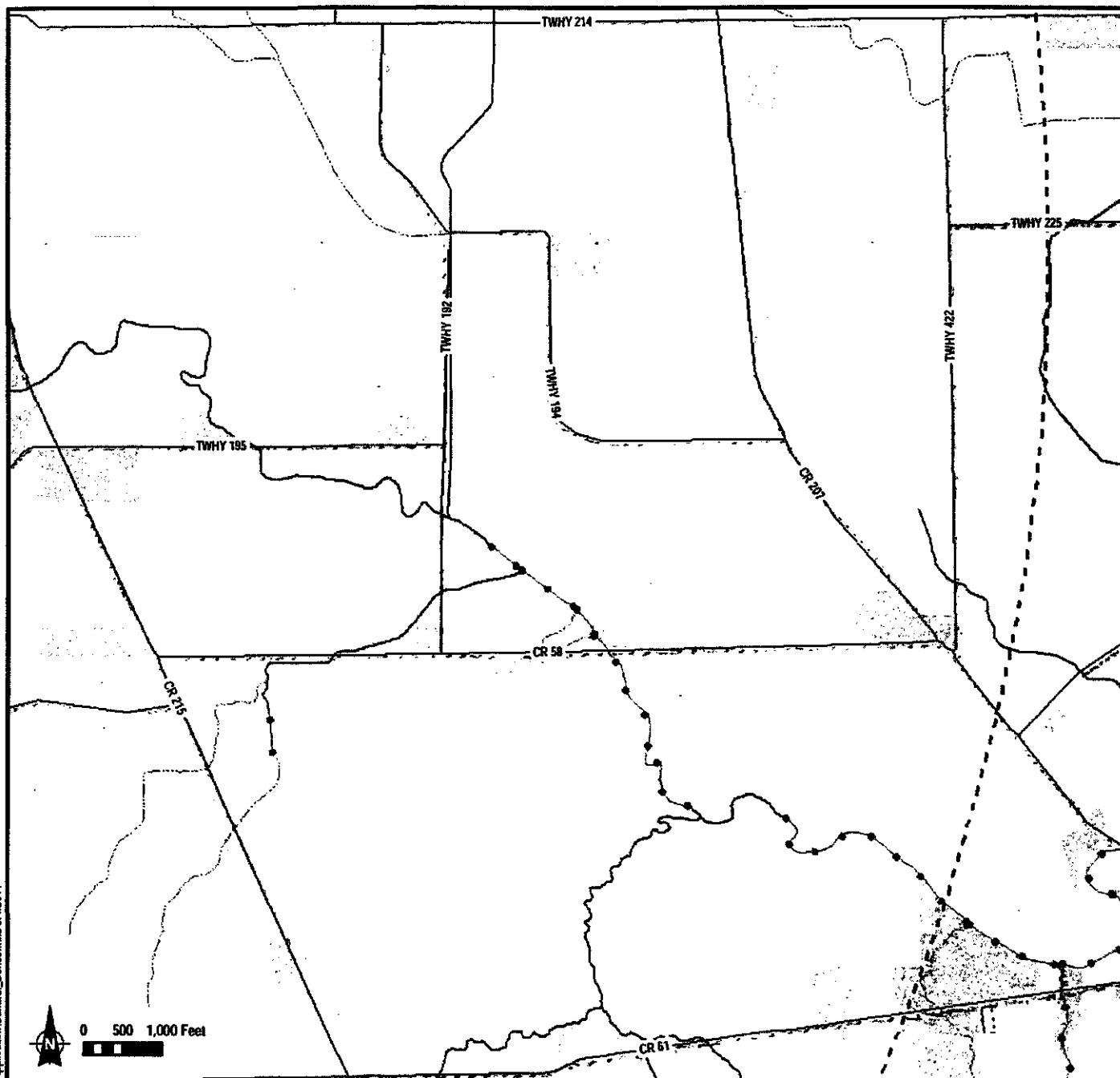
- Turbines (01-14-11)**
- Vestas V100**
- V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
 - Collection Line (01-14-11)
 - Access Roads (01-14-11)
 - Substation (01-13-11)
 - ▨ O&M Building (01-13-11)
 - ▨ Switchyard (01-13-11)

- ⊕ Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- ▨ Project Area (01-03-11)
- ▨ Laydown Yard & Batch Plant (01-13-11)
- ▨ Five Mile Buffer

- ▲ Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 19 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



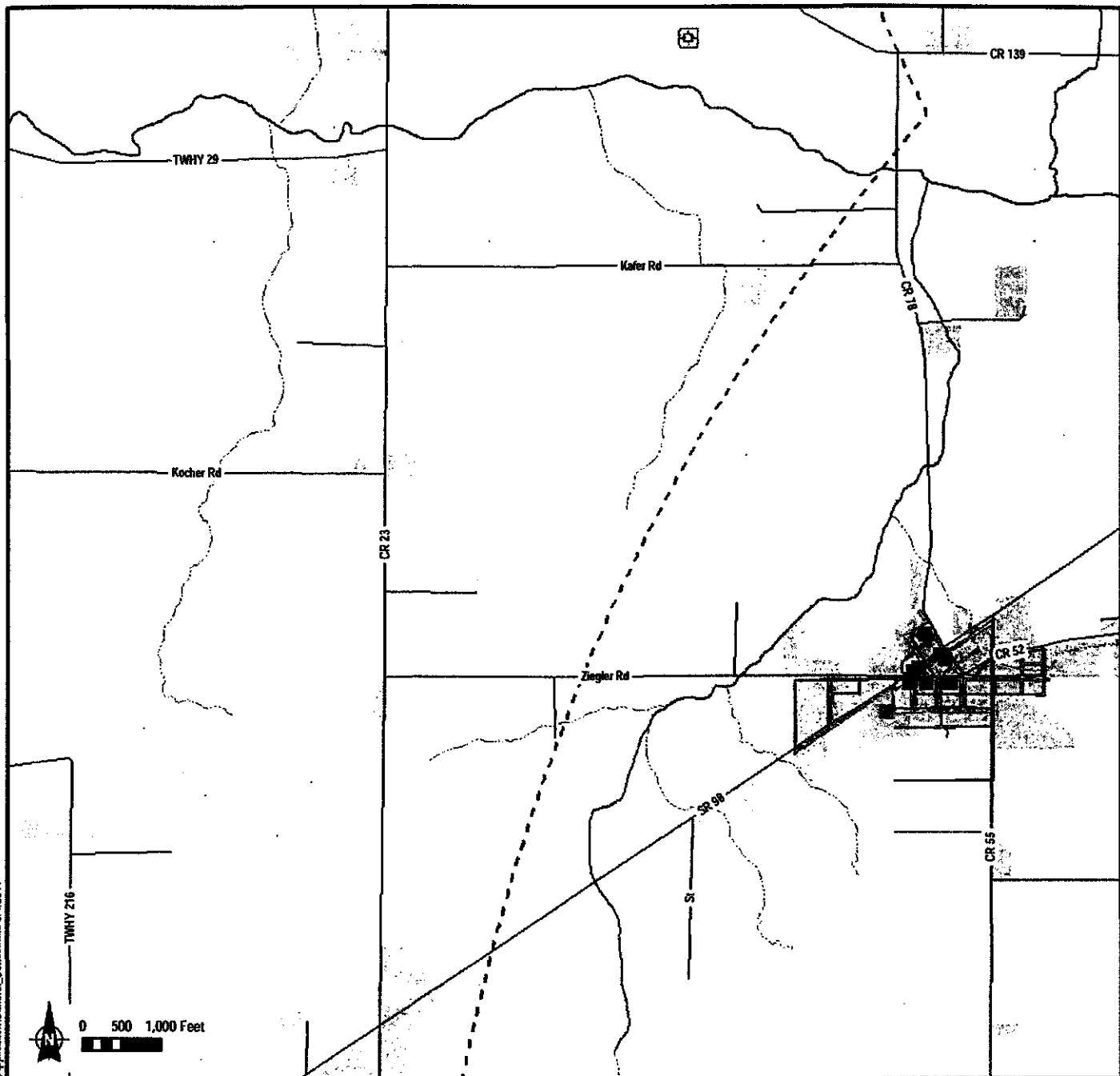
Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)	Archaeological Resources	Parks
Vestas V100	Determinations of Eligibility	Gas/Oil Well
V100 w/ 80 m Hub (130m tip height)	NRHP Listed Cultural Resources	Road
V100 w/ 95 m Hub (145m tip height)	Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)	Artificial Path
Collection Line (01-14-11)	Project Area (01-03-11)	Canal/Ditch
Access Roads (01-14-11)	Laydown Yard & Batch Plant (01-13-11)	Perennial Stream/River
Substation (01-13-11)	Five Mile Buffer	Intermittent
O&M Building (01-13-11)		
Switchyard (01-13-11)		

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 20 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)

Vestas V100

- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
- Switchyard (01-13-11)



Archaeological Resources

- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

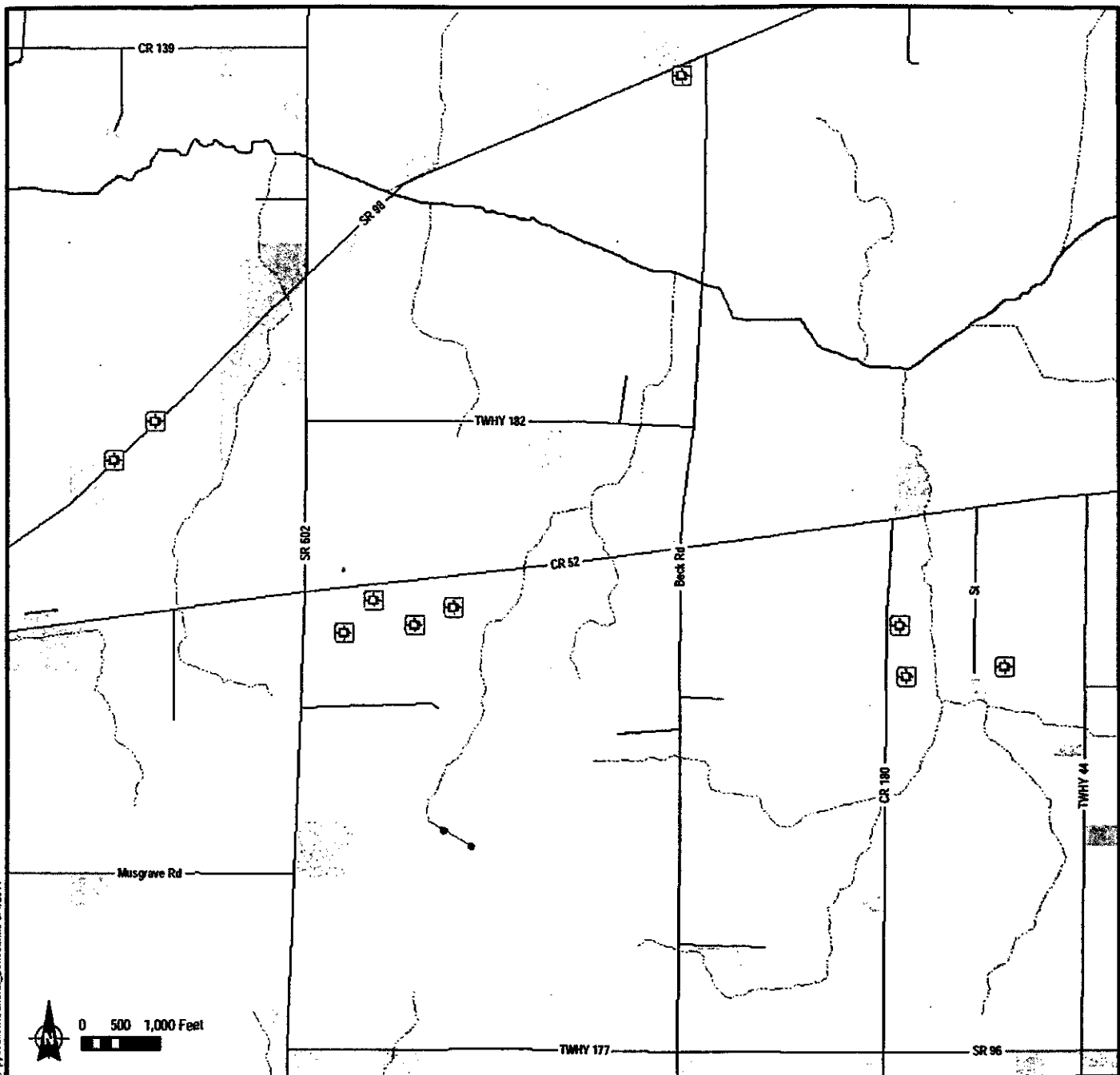


Parks

- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 21 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)

Vestas V100

- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)

- Collection Line (01-14-11)
- Access Roads (01-14-11)

- Substation (01-13-11)
- O&M Building (01-13-11)
- Switchyard (01-13-11)

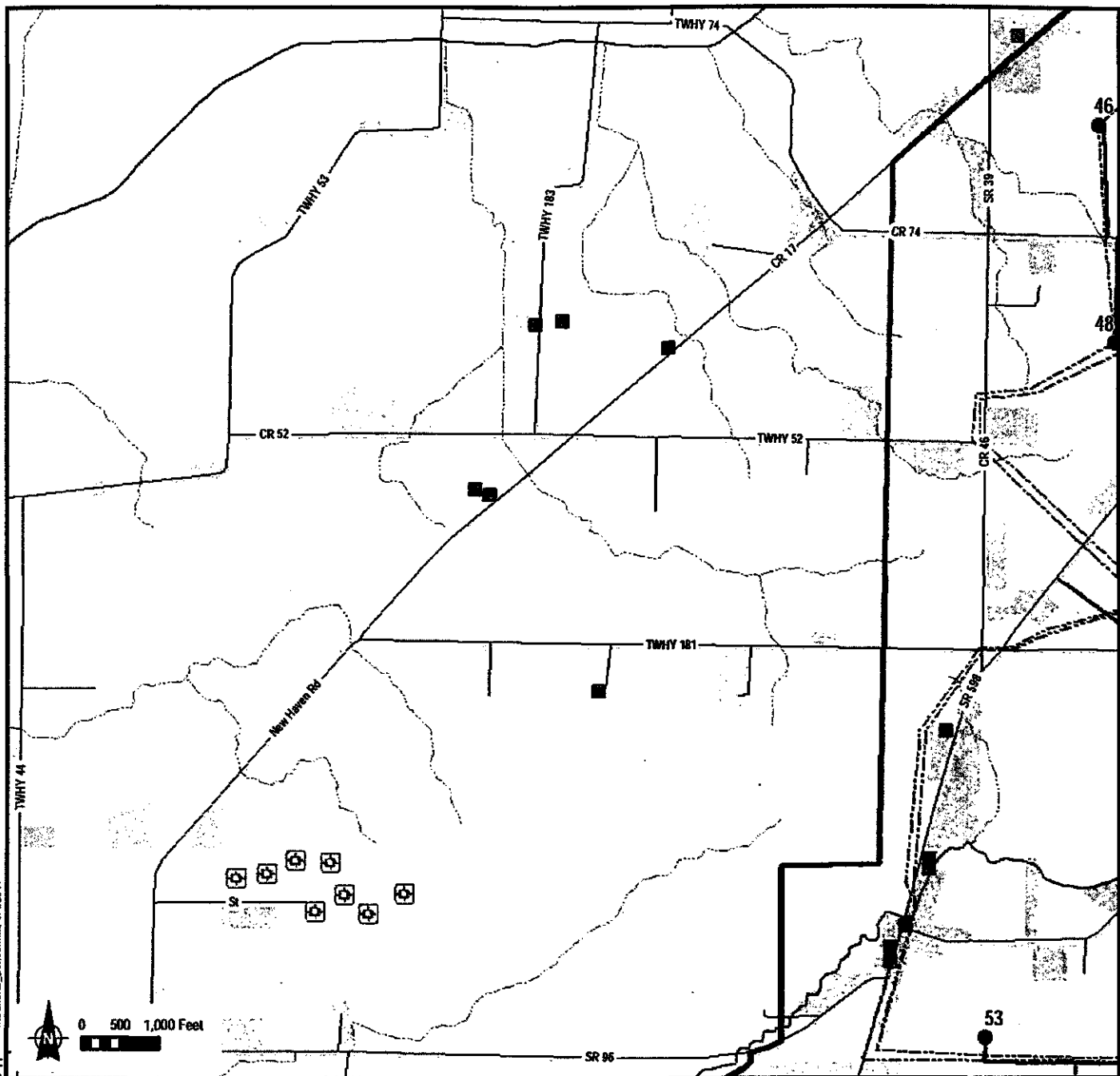
- Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

- ▲ Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 22 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2008; EP 2011.

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- | | | | | |
|------------------------|----------------|--|------------------------------|----------------|
| Parcel Land Use | Abatement | USGS Land Cover Classifications | Developed, Low Intensity | Open Water |
| Agricultural | Mineral Rights | Barren Land (Rock/Sand/Clay) | Developed, Open Space | Pasture/Hay |
| Commercial | Public Utility | Cultivated Crops | Emergent Herbaceous Wetlands | Shrub/Scrub |
| Residential | Transportation | Deciduous Forest | Evergreen Forest | Woody Wetlands |
| Exempt | Unknown | Developed, High Intensity | Grassland/Herbaceous | |
| Industrial | | Developed, Medium Intensity | Mixed Forest | |

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)

Vestas V100

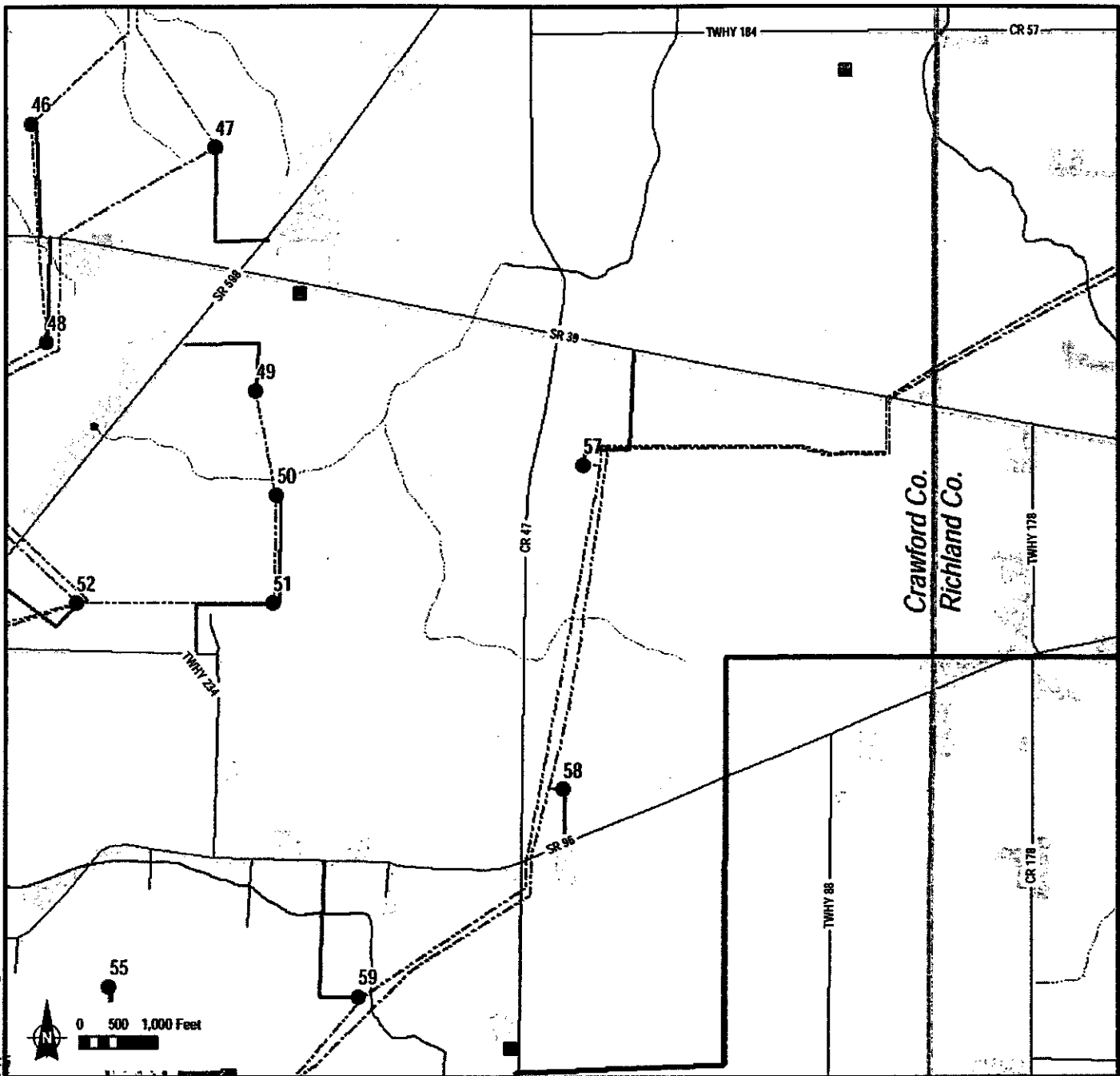
- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
- Switchyard (01-13-11)

- Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

- ▲ Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 23 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)

Vestas V100

- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- ▨ O&M Building (01-13-11)
- ▨ Switchyard (01-13-11)



- Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- ▨ Project Area (01-03-11)
- ▨ Laydown Yard & Batch Plant (01-13-11)
- ▨ Five Mile Buffer

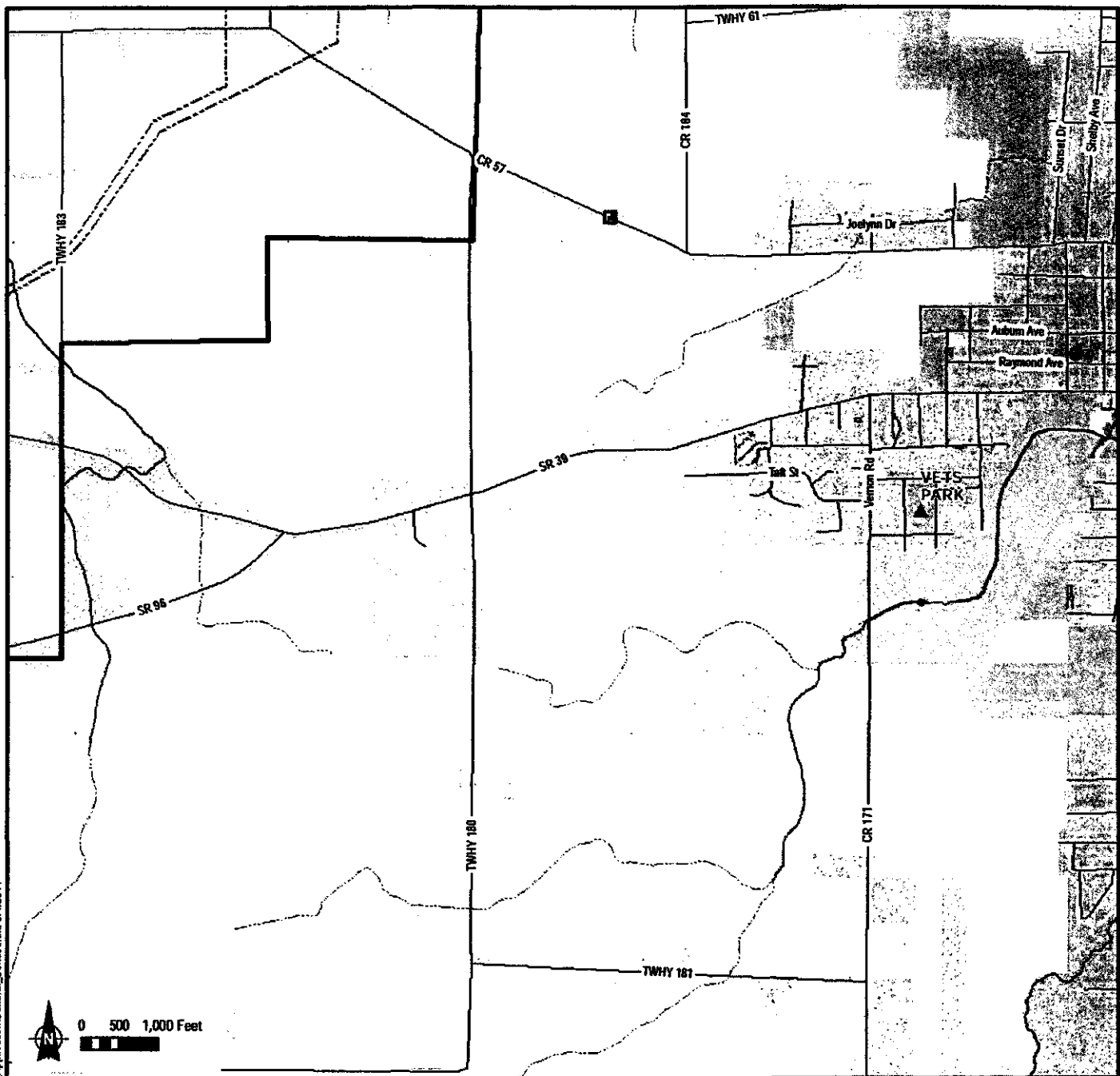


- Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5

Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 24 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2008; EP 2011.



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)

Vestas V100

- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
- Switchyard (01-13-11)



Archaeological Resources

- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

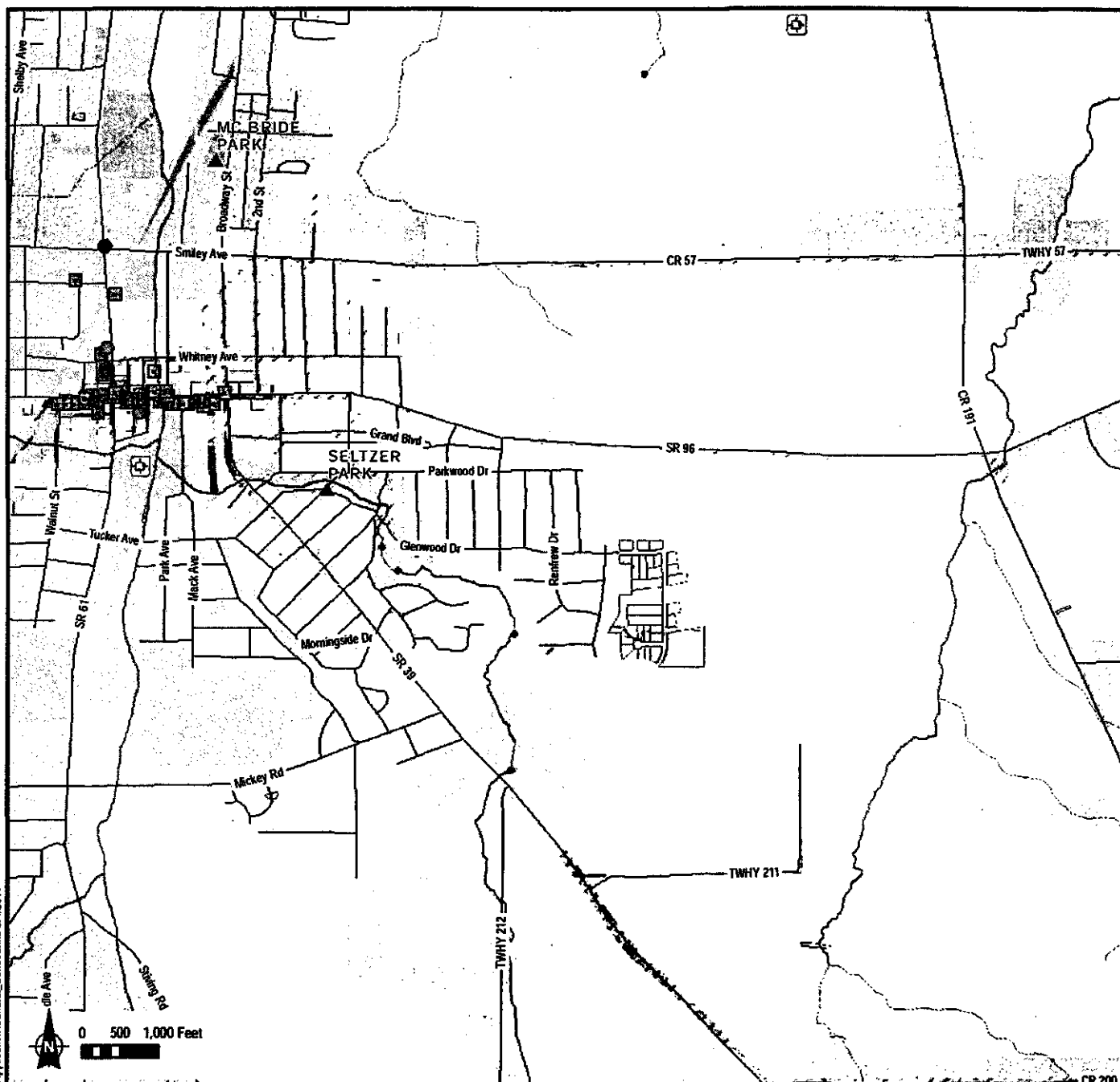


Parks

- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 25 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



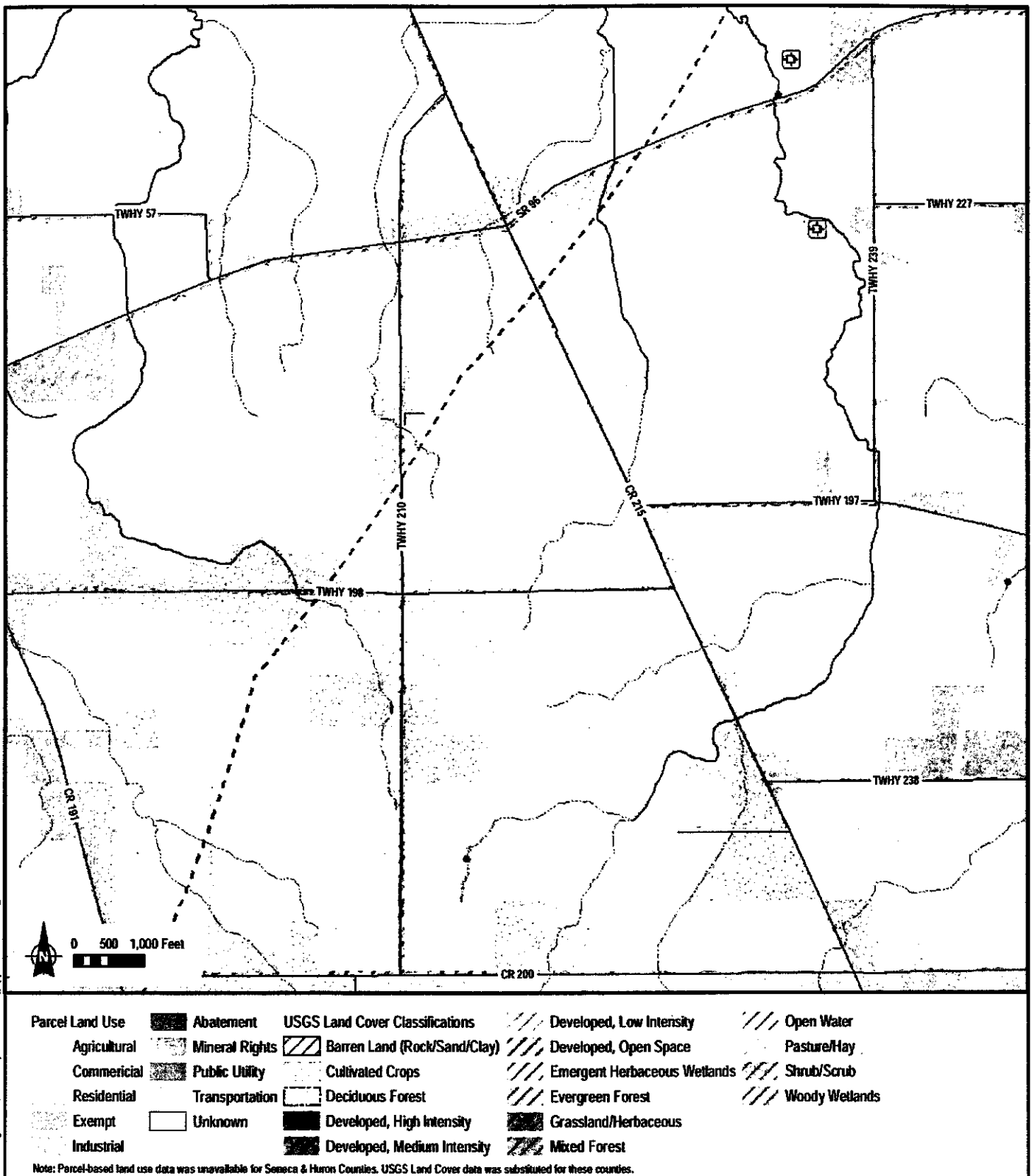
Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

- Turbines (01-14-11)
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
- Switchyard (01-13-11)
- Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer
- Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 26 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



Turbines (01-14-11)

