

Appendix K
Preliminary Archaeological Field Investigation



Stemper and Associates Consulting Archaeologists



Clifford A. Stemper
Archaeologist and Director
Phone: (507) 931-0823

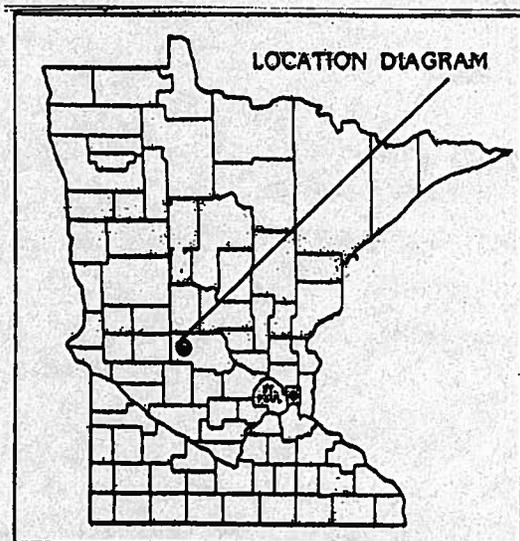
24505 Hardeggers Drive
Cleveland, MN 56017
Fax: (507) 931-5356

A PHASE I ARCHAEOLOGICAL FIELD INVESTIGATION FOR THE GETTY WIND PROJECT AREA IN STEARNS COUNTY, MINNESOTA

CULTURAL RESOURCE MANAGEMENT REPORT

No. 512

By
Stemper & Associates
24505 Hardeggers Dr
Cleveland, MN 56017



For
DeWild Grant Reckert and Assoc. Co.
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246

April 2011
Project No.: 11045122

Database Doc Number: _____

NATIONAL ARCHAEOLOGICAL DATABASE – REPORTS: DATA ENTRY FORM

1. R and C #: _____
2. Authors: Cliff Stemper

Year of Publication: 2011
3. Title: A Phase I Archaeological field Investigation for the Getty Wind Project Area in Stearns County, Minnesota

4. Report Title: Contract Completion Report
Volume #: _____ Report #: 512 NTIS: _____
Publisher: _____
Place: _____

5. Unpublished Sent From: _____
Sent To: _____
Contract #: _____

6. Federal Agency: USDA

7. State: Minnesota
County: Stearns
Town: _____

8. Work Type: 31

9. Keyword: 0 – Types of Resources / Features 1 – Generic terms / Research Questions
2 – Taxonomic Names 3 – Artifact Types / Material Classes
4 – Geographic Names / Locations 5 – Time Periods
6 – Project names / Study Unit 7 – Other Key Words
Des Moines Lobe [4] _____ [_____]
Sauk River [4] _____ [_____]
Crow River [4] _____ [_____]
No sites [0] _____ [_____]
_____ [_____] _____ [_____]
_____ [_____] _____ [_____]
_____ [_____] _____ [_____]

10. UTM Zone: 15 Easting: _____ Northing: _____
15 Easting: _____ Northing: _____
15 Easting: _____ Northing: _____
15 Easting: _____ Northing: _____

11. Township: T125N T126N
Range: R34W R34W
11. Township: _____
Range: _____

TABLE OF CONTENTS

ABSTRACT	1
INTRODUCTION	2
RESULTS OF ARCHIVAL/LITERATURE RESEARCH.....	3
METHODS AND PROCEDURES.....	6
RESULTS OF INVESTIGATION	6
Section 31-126-34.....	7
Wind Turbine No. 1.....	7
Wind Turbine No. 2.....	9
Wind Turbine No. 3.....	11
Section 32-126-34.....	14
Wind Turbine No. 4.....	14
Section 4-125-34.....	17
Wind Turbine No. 10.....	17
Wind Turbine No. 11.....	19
Wind Turbine No. 12.....	21
Section 5-125-34.....	24
Wind Turbine No. 5.....	24
Wind Turbine No. 8.....	26
Wind Turbine No. 9.....	28
Section 6-125-34.....	31
Wind Turbine No. 7.....	31
Section 7-125-34.....	34
Wind Turbine No. 13.....	34
Wind Turbine No. 14.....	36
Wind Turbine No. 15.....	38
Wind Turbine No. 16.....	40
Section 8-125-34.....	43
Wind Turbine No. 17.....	43
Wind Turbine No. 18.....	45
Wind Turbine No. 19.....	47
Section 9-125-34.....	50
Wind Turbine No. 20.....	50
Wind Turbine No. 21.....	52

Section 16-125-34.....	55
Wind Turbine No. 28.....	55
Section 17-125-34.....	58
Wind Turbine No. 23.....	58
Wind Turbine No. 24.....	60
Wind Turbine No. 25.....	62
Wind Turbine No. 26.....	64
Wind Turbine No. 27.....	66
Section 18-125-34.....	69
Wind Turbine No. 22.....	69
RECOMMENDATIONS.....	72
REFERENCES AND APPENDICES.....	73
APPENDICES	
A. Aerial Photograph of Project Area.....	74
B. Plat Maps of the Project Area.....	76
C. Project Area Photographs.....	80

LIST OF TABLES

Table 1. Inventory of Previously Platted Structures Within the Getty Wind Project Area.....	72
--	----

LIST OF FIGURES

Figure 1. Stearns County Map showing the project area location.....	1
Figure 2. Township maps showing the wind turbine locations.....	2
Figure 3. Township maps showing the view shed structure locations.....	4
Figure 4. Wisconsin period glacial map of Minnesota.....	5
Figure 5. USGS map showing wind turbines 1, 2, 3 on Section 31-126-34.....	7
Figure 6. Sketch map of wind turbine 1.....	9
Figure 7. Sketch map of wind turbine 2.....	11
Figure 8. Sketch map of wind turbine 3.....	13
Figure 9. USGS map showing wind turbine 4 on Section 32-126-34.....	14
Figure 10. Sketch map of wind turbine 4.....	16
Figure 11. USGS map showing wind turbines 10, 11, 12 on Section 4-125-34.....	17
Figure 12. Sketch map of wind turbine 10.....	19
Figure 13. Sketch map of wind turbine 11.....	21
Figure 14. Sketch map of wind turbine 12.....	23
Figure 15. USGS map showing wind turbines 5, 8, 9 on Section 5-125-34.....	24
Figure 16. Sketch map of wind turbine 5.....	26
Figure 17. Sketch map of wind turbine 8.....	28

Figure 18. Sketch map of wind turbine 9	30
Figure 19. USGS map showing wind turbine 7 on Section 6-125-34	31
Figure 20. Sketch map of wind turbine 7	33
Figure 21. USGS map showing wind turbines 13, 14, 15, 16 on Section 7-125-34.....	34
Figure 22. Sketch map of wind turbine 13	36
Figure 23. Sketch map of wind turbine 14	38
Figure 24. Sketch map of wind turbine 15	40
Figure 25. Sketch map of wind turbine 16	42
Figure 26. USGS map showing wind turbines 17, 18, 19 on Section 8-125-34.....	43
Figure 27. Sketch map of wind turbine 17	45
Figure 28. Sketch map of wind turbine 18	47
Figure 29. Sketch map of wind turbine 19	49
Figure 30. USGS map showing wind turbines 20, 21 on Section 9-125-34.....	50
Figure 31. Sketch map of wind turbine 20	52
Figure 32. Sketch map of wind turbine 21	54
Figure 33. USGS map showing wind turbine 28 on Section 16-125-34	55
Figure 34. Sketch map showing wind turbine 28	57
Figure 35. USGS map showing wind turbines 23, 24, 25, 26, 27 on Section 17-125-34.....	58
Figure 36. Sketch map showing wind turbine 23	60
Figure 37. Sketch map showing wind turbine 24	62
Figure 38. Sketch map showing wind turbine 25	64
Figure 39. Sketch map showing wind turbine 26	66
Figure 40. Sketch map showing wind turbine 27	68
Figure 41. USGS map showing wind turbine 22 on Section 18-125-34	69
Figure 42. Sketch map showing wind turbine 22	71

ABSTRACT

Phase I Archaeological Field Investigation for the Getty Wind Project Area in Stearns County, Minnesota. Project No. 11045122, Report No. 512. Stemper & Associates, Cleveland, MN.

A Phase I archaeological field investigation was conducted for DeWild Grant Reckert and Associates of Rock Rapids, Iowa, for the construction of 27 wind turbines in northwestern Stearns County, Minnesota. The purpose of an archaeological survey is to determine if prehistoric or historic properties exist or are absent within the area of potential effect. A previous records check was conducted with the Office of the State Archaeologist in St. Paul, Minnesota. No previously recorded archaeological sites are located within 300 feet of the survey area of potential effect investigated. Field methods included a surface reconnaissance, subsurface testing and soil probing conducted on the area of potential effect to determine if prehistoric or historic properties exist and to determine their location. No archaeological properties were discovered on the areas of potential effect. Finally, no further work is warranted on the proposed wind turbine sites summarized within this report.

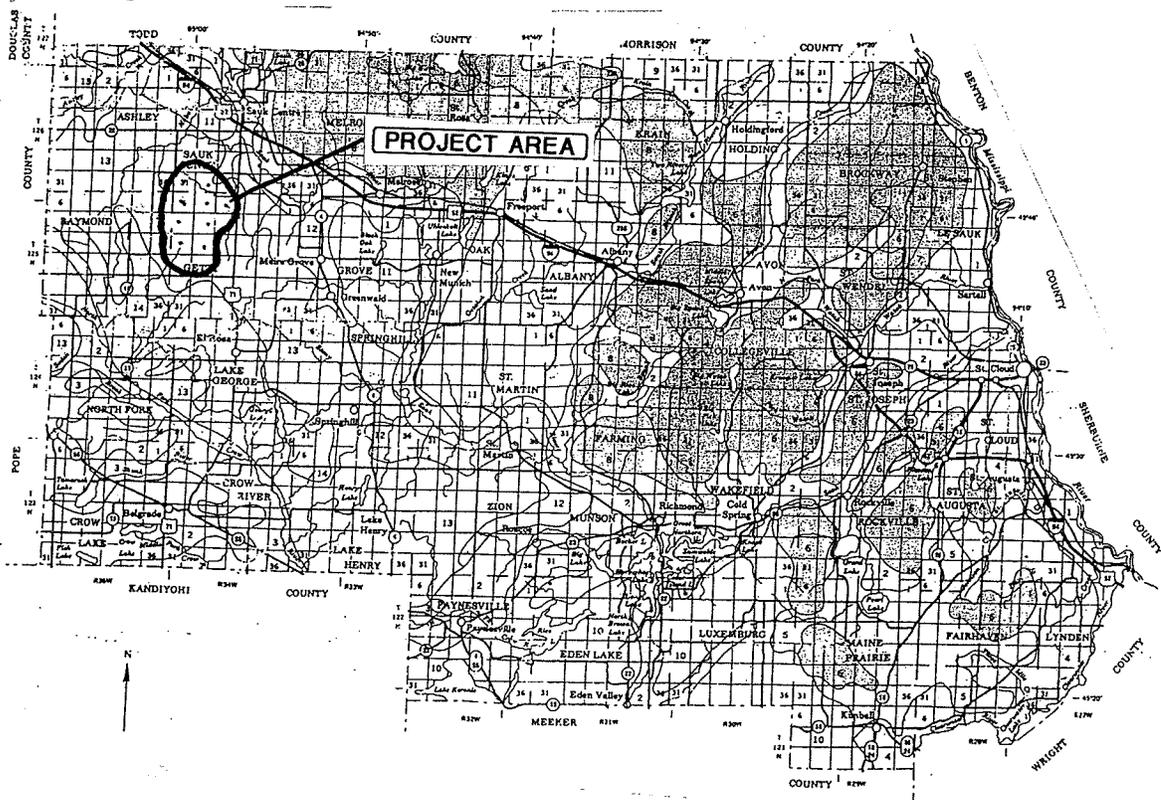


Figure 1. Stearns County Map showing the project area location.

INTRODUCTION

This report represents a Phase I archaeological field investigation for 27 proposed wind turbine sites on parts of Stearns County in central Minnesota. The Phase I archaeological field investigation was conducted for DeWild Grant Reckert and Associates, located in Rock Rapids, Iowa. The purpose of this survey is to determine if prehistoric or historic properties, in accordance with Section 106 of the National Preservation Act and Procedures for the Protection of Historic and Cultural Properties (36CFR800) are present or absent within the area of potential effect (APE).

The proposed project entails the construction of 27 wind turbines on 1-acre sites with connecting land corridors for service roads and underground connecting lines from the turbines. The proposed turbine site boundaries Phase I surveyed for cultural resources cover all construction and excavation areas for the proposed project wind farm. The wind turbine sites are shown below and are located on Sections 31, 32-T126N-R34W, Sections 4, 5, 6, 7, 8, 9, 16, 17 and 18 on T125N-R34W. It is a proposed wind farm south of Sauk Centre in central Minnesota. The total area of potential effect is 59.35 acres of land.