Vestas V100

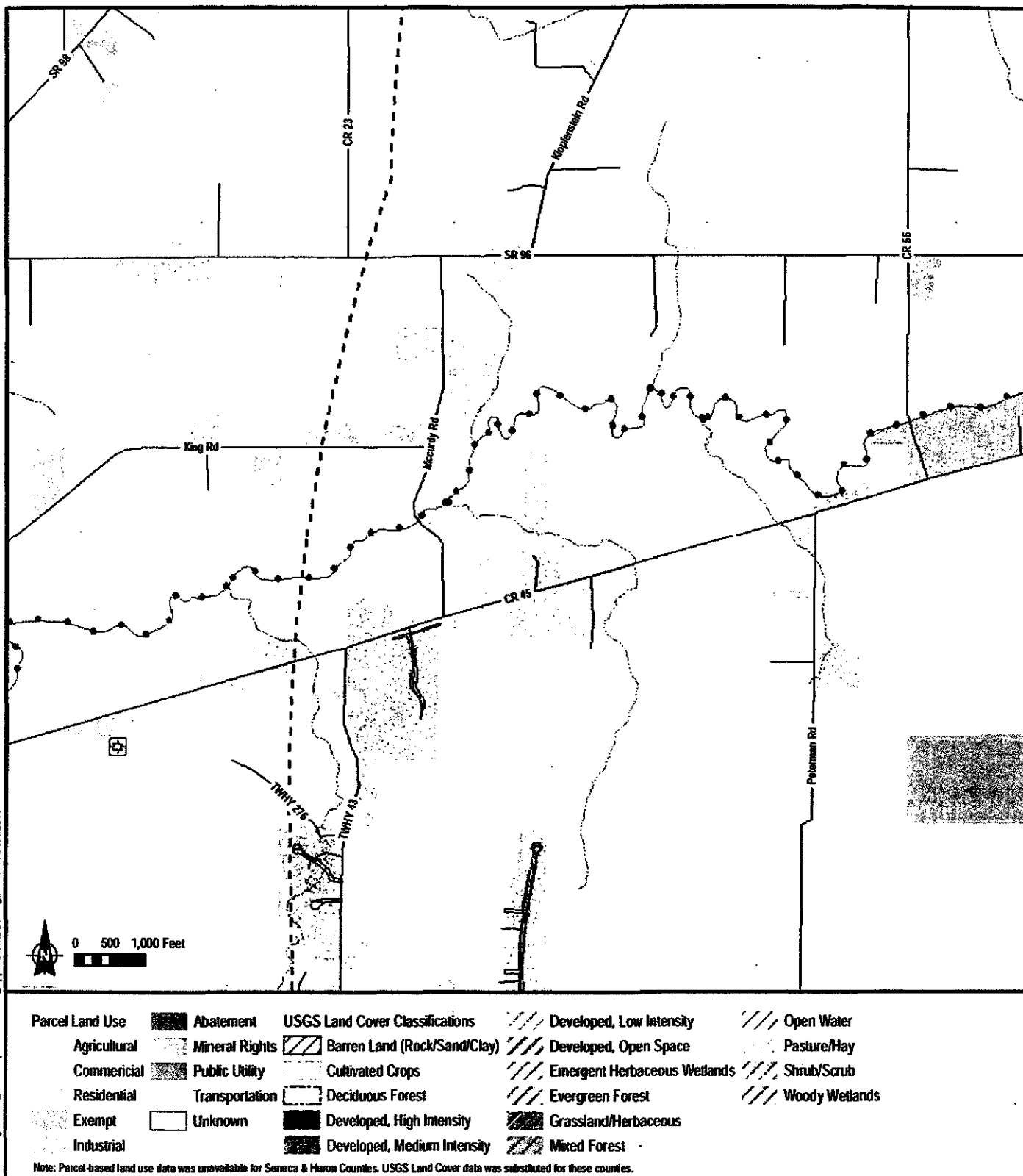
- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
- Switchyard (01-13-11)

- ⊕ Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

- ▲ Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 27 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



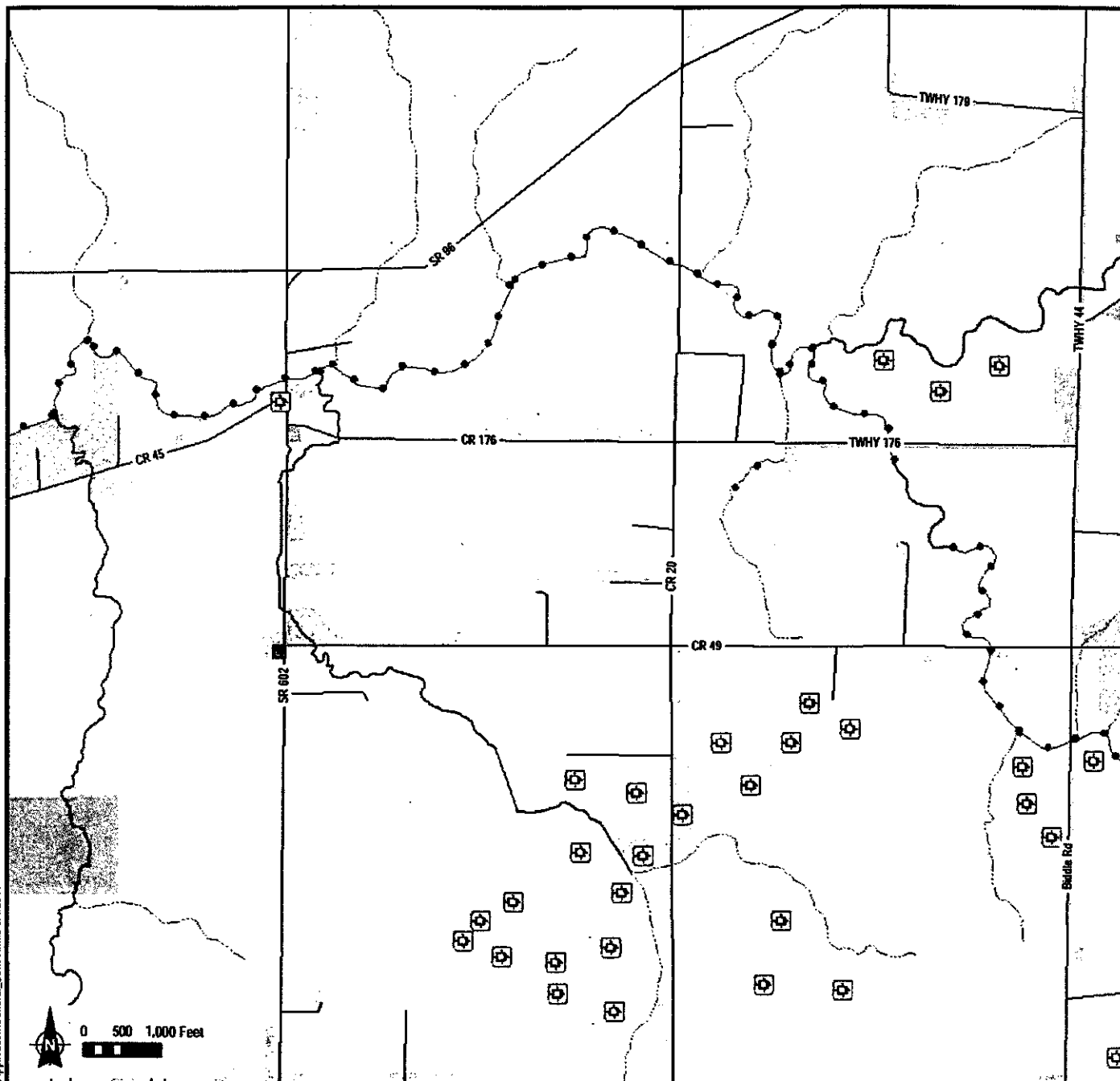
- Turbines (01-14-11)**
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
 - Collection Line (01-14-11)
 - Access Roads (01-14-11)
 - Substation (01-13-11)
 - O&M Building (01-13-11)
 - Switchyard (01-13-11)

- ⊕ Archaeological Resources
- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

- ▲ Parks
- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 28 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; MHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2008; EP 2011.



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)

Vestas V100

- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
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Archaeological Resources

- Determinations of Eligibility
- NRHP Listed Cultural Resources
- Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
- Project Area (01-03-11)
- Laydown Yard & Batch Plant (01-13-11)
- Five Mile Buffer

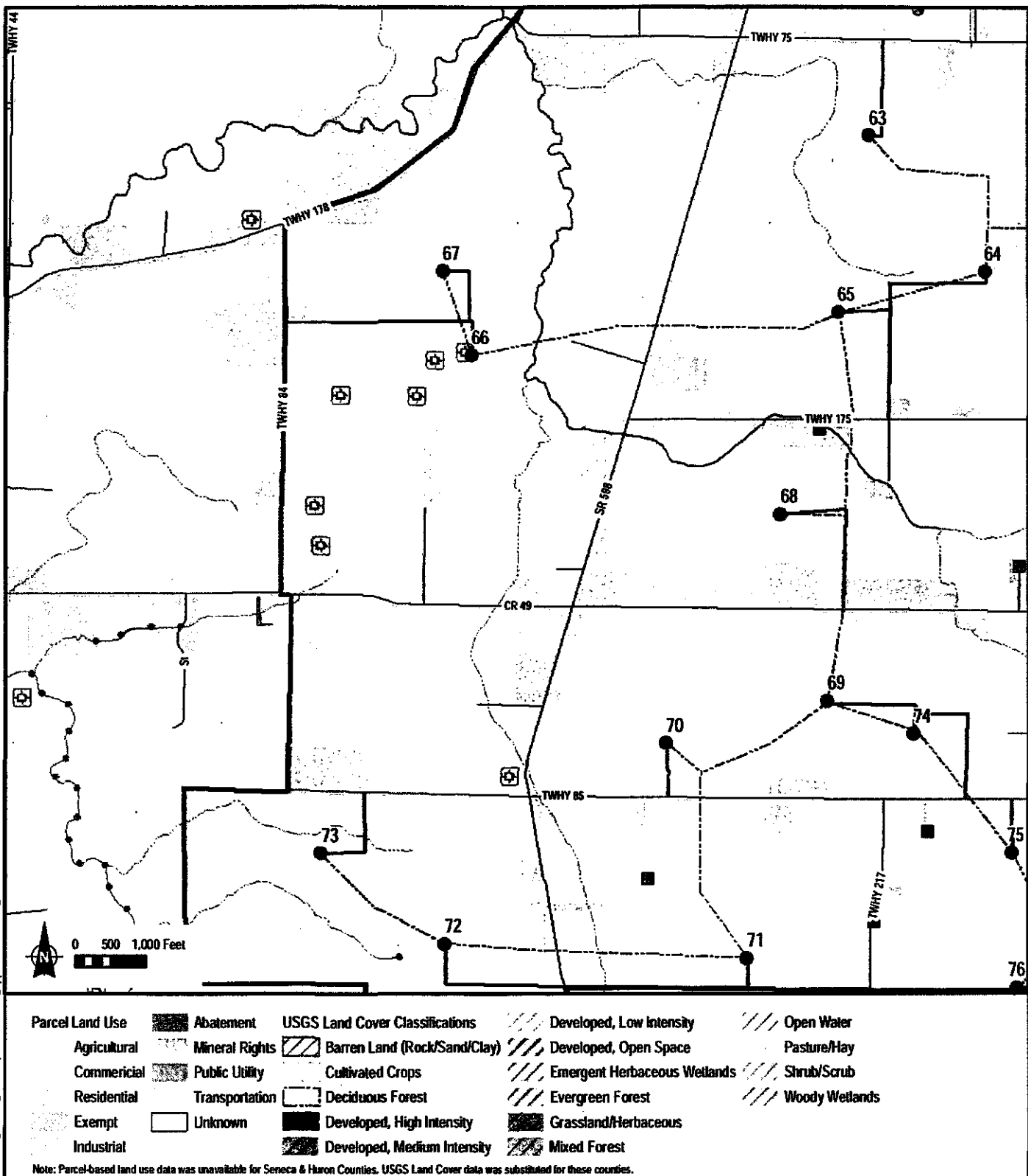
Parks

- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 29 of 45

Source: ESRI 2010; USGS NCLD 2001;
OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

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- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
 --- Access Roads (01-14-11)
 Substation (01-13-11)
 O&M Building (01-13-11)
 Switchyard (01-13-11)

- Archaeological Resources
 ● Determinations of Eligibility
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 --- Intermittent

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 30 of 45

Source: ESRI 2010; USGS NCLD 2001;
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 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

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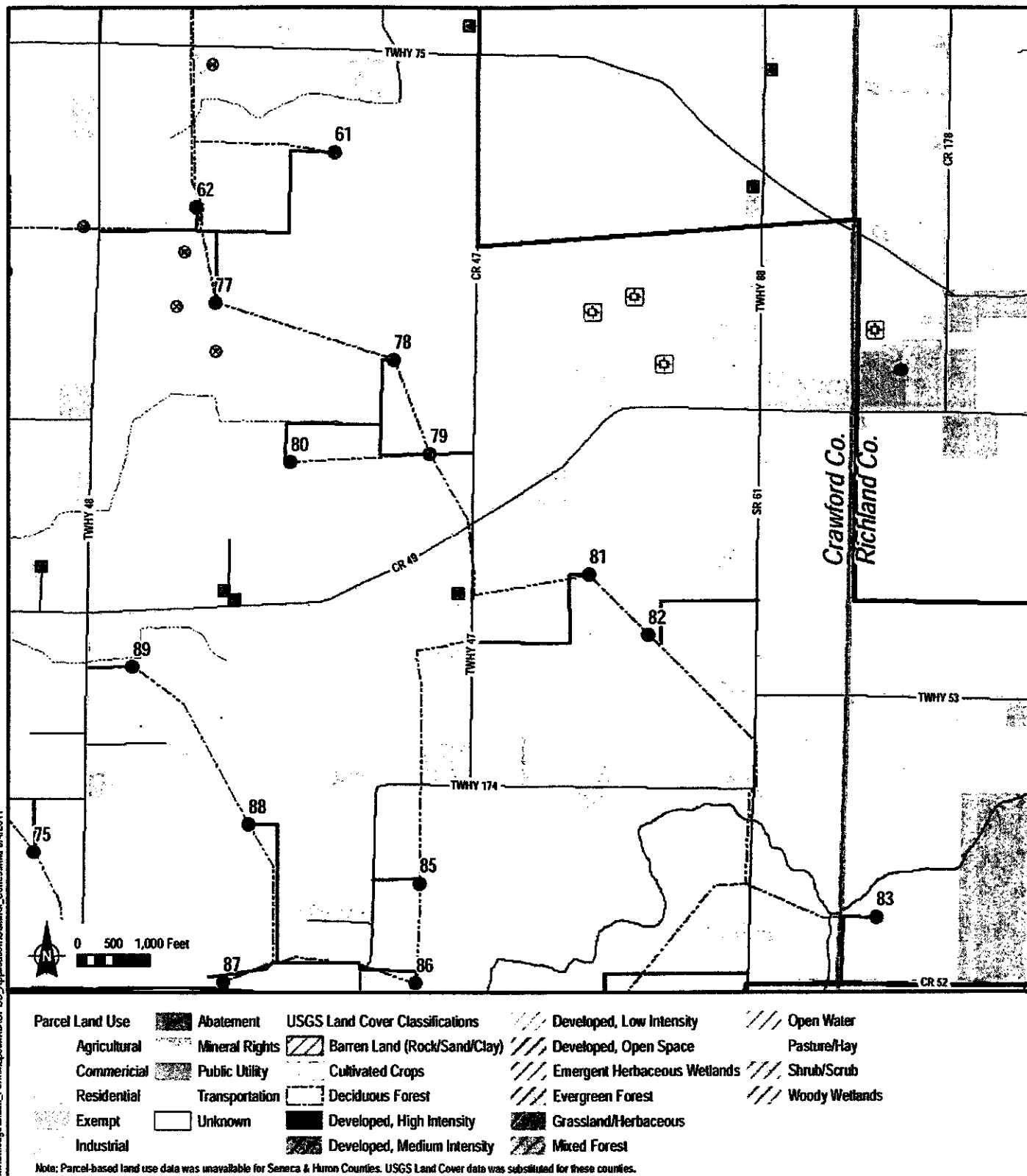
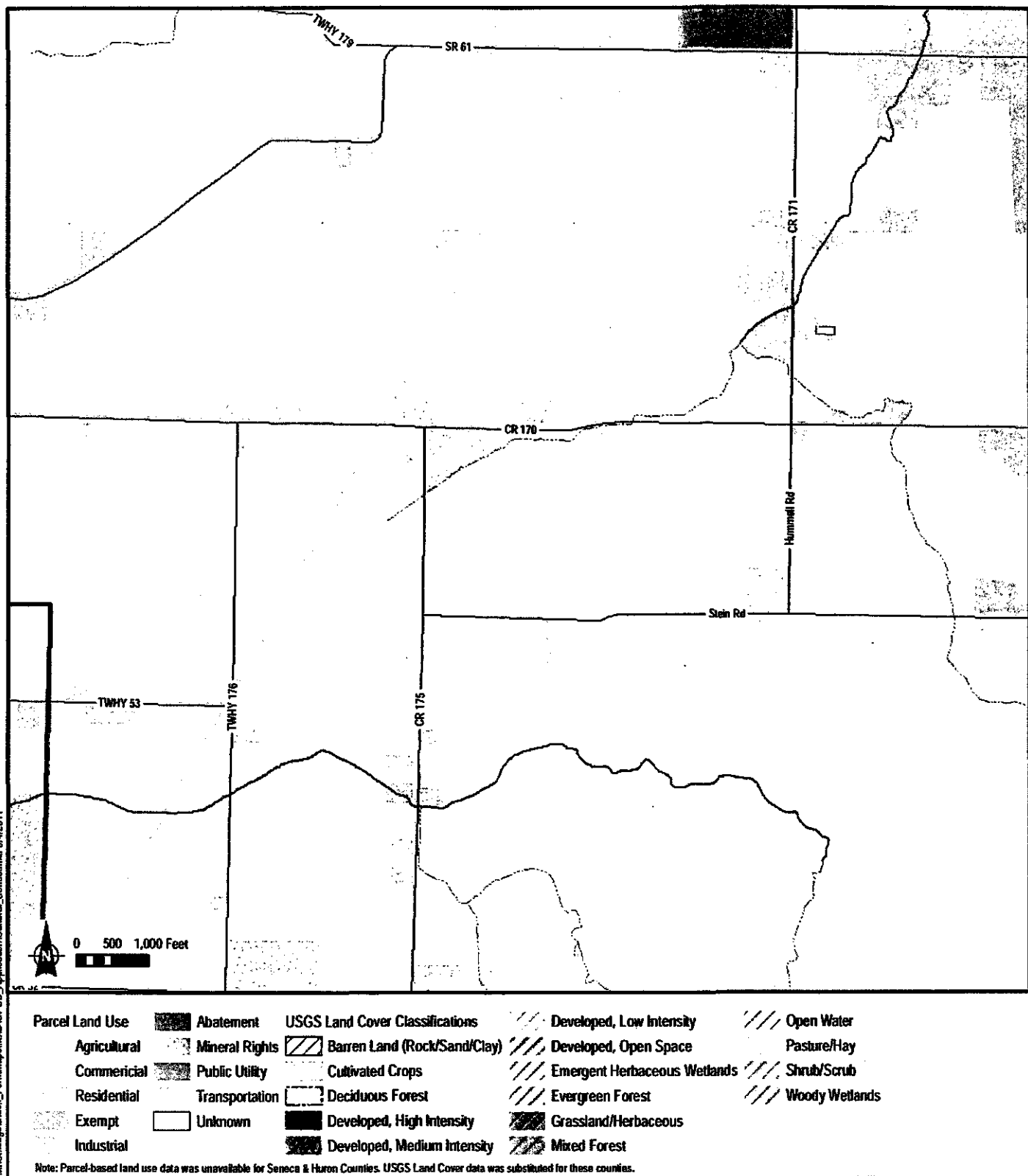


Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 31 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



- Turbines (01-14-11)**
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 - Collection Line (01-14-11)
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- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
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Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 32 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

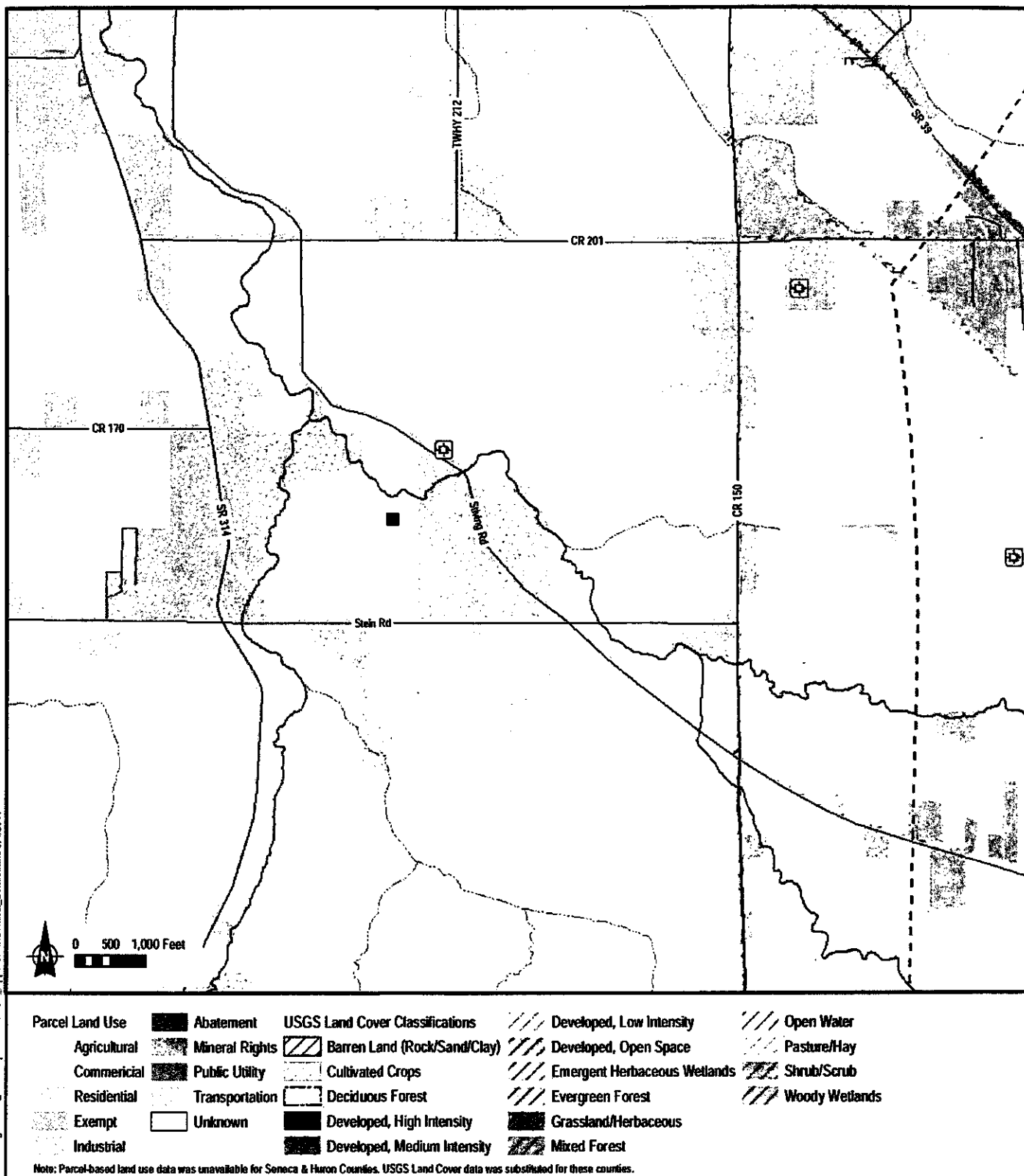
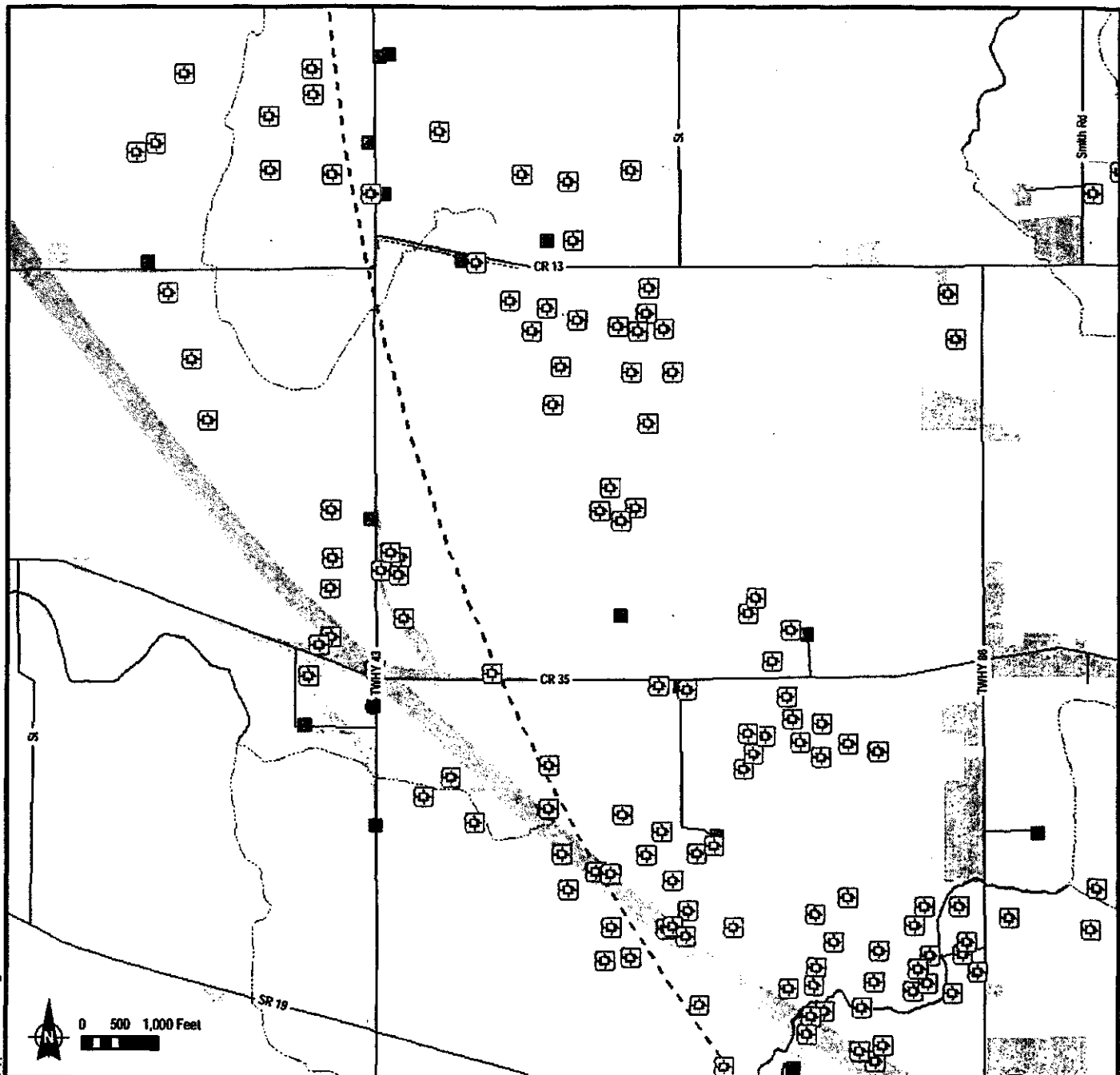


Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 33 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; MHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2008; EP 2011.



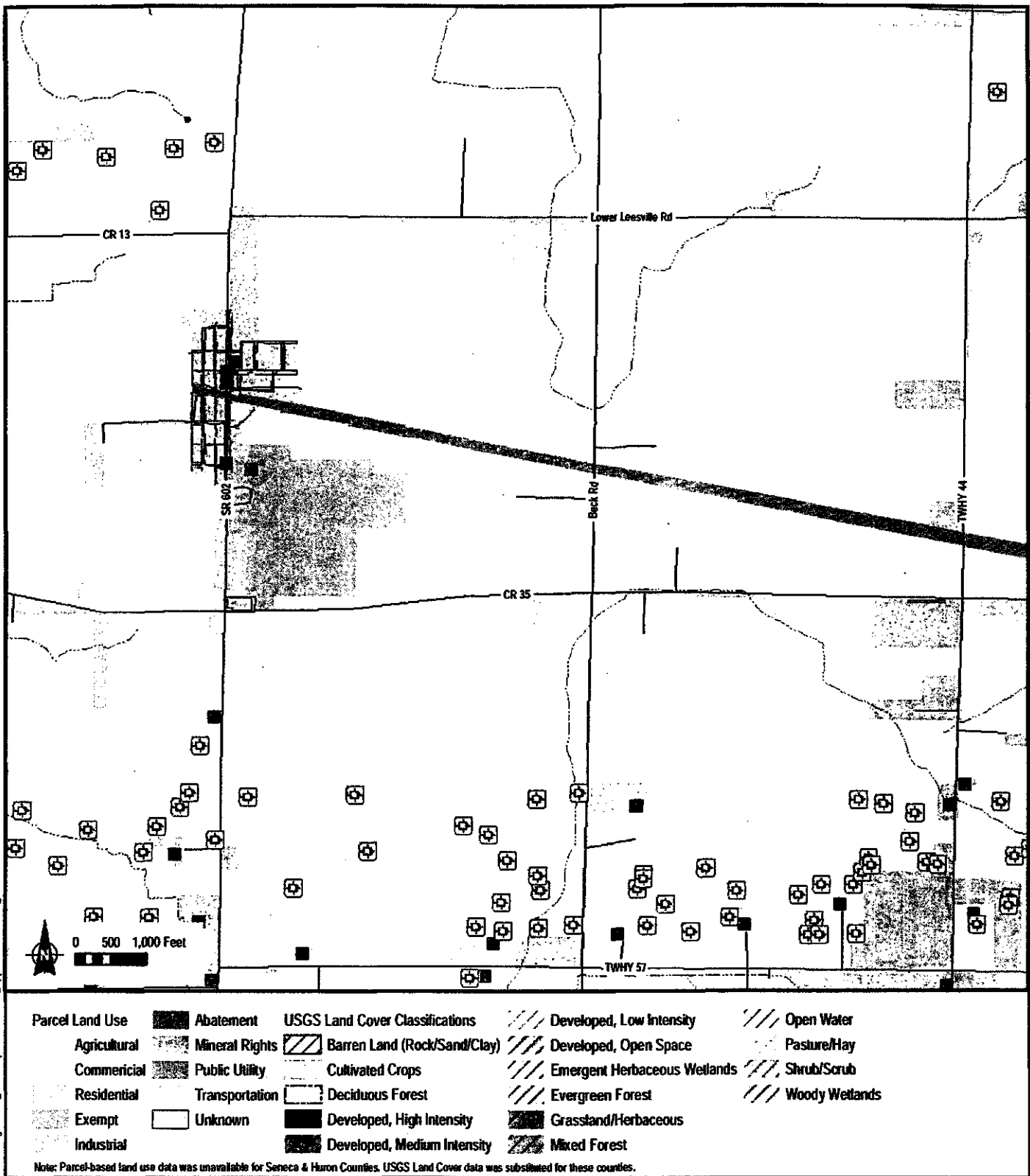
Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
Agricultural	Mineral Rights	Barren Land (Rock/Sand/Clay)	Developed, Open Space	Pasture/Hay
Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)	Archaeological Resources	Parks
Vestas V100	Determinations of Eligibility	Gas/Oil Well
● V100 w/ 80 m Hub (130m tip height)	● NRHP Listed Cultural Resources	— Road
● V100 w/ 95 m Hub (145m tip height)	● Ohio Historic Inventory of Structures	— Artificial Path
--- Collection Line (01-14-11)	■ (Potentially Eligible for NRHP)	— Canal/Ditch
— Access Roads (01-14-11)	■ Project Area (01-03-11)	— Perennial Stream/River
■ Substation (01-13-11)	■ Laydown Yard & Batch Plant (01-13-11)	--- Intermittent
■ O&M Building (01-13-11)	■ Five Mile Buffer	
■ Switchyard (01-13-11)		

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 34 of 45

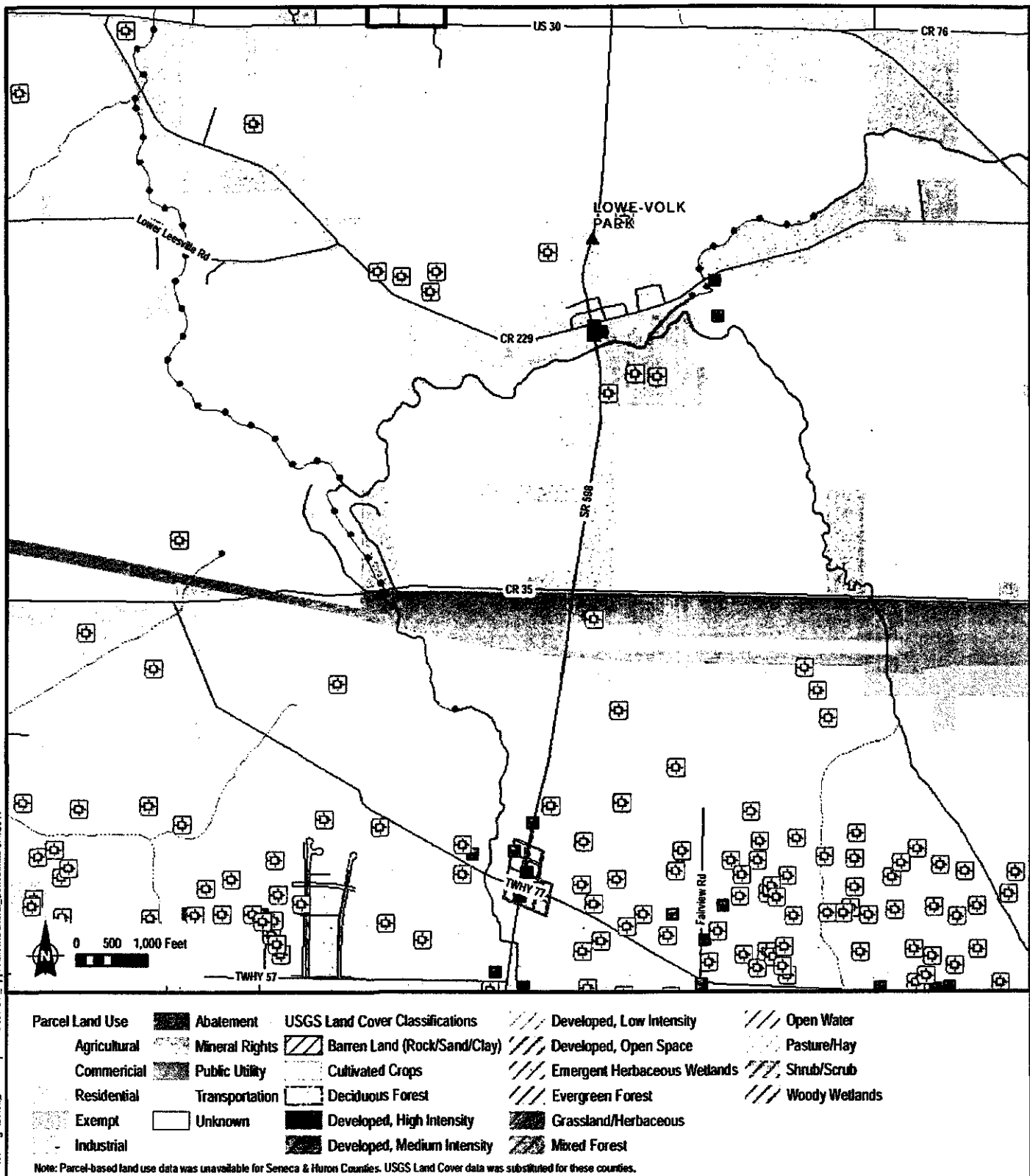
Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2008; EP 2011.



- Turbines (01-14-11)**
 - Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)**
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- O&M Building (01-13-11)**
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- Archaeological Resources**
 - Determinations of Eligibility
 - NRHP Listed Cultural Resources
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- Five Mile Buffer**
- Parks**
- Gas/Oil Well**
- Road**
- Artificial Path**
- Canal/Ditch**
- Perennial Stream/River**
- Intermittent**

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 35 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2008; EP 2011.



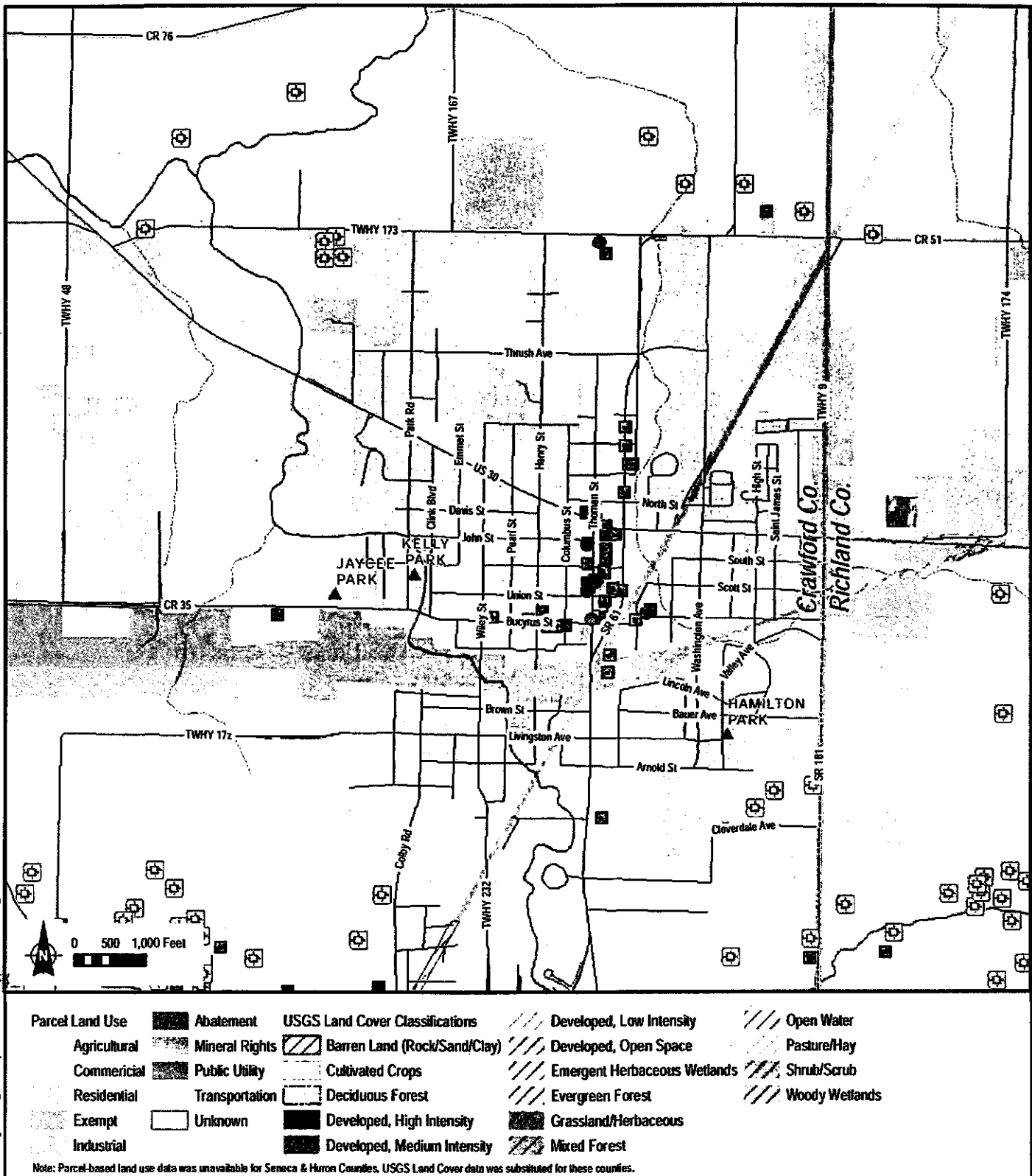
- Turbines (01-14-11)**
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
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- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 36 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



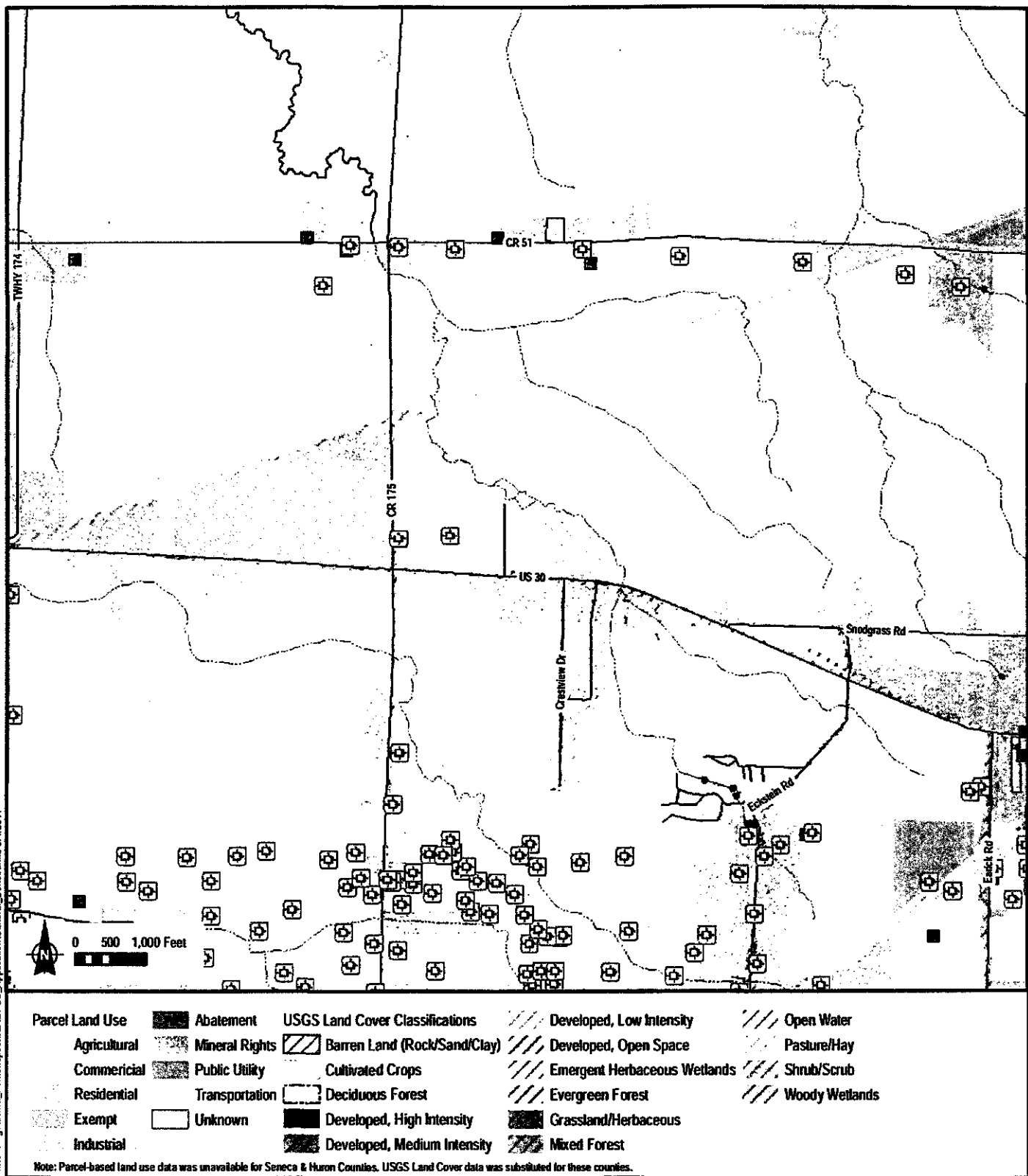
- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
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 ■ O&M Building (01-13-11)
 ■ Switchyard (01-13-11)

- ⊕ Archaeological Resources
 ● Determinations of Eligibility
 ● NRHP Listed Cultural Resources
 ■ Ohio Historic Inventory of Structures (Potentially Eligible for NRHP)
 ■ Project Area (01-03-11)
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 ■ Five Mile Buffer

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 ● Gas/Oil Well
 --- Road
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 --- Perennial Stream/River
 --- Intermittent

Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 37 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



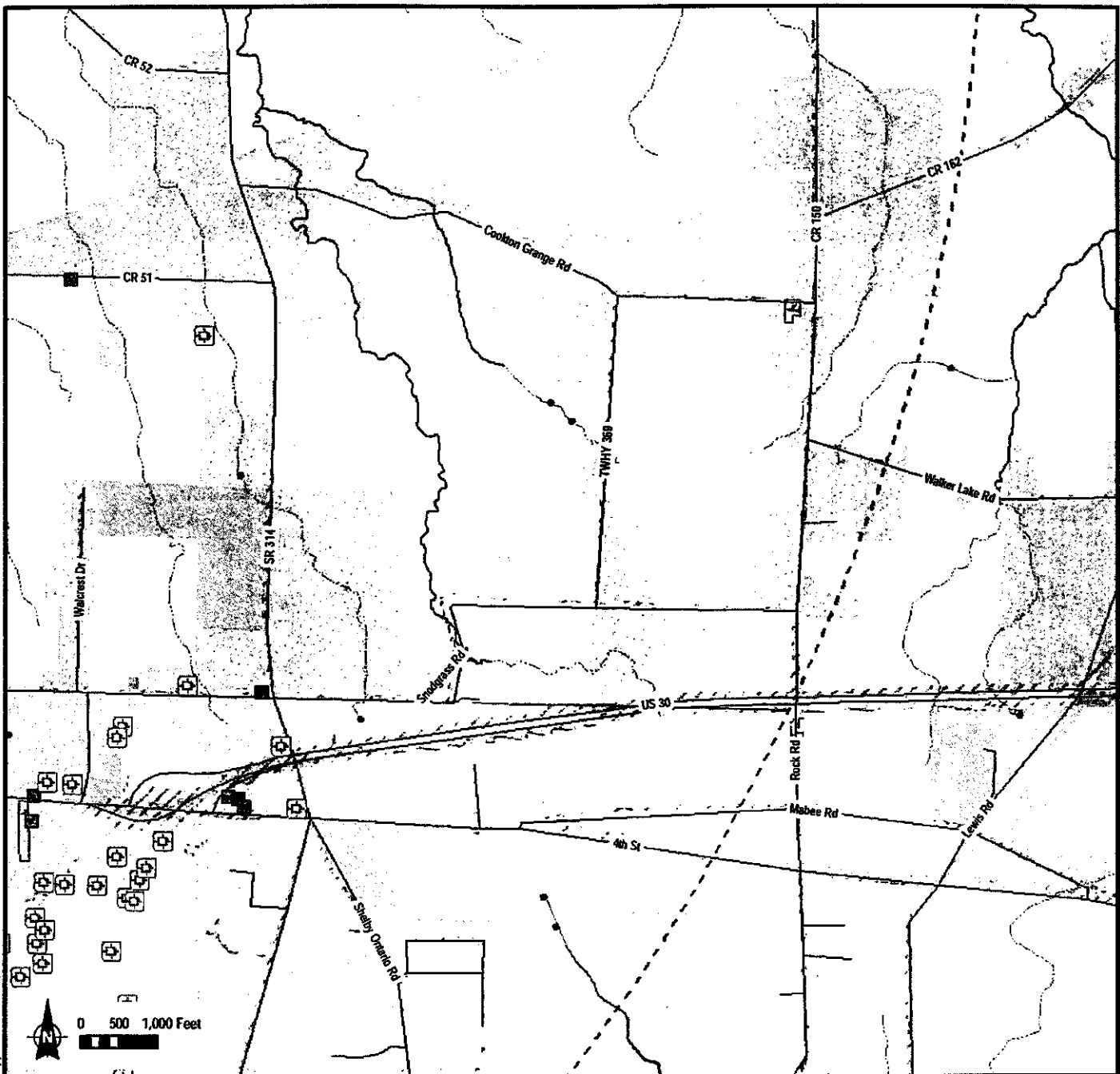
- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
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Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 38 of 45

Source: ESRI 2010; USGS NCLD 2001;
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 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
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Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Unknown	Developed, High Intensity	Grassland/Herbaceous	
Industrial		Developed, Medium Intensity	Mixed Forest	

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)

Vestas V100

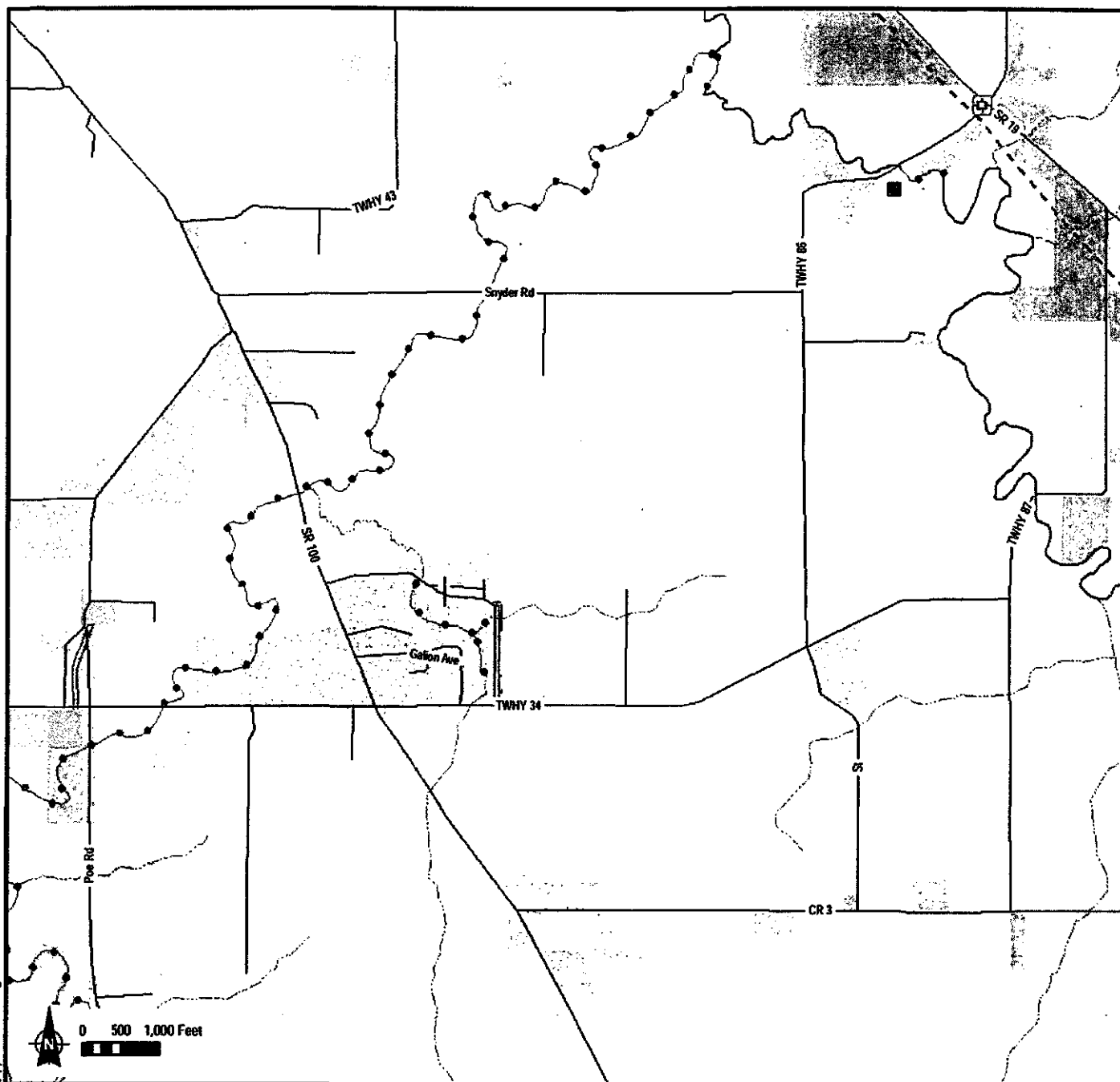
- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- O&M Building (01-13-11)
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- Five Mile Buffer

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- Gas/Oil Well
- Road
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 39 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



Parcel Land Use	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
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Residential	Deciduous Forest	Evergreen Forest	Woody Wetlands
Exempt	Developed, High Intensity	Grassland/Herbaceous	
Industrial	Developed, Medium Intensity	Mixed Forest	
Abatement			
Mineral Rights			
Public Utility			
Transportation			
Unknown			

Note: Parcel-based land use data was unavailable for Seneca & Huron Counties. USGS Land Cover data was substituted for these counties.

Turbines (01-14-11)	Archaeological Resources	Parks
Vestas V100	Determinations of Eligibility	Gas/Oil Well
● V100 w/ 80 m Hub (130m tip height)	● NRHP Listed Cultural Resources	— Road
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--- Access Roads (01-14-11)	■ Laydown Yard & Batch Plant (01-13-11)	— Perennial Stream/River
■ Substation (01-13-11)	■ Five Mile Buffer	--- Intermittent
■ O&M Building (01-13-11)		
■ Switchyard (01-13-11)		

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 40 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

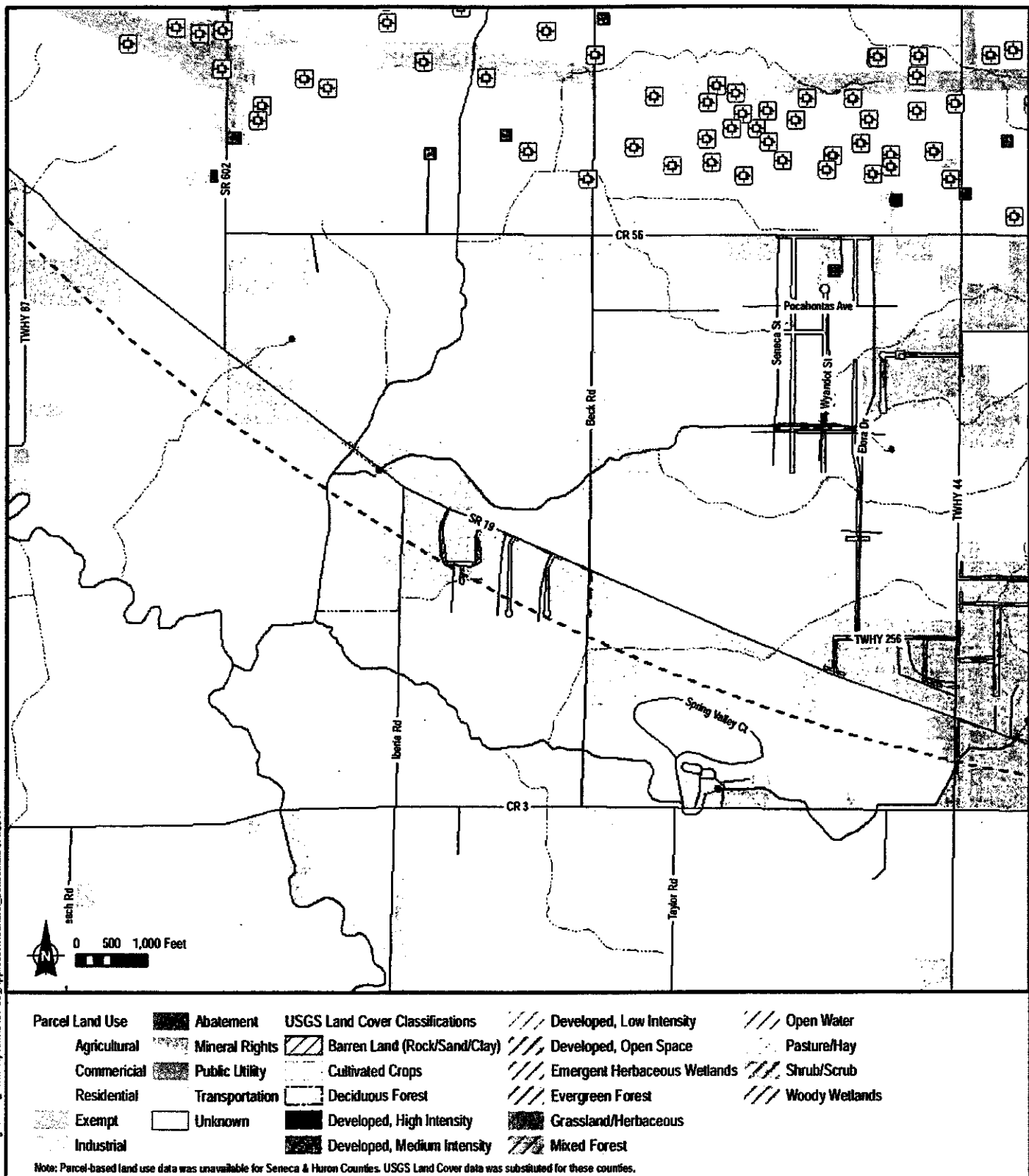


Figure 8-5
 Black Fork Wind Energy, LLC
 General Land Uses and Cultural Landmarks
 Crawford, Richland, Huron & Seneca Counties, Ohio
 Map 41 of 45

Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

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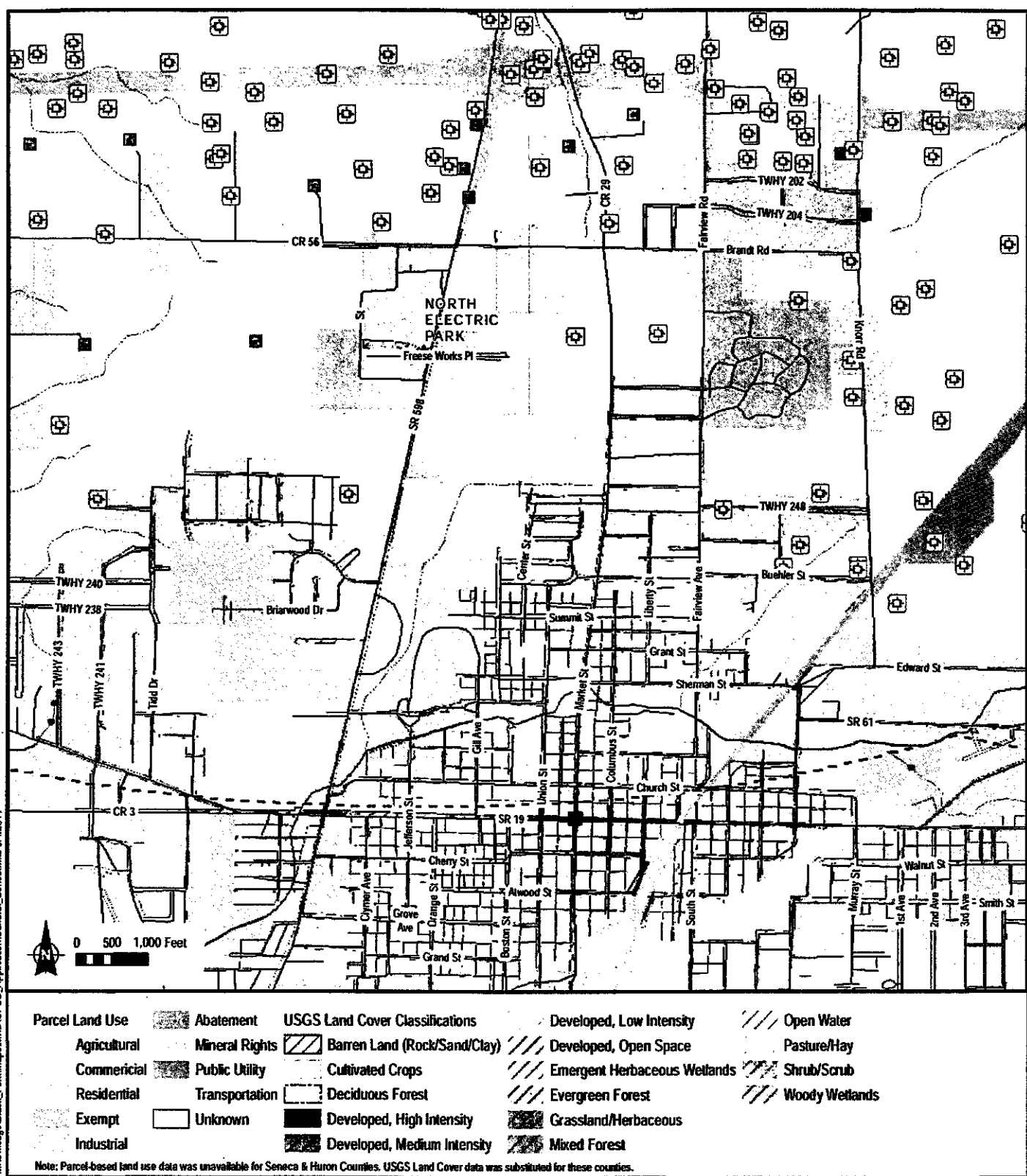








Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 42 of 45
 Source: ESRI 2010; USGS NCLD 2001;
 OHPO 2010; NRHP 2008; NHD 2008; OH DNR 2009
 CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

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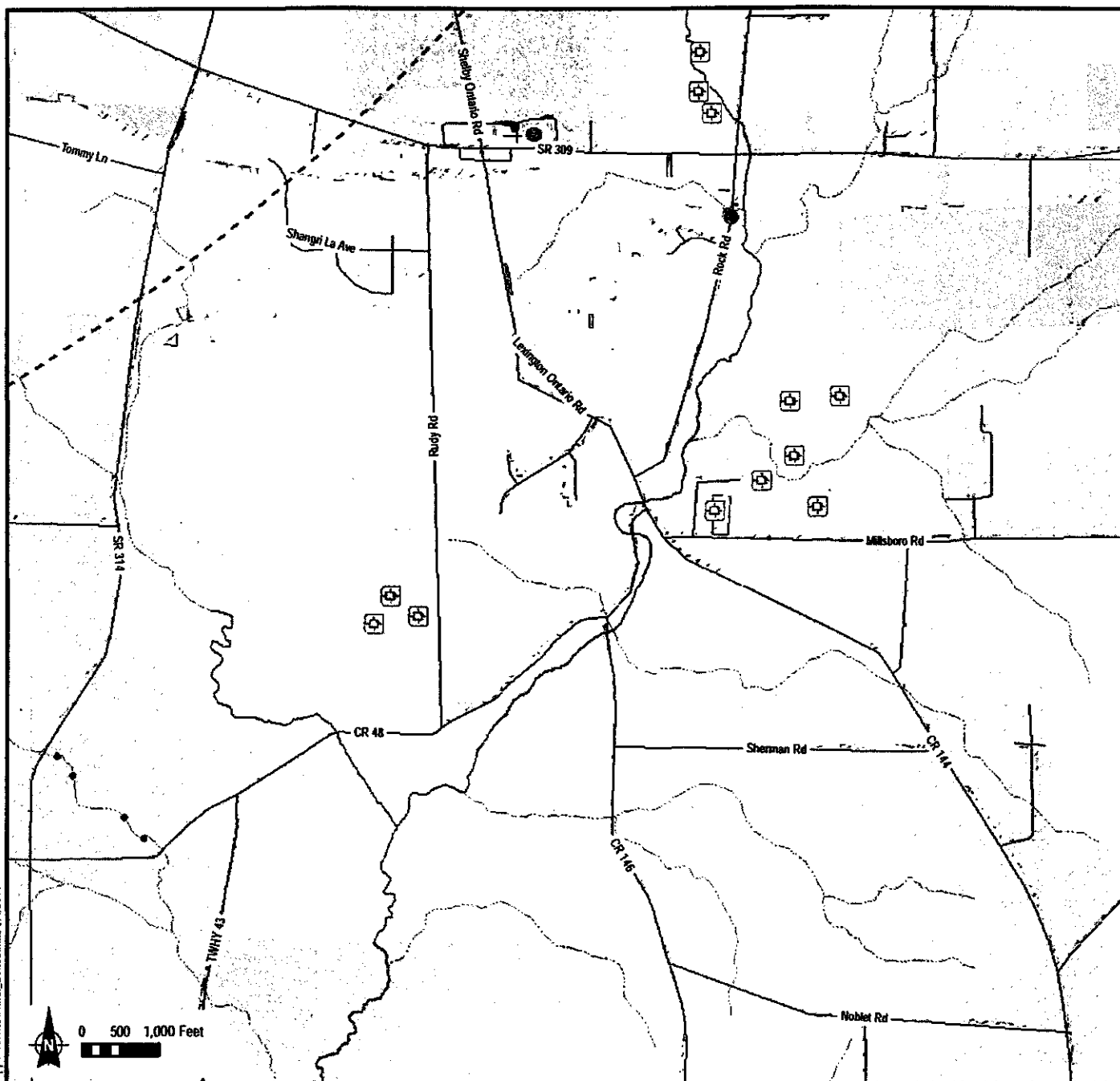
- Turbines (01-14-11)**
Vestas V100
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 ● V100 w/ 95 m Hub (145m tip height)
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 Project Area (01-03-11)
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 Five Mile Buffer

- ▲ Parks
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 — Road
 ●— Artificial Path
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 — Perennial Stream/River
 - - - Intermittent

Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 44 of 45

Source: ESRI 2010; USGS NCLD 2007;
OHPO 2010; NRHP 2009; NHD 2008; OH DNR 2009
CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.



Parcel Land Use	Abatement	USGS Land Cover Classifications	Developed, Low Intensity	Open Water
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Commercial	Public Utility	Cultivated Crops	Emergent Herbaceous Wetlands	Shrub/Scrub
Residential	Transportation	Deciduous Forest	Evergreen Forest	Woody Wetlands
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Turbines (01-14-11)

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Figure 8-5
Black Fork Wind Energy, LLC
General Land Uses and Cultural Landmarks
Crawford, Richland, Huron & Seneca Counties, Ohio
Map 45 of 45

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CRAWFORD, RICHLAND COUNTY AUDITOR 2009; EP 2011.