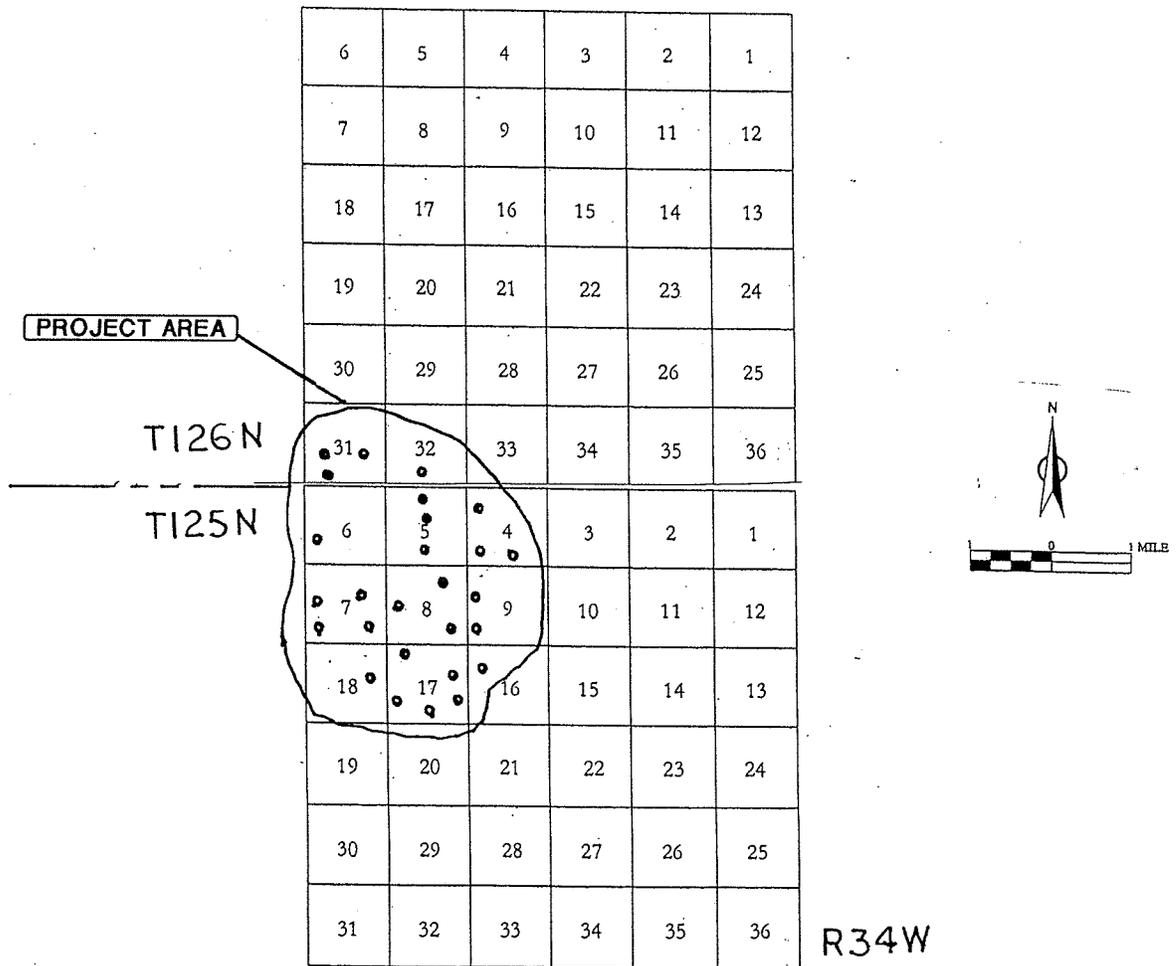


Figure 2. Township maps showing the wind turbine locations.

The archaeological field investigation was conducted in April 2011. All artifacts, if found, were either drawn or photographed, then left on the site area. Construction easements permitted the Phase I archaeological field investigation survey to commence on the locations shown within this report.

RESULTS OF ARCHIVAL / LITERATURE RESEARCH

A prior record and archival search was conducted at the Office of the State Archaeologist (OSA) in St. Paul, Minnesota. The following information regarding previously surveyed areas, previously recorded archaeological properties, plat map reviews and National Register of Historic Places (NRHP) is shown below for the area of potential effect (APE).

Previous Archaeological Field Investigations: The project areas of potential effect designated for an archaeological field investigation were not previously surveyed for archaeological resources.

Previously Recorded Prehistoric Properties 9500BC-1700AD: There are no previously recorded prehistoric properties within 300 feet of the area of potential effect. A distance of 300 feet from previously recorded sites is used as a setback because not all sites are clearly defined in the area.

Previously Recorded Historic Properties 1700AD-1972AD: There are no previously recorded historic properties within 300 feet of the area of potential effect.

View Shed Review: A view shed review was conducted for potentially eligible properties for listing on the National Register of Historic Places within .50 mile of the wind turbine locations. The following listing of structures is not on the proposed areas of potential effect. There are 19 structures within .50 mile of the wind turbine sites and they are shown below.

Map No.: 51201
Location: SE ¼ Section 32-126-34
Type: Structure

Map No.: 51206
Location: NE ¼ Section 8-125-34
Type: Structure

Map No.: 51202
Location: SW ¼ Section 31-126-34
Type: Structure

Map No.: 51207
Location: NE ¼ Section 8-125-34
Type: Structure

Map No.: 51203
Location: E ¼ cor. Section 36-126-35
Type: Structure

Map No.: 51208
Location: SE ¼ Section 18-125-34
Type: Structure

Map No.: 51204
Location: NW ¼ Section 5-125-34
Type: Structure

Map No.: 51209
Location: SE ¼ Section 12-125-35
Type: Structure

Map No.: 51205
Location: SW ¼ Section 5-125-34
Type: Structure

Map No.: 51210
Location: SW ¼ Section 6-125-34
Type: Structure

Map No.: 51211
Location: NW ¼ Section 4-125-34
Type: Structure

Map No.: 51217
Location: SW ¼ Section 9-125-34
Type: Structure

Map No.: 51212
Location: NE ¼ Section 5-125-34
Type: Structure

Map No.: 51218
Location: SE ¼ Section 8-125-34
Type: Structure

Map No.: 51213
Location: SW ¼ Section 4-125-34
Type: Structure

Map No.: 51219
Location: SE ¼ Section 7-125-34
Type: Structure

Map No.: 51214
Location: SE ¼ Section 5-125-34
Type: Structure

Map No.: 51220
Location: SW ¼ Section 8-125-34
Type: Structure

Map No.: 51215
Location: NW ¼ Section 9-125-34
Type: Structure

Map No.: 51221
Location: NE ¼ Section 17-125-34
Type: Structure

Map No.: 51216
Location: SE ¼ Section 4-125-34
Type: Structure

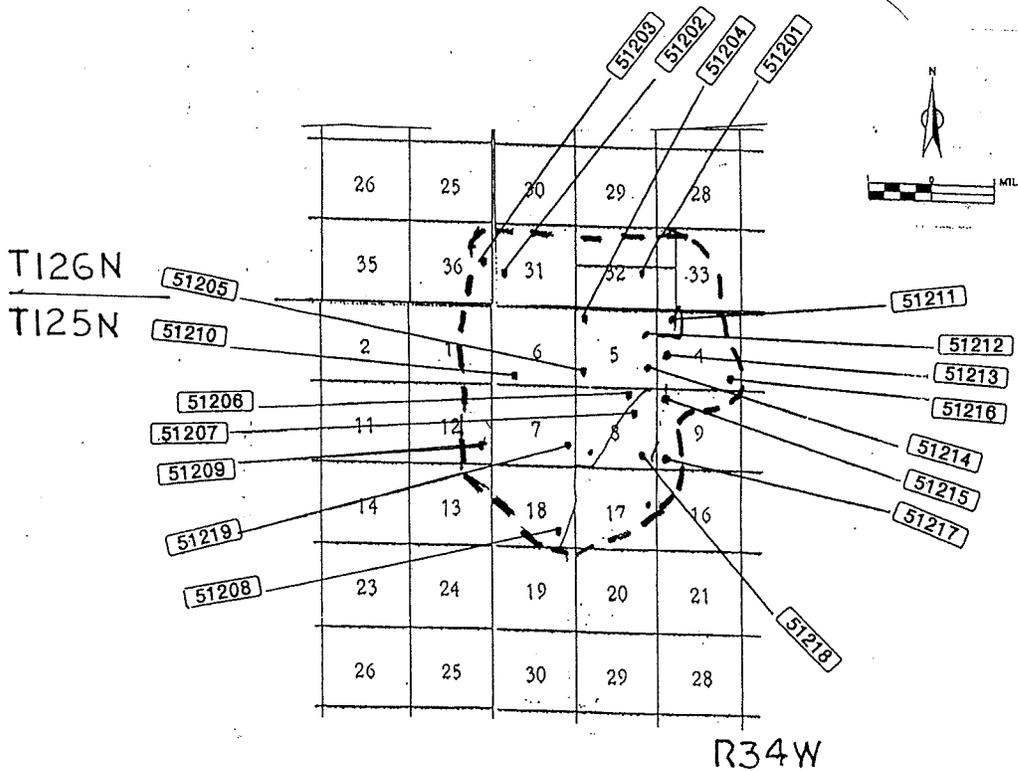


Figure 3. Township maps showing the view shed structure locations.

National Register of Historic Places (NRHP): There are no National Register of Historic Places properties within 300 feet of the area of potential effect.

Maps/Plat Maps: Historic maps or plat maps from 1858 (Trygg), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT) and USGS maps show no rural cemeteries, isolated gravesites, family plots, rural post offices, abandoned townsites, rural businesses, or miscellaneous historic structures on the direct proposed project areas of potential effect.

Geomorphology: The proposed wind turbine project areas of potential effect are located on the Des Moines Lobe geomorphic region and within the Sauk River and North Fork of the Crow River watersheds in northwestern Stearns County in central Minnesota.

The Des Moines Lobe geomorphic region (Osakis till plain) within part of western Stearns County was covered by a mantle of Cary drift and sediments deposited by the Late Wisconsin glaciation 12,000 years ago. The sandy clayey glacial drift overlies PreCambrian granitic rock, slate and iron formations. Formation of upland and bottomland soils began less than 12,000 years ago after the glaciation in Minnesota ended and the climate began a warming trend.

The project areas of potential effect are situated within the Normania-Flom soil associations of nearly level to well to moderately drained soils that formed in loamy glacial till. The solum averages are 24 inches to 36 inches. Native vegetation in western Stearns County consisted of tall and mid prairie grasses with treed lines along drainage areas.

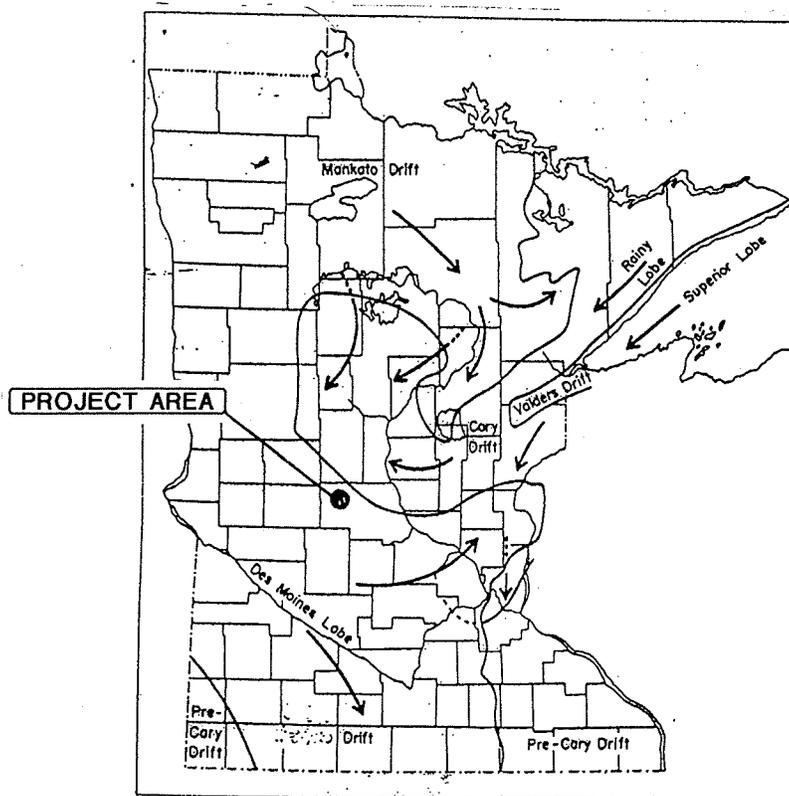


Figure 4. Wisconsin period glacial map of Minnesota.

METHODS AND PROCEDURES

The field methods employed during this investigation were developed to allow for the identification of prehistoric or historic properties in or immediately adjacent to the project area surveyed. In order to maximize the location of prehistoric or historic properties and to determine the nature and extent of each prehistoric or historic property, 4 field methodologies were used on the project area. They were 1) a pedestrian survey, 2) subsurface testing, 3) soil probing and 4) an inspection of potentially eligible historic properties within .50 mile of the view shed.

A pedestrian survey was conducted walking transects at 7-meter intervals along 100% of the project area tested. The surface reconnaissance examined the project area for surface artifacts, burial mounds, non-mound ground features and architectural locations. Within the project area of potential effect subsurface testing was conducted in arbitrary 10cm levels to a depth that varied depending upon site conditions. Removed sediment was screened through a ¼-inch mesh for cultural materials and the soil profiles were recorded. Because of wet conditions, the soils on the project area were carefully troweled for artifacts or cultural materials. Subsurface probing was conducted and is a minimal-disturbance technique for sampling and evaluating subsurface stratigraphy, disturbance or cultural materials. The soil probe was 1 meter in length with a coring capacity of 1 square centimeter. It was used primarily in the bottom of completed subsurface tests for a final soil strata evaluation. All artifacts, if found, were left in place then drawn or photographed.