JUNE 3, 2011

SUBMITTAL

VORYS

Vorys, Sater, Seymour and Pease LLP
Legal Counsel

52 East Gay St.
PO Box 1008
Columbus, Ohio 43216-1008

614.464.6400 | www.vorys.com

Founded 1909

Michael J. Settineri
Direct Dial (614) 464-5462
Direct Fax (614) 719-5146
Email mjsettineri@vorys.com

June 3, 2011

VIA HAND DELIVERY

Jon Pawley
Power Siting Board
Staff, 6th Floor
180 E. Broad Street
Columbus, OH 43215

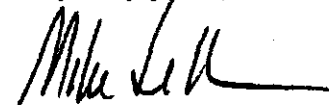
Re: Case No. 10-2865-EL-BGN
Black Fork Wind Energy Project

Dear Mr. Pawley:

Please find enclosed Black Fork Wind Energy, LLC's Second Set of Responses to Staff's May 24, 2011 Second Set of Data Requests. In accordance with prior submittals to you, I am enclosing 26 copies of this submittal for inclusion into the Completeness Review Submittal notebooks.

Please call me or Scott Hawken, the Black Fork Wind Energy Project manager, if you have any questions or require additional information.

Very truly yours,



Michael J. Settineri

MJS/drd

Enclosures

cc: John Jones (w/o encl.)
Scott Hawken (w/o encl.)

1. On page 24 of the Application, the geologic reference is generalized and somewhat outdated. It does not have documentation (geologic maps, cross-sections, etc.) to support the bedrock and glacial geology in the project area. The Division of Geological Survey has much more recent and detailed information available both on-line and on file at the Division's central office.

The Site Geology discussion in Section 4906-17-05(A)(4)(a) has been updated, a copy of which is attached, to provide a more detailed discussion of the geology of the Project area. Additionally, Figure 5-6a is provided which depicts the surficial geology of the Project area and Figure 5-9 has been updated to reflect more detailed information pertaining to the different bedrock aquifers that are present in the area (Figures 5-9a – 5-9d).

2. The maps found in Figure 5-3 are labeled as "Project Area Geology and Topography"; however, these maps contain no geology.

Figure 5-3 has been renamed "Project Area Land Use and Topography" to more accurately reflect the content of the map. The updated Figure 5-3 is attached.

3. The map in Figure 5-6, "Surficial Geology", shows only drift thickness and does not show surficial thickness. There is available surficial geology mapping for the Black Fork project area.

To supplement the drift thickness data for the Project area, Figure 5-6a is provided and depicts the surficial geology in the Project area.

4. The bedrock and aquifer maps (Figure 5-8 and 5-9) are incorrectly attributed to the United States Geological Survey (USGS) and not to the ODNR, Division of Water.

The source information for Figures 5-8 and 5-9 has been updated to reflect the correct data source as the ODNR Division of Geological Survey. The updated Figures 5-8 and 5-9 are attached.

5. The legend is incorrect for the map (all of the aquifer names are from a different area of the State and not from the project area) found in Figure 5-8.

The legend in Figure 5-8 has been updated to reflect the correct aquifer names for the Project area. The Aquifer discussion in Section 4906-17-05(A)(5)(c) has been updated, a copy of which is attached, to reflect the changes made to Figure 5-8.

4906-17-05(A)(4)

(4) Geology and Seismology

Figure 5-5 provides a map of the bedrock geology in the Project area. Figure 5-6 provides a map of the thicknesses of glacial till, in the Project area and Figure 5-6a provides a map of the surficial geology in the Project area. The location of proposed test borings is not shown on this map and the Applicant has requested a waiver to allow for the delayed submittal of this information.

(a) Site Geology

This bedrock geology of Crawford County and Richland County consists of Mississippian and Devonian aged bedrock. The Mississippian (about 322 to 359 million years ago) consists of sedimentary rocks: sandstone, shale, siltstone, conglomerate and minor limestone. The Devonian (about 359 to 385 million years ago) consists of sedimentary rocks: mainly shale and siltstone with some sandstone (ODNR 2006a).

This bedrock underlies the unconsolidated deposits in the Generation Facility area. Most of the Generation Facility area is underlain by Sunbury Shale, with older Bedford Shale and Berea Sandstone to the northwest and southwest, and younger Logan and Cuyahoga Formations (shale and sandstone sequences, occasional conglomerates) to the northeast (Coogan 1996). The bedrock geology of the Project area is depicted in Figure 5-5.

Figure 5-6a provides a map of the surficial geology in the Project area which consists of Wisconsin-aged glacial deposits including: clayey till (ground moraine and end moraine); lacustrine clay (deposited in calm water of glacial lakes, mostly laminated, covered in places with thin organic deposits); outwash (undifferentiated, deposited by meltwater in front of glacial ice); and peat (0.4 meters or more thick with minor amounts of sand, silt, or clay; also contains organic or marl in some areas). Glacial drift thicknesses in the area range from 51 to 80 feet (ODNR 2003). The variability in the depth to bedrock reported in area well logs likely reflects the presence of preglacial bedrock river valleys. The Project area lies along the east flank of the Cincinnati arch, resulting in bedrock dips to the east-southeast (Coogan 1996).

Karst topography is created from the dissolution of soluble rocks, principally limestone and dolomite. Generally, karst forms by the movement of water through rocks containing 50 percent or more carbonate minerals. Karst is characterized by closed depressions, termed sinkholes, and by caves, cave systems, and underground drainage. There are no probable karst areas within the Project area (ODNR 2011d).

Seismic hazards in the Generation Facility area are relatively low. The estimated peak ground acceleration (%g) with a 2% probability of exceedance in 50 years for this area is approximately 6%g (USGS 2008). There are no major deep structural features within the Generation Facility area; however, the nearest earthquake to the Generation Facility area was approximately 1 mile south of the southeast corner of the Generation Facility area in 1995 (magnitude 3.3). Other recent earthquakes nearby include two approximately 11 miles northeast of Shelby in 1998 (magnitude 3.2) and in 2001 (magnitude 2.7). These earthquake magnitudes result in some disturbance of dishes, windows, and doors; they are felt indoors by many people, but outdoors by few people (ODNR 2011e).

Based on the desktop assessment of the Project area geology, no geologic constructability issues were identified. The test borings that are planned for the site will be used to further determine the suitability of the Project area for construction and will also be used to assess the need to remedy any geological inadequacies.

Ohio Department of Natural Resources (ODNR). 2003. Shaded Drift-Thickness Map of Ohio. Division of Geological Survey.

_____. 2006a. Bedrock Geologic Map of Ohio. Division of Geologic Survey.

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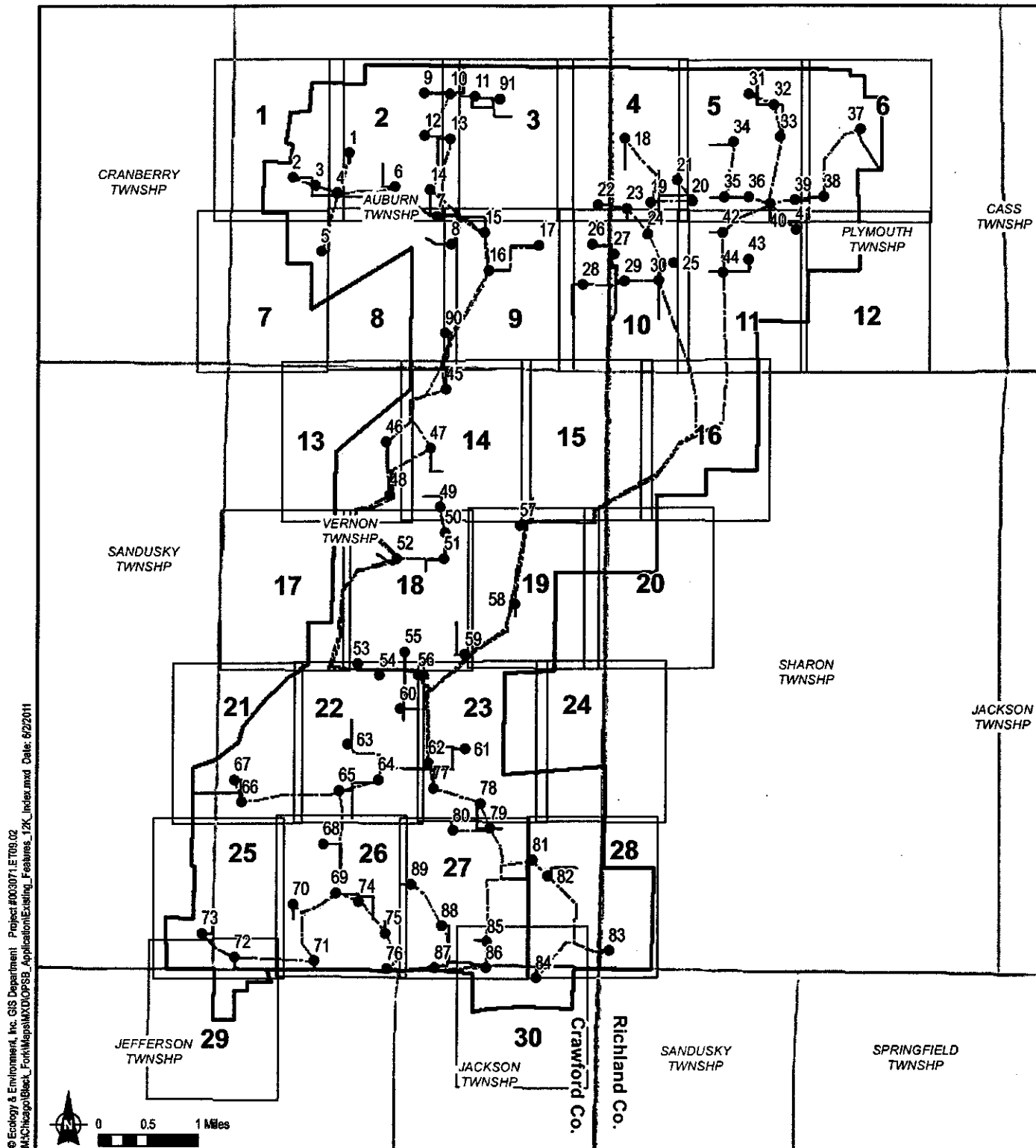
(c) Aquifers

Figures 5-8 and 5-9 (a through d) provide maps of the aquifers in the Project area. As described previously, the construction or operation of the Project will have no affect on the recharge or natural discharge of any shallow groundwater aquifers located in the Project area. The majority of residences in the Project area use groundwater wells as their primary source of potable water. Groundwater yields within the Project area are typically low. Groundwater is obtained from both unconsolidated and bedrock deposits. Within the Project area, unconsolidated aquifer deposits include: Galion End Moraine Aquifer, Galion Ground Moraine Aquifer, and Sandusky River Alluvial Aquifer. These aquifers are 25 to 100 feet in thickness and yields 5 to 25 gpm. These aquifers are presented on Figure 5-8.

Within the Project area, Mississippian age bedrock aquifers include: The Berea Sandstone Aquifer, Bedford Shale Aquifer, Cuyahoga Group Aquifer, and the Sunbury Shale Aquifer. The Berea Sandstone Aquifer (see Figure 5-9a) underlies most of the Project area, is less than 100 feet in thickness, and yields 5 to 25 gpm. The Bedford Shale Aquifer (Figure 5-9b) is located in the northwest corner of the Project area and is greater than 100 feet in thickness and yields 0 to 5 gpm, while in the southwest corner of the Project area it is less than 100 feet in thickness and yields 0 to 5 gpm. The Cuyahoga Group Aquifer (Figure 5-9c) is located in the northeast corner of the Project area, is less than 100 feet in thickness and yields 5 to 25 gpm. The Sunbury Shale Aquifer (Figure 5-9d) is located in the northwest corner and southwest corner of the Project area, is less than 100 feet in thickness and yields 0 to 5 gpm.

Dry wells are not uncommon, and oil is sometimes reported in bedrock wells in Plymouth Township in Richland County (ODNR 2011f). The City of Shelby, the nearest major population center to the Project area, uses surface water for its public water supply, but has two municipal wells as a backup water supply (City of Shelby 2011a).

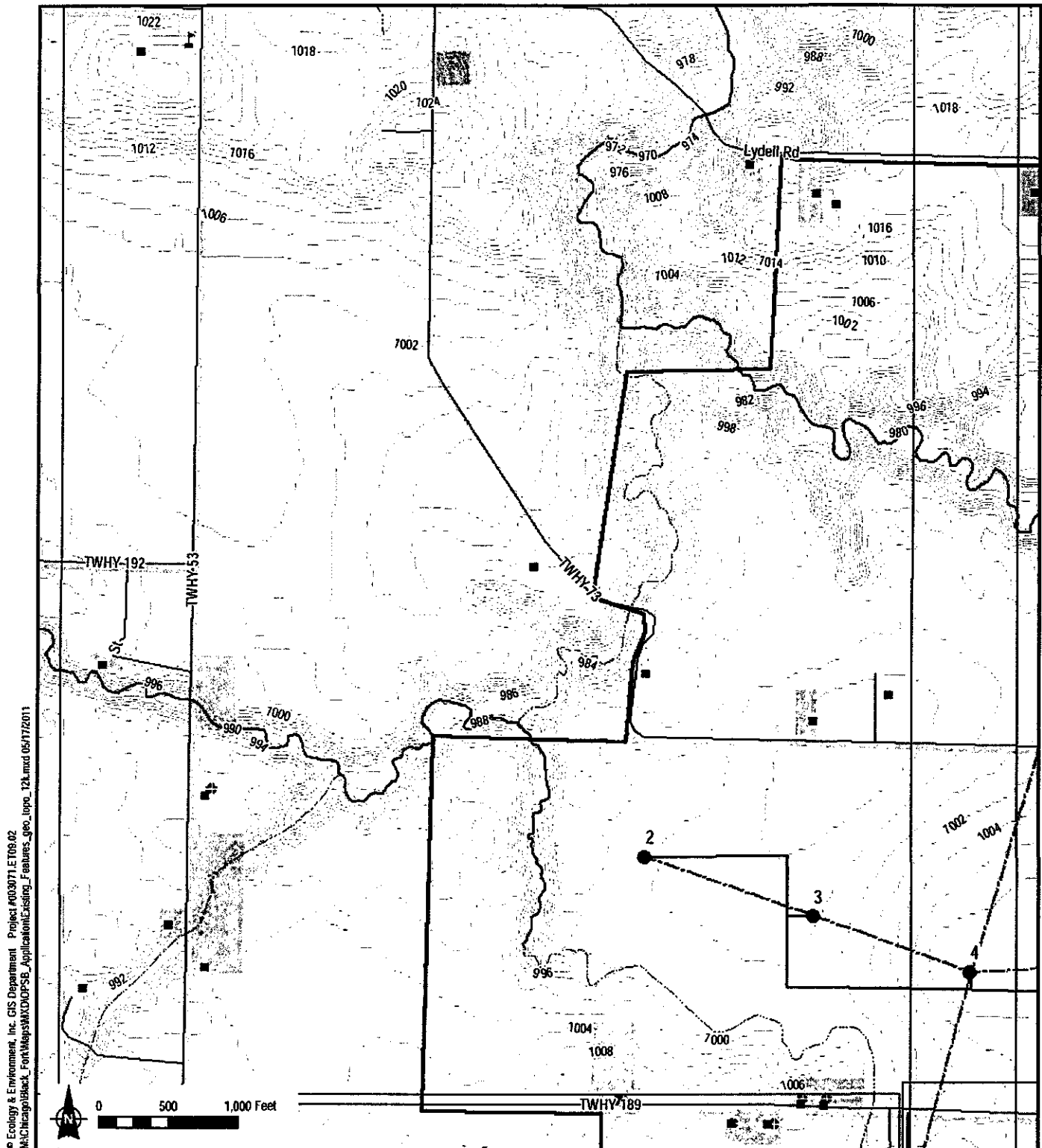
Black Fork Wind Energy, LLC Project Area Land Use and Topography Index Map



- Turbines (01-14-11)
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- ▭ Project Area (04-27-11)
- Substation (01-13-11)
- ▭ Township boundary
- ▭ County boundary

Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
Index Map 1:12,000 Scale
Crawford and Richland Counties, OH

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Project Area (04-27-11)**
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 ■ Schools
 ■ Church
 ■ Hospital
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 ■ Water Well
 ● Gas/Oil Well

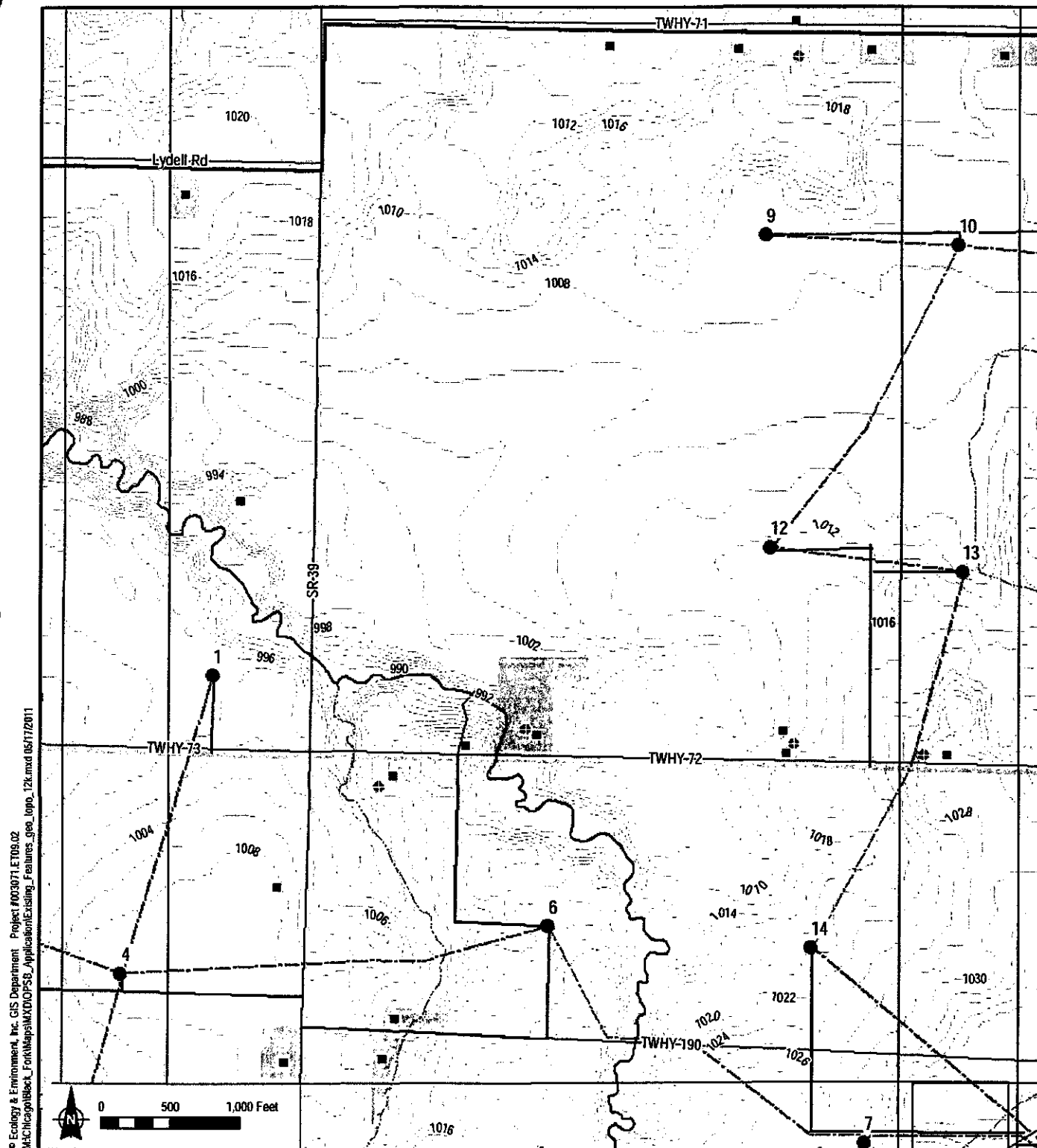
- Road**
 --- Contours (2-11)
 --- Artificial Path
 --- Canal/Ditch
 --- Perennial Stream/River
 --- Intermittent

- Parcel Land Use Data**
 Agricultural
 Commercial
 Residential
 Exempt
 Industrial
 Abatement
 Mineral Rights
 Public Utility
 Transportation
 Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 1 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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 - Gas/Oil Well

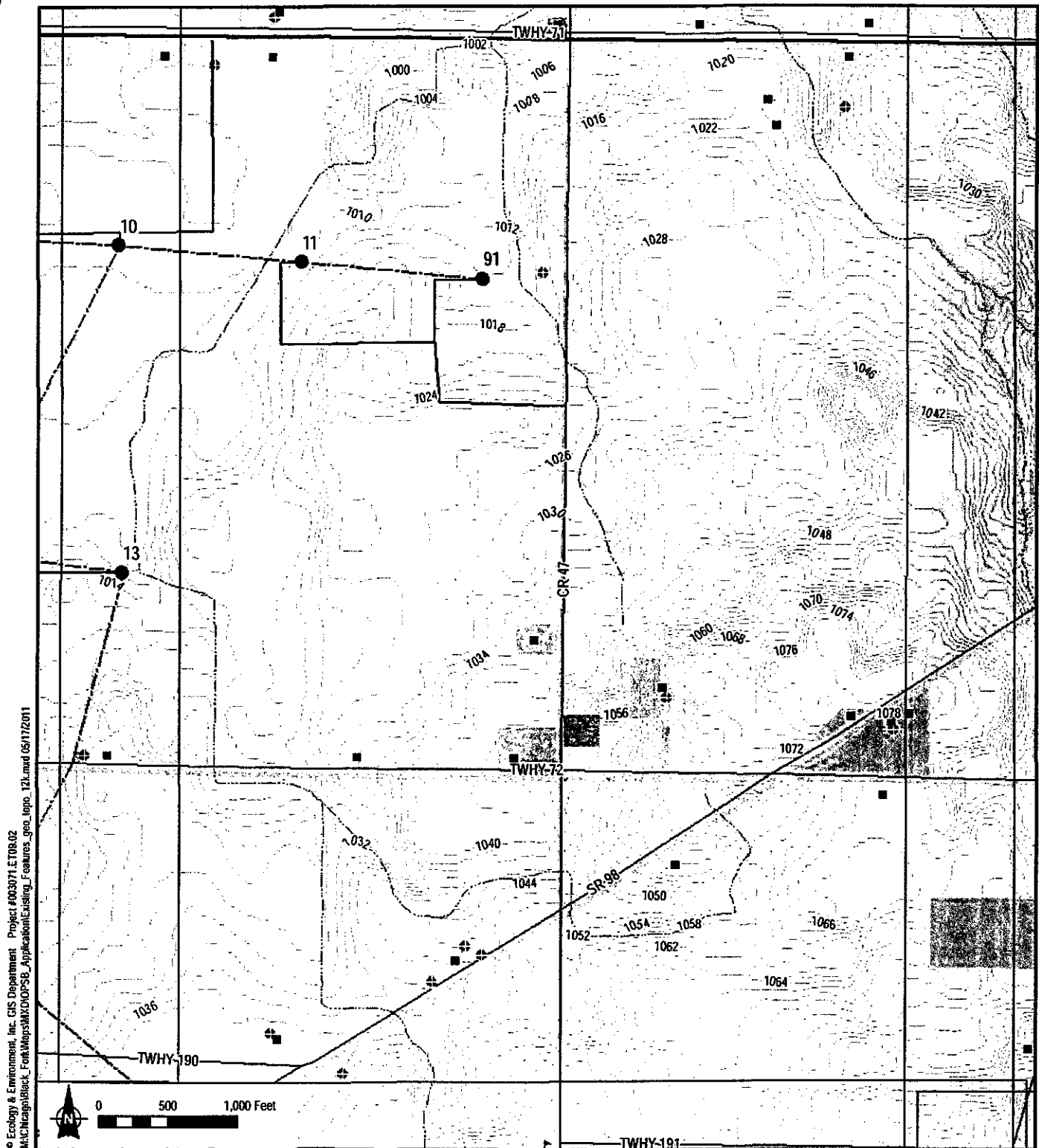
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 - Public Utility
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Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
Crawford and Richland Counties, Ohio
Map 2 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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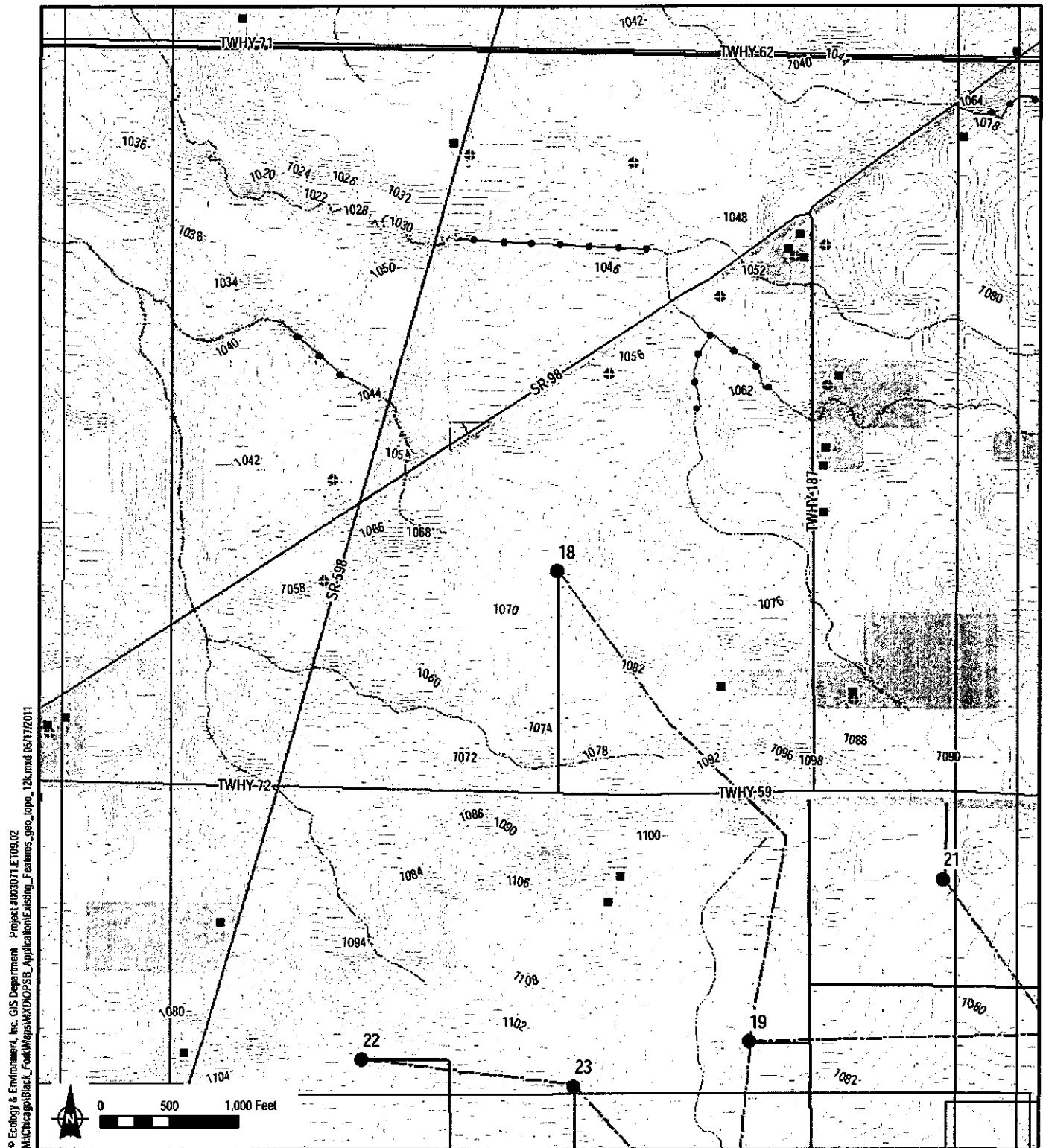
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| Industrial | Abatement |
| Mineral Rights | Public Utility |
| Transportation | Unknown |