The archaeological field investigation considered the view shed aspects within .50 mile of the wind turbine locations. A field investigation was conducted on all potentially eligible properties within .50 mile of the wind turbine locations to determine the NRHP integrity of the historic properties.

RESULTS OF INVESTIGATION

The Phase I archaeological field survey examined 27 wind turbine sites and service land corridors. Each wind turbine site is 1 acre in size with a varying land corridor length that measures 50 feet in width. The following Phase I archaeological surveys are expanded upon below according to the land section they are on.

SECTION 31-126-34

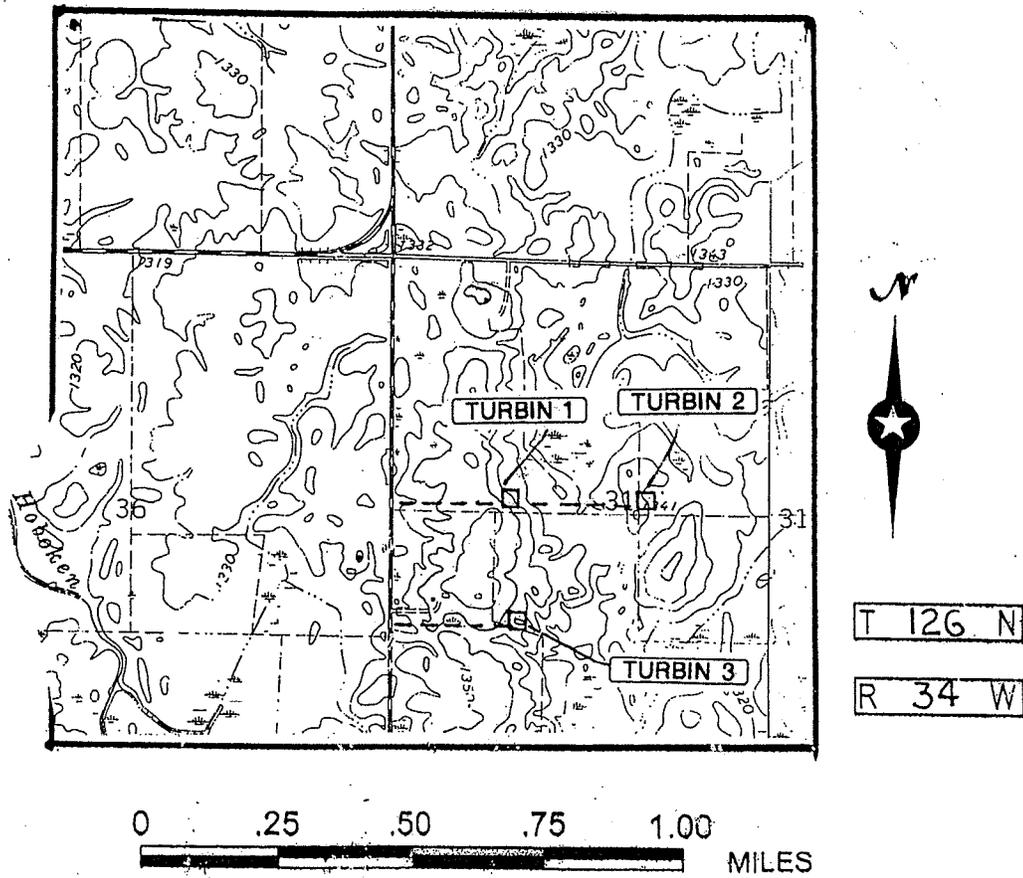


Figure 5. USGS map showing wind turbines 1, 2, 3 on Section 31-126-34 (USGS: Raymond Lake 1965).

Wind Turbine No. 1

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 1 consists of a service land corridor .25 mile in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the SW 1/4 of Section 31-126-34 and contain a total of 2.5 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

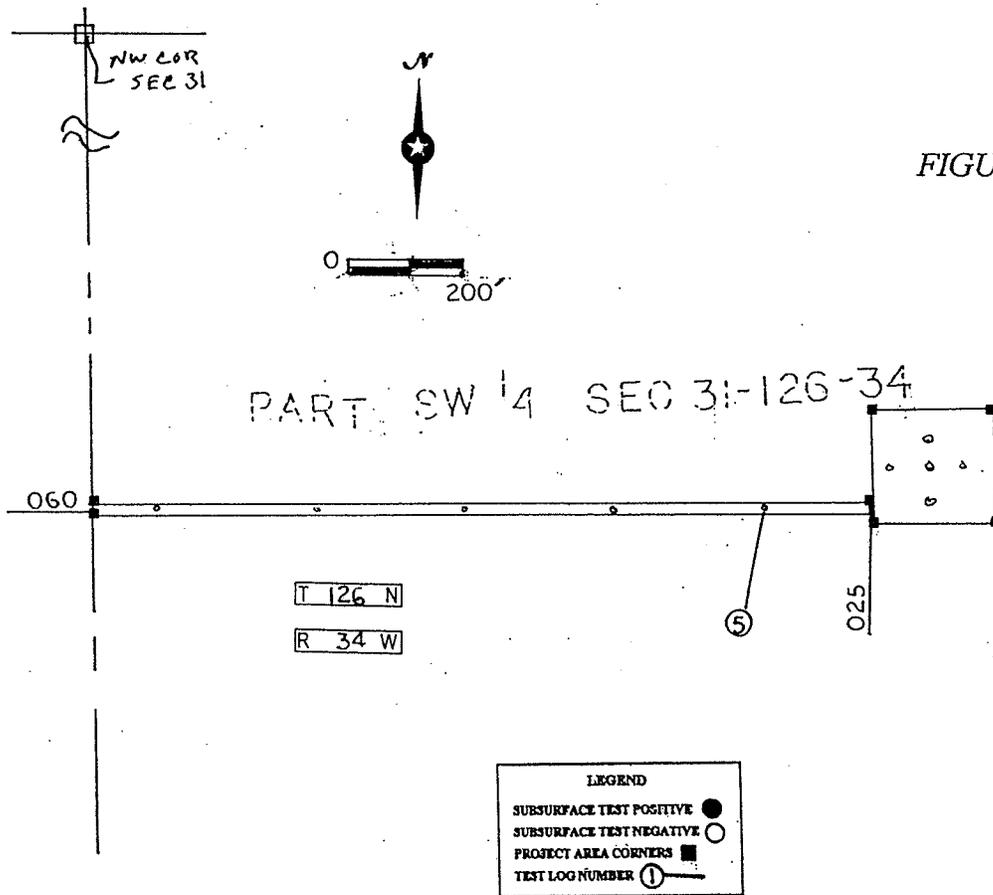
Field Survey: Wind Turbine No. 1 area of potential effect is 2.5 acres of land. It is 1.5 miles east of Hoboken Creek, a tributary of the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,341 feet to 1,350 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 10 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland, then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam, then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 1 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 1
Subsurface Test No.: 5
Location: SW ¼ Sec. 31-126-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-23	Black 10YR2/1 loam
A	23-35	Black 10YR2/1 loam
B	35-71	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 1



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 1 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 1 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 1.

Wind Turbine No. 2

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 2 consists of a service land corridor .25 mile in length and 50 feet wide to the 1 acre wind turbine site. The wind turbine and land corridor are located on part of the NW ¼ of Section 31-126-34, and contain a total of 2.5 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 2 area of potential effect is 2.5 acres of land. It is 1.5 miles east of Hoboken Creek, a tributary of the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,330 feet to 1,341 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 10 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 73cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 2 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 2
Subsurface Test No.: 2
Location: NW ¼ Section 31-126-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-21	Black 10YR2/1 loam
A	21-33	Black 10YR2/1 loam
B	33-73	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 2

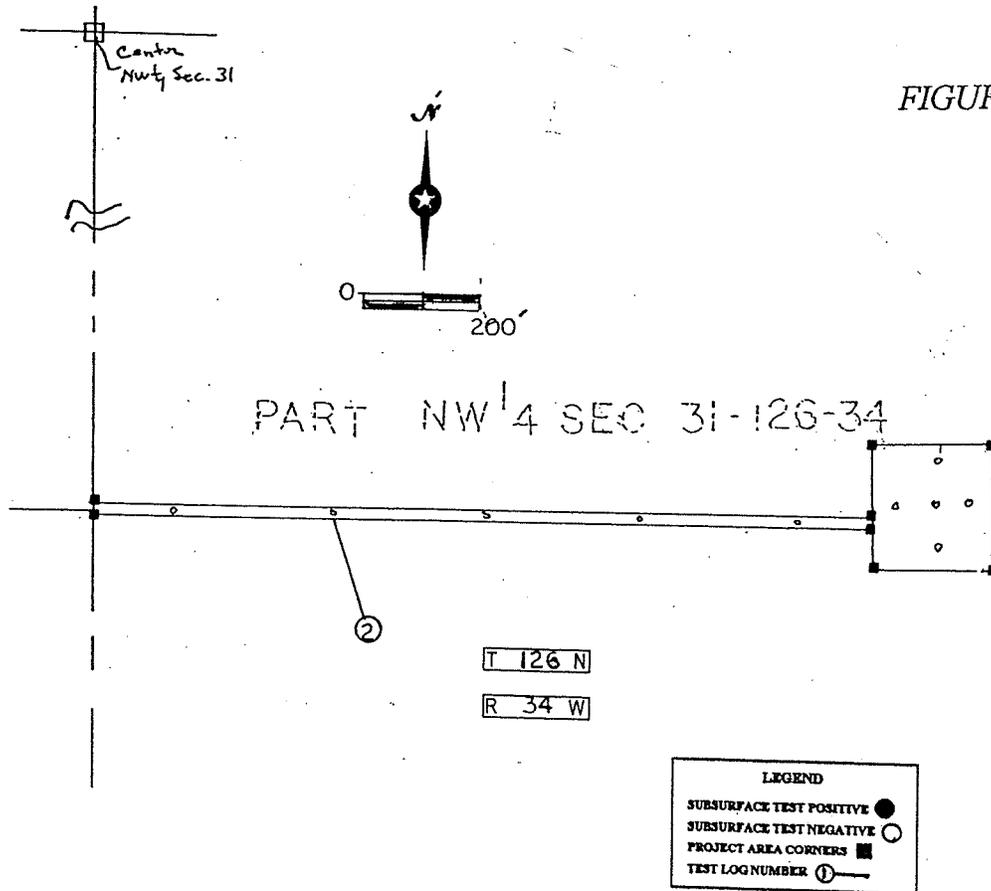


FIGURE 7

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 2 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 2 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 2.

Wind Turbine No. 3

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 3 consists of a service land corridor .25 mile in length and 50 feet wide to the 1 acre wind turbine site. The wind turbine and land corridor are located on part of the SW 1/4 of Section 31-126-34 and contain a total of 2.5 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

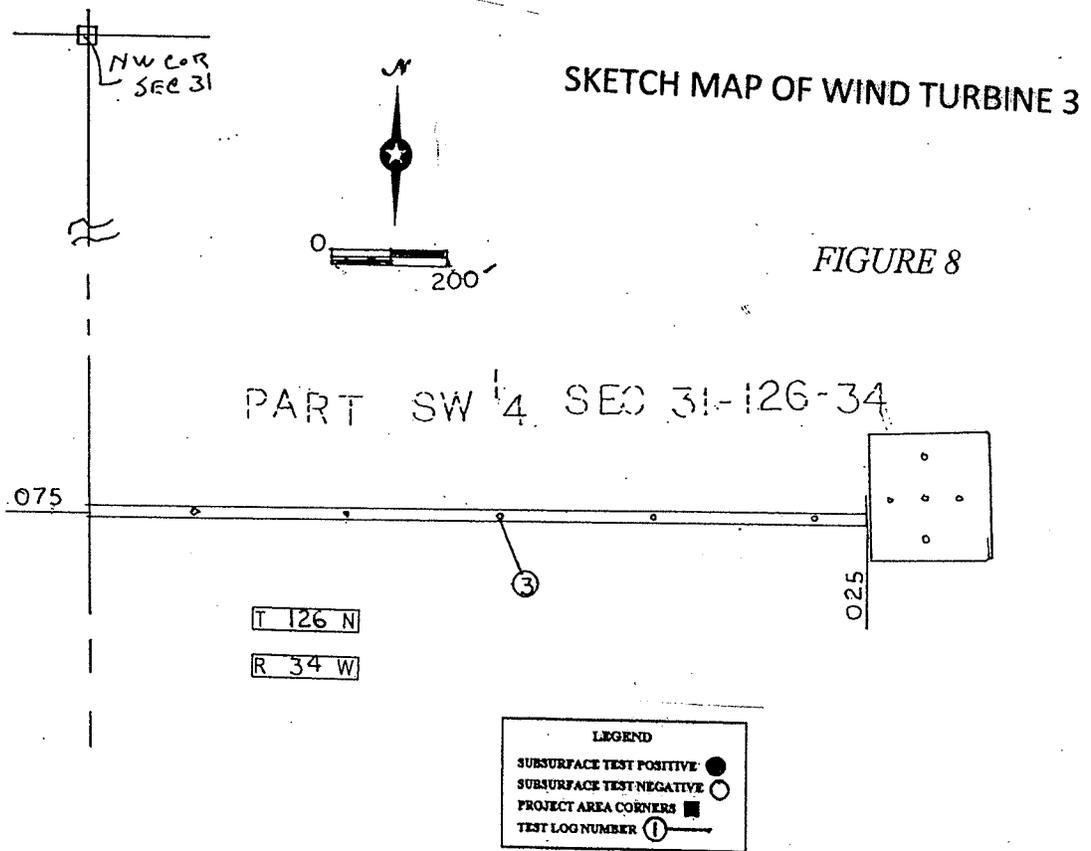
Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 3 area of potential effect is 2.5 acres of land. It is .75 mile east of Hoboken Creek. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,340 feet to 1,350 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 10 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland, then excavated to an average depth of 73cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 3 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 3
Subsurface Test No.: 3
Location: SW ¼ Section 31-126-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-20	Black 10YR2/1 loam
A	20-34	Black 10YR2/1 loam
B	34-73	Olive brown 2.5Y4/4 loam



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 3 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 3 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 3.