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 3 of 30

Source: ESRI 2010; NHD, 2006
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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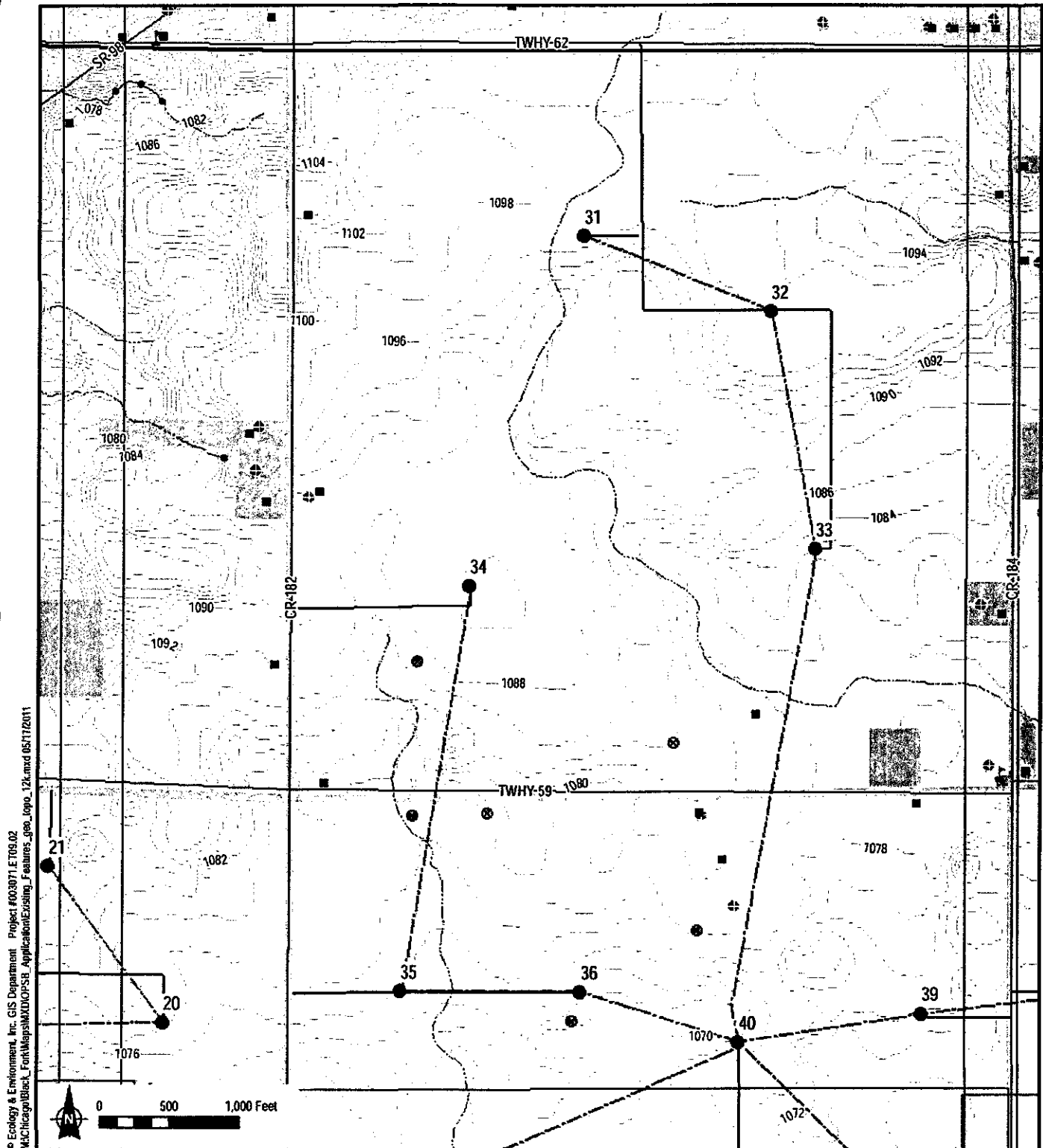
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 Public Utility
 Transportation
 Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 4 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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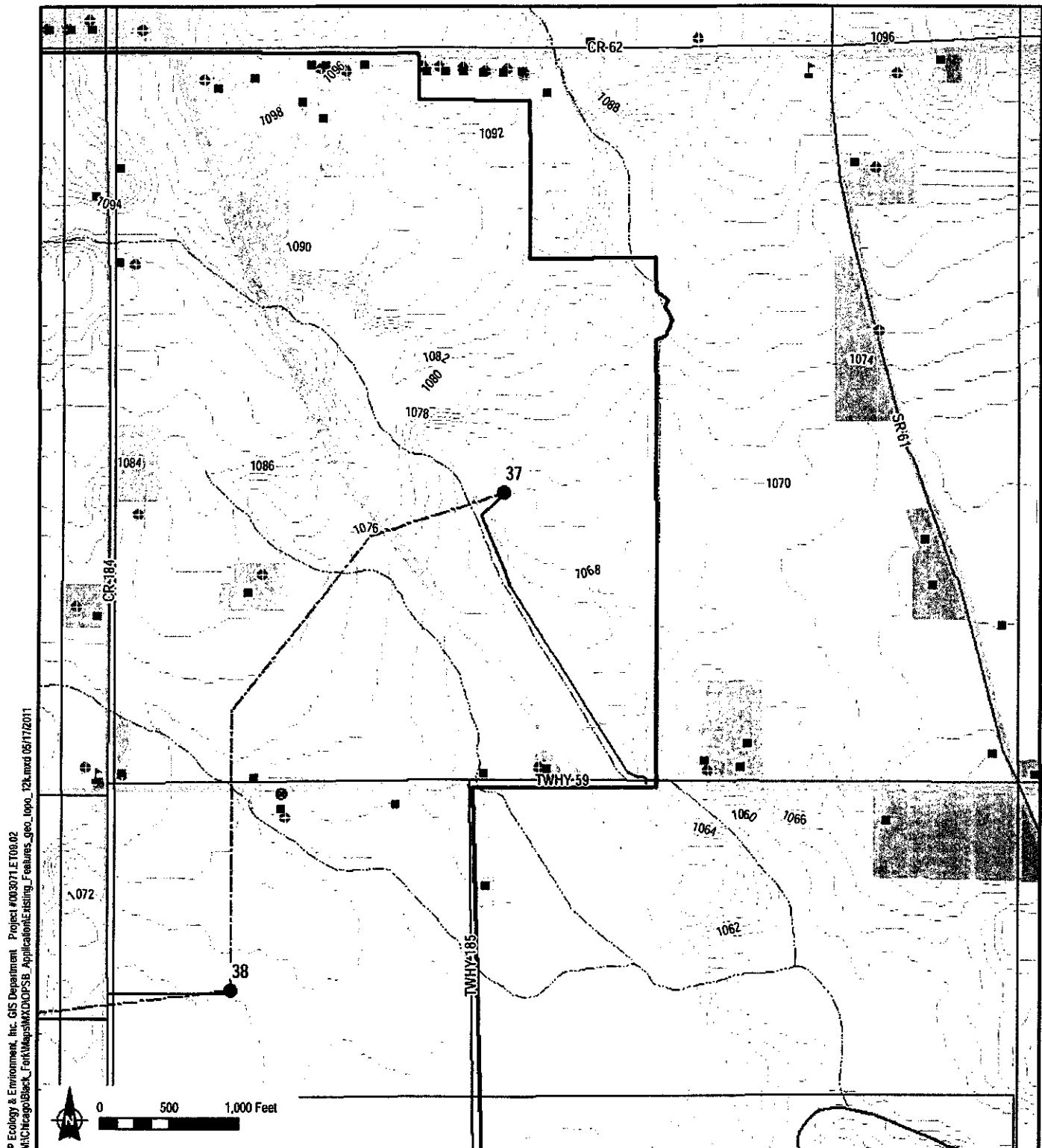
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Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 5 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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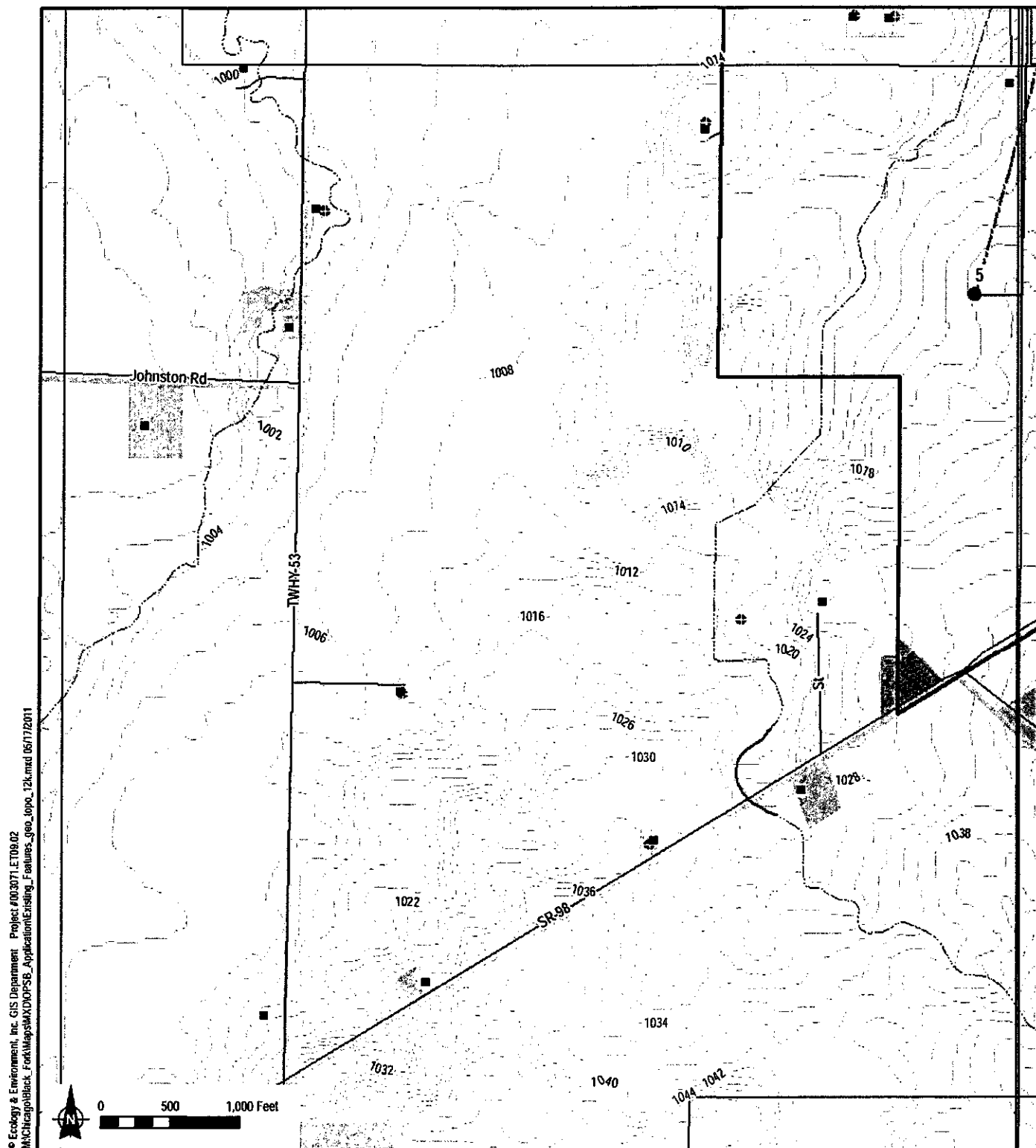
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 Public Utility
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Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 6 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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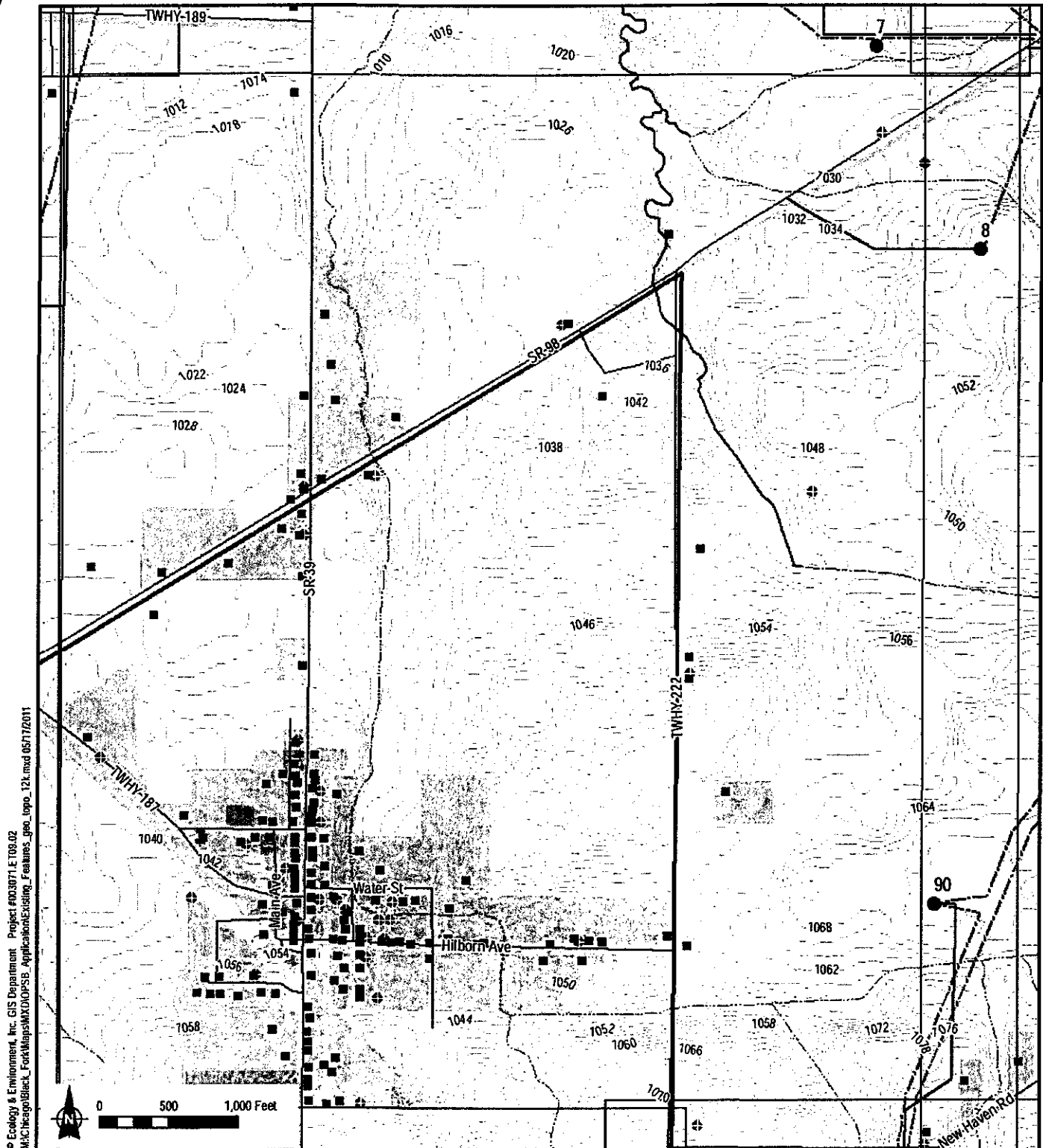
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Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
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Map 7 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
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Black Fork Wind Energy, LLC Project Area Land Use and Topography



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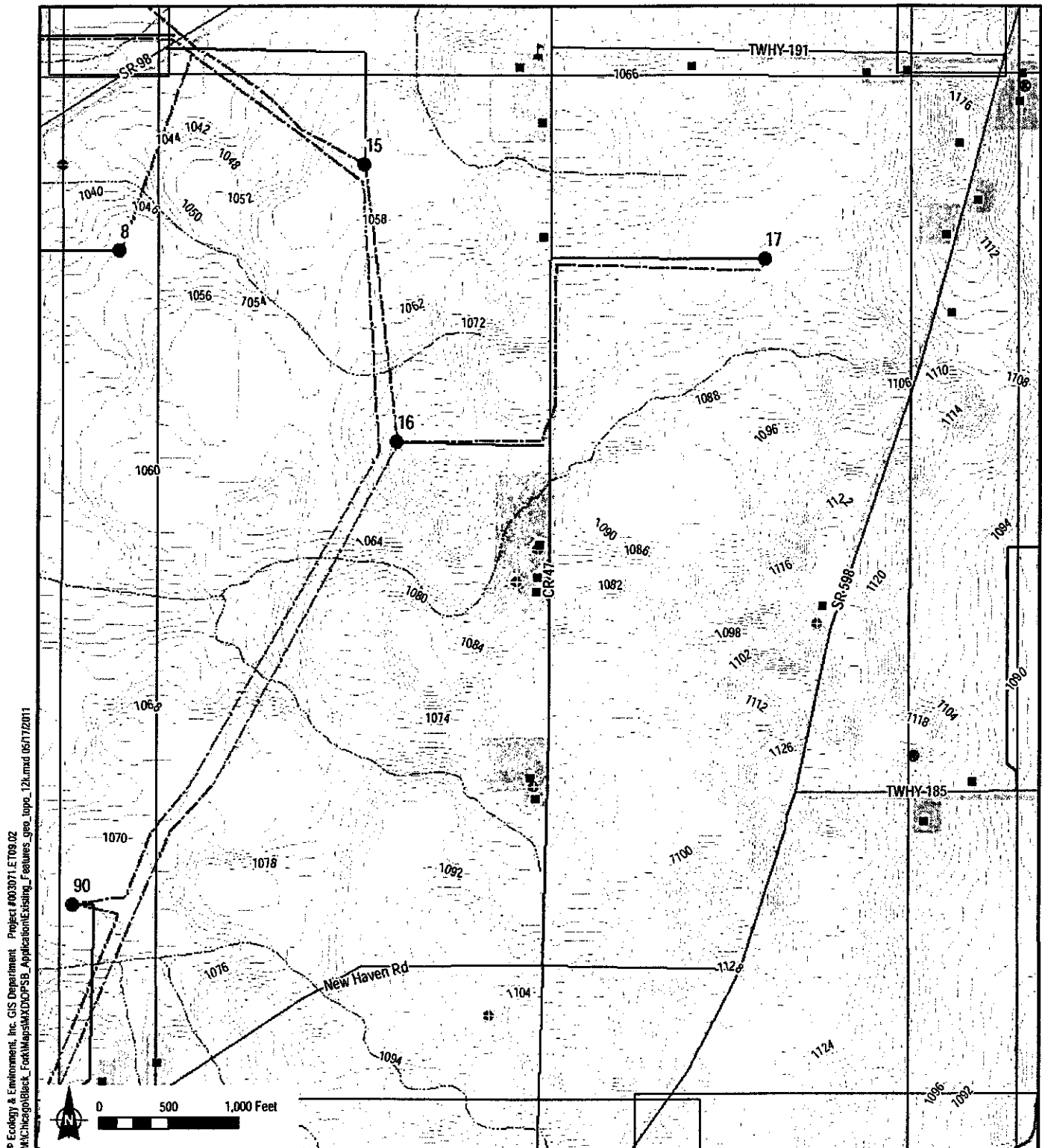
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Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
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Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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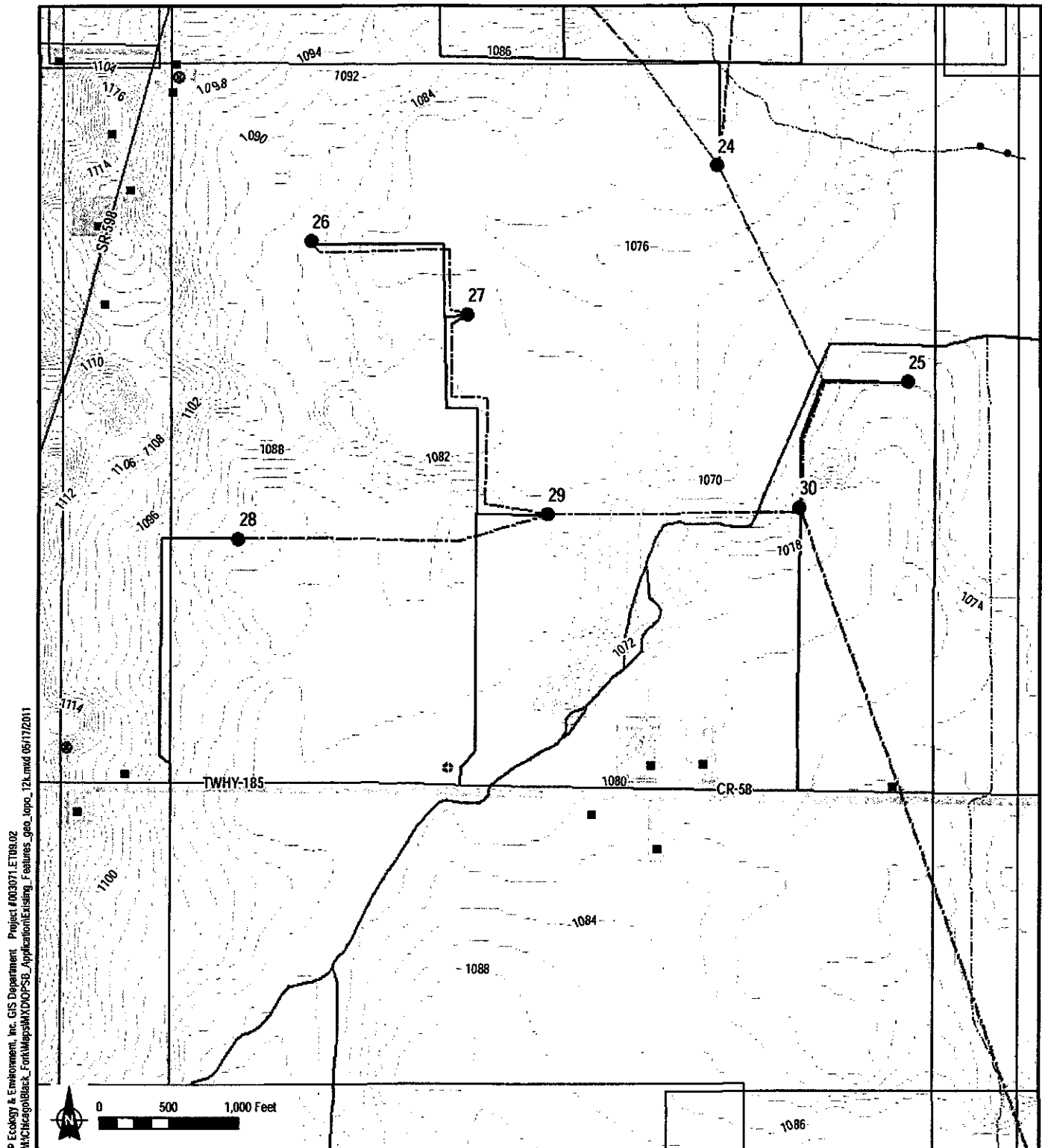
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Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
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Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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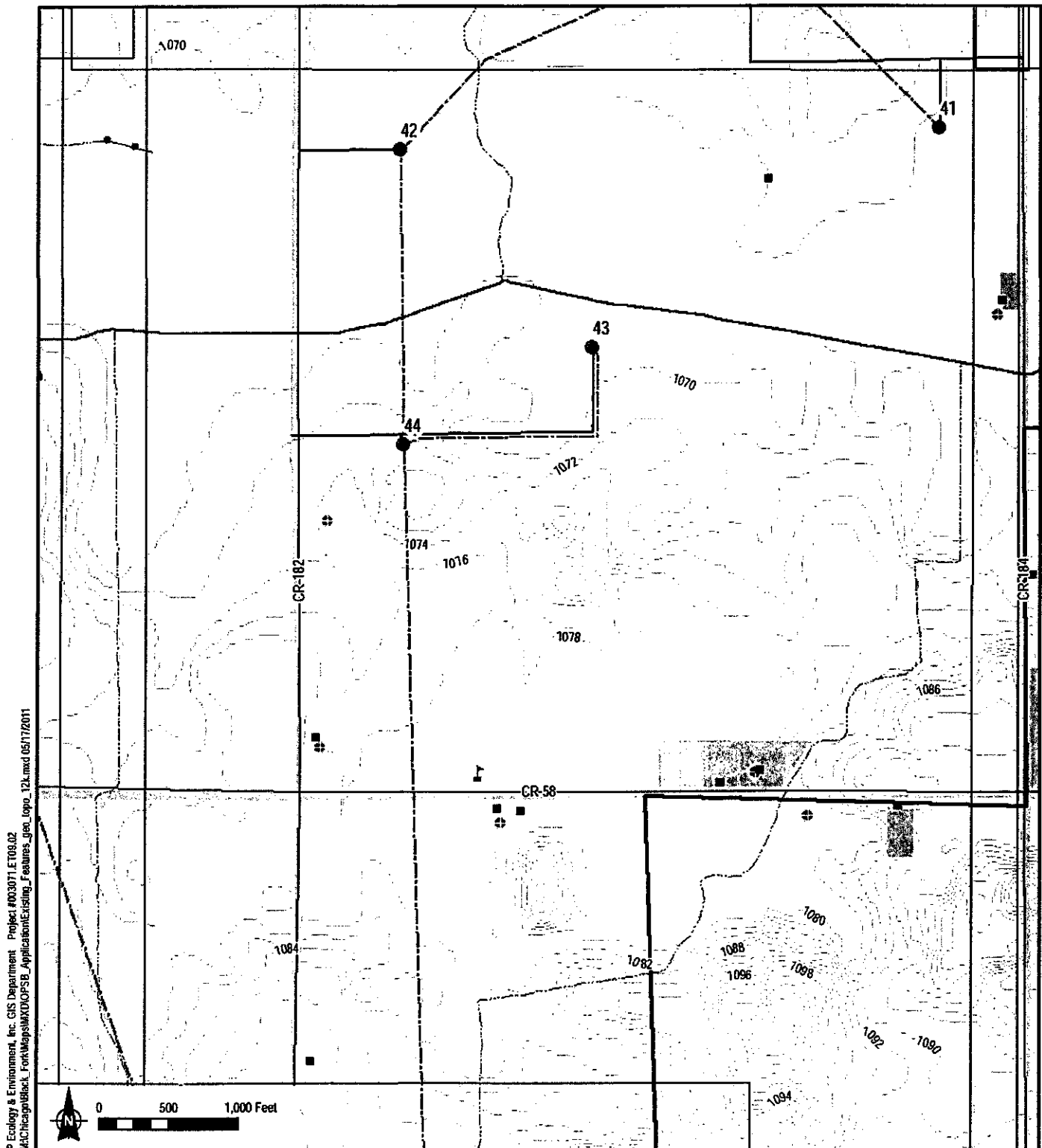
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Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 10 of 30

Source: ESRI 2010; NHD, 2008
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Black Fork Wind Energy, LLC Project Area Land Use and Topography



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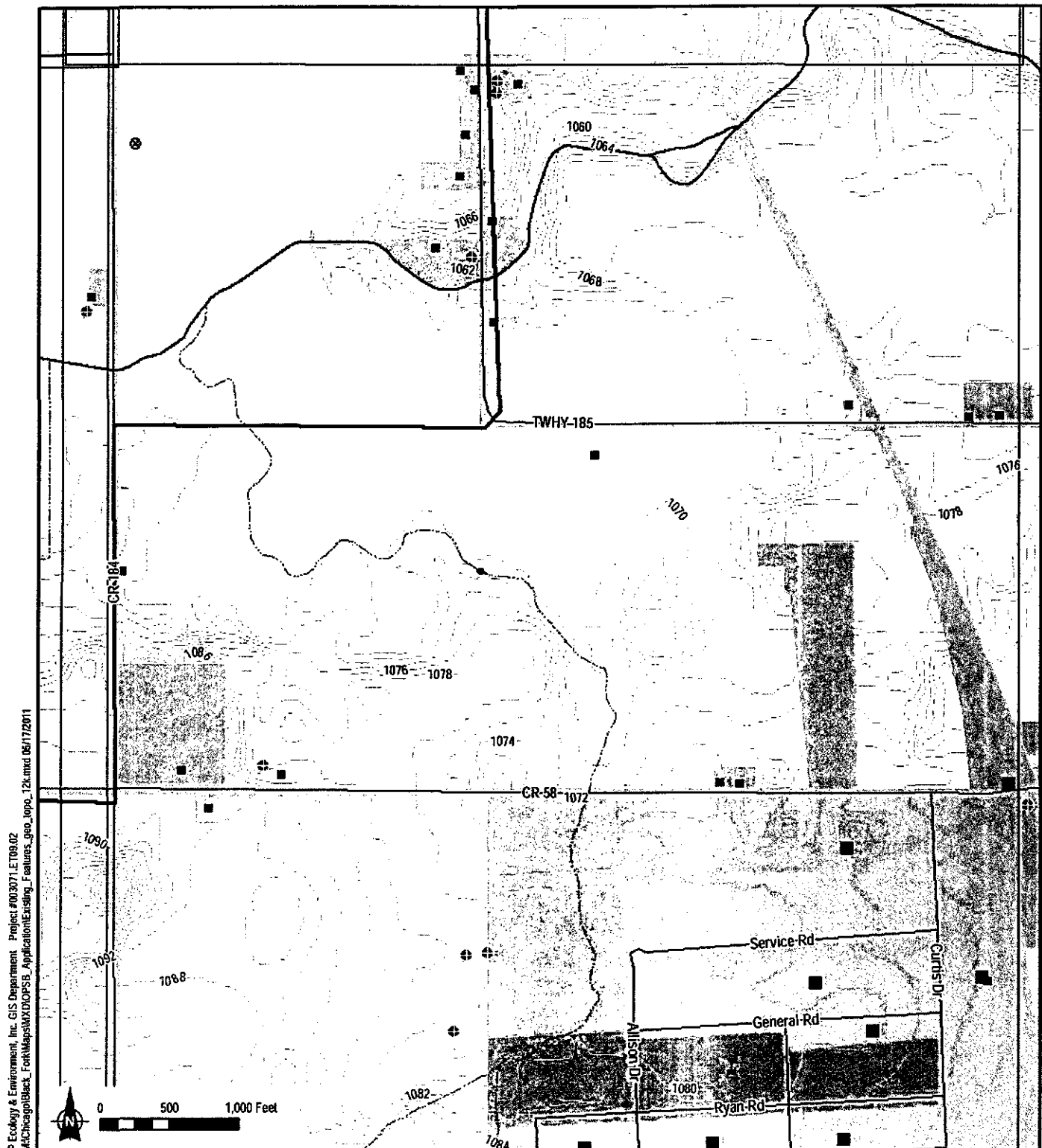
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Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
Crawford and Richland Counties, Ohio
Map 11 of 30

Source: ESRI 2010; NHD, 2008
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Black Fork Wind Energy, LLC Project Area Land Use and Topography



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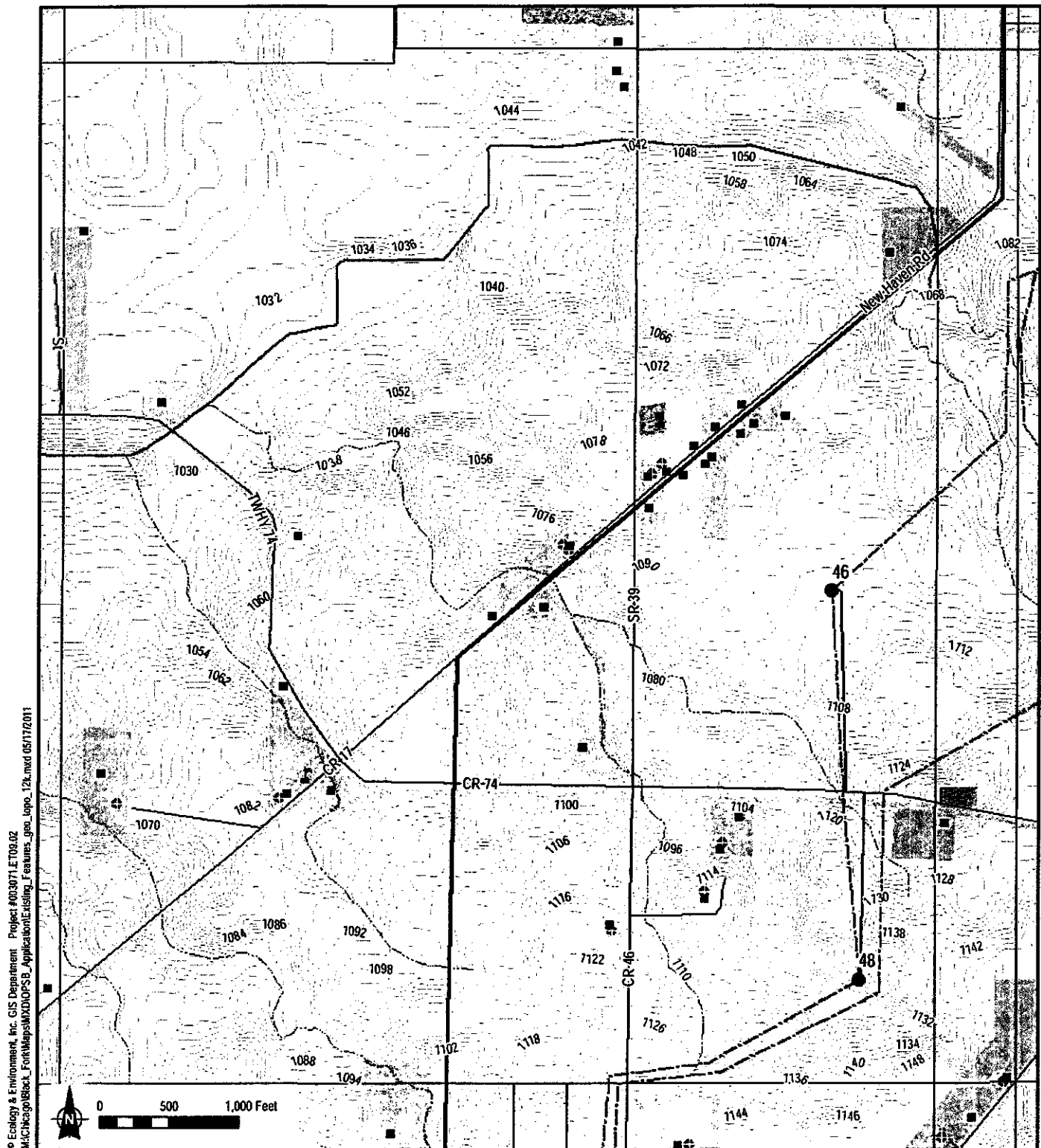
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 Transportation
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Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 12 of 30

Source: ESRI 2010; NHD, 2008
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Black Fork Wind Energy, LLC Project Area Land Use and Topography



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 - ▨ O&M Building (01-13-11)
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 - ▨ Laydown Yard & Batch Plant (01-13-11)

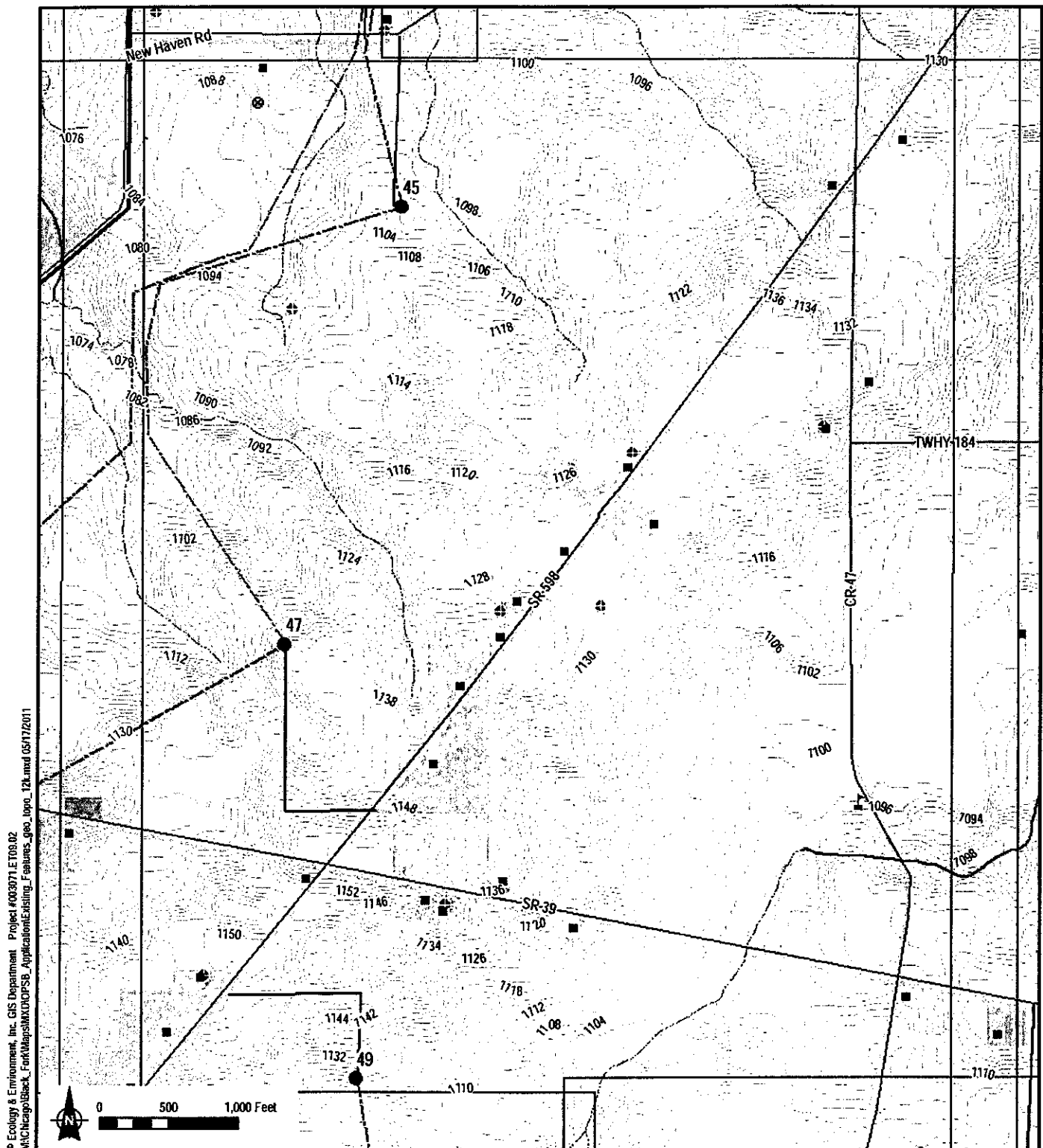
- Project Area (04-27-11)
- Residential Locations
- Schools
- Church
- Hospital
- Industrial Building
- Water Well
- Gas/Oil Well
- Road
- Contours (2-ft)
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

- Parcel Land Use Data**
- Agricultural
 - Commercial
 - Residential
 - Exempt
 - Industrial
 - Abatement
 - Mineral Rights
 - Public Utility
 - Transportation
 - Unknown

Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
Crawford and Richland Counties, Ohio
Map 13 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
 - Collection Line (01-14-11)
 - Access Roads (01-14-11)
 - Substation (01-13-11)
 - ▨ O&M Building (01-13-11)
 - ▨ Switchyard (01-13-11)
 - ▨ Laydown Yard & Batch Plant (01-13-11)

- Project Area (04-27-11)**
- Residential Locations
 - Schools
 - Church
 - Hospital
 - Industrial Building
 - Water Well
 - Gas/Oil Well

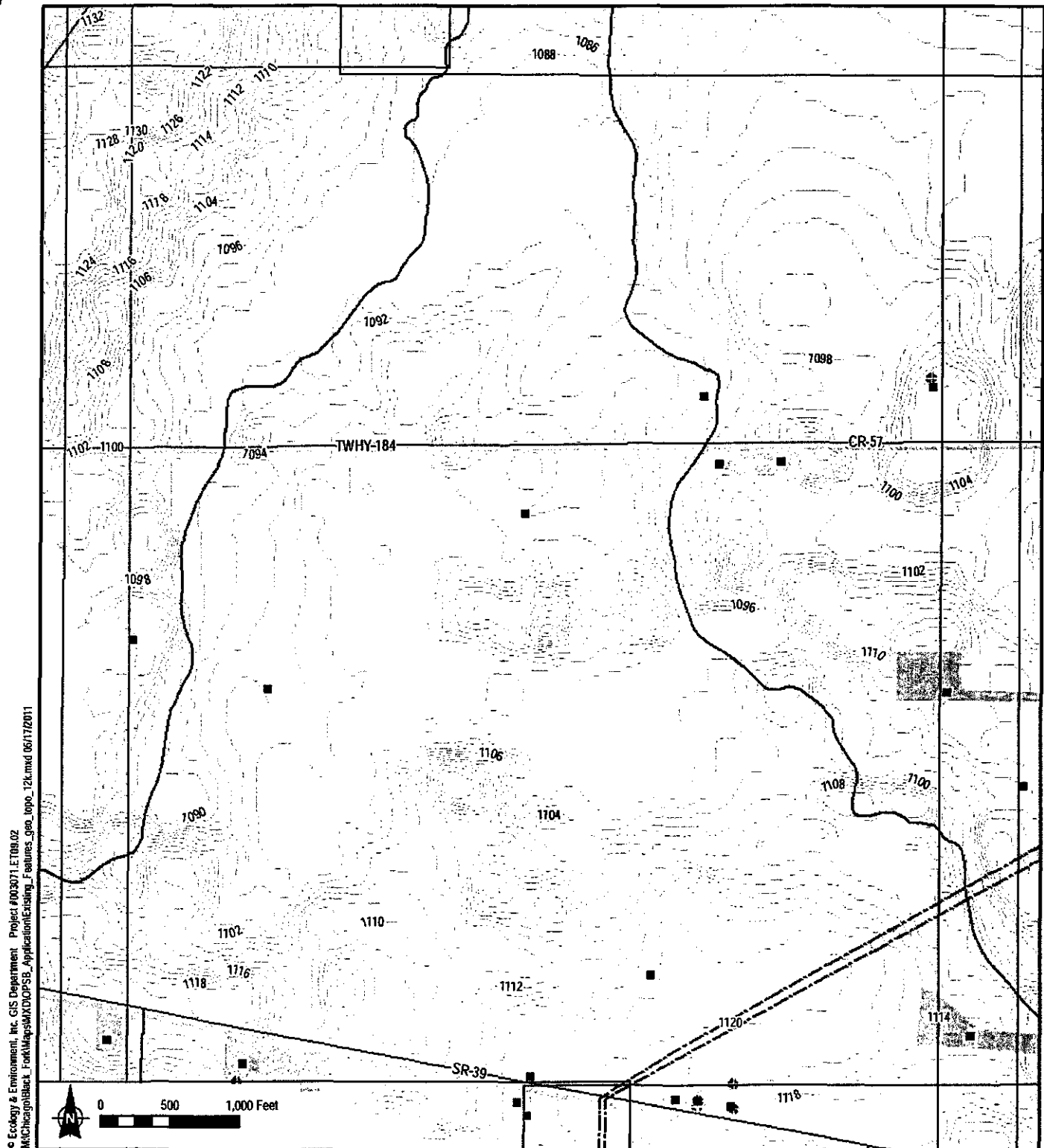
- Road
- Contours (2-ft)
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

- Parcel Land Use Data**
- Agricultural
 - Commercial
 - Residential
 - Exempt
 - Industrial
 - Abatement
 - Mineral Rights
 - Public Utility
 - Transportation
 - Unknown

Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
Crawford and Richland Counties, Ohio
Map 14 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



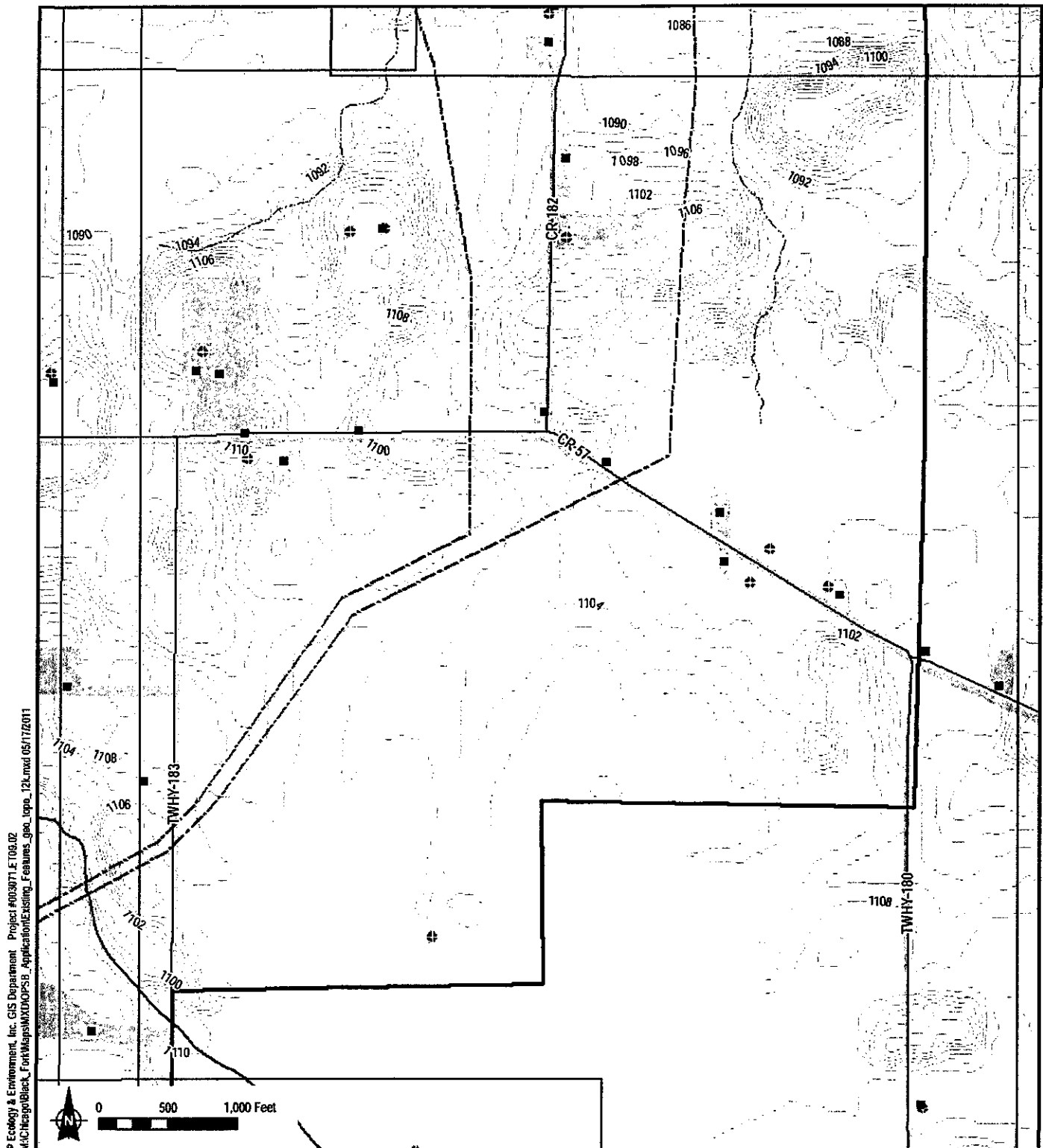
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- | | | | |
|--|---|--|--|
| Turbines (01-14-11)
Vestas V100
● V100 w/ 80 m Hub (130m tip height)
● V100 w/ 95 m Hub (145m tip height)
--- Collection Line (01-14-11)
--- Access Roads (01-14-11)
■ Substation (01-13-11)
▨ O&M Building (01-13-11)
▨ Switchyard (01-13-11)
▨ Laydown Yard & Batch Plant (01-13-11) | Project Area (04-27-11)
■ Residential Locations
■ Schools
■ Church
■ Hospital
■ Industrial Building
■ Water Well
● Gas/Oil Well | Road
--- Contours (2-ft)
--- Artificial Path
--- Canal/Ditch
--- Perennial Stream/River
--- Intermittent | Parcel Land Use Data
Agricultural
Commercial
Residential
Exempt
Industrial
Abatement
Mineral Rights
Public Utility
Transportation
Unknown |
|--|---|--|--|

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 15 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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Turbines (01-14-11)

- Vestas V100
- V100 w/ 80 m Hub (130m tip height)
- V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- ▨ O&M Building (01-13-11)
- ▨ Switchyard (01-13-11)
- ▨ Laydown Yard & Batch Plant (01-13-11)

Project Area (04-27-11)

- Residential Locations
- Schools
- Church
- Hospital
- Industrial Building
- Water Well
- Gas/Oil Well

- Road
- Contours (2-ft)
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

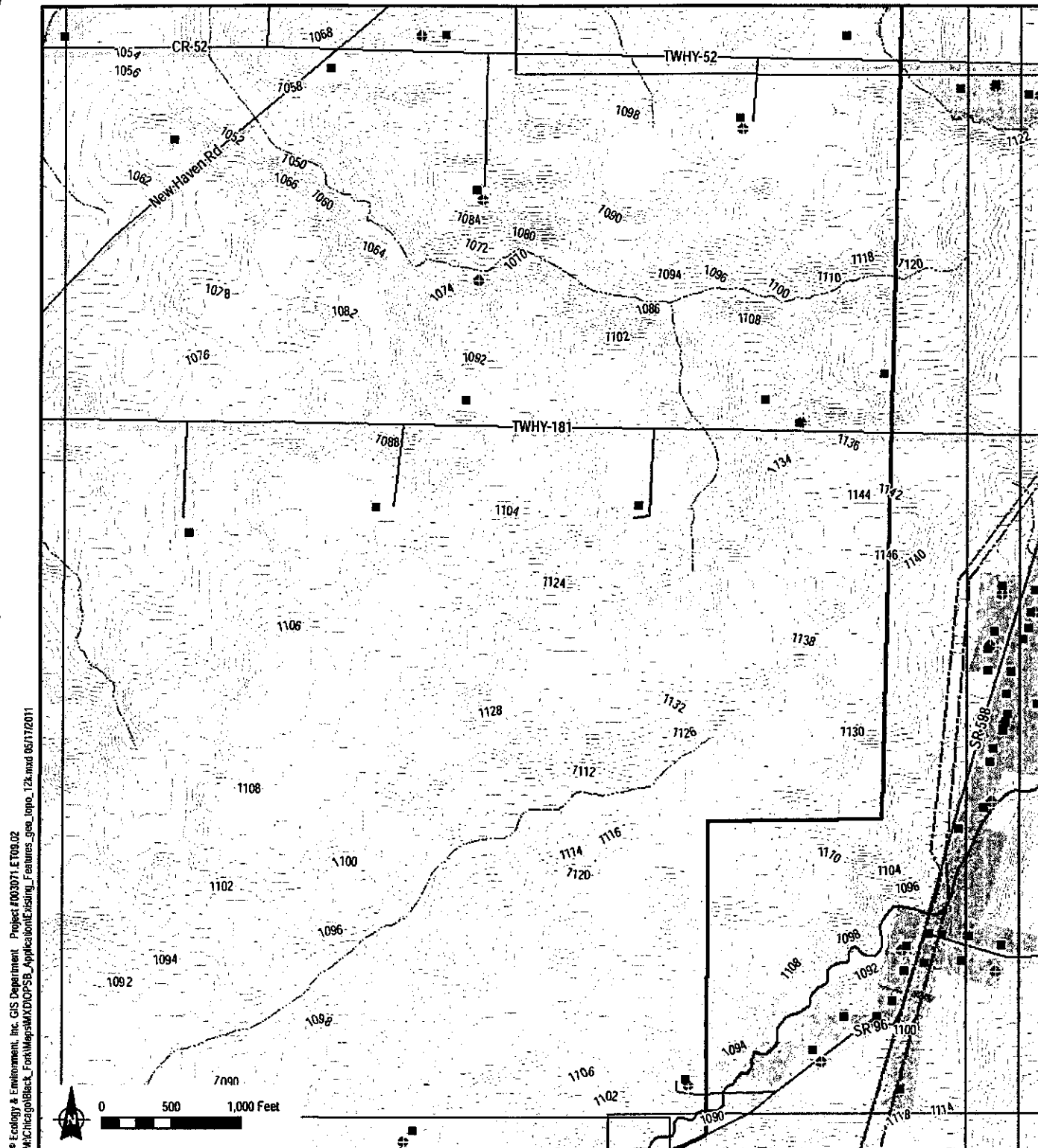
Parcel Land Use Data

- Agricultural
- Commercial
- Residential
- Exempt
- Industrial
- Abatement
- Mineral Rights
- Public Utility
- Transportation
- Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 16 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2008;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
 --- Access Roads (01-14-11)
 ■ Substation (01-13-11)
 ▨ O&M Building (01-13-11)
 ▨ Switchyard (01-13-11)
 ▨ Laydown Yard & Batch Plant (01-13-11)

- Project Area (04-27-11)**
 ■ Residential Locations
 ■ Schools
 ■ Church
 ■ Hospital
 ■ Industrial Building
 ■ Water Well
 ● Gas/Oil Well

- Road
 --- Contours (2-ft)
 --- Artificial Path
 --- Canal/Ditch
 --- Perennial Stream/River
 --- Intermittent

- Parcel Land Use Data**
 Agricultural
 Commercial
 Residential
 Exempt
 Industrial
 Abatement
 Mineral Rights
 Public Utility
 Transportation
 Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 17 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

This topographic map displays the study area with contour lines indicating elevation. Key features include:

- Contour Lines:** Labeled with values such as 1100, 1110, 1120, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1230, 1240, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370, 1380, 1390, 1400, 1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000.
- Roads:** CR-46, SR-598, SR-56, and TWHY-234 are shown.
- Points of Interest:** Labeled with numbers 50, 51, 52, 55, and 59.
- Other Features:** A north arrow and a scale bar (0 to 1,000 feet) are located in the bottom left corner.

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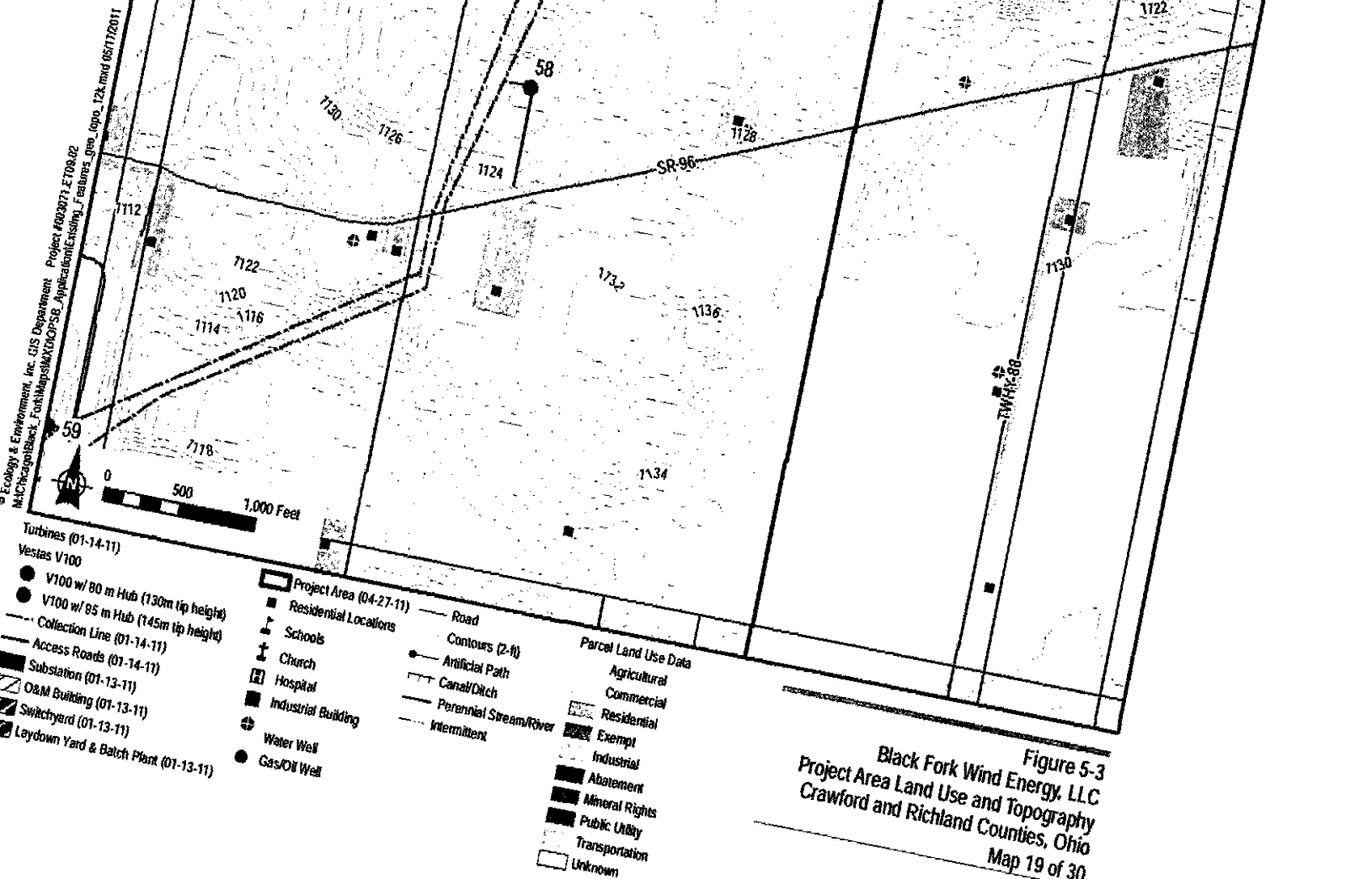
- Turbines (01-14-11)**
Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
 --- Access Roads (01-14-11)
 ■ Substation (01-13-11)
 ▨ O&M Building (01-13-11)
 ▩ Switchyard (01-13-11)
 ▨ Laydown Yard & Batch Plant (01-13-11)

- Project Area (04-27-11)** **Road**
Residential Locations **Contours (2-ft)**
Schools **Artificial Path**
Church **Canal/Ditch**
Hospital **Perennial Stream/River**
Industrial Building **Intermittent**
Water Well
Gas/Oil Well

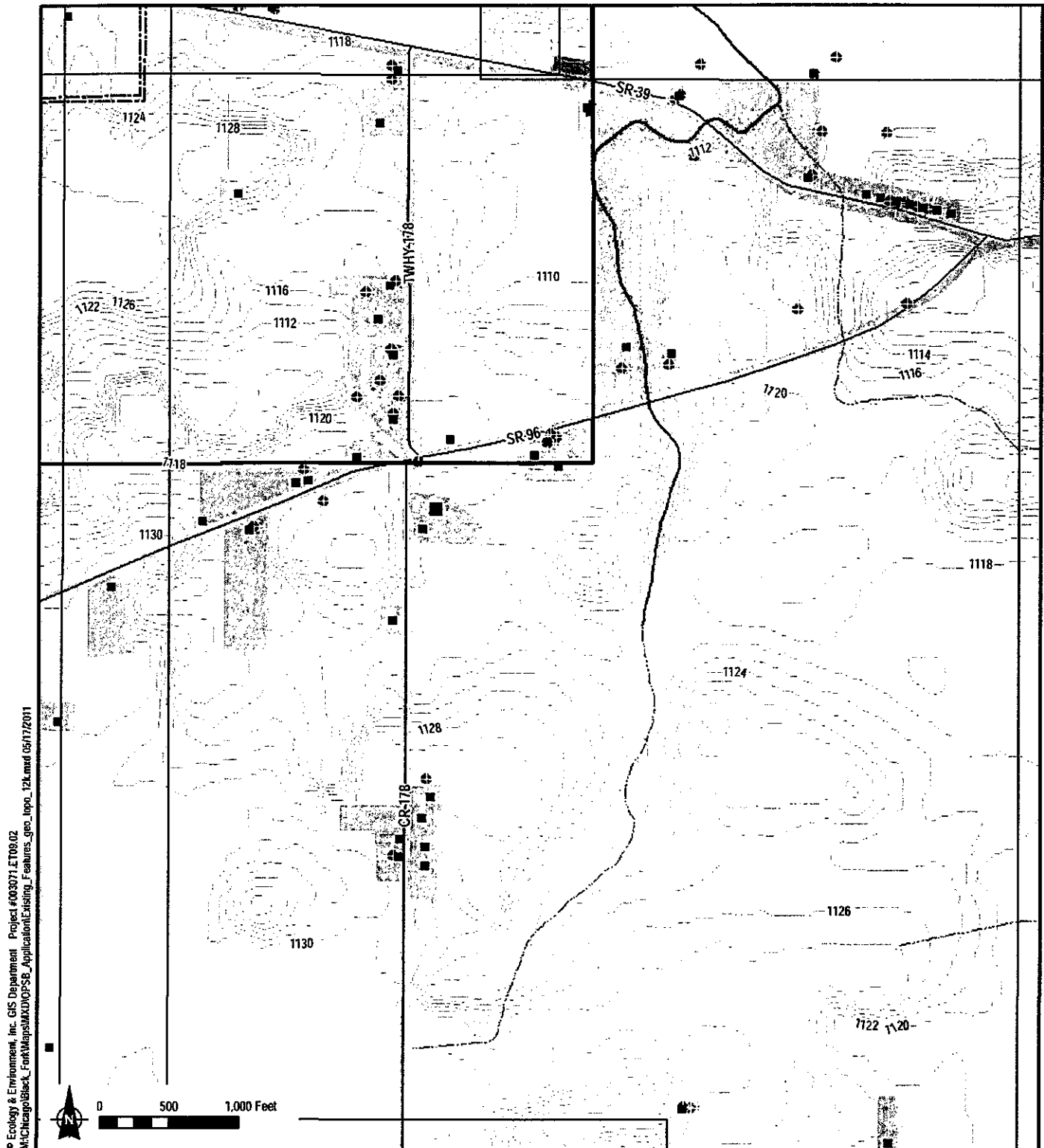
- Parcel Land Use Data**
- Agricultural
 - Commercial
 - Residential
 - Exempt
 - Industrial
 - Abatement
 - Mineral Rights
 - Public Utility
 - Transportation
 - Unknown

Source: ESRI 2010; NHD, 2008
USGS/EPA NHD 2008; OH DNR 2009;
Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
- Collection Line (01-14-11)
- Access Roads (01-14-11)
- Substation (01-13-11)
- ▨ O&M Building (01-13-11)
- ▨ Switchyard (01-13-11)
- ▨ Laydown Yard & Batch Plant (01-13-11)

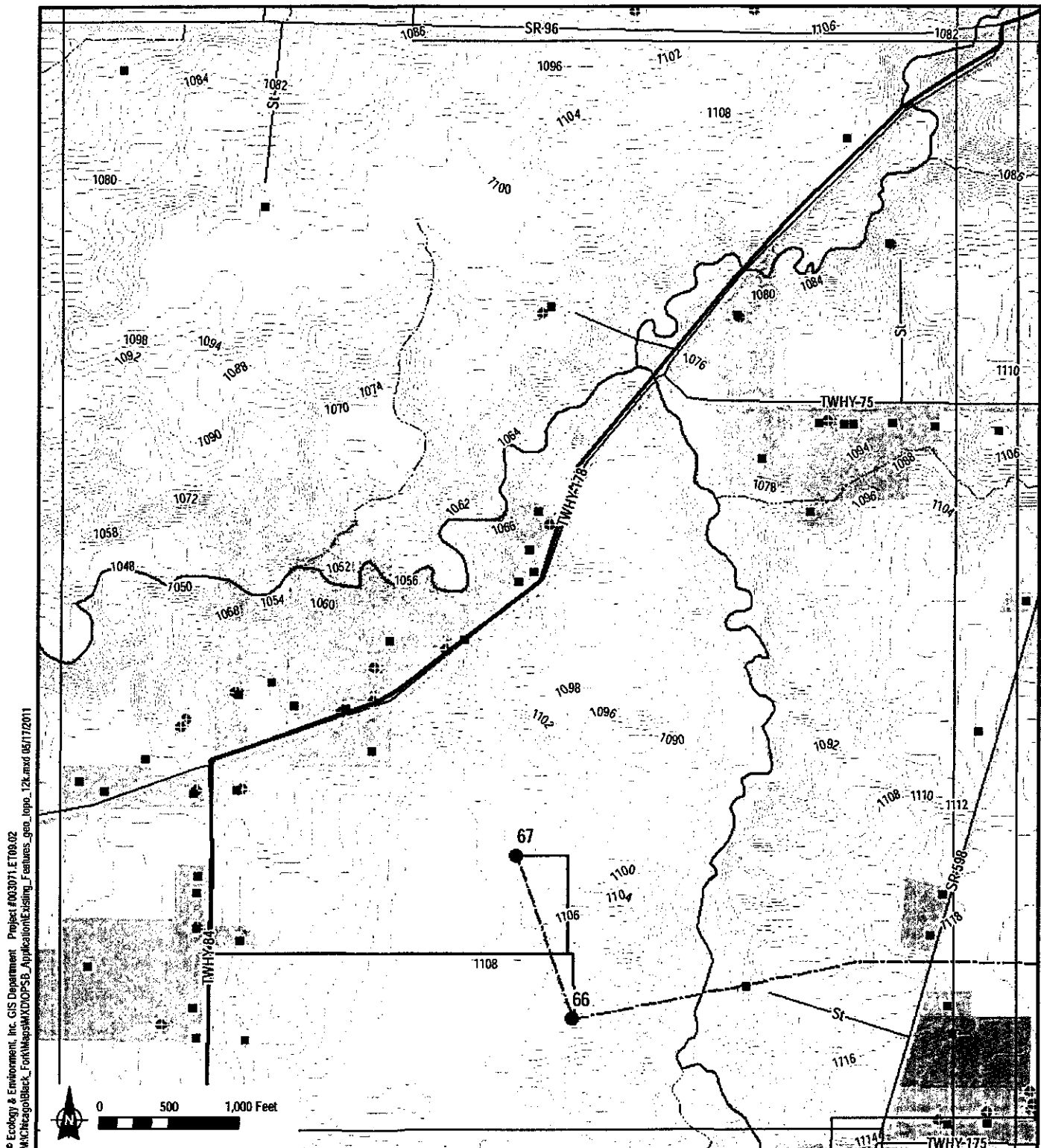
- ▭ Project Area (04-27-11)
- Residential Locations
- ⌂ Schools
- ✝ Church
- ⚕ Hospital
- 🏢 Industrial Building
- ⚡ Water Well
- ⛽ Gas/Oil Well
- Road
- Contours (2-ft)
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

- Parcel Land Use Data
- Agricultural
- Commercial
- Residential
- Exempt
- Industrial
- Abatement
- Mineral Rights
- Public Utility
- Transportation
- Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 20 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
 - Collection Line (01-14-11)
 - Access Roads (01-14-11)
 - Substation (01-13-11)
 - ▨ O&M Building (01-13-11)
 - ▨ Switchyard (01-13-11)
 - ▨ Laydown Yard & Batch Plant (01-13-11)

- Project Area (04-27-11)**
- Residential Locations
 - Schools
 - Church
 - Hospital
 - Industrial Building
 - Water Well
 - Gas/Oil Well

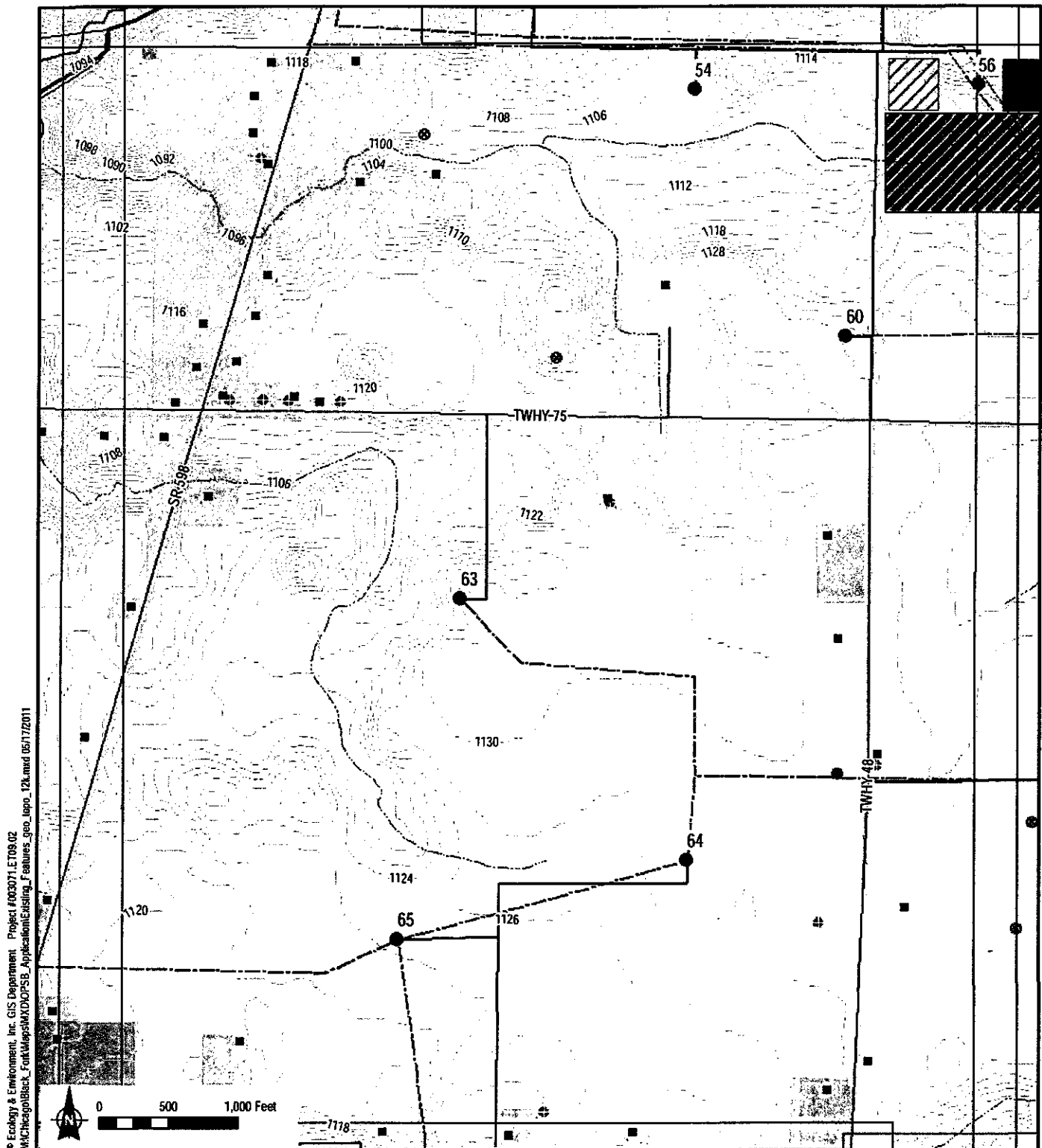
- Road**
- Contours (2-ft)
 - Artificial Path
 - Canal/Ditch
 - Perennial Stream/River
 - Intermittent