SECTION 32-126-34

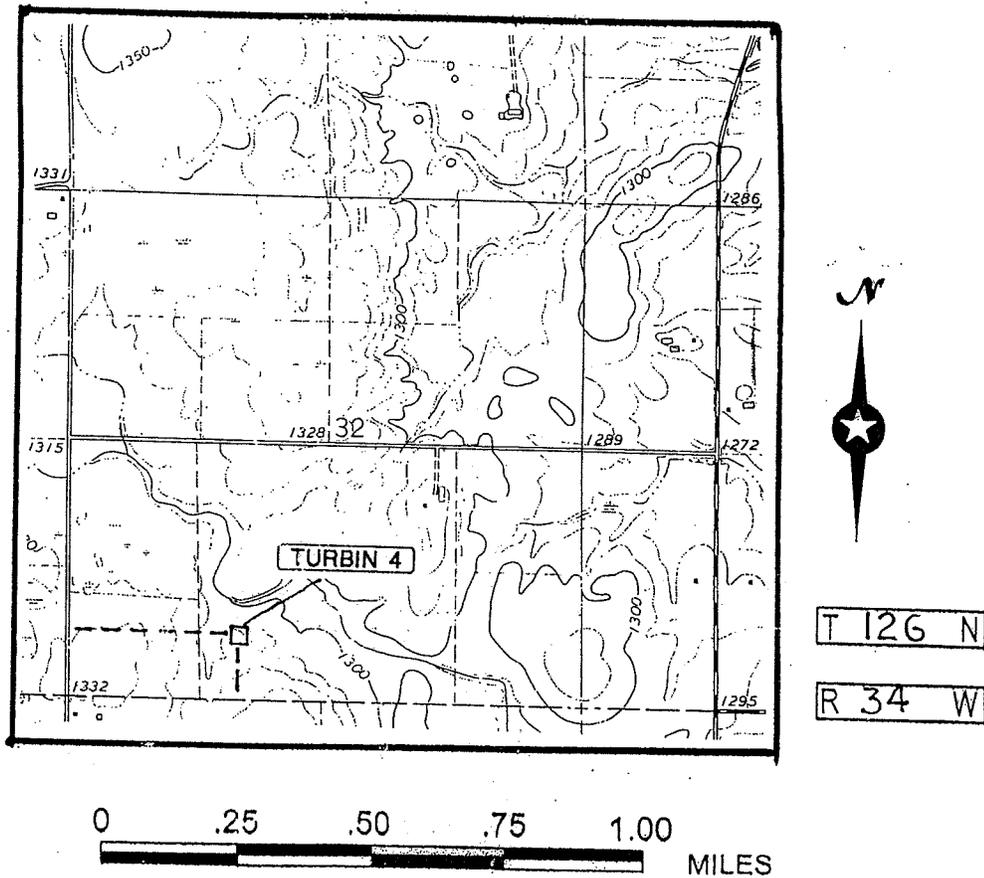


Figure 9. USGS map showing wind turbine 4 on Section 32-126-34 (USGS: Sauk Centre 1965).

Wind Turbine No. 4

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 4 consists of a service land corridor .45 mile in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the SW 1/4 of Section 32-126-34 and contain a total of 3.4 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

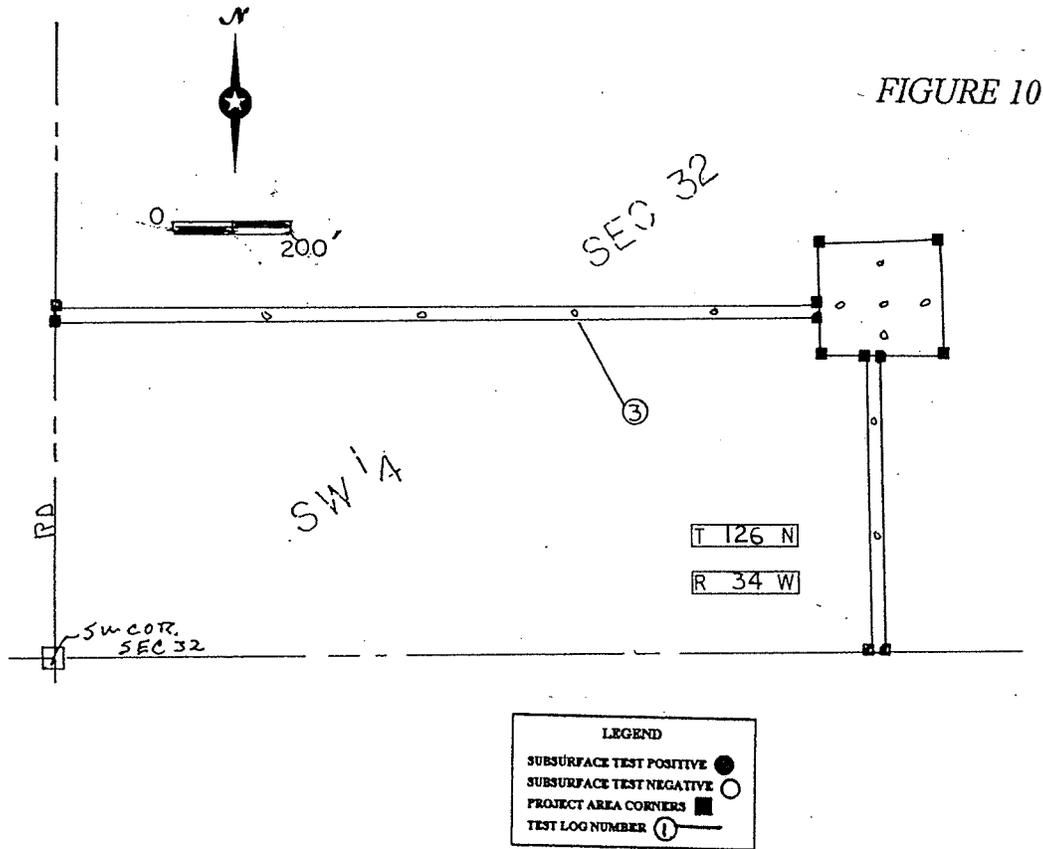
Field Survey: Wind Turbine No. 4 area of potential effect is 3.4 acres of land. It is situated near a secondary stream that eventually flows into the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,320 feet to 1,332 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 9 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 72cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 4 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 4
Subsurface Test No.: 3
Location: SW ¼ Section 32-126-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-23	Black 10YR2/1 loam
A	23-36	Black 10YR2/1 loam
B	36-72	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 4



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 4 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 4 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 4.

SECTION 4-125-34

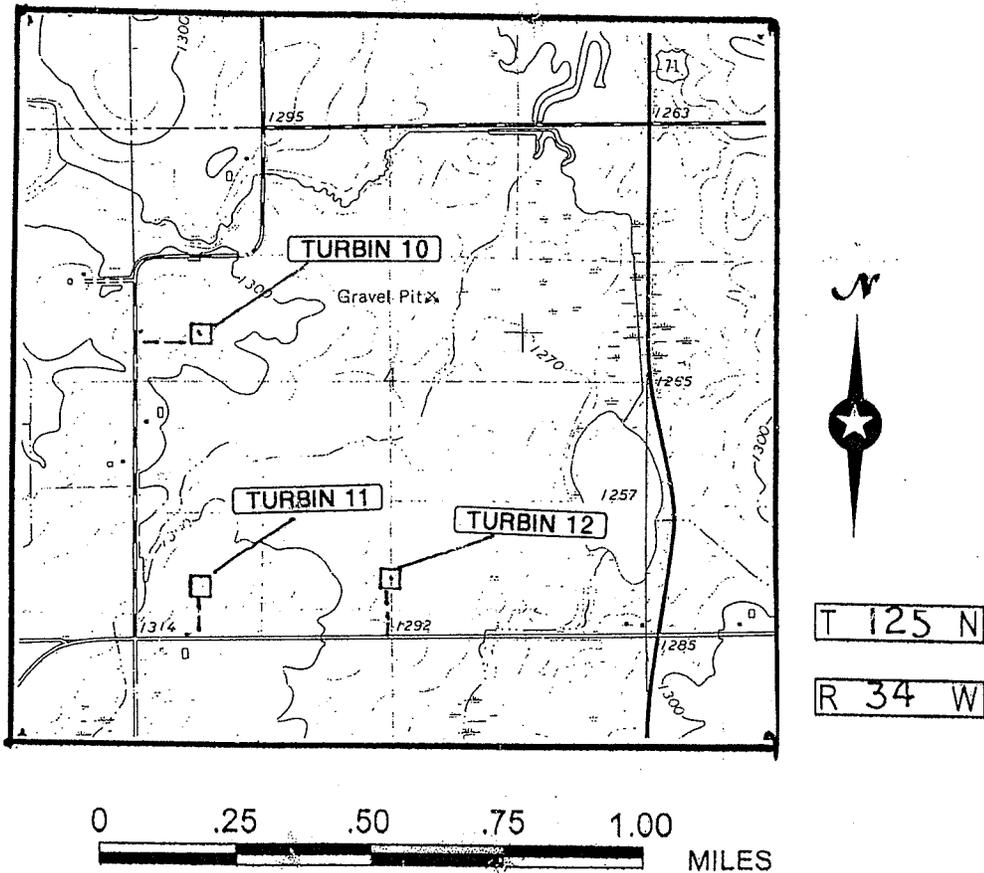


Figure 11. USGS map showing wind turbines 10, 11, 12 on Section 4-125-34 (USGS: Sauk Centre 1965).

Wind Turbine No. 10

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 10 consists of a service land corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the NW ¼ of Section 4-125-34 and contain a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

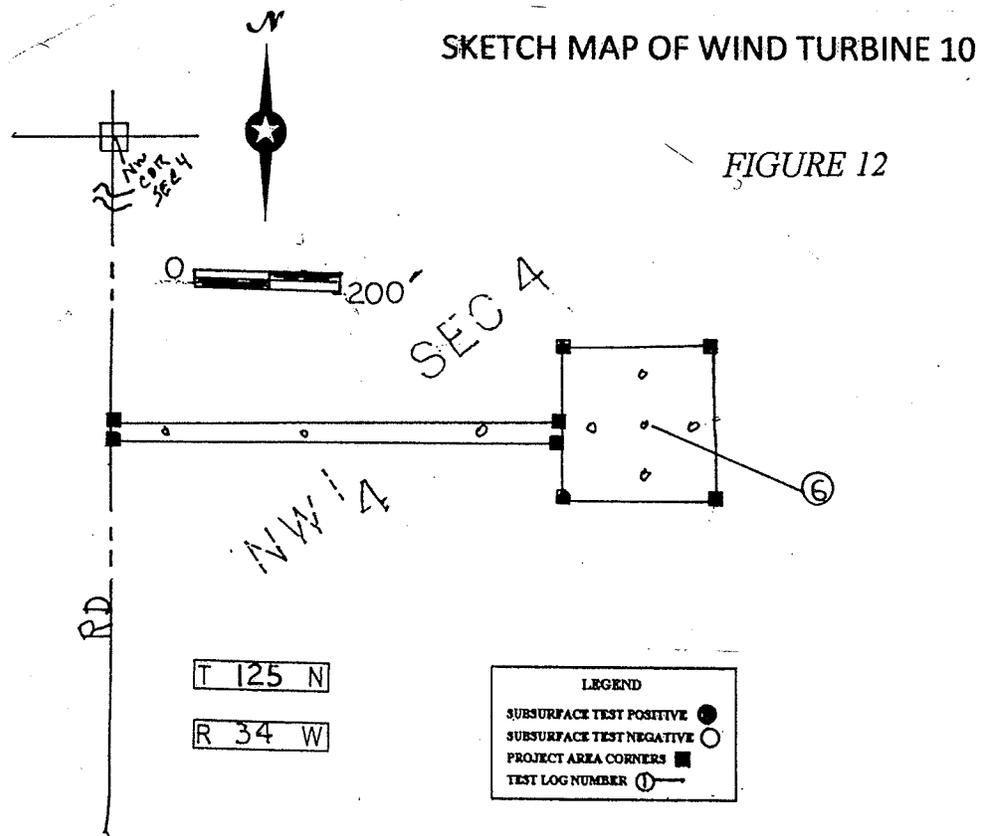
Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 10 area of potential effect is 1.7 acres of land. It is located on an upland rise and .50 mile west of a secondary stream of the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,290 feet to 1,300 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 8 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland, then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 10 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 10
Subsurface Test No.: 6
Location: NW ¼ Section 4-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-23	Black 10YR2/1 loam
A	23-35	Black 10YR2/1 loam
B	35-71	Olive brown 2.5Y4/4 loam



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 10 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 10 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 10.

Wind Turbine No. 11

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 11 consists of a service land corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the SW ¼ of Section 4-125-34 and contain a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

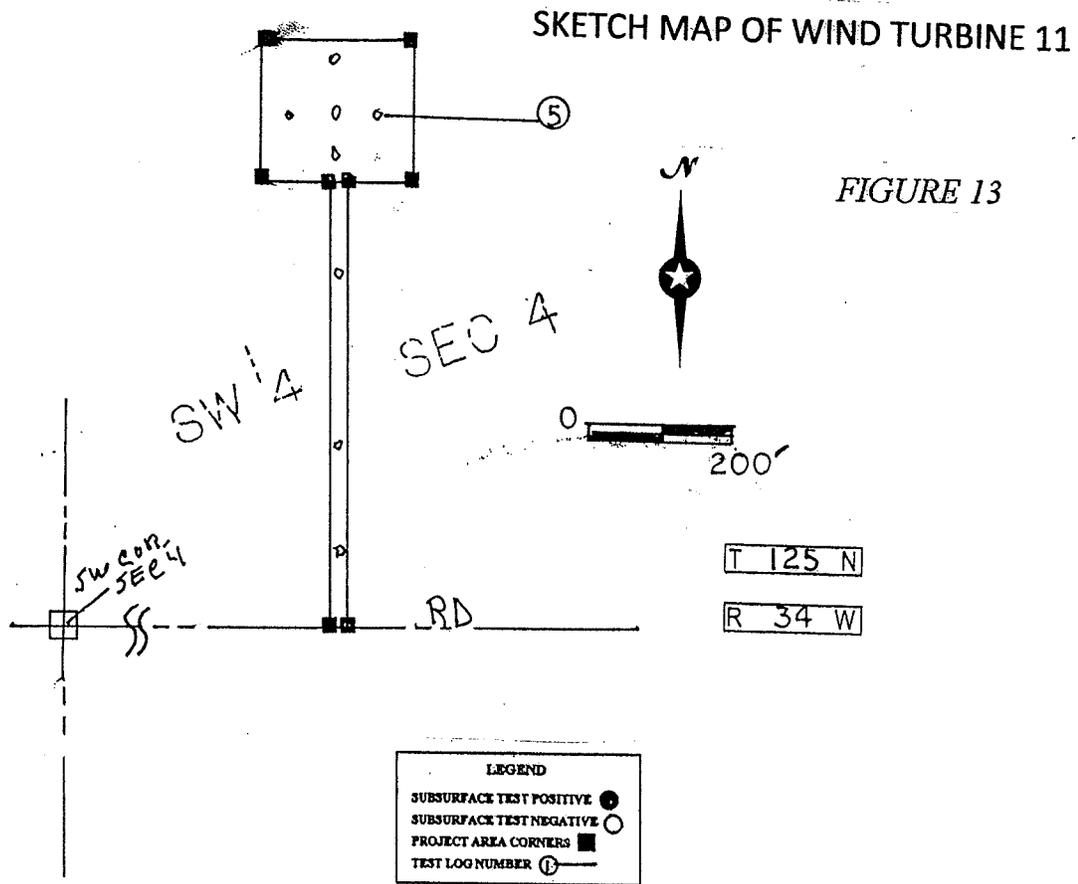
Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 11 area of potential effect is 1.7 acres of land. It is situated 600 feet east of a secondary stream of the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,300 feet to 1,314 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 8 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 69cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 11 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 11
Subsurface Test No.: 5
Location: SW ¼ Section 4-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-18	Black 10YR2/1 loam
A	18-36	Black 10YR2/1 loam
B	36-69	Olive brown 2.5Y4/4 loam



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 11 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 11 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 11.

Wind Turbine No. 12

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 12 consists of a service corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. It begins at circa the south quarter corner of Section 4-125-34, then 600 feet north to the wind turbine site; the wind turbine site is 1 acre in size and is 600 feet north of the south quarter corner of Section 4 with a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

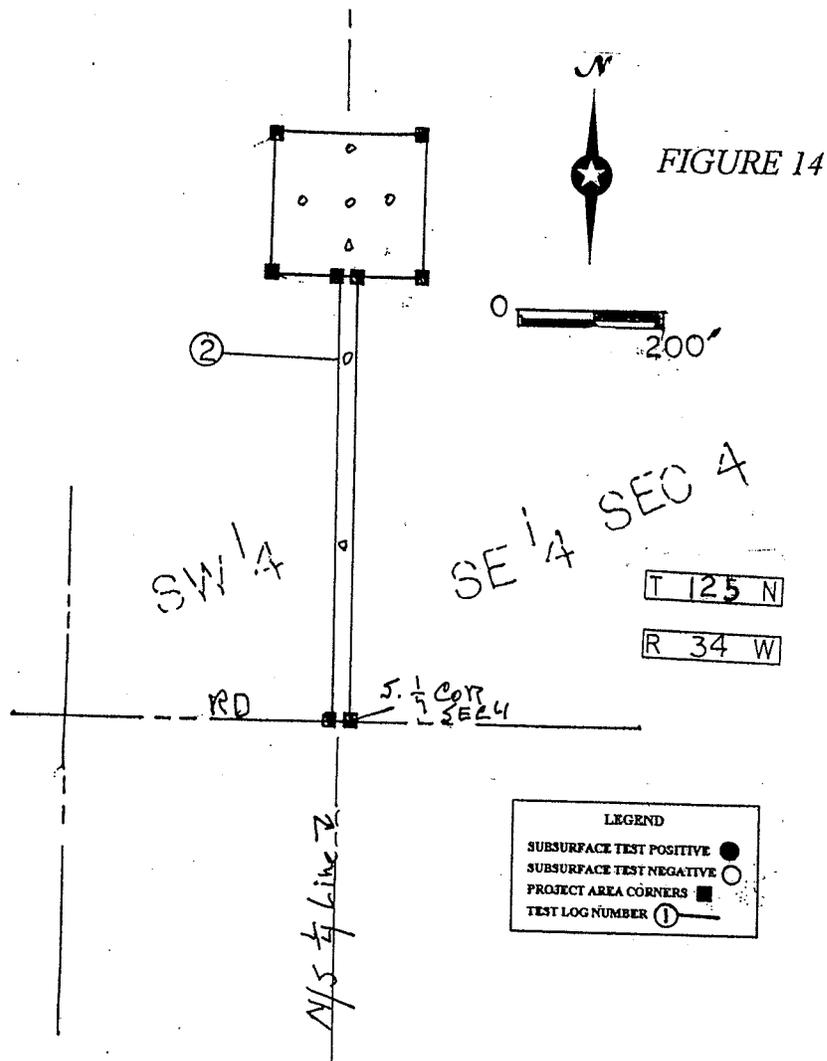
Field Survey: Wind Turbine No. 12 area of potential effect is 1.7 acres of land. It is situated .50 mile east of a secondary stream of the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,280 feet to 1,292 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 8 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 68cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 12 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 12
Subsurface Test No.: 2
Location: SW ¼ Section 4-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-17	Black 10YR2/1 loam
A	17-34	Black 10YR2/1 loam
B	34-68	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 12



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 12 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 12 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 12.

SECTION 5-125-34

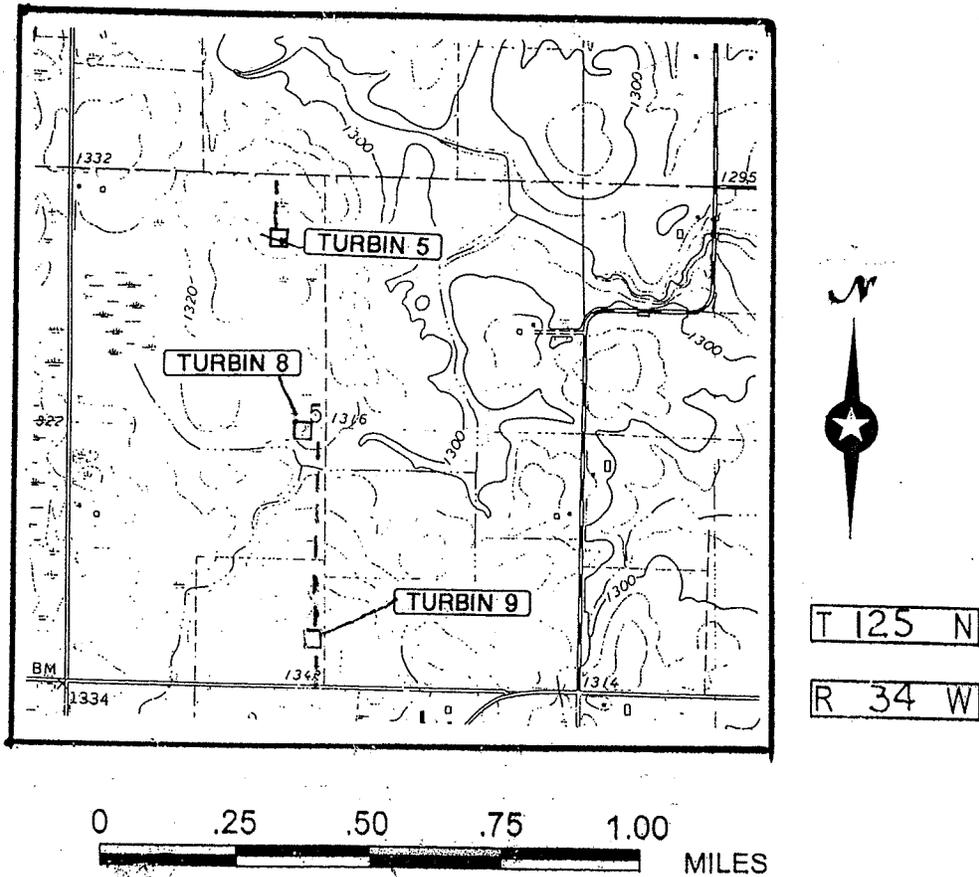


Figure 15. USGS map showing wind turbines 5, 8, 9 on Section 5-125-34 (USGS: Sauk Centre 1965).

Wind Turbine No. 5

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 5 consists of a service land corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the NW ¼ of Section 5-125-34 and contain a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

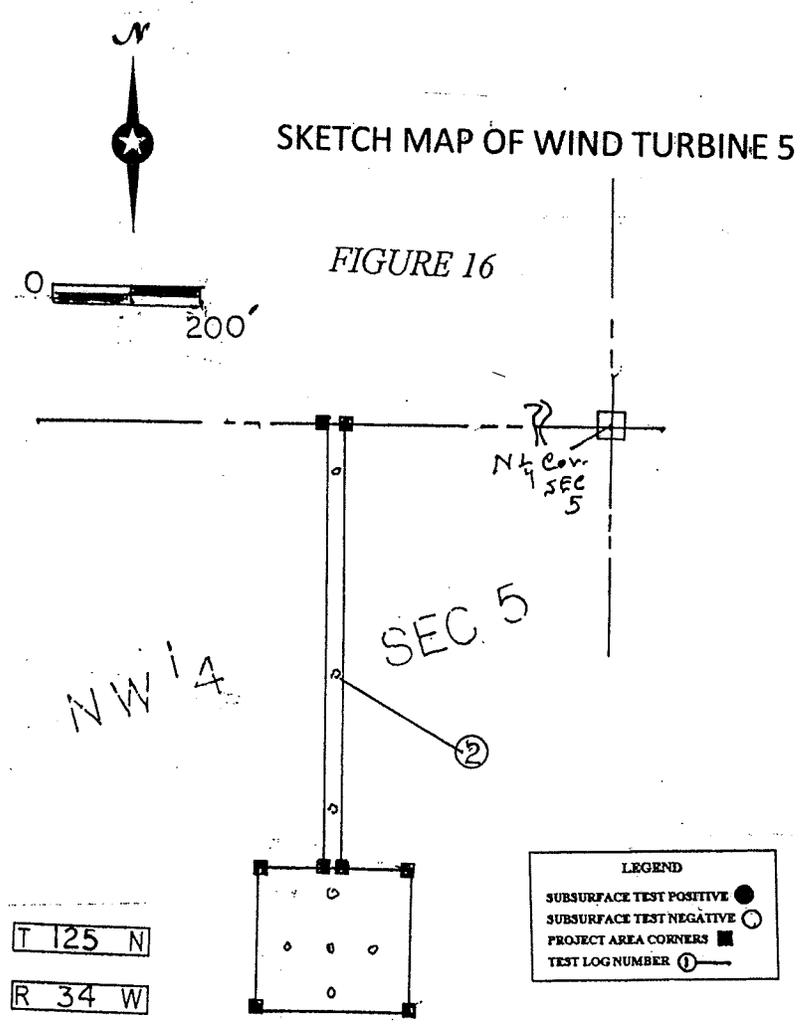
Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 5 area of potential effect is 1.7 acres of land. It is situated .35 mile south of a secondary tributary of the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,318 feet to 1,320 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 8 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland, then excavated to an average depth of 63cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 5 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 5
Subsurface Test No.: 2
Location: NW ¼ Section 5-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-21	Black 10YR2/1 loam
A	21-33	Black 10YR2/1 loam
B	33-63	Olive brown 2.5Y4/4 loam



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 5 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 5 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 5.