- Parcel Land Use Data**
- Agricultural
 - Commercial
 - Residential
 - Exempt
 - Industrial
 - Abatement
 - Mineral Rights
 - Public Utility
 - Transportation
 - Unknown

Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
Crawford and Richland Counties, Ohio
 Map 21 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
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 - ▨ Switchyard (01-13-11)
 - ▨ Laydown Yard & Batch Plant (01-13-11)

- Project Area (04-27-11)**
- Residential Locations
 - Schools
 - Church
 - Hospital
 - Industrial Building
 - Water Well
 - Gas/Oil Well

- Road
- Contours (2-ft)
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

- Parcel Land Use Data**
- Agricultural
 - Commercial
 - Residential
 - Exempt
 - Industrial
 - Abatement
 - Mineral Rights
 - Public Utility
 - Transportation
 - Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 22 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography

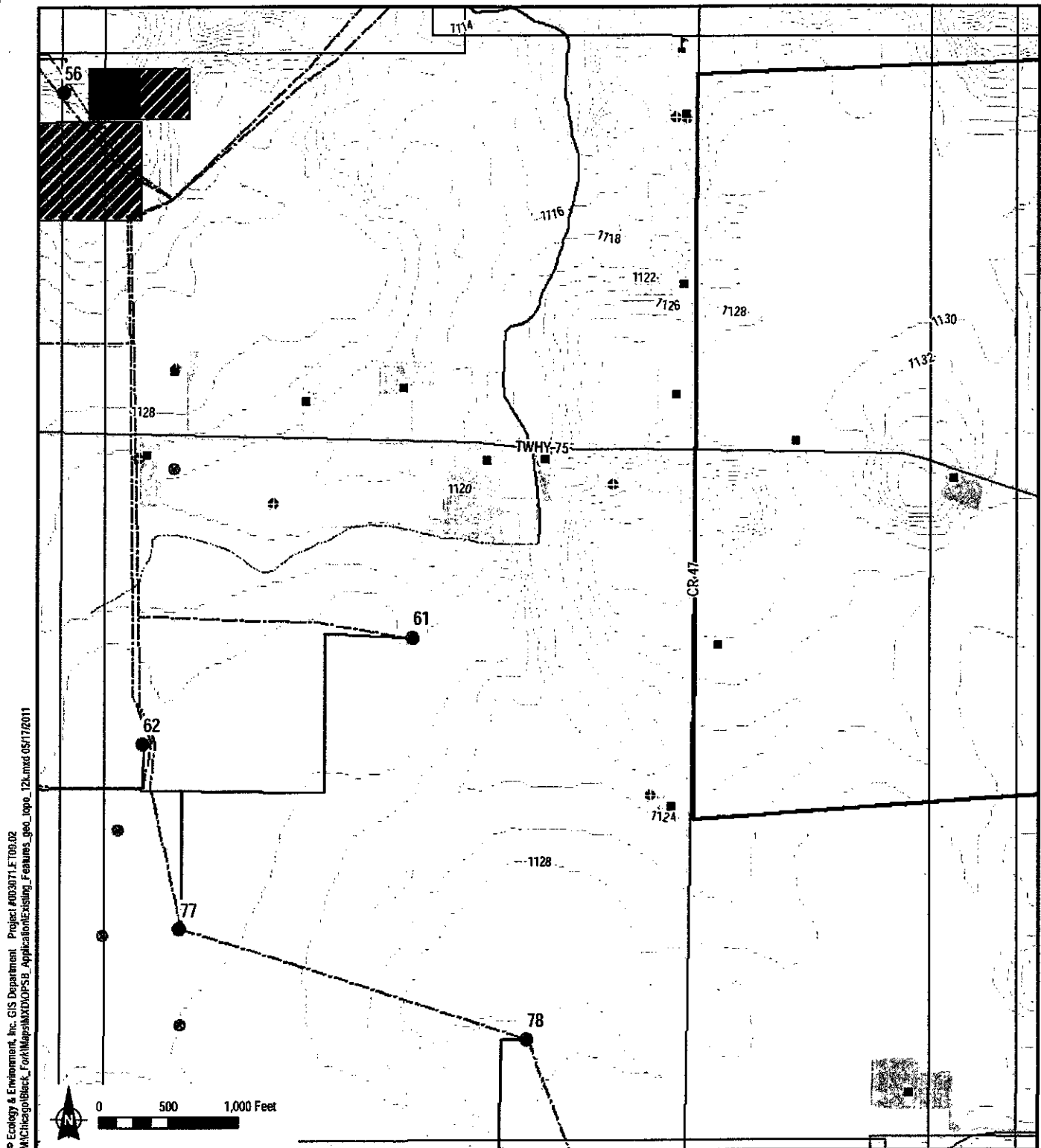
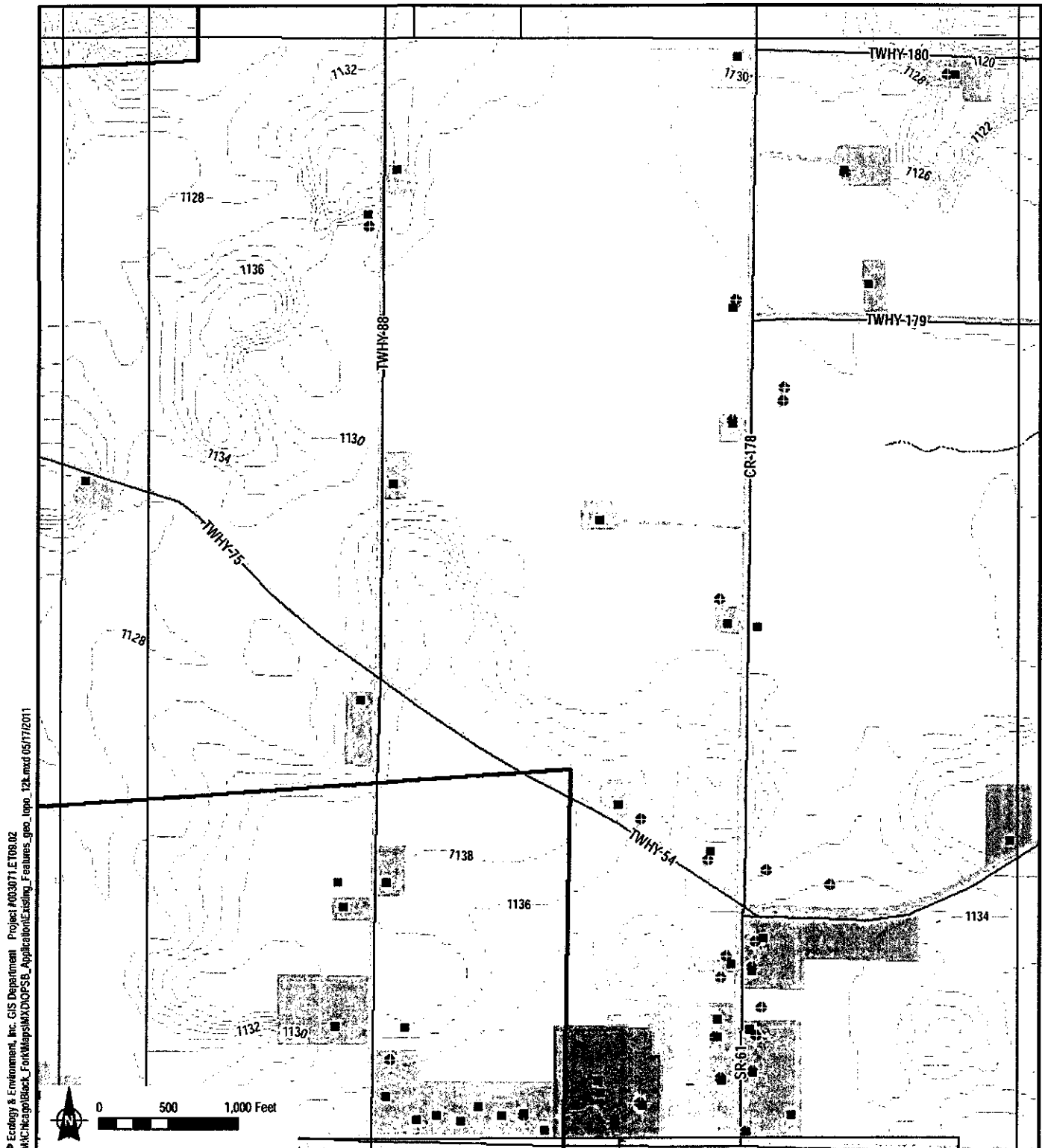


Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
Crawford and Richland Counties, Ohio
Map 23 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
- Vestas V100
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 - ▨ O&M Building (01-13-11)
 - ▨ Switchyard (01-13-11)
 - ▨ Laydown Yard & Batch Plant (01-13-11)

- Project Area (04-27-11)**
- Residential Locations
 - Schools
 - Church
 - Hospital
 - Industrial Building
 - Water Well
 - Gas/Oil Well

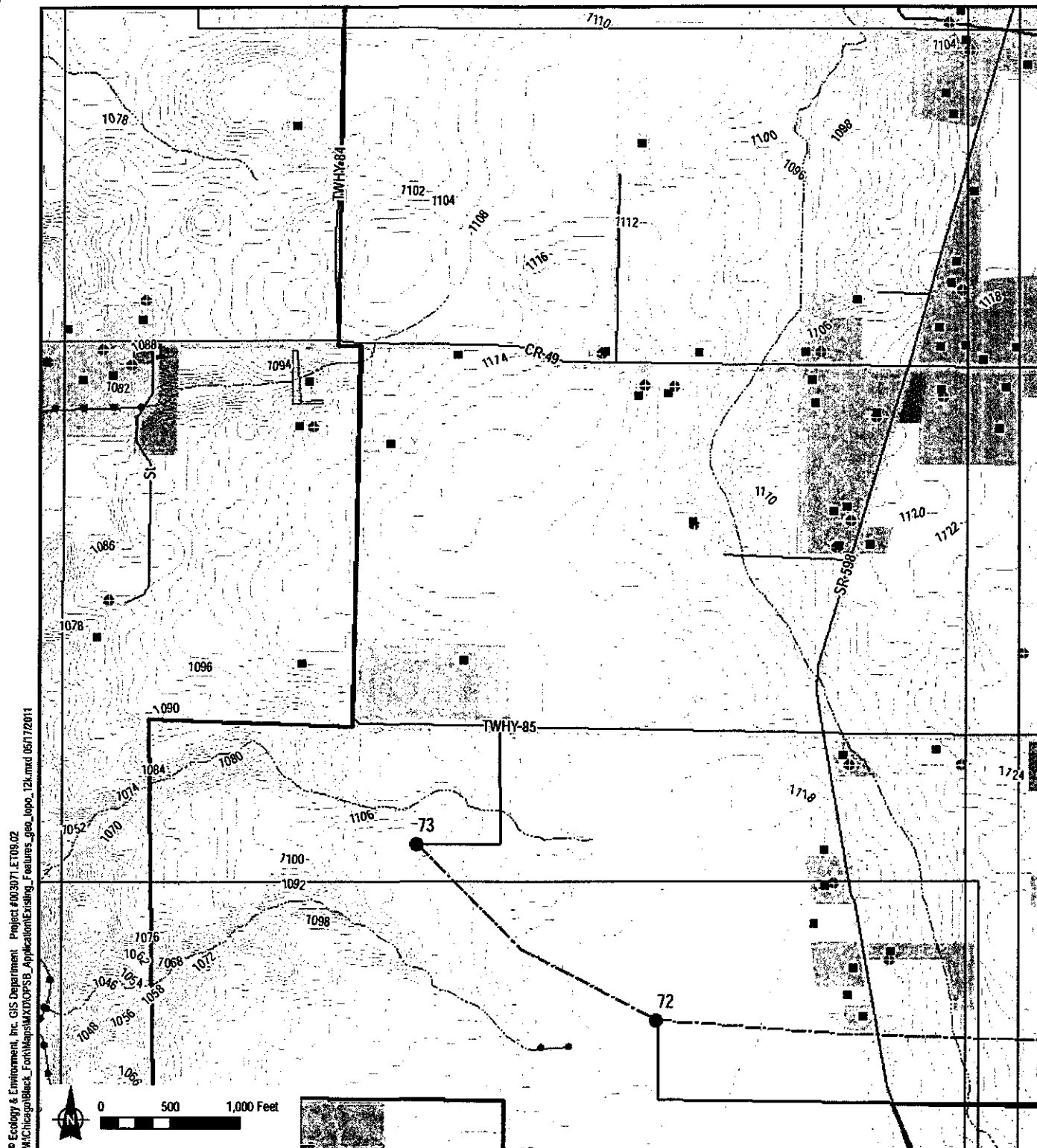
- Road
- Contours (2-ft)
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

- Parcel Land Use Data**
- Agricultural
 - Commercial
 - Residential
 - Exempt
 - Industrial
 - Abatement
 - Mineral Rights
 - Public Utility
 - Transportation
 - Unknown

Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
Crawford and Richland Counties, Ohio
Map 24 of 30

Source: ESRI 2010; NHD, 2008
USGS/EPA NHD 2008; OH DNR 2009;
Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
Vestas V100
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● V100 w/ 95 m Hub (145m tip height)
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■ Substation (01-13-11)
▨ O&M Building (01-13-11)
▨ Switchyard (01-13-11)
▨ Laydown Yard & Batch Plant (01-13-11)

- Project Area (04-27-11)**
■ Residential Locations
■ Schools
■ Church
■ Hospital
■ Industrial Building
● Water Well
● Gas/Oil Well

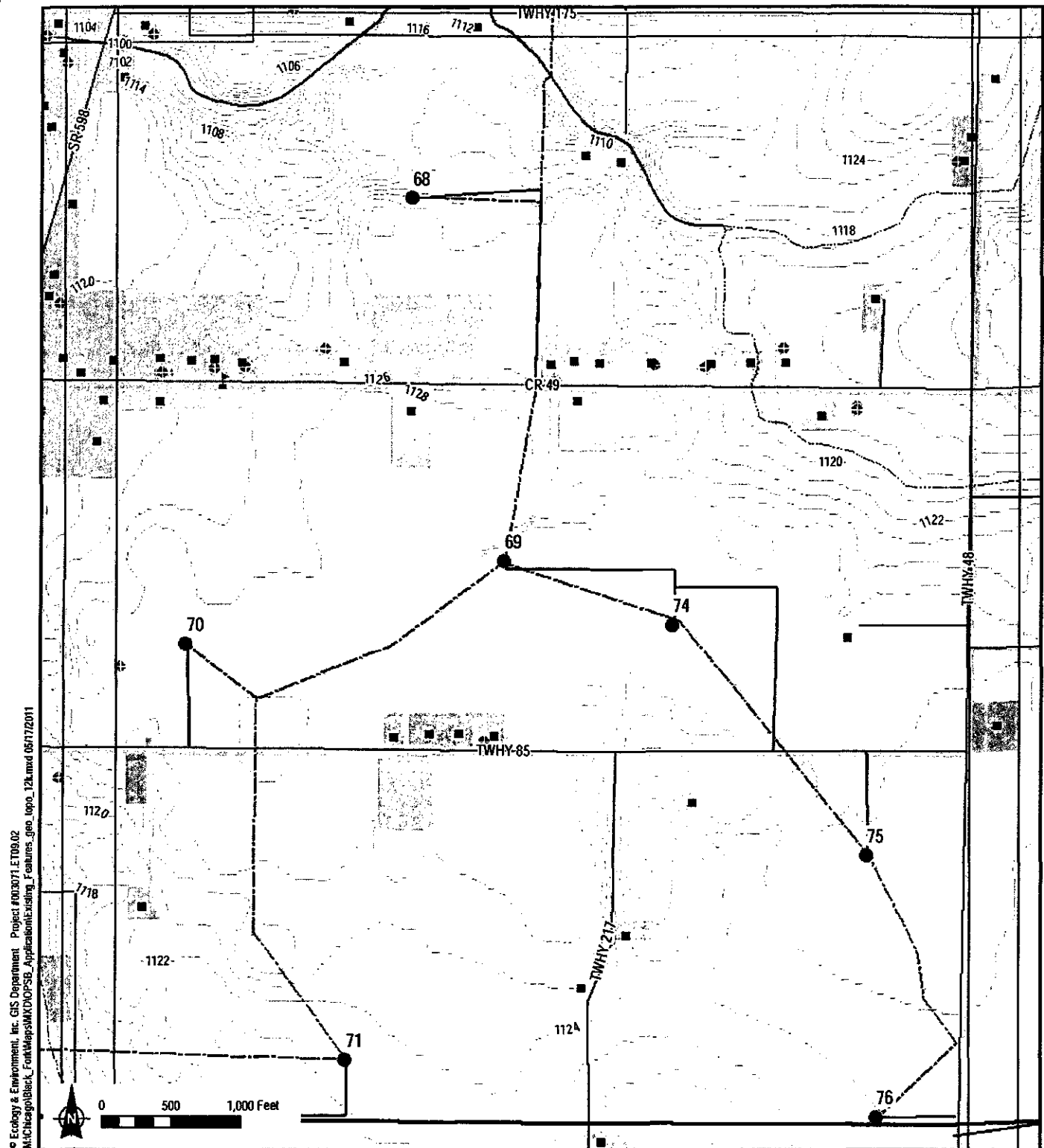
- Road
--- Contours (2-ft)
--- Artificial Path
--- Canal/Ditch
--- Perennial Stream/River
--- Intermittent

- Parcel Land Use Data**
Agricultural
Commercial
Residential
Exempt
Industrial
Abatement
Mineral Rights
Public Utility
Transportation
Unknown

Figure 5-3
Black Fork Wind Energy, LLC
Project Area Land Use and Topography
Crawford and Richland Counties, Ohio
Map 25 of 30

Source: ESRI 2010; NHD, 2008
USGS/EPA NHD 2008; OH DNR 2009;
Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
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 --- Access Roads (01-14-11)
 ■ Substation (01-13-11)
 ■ O&M Building (01-13-11)
 ■ Switchyard (01-13-11)
 ■ Laydown Yard & Batch Plant (01-13-11)

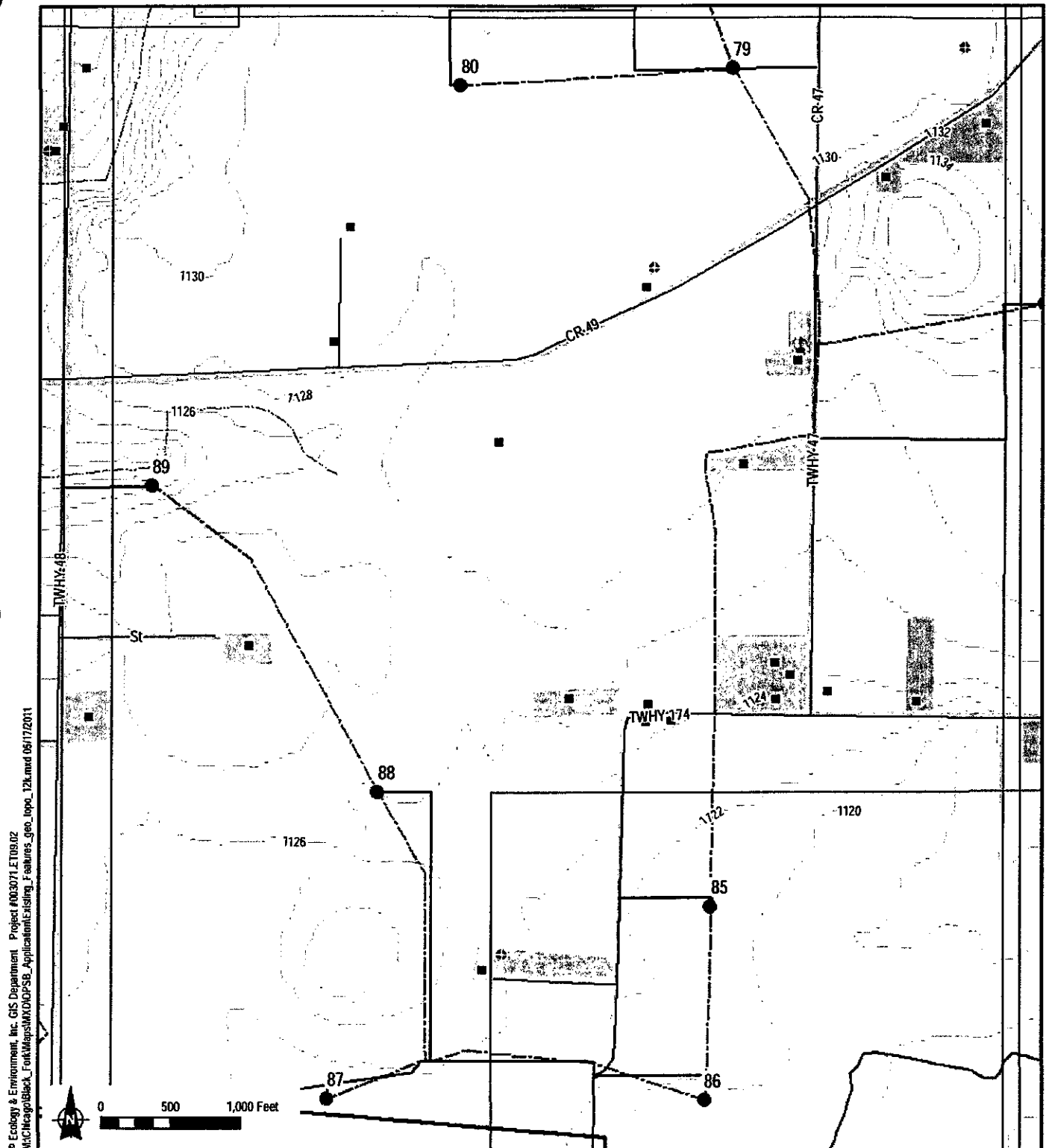
- Project Area (04-27-11)**
 ■ Residential Locations
 ■ Schools
 ■ Church
 ■ Hospital
 ■ Industrial Building
 ■ Water Well
 ■ Gas/Oil Well
- Road**
 --- Contours (2-ft)
 --- Artificial Path
 --- Canal/Ditch
 --- Perennial Stream/River
 --- Intermittent

- Parcel Land Use Data**
 ■ Agricultural
 ■ Commercial
 ■ Residential
 ■ Exempt
 ■ Industrial
 ■ Abatement
 ■ Mineral Rights
 ■ Public Utility
 ■ Transportation
 ■ Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 26 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
 --- Access Roads (01-14-11)
 --- Substation (01-13-11)
 ▨ O&M Building (01-13-11)
 ▨ Switchyard (01-13-11)
 ▨ Laydown Yard & Batch Plant (01-13-11)

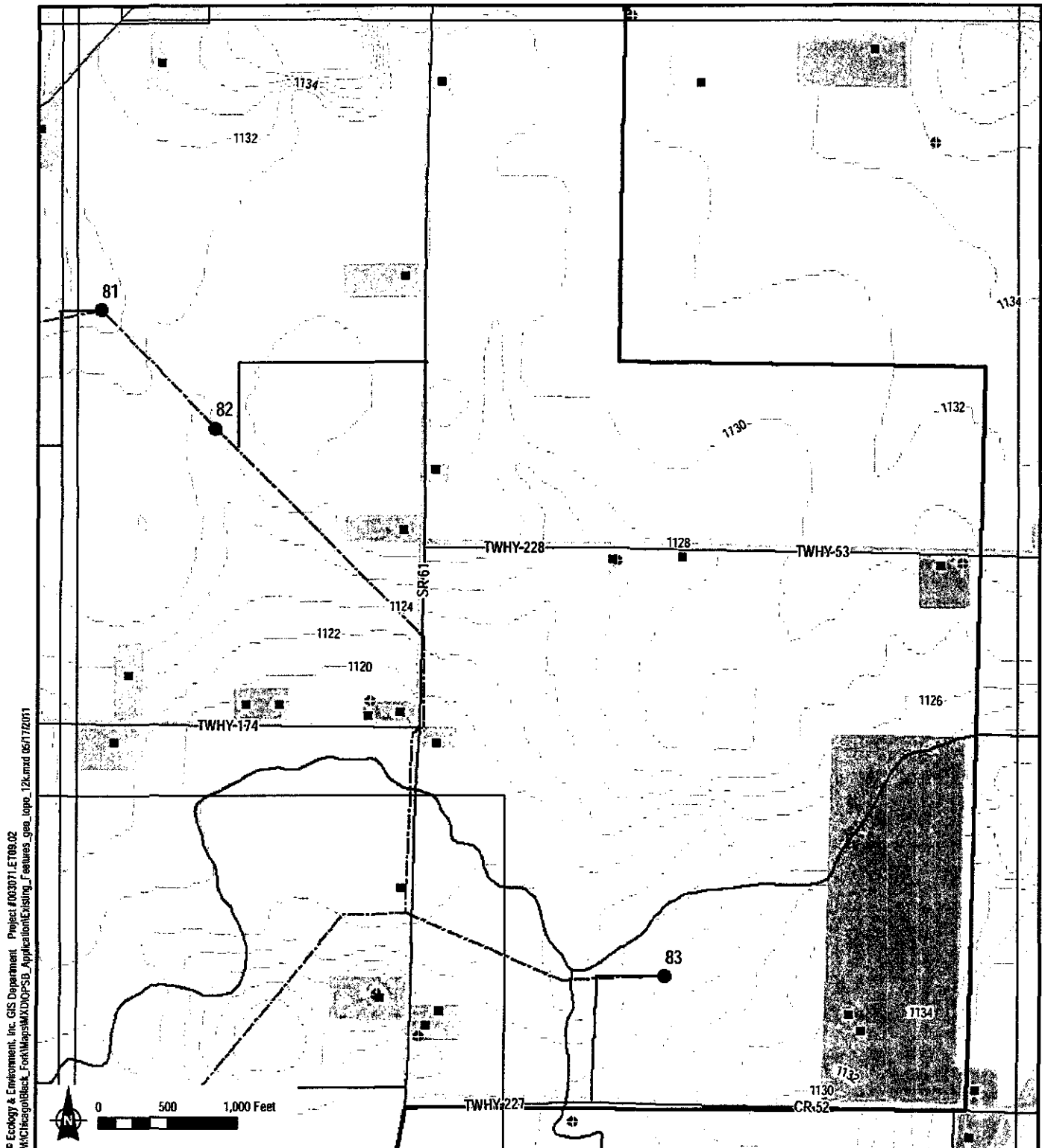
- Project Area (04-27-11)**
 ■ Residential Locations
 ■ Schools
 ■ Church
 ■ Hospital
 ■ Industrial Building
 ■ Water Well
 ● Gas/Oil Well
- Road
 --- Contours (2-ft)
 --- Artificial Path
 --- Canal/Ditch
 --- Perennial Stream/River
 --- Intermittent

- Parcel Land Use Data**
 ■ Agricultural
 ■ Commercial
 ■ Residential
 ■ Exempt
 ■ Industrial
 ■ Abatement
 ■ Mineral Rights
 ■ Public Utility
 ■ Transportation
 ■ Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 27 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
 Vestas V100
 ● V100 w/ 80 m Hub (130m tip height)
 ● V100 w/ 95 m Hub (145m tip height)
 --- Collection Line (01-14-11)
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 ■ Substation (01-13-11)
 ▨ O&M Building (01-13-11)
 ▨ Switchyard (01-13-11)
 ▨ Laydown Yard & Batch Plant (01-13-11)

- Project Area (04-27-11)
 ■ Residential Locations
 ■ Schools
 ■ Church
 ■ Hospital
 ■ Industrial Building
 ● Water Well
 ● Gas/Oil Well

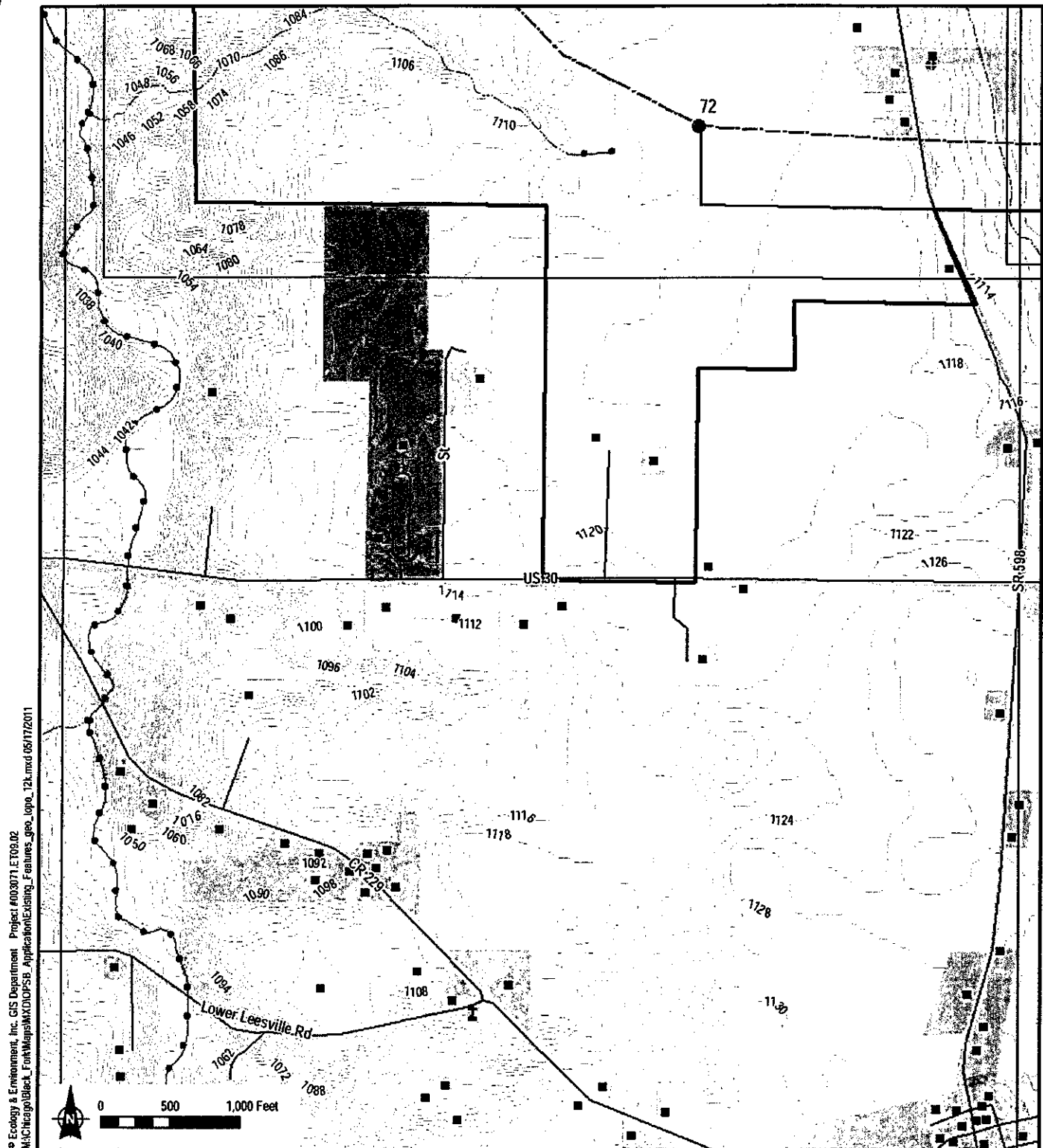
- Road
 --- Contours (2-ft)
 --- Artificial Path
 --- Canal/Ditch
 --- Perennial Stream/River
 --- Intermittent