Wind Turbine No. 8

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 8 consists of a service land corridor .40 mile in length and 50 feet wide from the wind turbine site. It begins circa center of Section 5-125-34, then .40 mile south along the north/south quarterline of Section 5; the wind turbine site is 1 acre in size and near the center of Section 5-125-34 with a total of 3.42 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

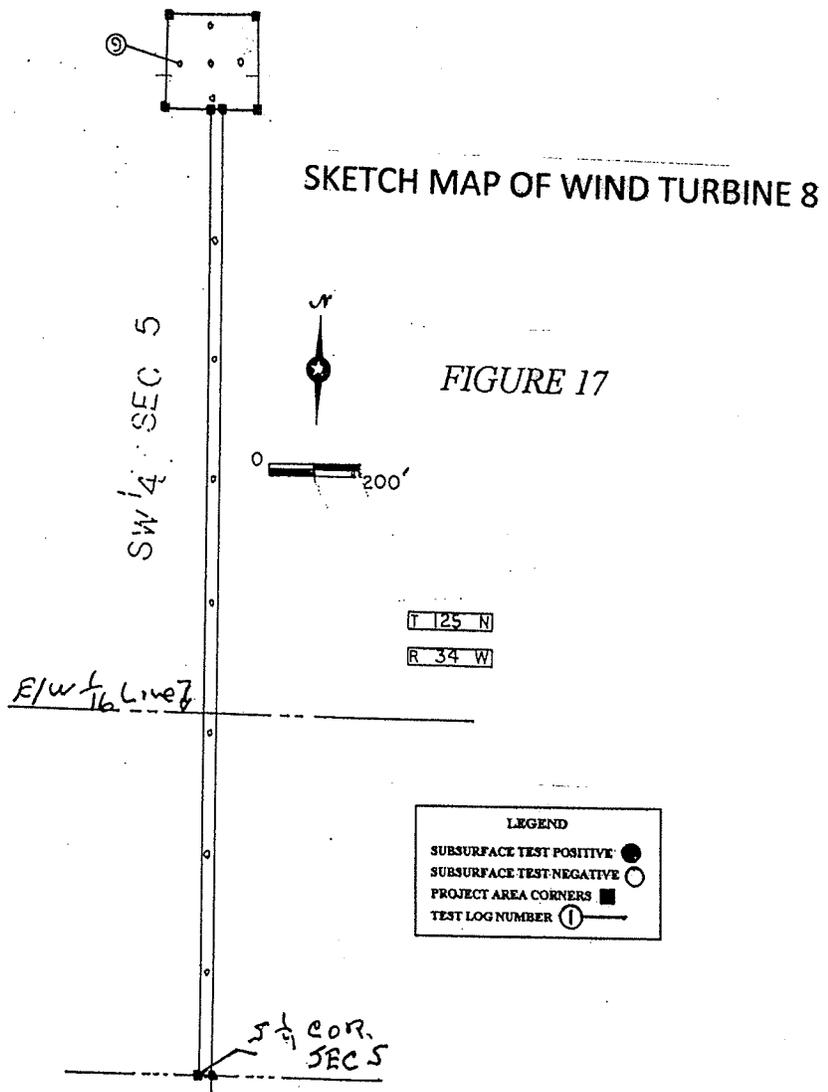
Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 8 area of potential effect is 3.42 acres of land. It is located near a secondary stream of the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,316 feet to 1,320 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 12 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 8 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 8
Subsurface Test No.: 9
Location: SW ¼ Section 5-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-23	Black 10YR2/1 loam
A	23-35	Black 10YR2/1 loam
B	35-71	Olive brown 2.5Y 4/4 loam



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 8 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 8 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 8.

Wind Turbine No. 9

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 9 consists of a 600 foot service land corridor that is 50 feet wide from the wind turbine site. It begins at the south quarter corner of Section 5, then 600 feet north to the wind turbine site. The wind turbine site is 1 acre in size and is located on the SE 1/4 SW 1/4 of Section 5-125-34 with a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 9 area of potential effect is 1.7 acres of land. It is situated within a secondary stream system of the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,334 feet to 1,342 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 8 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 72cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 9 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 9
Subsurface Test No.: 7
Location: SW ¼ Section 5-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-22	Black 10YR2/1 loam
A	22-34	Black 10YR2/1 loam
B	34-72	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 9

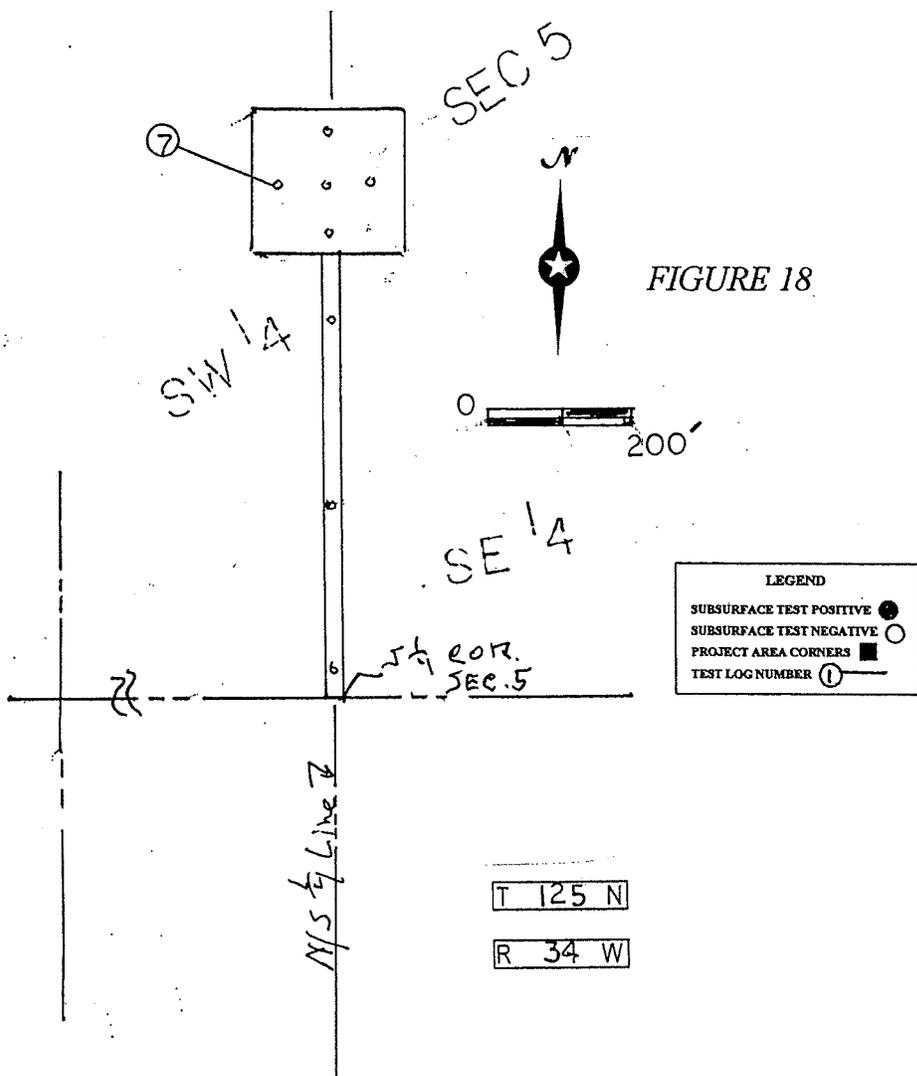


FIGURE 18

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 9 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 9 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 9.

SECTION 6-125-34

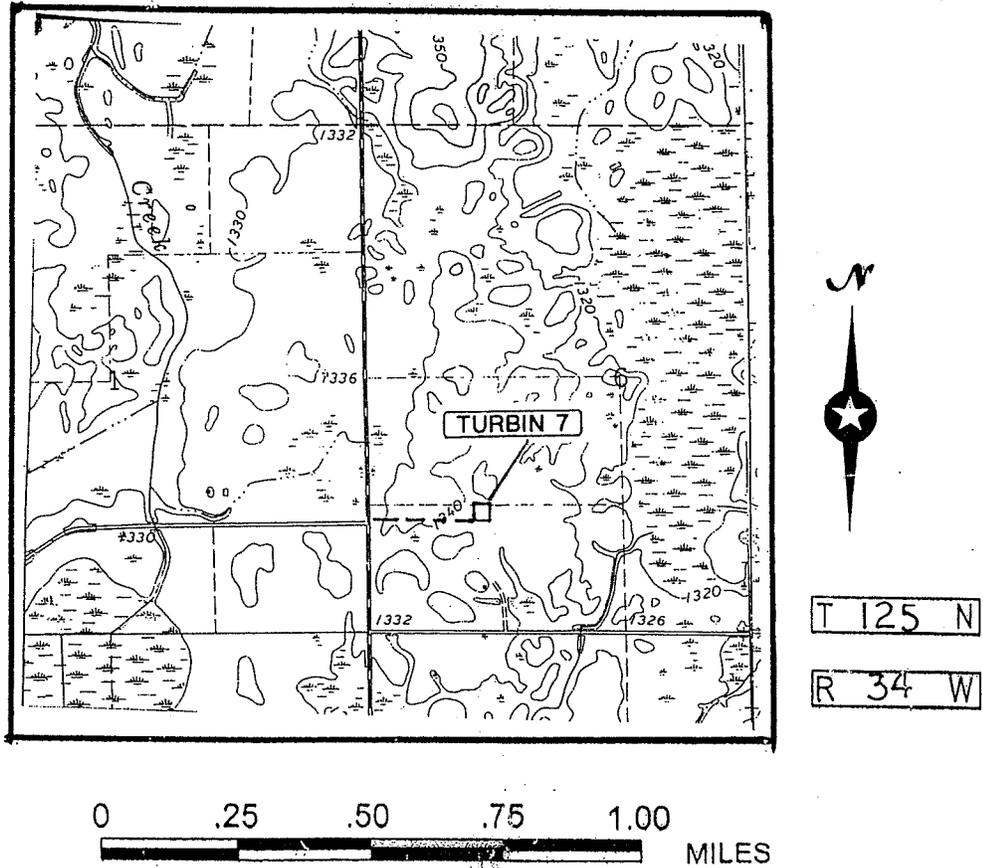


Figure 19. USGS map showing wind turbine 7 on Section 6-125-34 (USGS: Raymond Lake 1965).

Wind Turbine No. 7

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 7 consists of a service land corridor .25 mile in length and 50 feet wide to the 1-acre wind turbine site. It begins circa at the west sixteenth corner of the southwest quarter of Section 6-125-34, then 600 feet east to the 1-acre turbine site. The wind turbine site is located on the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 6-125-34, with a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 7 area of potential effect is 1.7 acres in size. It is situated .40 mile east of Hoboken creek, a tributary of the Sauk River. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,232 feet to 1,240 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 10 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 63cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 7 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 7
Subsurface Test No.: 7
Location: SW ¼ Section 6-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-18	Black 10YR2/1 loam
A	18-29	Black 10YR2/1 loam
B	29-63	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 7

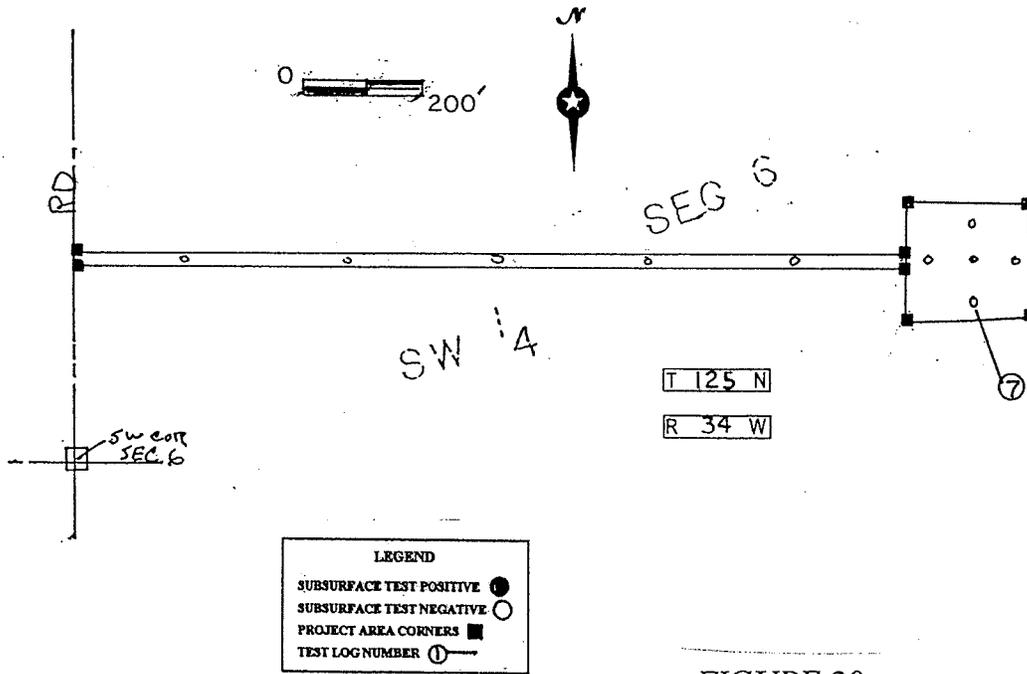


FIGURE 20

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 7 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 7 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 7.

SECTION 7-125-34

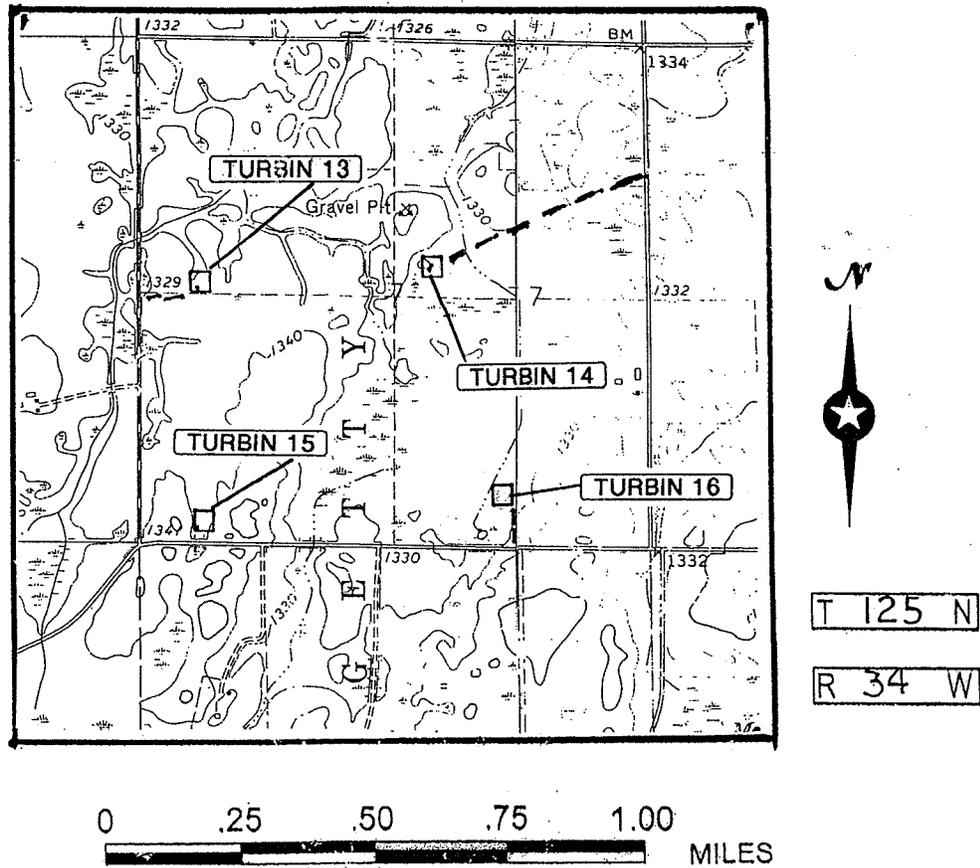


Figure 21. USGS map showing wind turbines 13, 14, 15, 16 on Section 7-125-34 (USGS: Raymond Lake 1965).

Wind Turbine No. 13

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 13 consists of a service land corridor 600 feet in length and 50 feet wide to the wind turbine site and begins circa at the west quarter corner of Section 7-125-34, then 600 feet east to the wind turbine site. The wind turbine site is 1 acre in size and is located on the NW ¼ of Section 7-125-34, with a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 14 area of potential effect is 7.6 acres in size. It is situated 1.00 mile south of the Sauk River and is near secondary upland drainageways. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,330 feet to 1,340 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 10 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 70cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 14 showed no evidence of buried paleosols within the excavated soils.

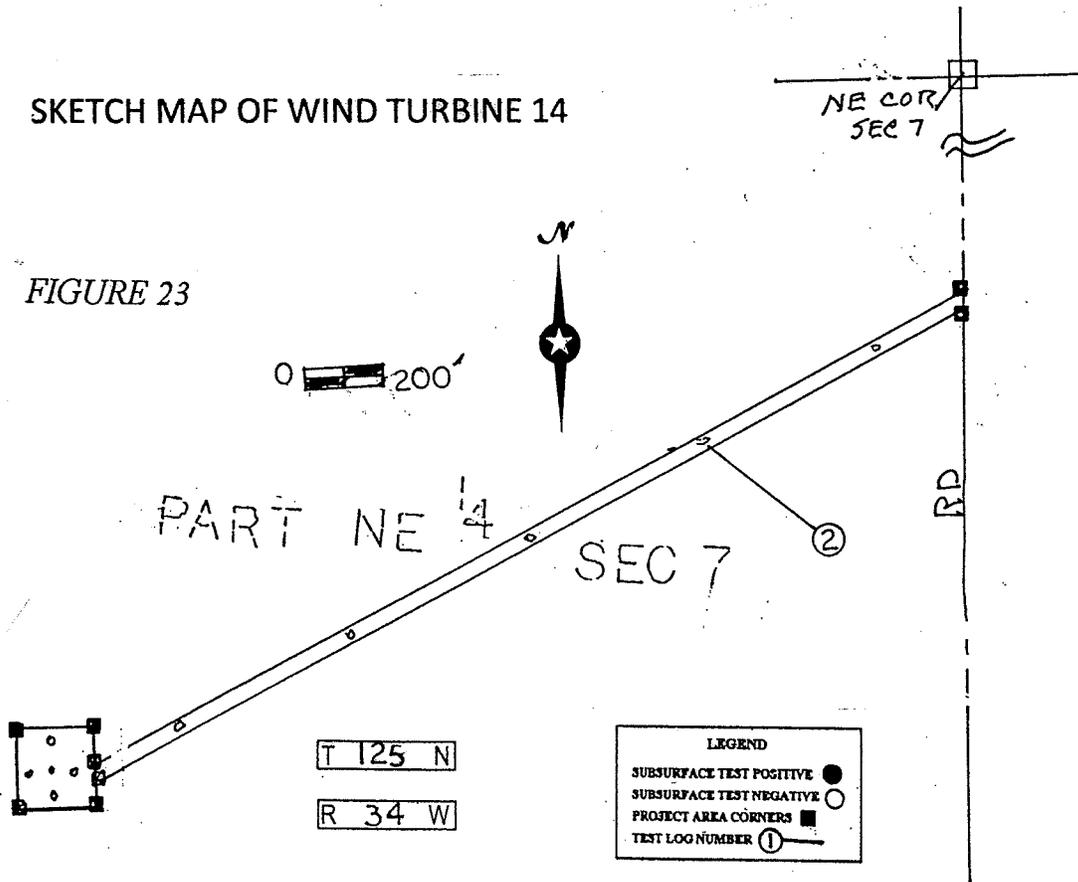
TEST LOG

Wind Turbine No.: 14
Subsurface Test No.: 2
Location: NE ¼ Section 7-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-21	Black 10YR2/1 loam
A	21-34	Black 10YR2/1 loam
B	34-70	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 14

FIGURE 23



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 14 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 14 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 14.

Wind Turbine No. 15

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 15 consists of a service land corridor circa 300 feet in length and 50 feet wide to the wind turbine site. The corridor and the 1-acre wind turbine site are located on the SW 1/4 SW 1/4 SW 1/4 of Section 7-125-34 with a total of 1.30 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 15 area of potential effect is 1.30 acres of land. It is situated on upland drainage areas and 1.00 mile east of Hoboken Creek. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,340 feet to 1,341 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. West of the project area is a stone erected near the road and it states, God Bless America and is dedicated to a Jewish farmer (circa 2000). It is not on the area of potential effect and was placed at that location by a local farmer. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 7 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 70cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 15 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 15
Subsurface Test No.: 5
Location: SW ¼ Section 7-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-16	Black 10YR2/1 loam
A	16-29	Black 10YR2/1 loam
B	29-70	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 15

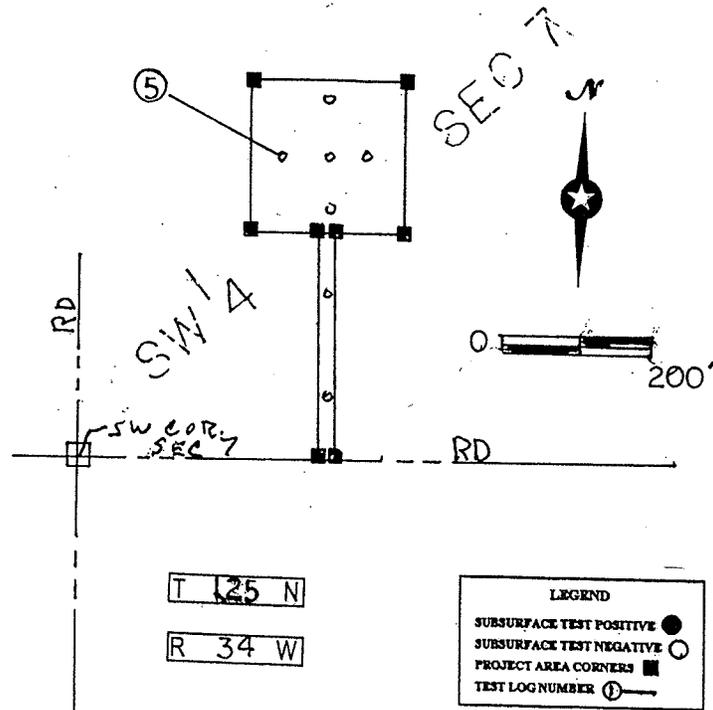


FIGURE 24

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 15 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 15 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 15.

Wind Turbine No. 16

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 16 consists of a service land corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the SE ¼ of Section 7-125-34 and contain a total 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

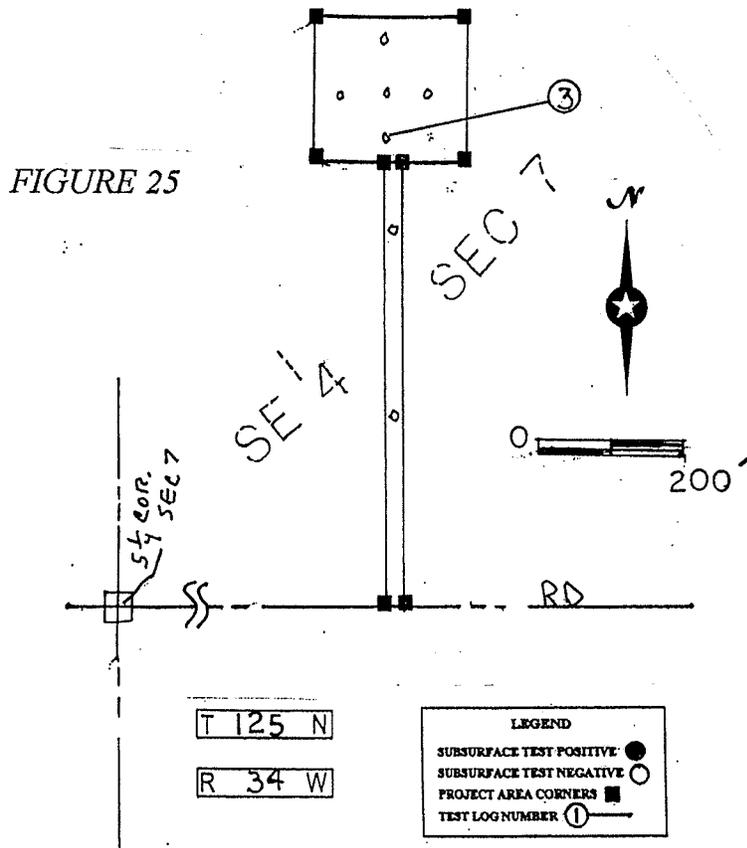
Field Survey: Wind Turbine No. 16 area of potential effect is 1.7 acres of land. It is situated on an upland drainage area and is 1.25 miles southeast of Hoboken creek. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,330 feet to 1,332 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 7 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 16 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 16
Subsurface Test No.: 3
Location: SE ¼ Section 7-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-20	Black 10YR2/1 loam
A	20-30	Black 10YR2/1 loam
B	30-71	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 16



Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 16 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 16 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 16.

SECTION 8-125-34

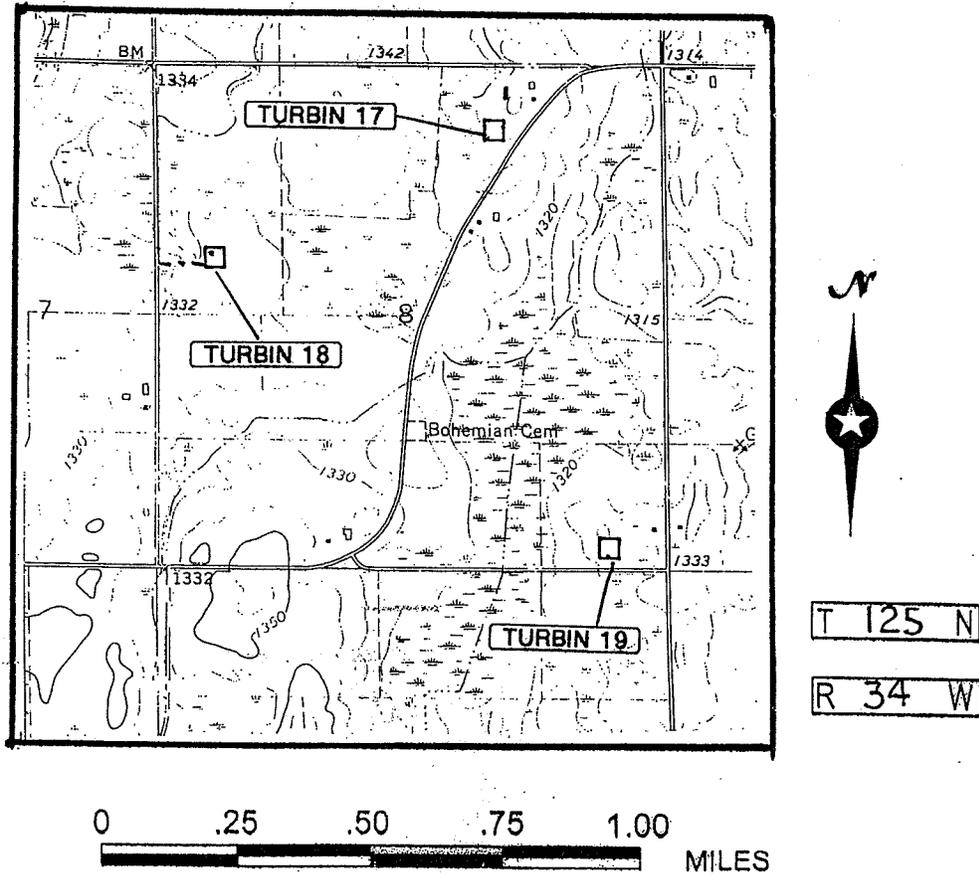


Figure 26. USGS map showing wind turbines 17, 18, 19 on Section 8-125-34 (USGS: Sauk Centre 1965).