- Parcel Land Use Data**
 Agricultural
 Commercial
 Residential
 Exempt
 Industrial
 Abatement
 Mineral Rights
 Public Utility
 Transportation
 Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 28 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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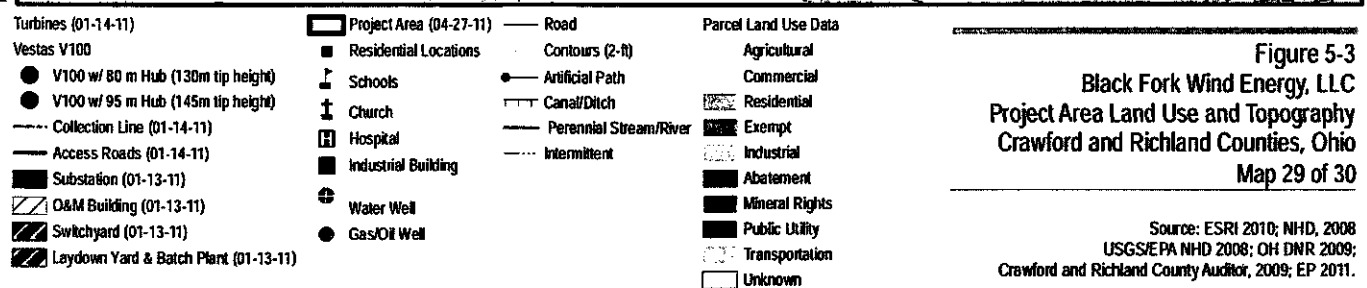
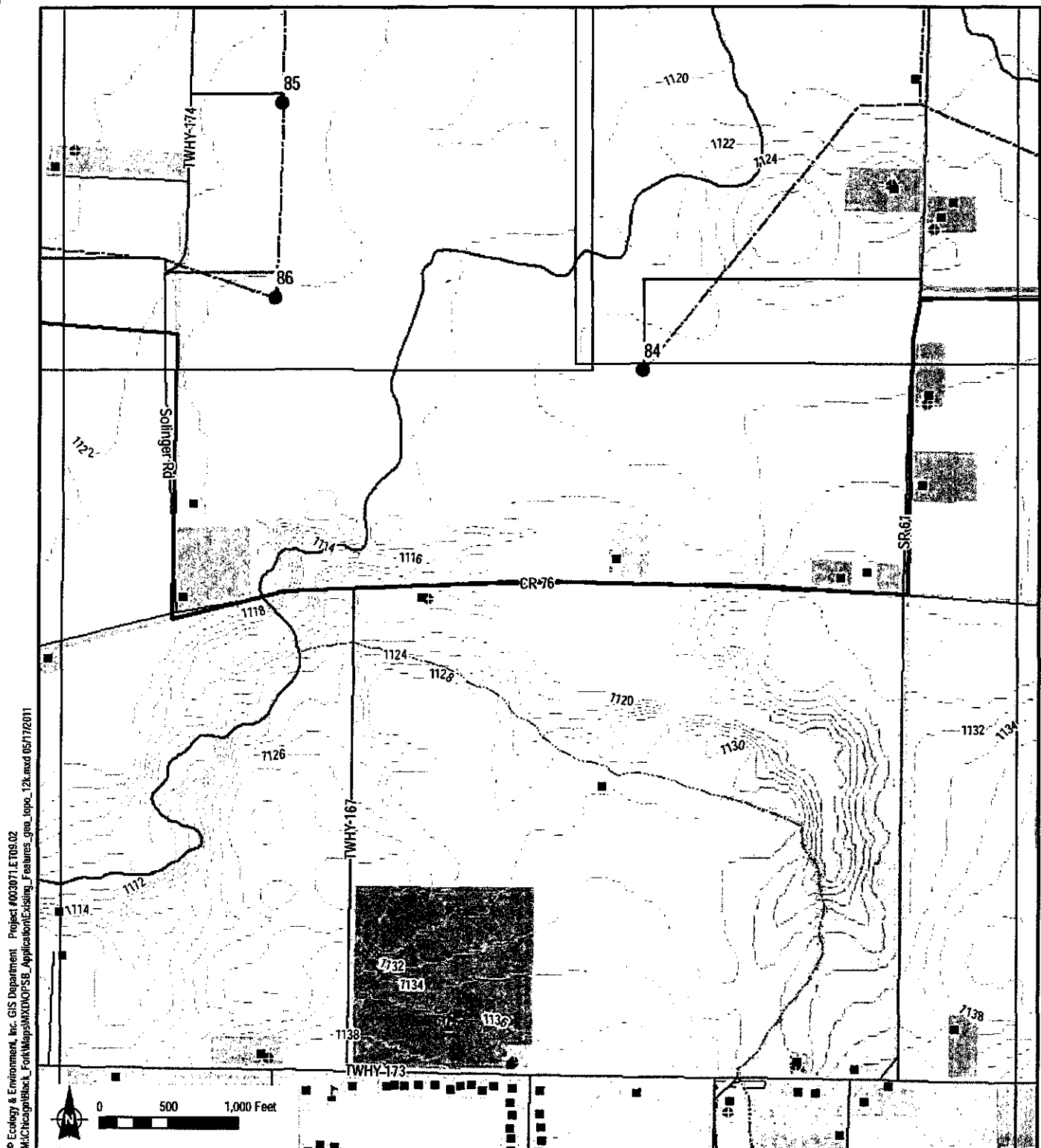


Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 29 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC Project Area Land Use and Topography



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- Turbines (01-14-11)**
- Vestas V100
 - V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
 - Collection Line (01-14-11)
 - Access Roads (01-14-11)
 - Substation (01-13-11)
 - ▨ O&M Building (01-13-11)
 - ▨ Switchyard (01-13-11)
 - ▨ Laydown Yard & Batch Plant (01-13-11)

- Project Area (04-27-11)
- Residential Locations
- Schools
- Church
- Hospital
- Industrial Building
- Water Well
- Gas/Oil Well
- Road
- Contours (2-ft)
- Artificial Path
- Canal/Ditch
- Perennial Stream/River
- Intermittent

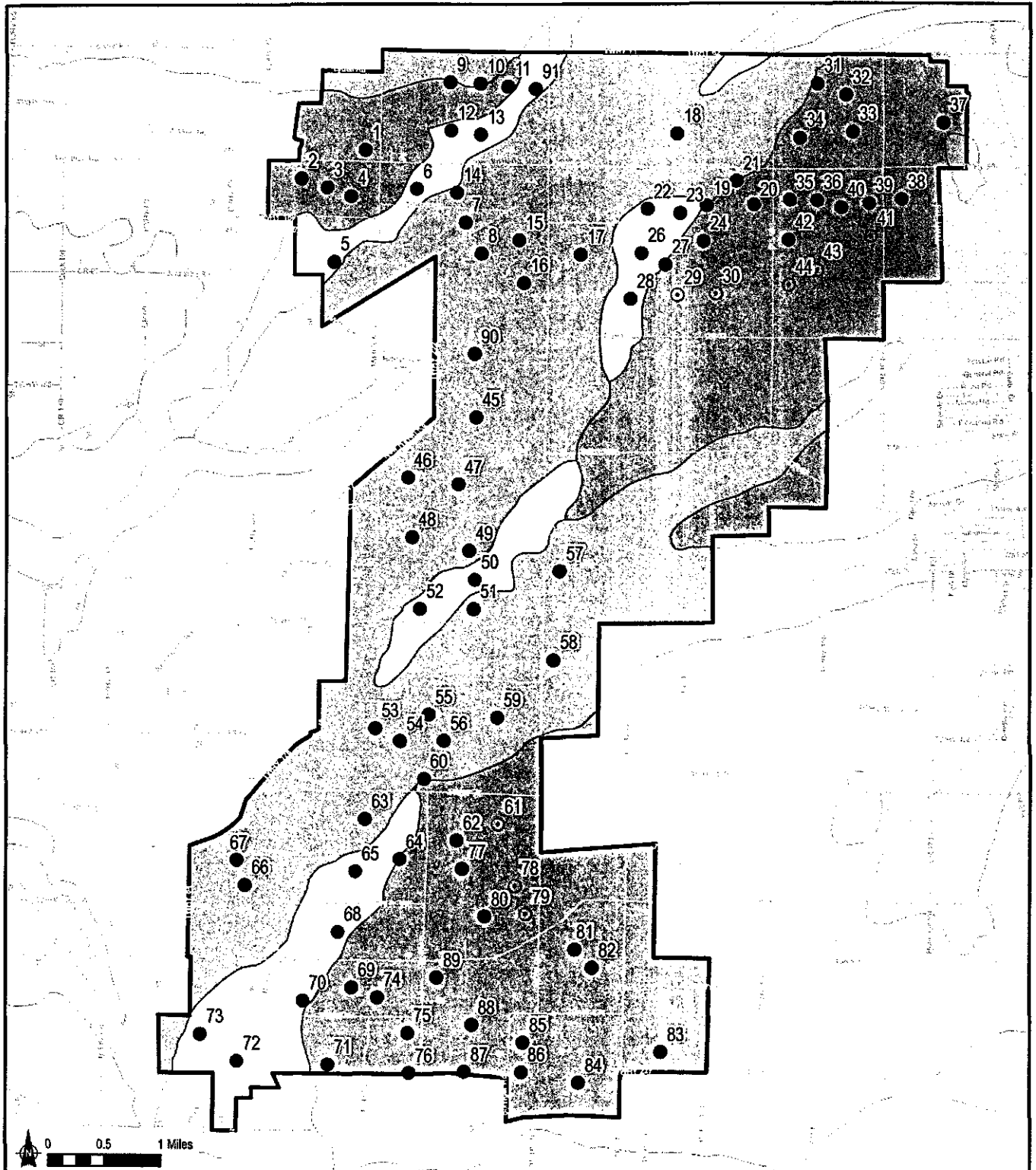
- Parcel Land Use Data**
- Agricultural
 - Commercial
 - Residential
 - Exempt
 - Industrial
 - Abatement
 - Mineral Rights
 - Public Utility
 - Transportation
 - Unknown

Figure 5-3
 Black Fork Wind Energy, LLC
 Project Area Land Use and Topography
 Crawford and Richland Counties, Ohio
 Map 30 of 30

Source: ESRI 2010; NHD, 2008
 USGS/EPA NHD 2008; OH DNR 2009;
 Crawford and Richland County Auditor, 2009; EP 2011.

Black Fork Wind Energy, LLC - Surficial Geology

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Turbines (01-14-11)

Vestas V100

● V100 w/ 80 m Hub (130m tip height)

● V100 w/ 95 m Hub (145m tip height)

▭ Project Area (04-27-11)

— Road

Surficial Geology

□ G4; Clayey till, ground moraine

▨ LC; Lacustrine clay, deposited in calm water of glacial lakes

▨ M4; Clayey till, end moraine

□ OU; Outwash, undifferentiated

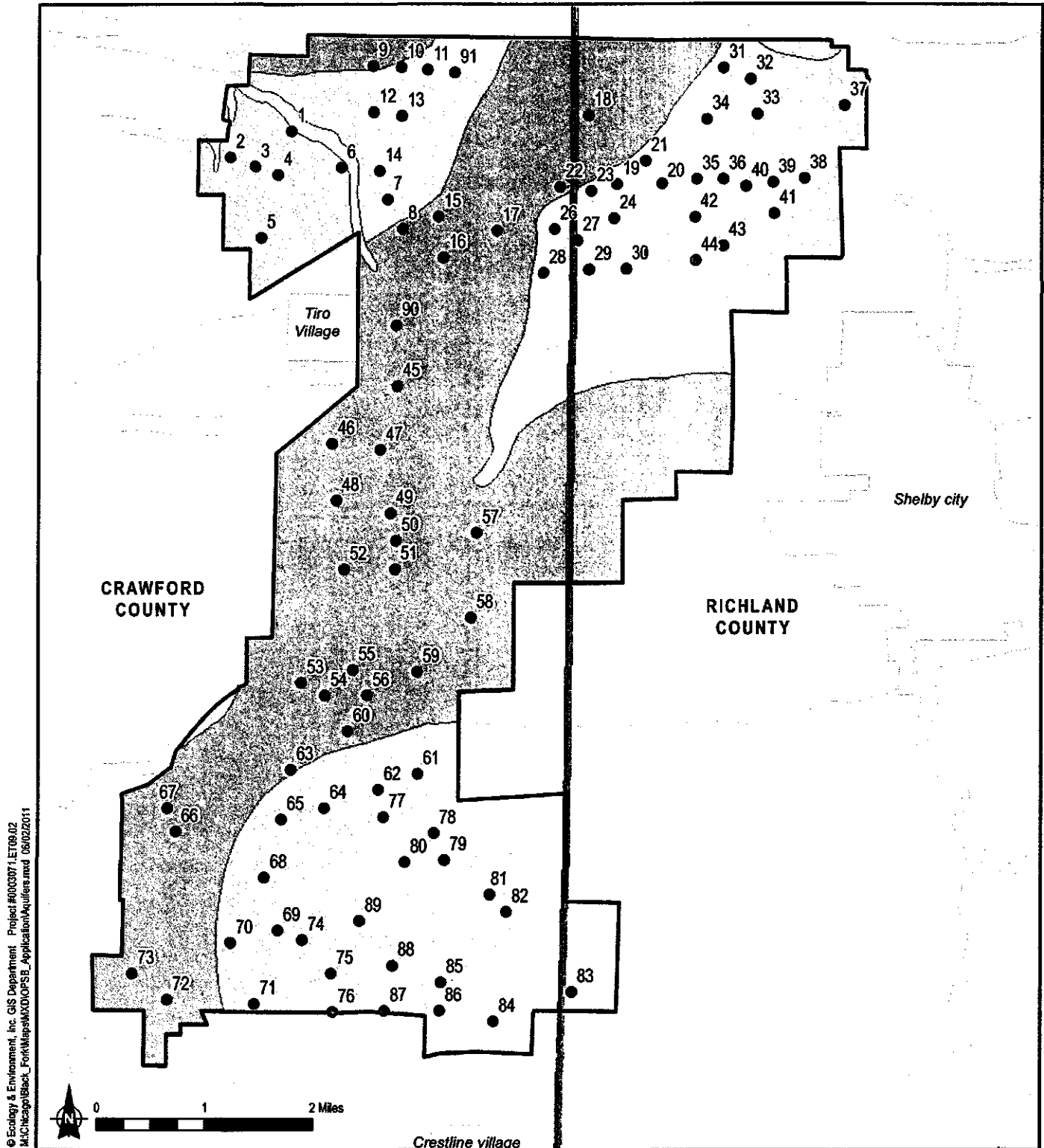
▨ p; Peat, 0.4 m or more thick, with minor amounts of sand

Figure 5-6a

Black Fork Wind Energy, LLC
 Surficial Geology
 Crawford and Richland Counties, Ohio

Source: ESRI 2010; OH DNR Division of Geological Survey 1999; EP 2011.

Black Fork Wind Energy, LLC - Unconsolidated Aquifers



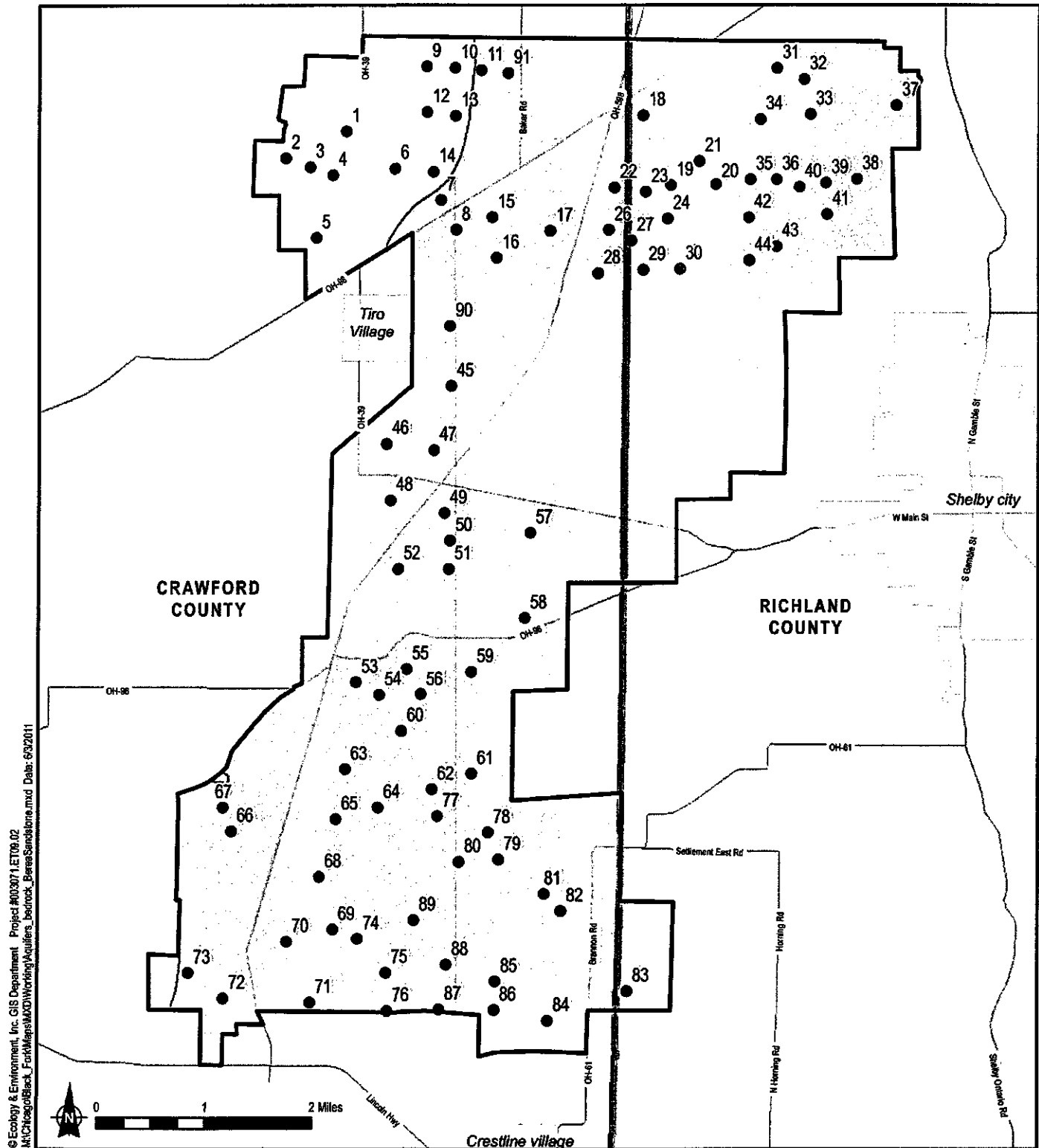
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- | | |
|--------------------------------------|-----------------------------------|
| Turbines (01-14-11) | Municipality Boundary |
| Vestas V100 | County Boundary |
| ● V100 w/ 80 m Hub (130m tip height) | Aquifer Name |
| ● V100 w/ 95 m Hub (145m tip height) | □ Gallion End Moraine Aquifer |
| □ Project Area (04-27-11) | □ Gallion Ground Moraine Aquifer |
| | □ Sandusky River Alluvial Aquifer |

Figure 5-8
Black Fork Wind Energy, LLC
Unconsolidated Aquifers
Crawford and Richland Counties, Ohio

Source: ESRI 2010; OH DNR Division of Geological Survey 2000; EP 2011.

Black Fork Wind Energy, LLC - Bedrock Aquifers

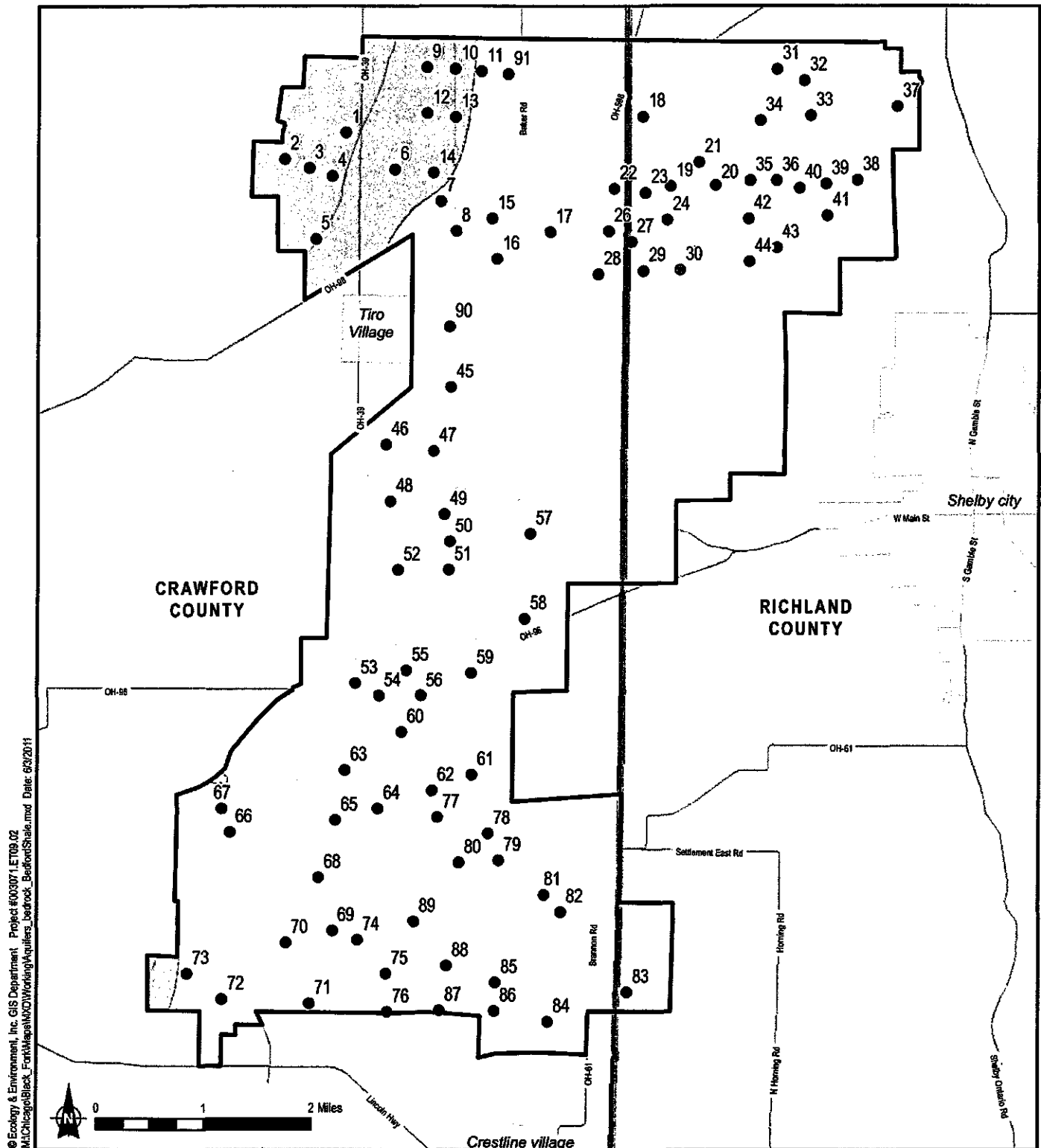


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- Turbines (01-14-11)**
 Vestas V100
- V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
- Bedrock Aquifer**
- Mississippian Berea Sandstone
 - Data Not Available
 - County Boundary
- Project Area (04-27-11)

Figure 5-9a
 Black Fork Wind Energy, LLC
 Bedrock Aquifers - Berea Sandstone
 Crawford and Richland Counties, Ohio

Black Fork Wind Energy, LLC - Bedrock Aquifers



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Turbines (01-14-11)

Vestas V100

● V100 w/ 80 m Hub (130m tip height)

● V100 w/ 95 m Hub (145m tip height)

▭ Project Area (04-27-11)

Bedrock Aquifer

▭ Mississippiian Bedford Shale

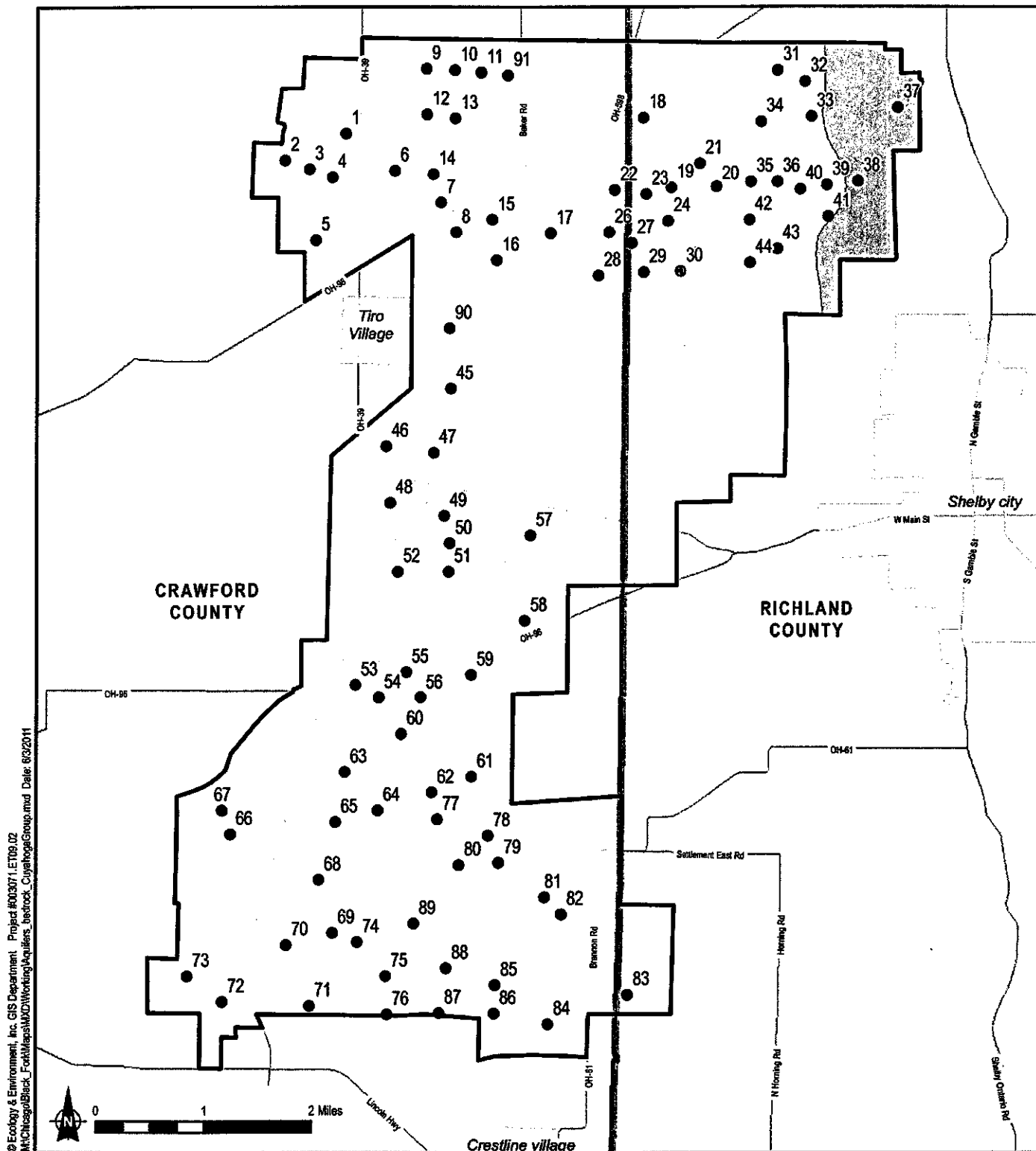
▭ Data Not Available

▭ County Boundary

Figure 5-9b

Black Fork Wind Energy, LLC
 Bedrock Aquifers - Bedford Shale
 Crawford and Richland Counties, Ohio

Black Fork Wind Energy, LLC - Bedrock Aquifers



Turbines (01-14-11)

Vestas V100

● V100 w/ 80 m Hub (130m tip height)

● V100 w/ 95 m Hub (145m tip height)

▭ Project Area (04-27-11)

Bedrock Aquifer

▨ Mississippian Cuyahoga Group

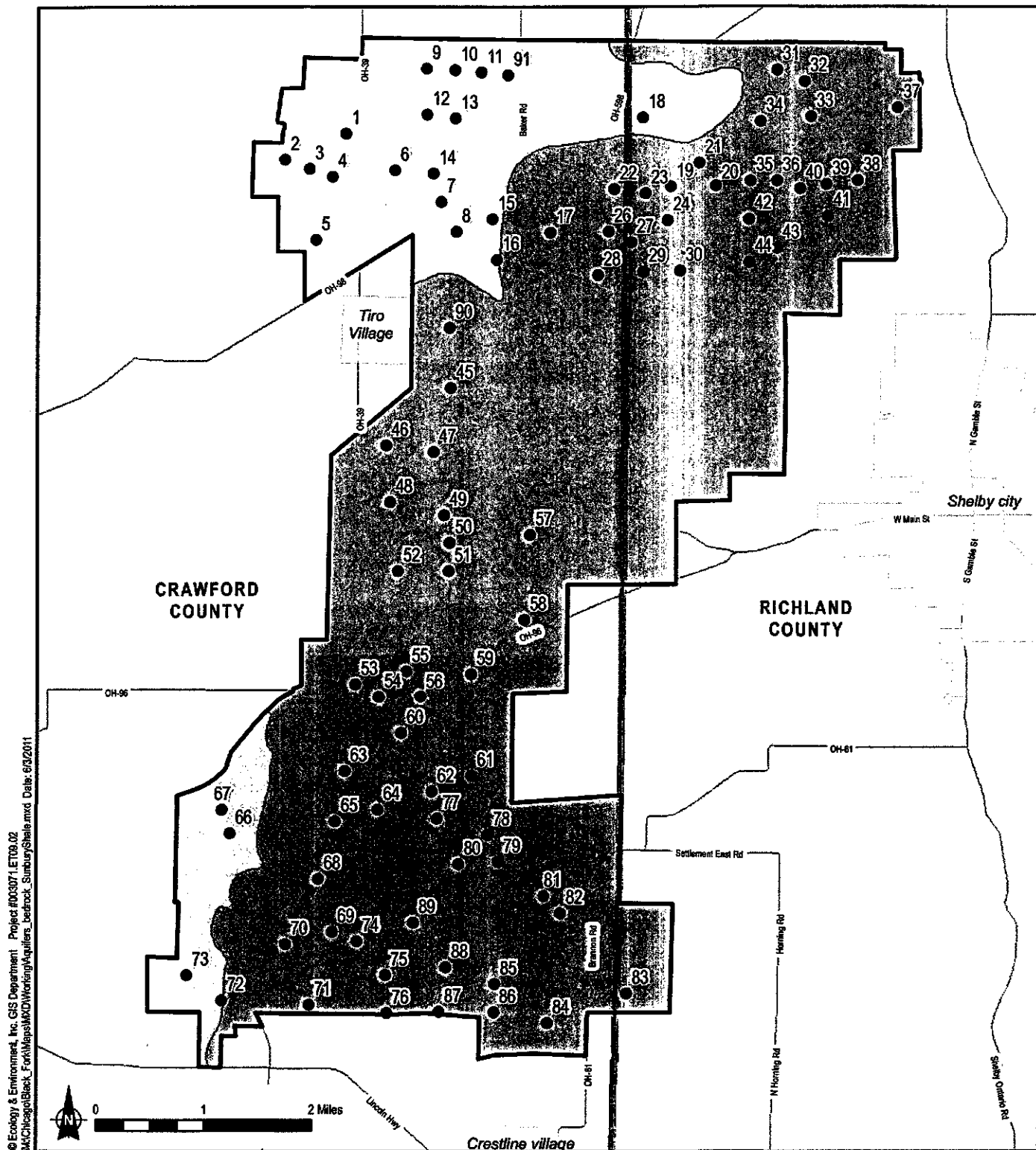
▭ Data Not Available

▭ County Boundary

Figure 5-9c

Black Fork Wind Energy, LLC
Bedrock Aquifers - Cuyahoga Group
Crawford and Richland Counties, Ohio

Black Fork Wind Energy, LLC - Bedrock Aquifers



- Turbines (01-14-11)
- Vestas V100
- V100 w/ 80 m Hub (130m tip height)
 - V100 w/ 95 m Hub (145m tip height)
- Bedrock Aquifer
- Mississippian Sunbury Shale
 - Data Not Available
- County Boundary
- Project Area (04-27-11)

Figure 5-9d
Black Fork Wind Energy, LLC
Bedrock Aquifers - Sunbury Shale
Crawford and Richland Counties, Ohio

L

Figure

- 2-1 Black Fork Wind Energy LLC Project Schedule
- 4-1 Black Fork Wind Energy LLC Constraints Map
- 5-1 Black Fork Wind Energy LLC Five Mile Radius Map
- 5-2 Black Fork Wind Energy LLC One Mile Radius
- 5-3 Black Fork Wind Energy LLC Project Area Land Use and Topography
- 5-4 Black Fork Wind Energy LLC Vegetative Cover
- 5-5 Black Fork Wind Energy LLC Bedrock Geology
- 5-6 Black Fork Wind Energy LLC Surficial Geology – Drift Thickness
- 5-6a Black Fork Wind Energy LLC Surficial Geology
- 5-7 Black Fork Wind Energy LLC Floodplains in Project Area
- 5-8 Black Fork Wind Energy LLC Unconsolidated Aquifers in Project Area
- 5-9 Black Fork Wind Energy LLC Bedrock Aquifers in Project Area
- 5-10 Black Fork Wind Energy LLC Project Site
- 7-1 Black Fork Wind Energy LLC Watersheds and Surface Waters
- 8-1 Black Fork Wind Energy LLC Sensitive Receptors
- 8-2 Black Fork Wind Energy LLC Source Water Protection Zones, Public Water Supply Wells, and Intakes
- 8-3 Black Fork Wind Energy LLC Source Water Protection Zones and Surface Water Emergency Management Zones
- 8-4 Black Fork Wind Energy LLC Ecological Communities
- 8-5 Black Fork Wind Energy LLC Land Use and Cultural Landmarks Within 5 Miles of the Project Area
- 8-6 Location of the Proposed Black Fork Wind Project and Visual APE
- 8-7 Black Fork Wind Energy LLC Tower Structures
- 8-8 Black Fork Wind Energy LLC Agricultural Land