Wind Turbine No. 17

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 17 consists of a service land corridor 300 feet in length and 50 feet wide to the wind turbine site. The corridor and wind turbine site are on the NE ¼ of Section 8-125-34 and contain 1.35 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 17 area of potential effect is 1.35 acres of land. It is situated on an upland drainage area circa 1.75 miles east of Hoboken Creek. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,320 feet to 1,330 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 7 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 17 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 17
Subsurface Test No.: 3
Location: NE ¼ Section 8-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-23	Black 10YR2/1 loam
A	23-35	Black 10YR2/1 loam
B	35-71	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 17.

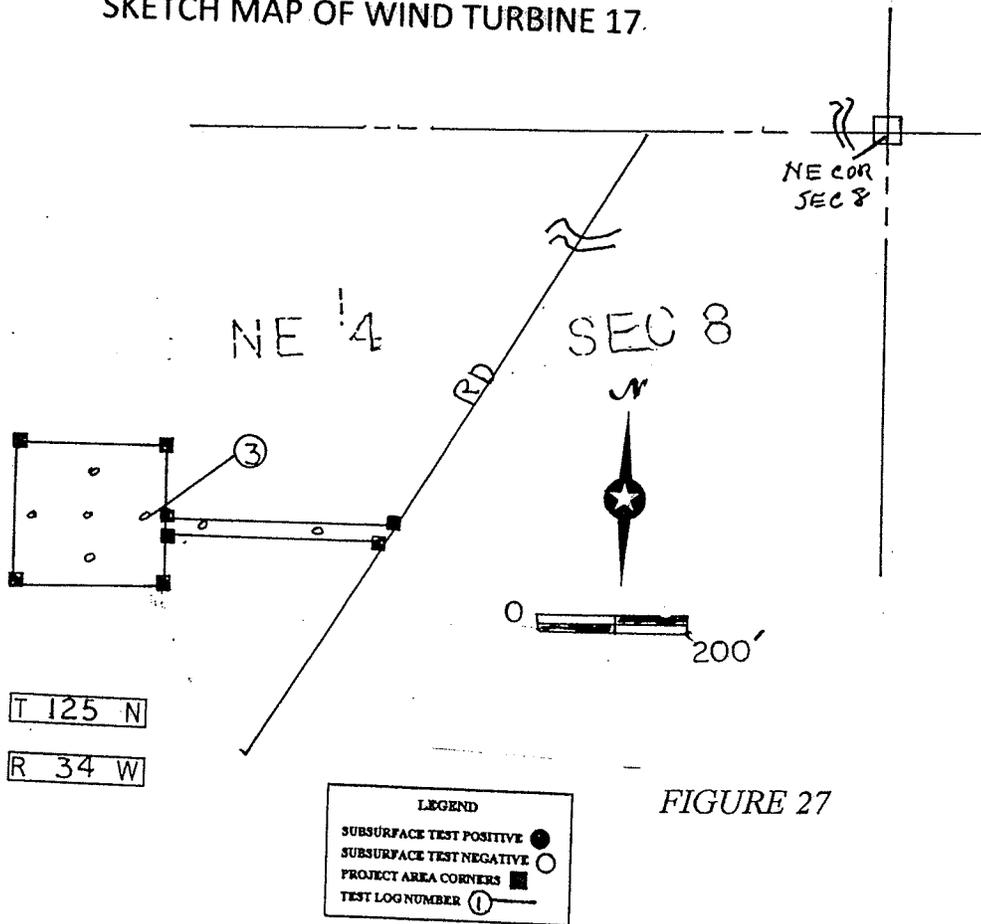


FIGURE 27

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 17 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 17 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 17.

Wind Turbine No. 18

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 18 consists of a service land corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine site and corridor are located on the NW ¼ Section 8-125-34 and contain 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 18 area of potential effect is 1.7 acres of land. It is situated on the upland drainageways and 1.50 miles east of Hoboken Creek. The topography on the area of potential effect Phase I survey area is flat with 0% to 2% slopes with elevations of 1,332 feet to 1,334 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 7 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 70cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 18 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 18
Subsurface Test No.: 5
Location: NW ¼ Section 8-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-21	Black 10YR2/1 loam
A	21-34	Black 10YR2/1 loam
B	34-70	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 18

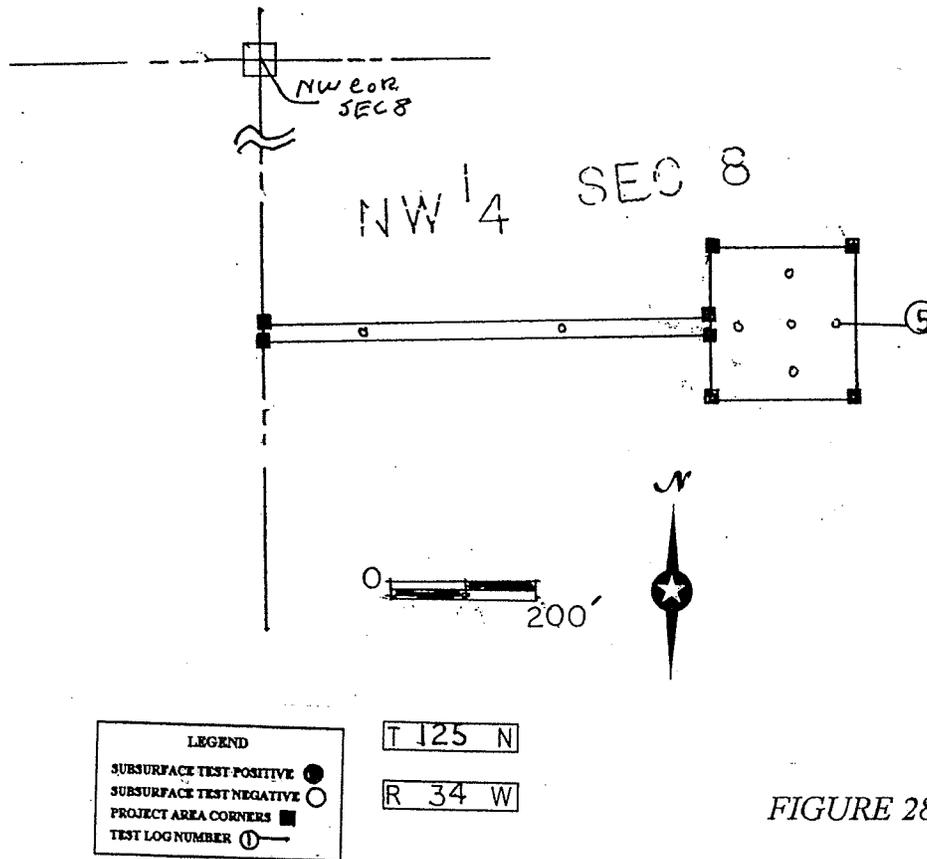


FIGURE 28

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 18 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 18 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 18.

Wind Turbine No. 19

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 19 consists of a service land corridor 300 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and corridor are located on part of the SE ¼ Section 8-125-34 and contains 1.34 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 19 area of potential effect is 1.34 acres of land. It is situated on the upland drainage area near a secondary stream. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,320 feet to 1,330 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 7 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 19 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 19
Subsurface Test No.: 5
Location: SW ¼ Section 8-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-22	Black 10YR2/1 loam
A	22-30	Black 10YR2/1 loam
B	30-71	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 19

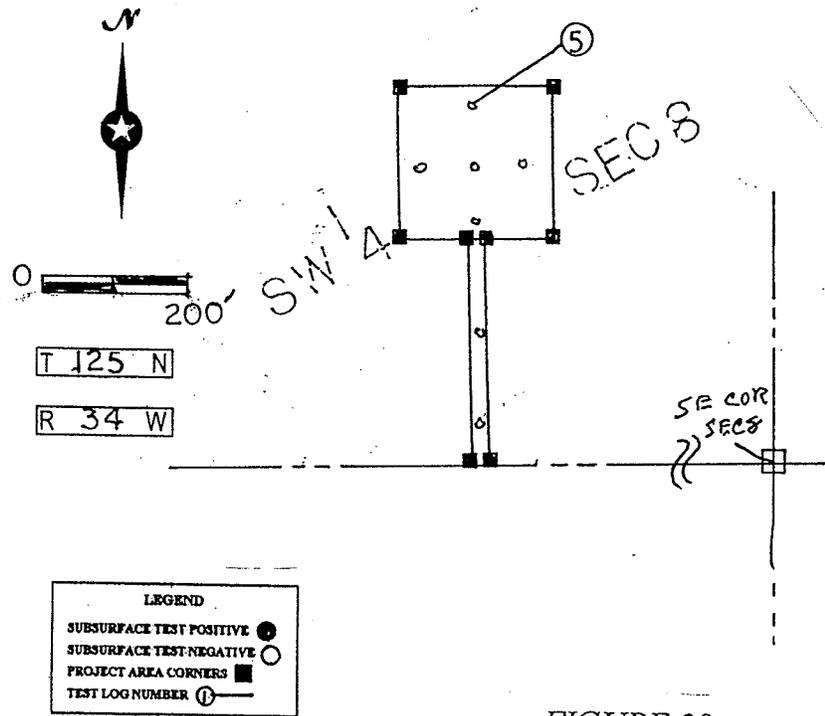


FIGURE 29

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 19 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 19 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 19.

SECTION 9-125-34

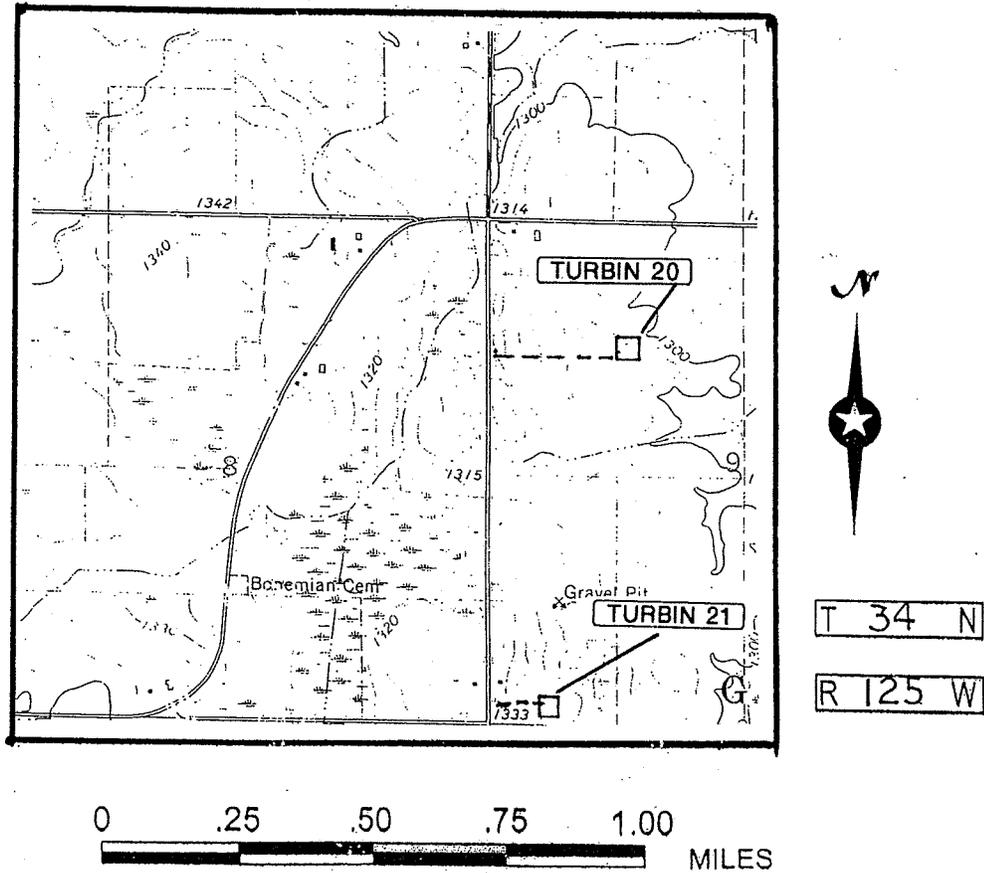


Figure 30. USGS map showing wind turbines 20, 21 on Section 9-125-34 (USGS: Sauk Centre 1965).

Wind Turbine No. 20

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 20 consists of a service land corridor .25 mile in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the NW ¼ of Section 9-125-34 and contain a total of 2.5 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 20 area of potential effect is 2.5 acres of land. It is situated .35 mile east of a small secondary unnamed stream on the uplands. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,300 feet to 1,305 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 9 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 69cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 20 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 20
Subsurface Test No.: 3
Location: NW ¼ Section 9-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-18	Black 10YR2/1 loam
A	18-28	Black 10YR2/1 loam
B	28-69	Olive brown 2.5Y4/4 loam

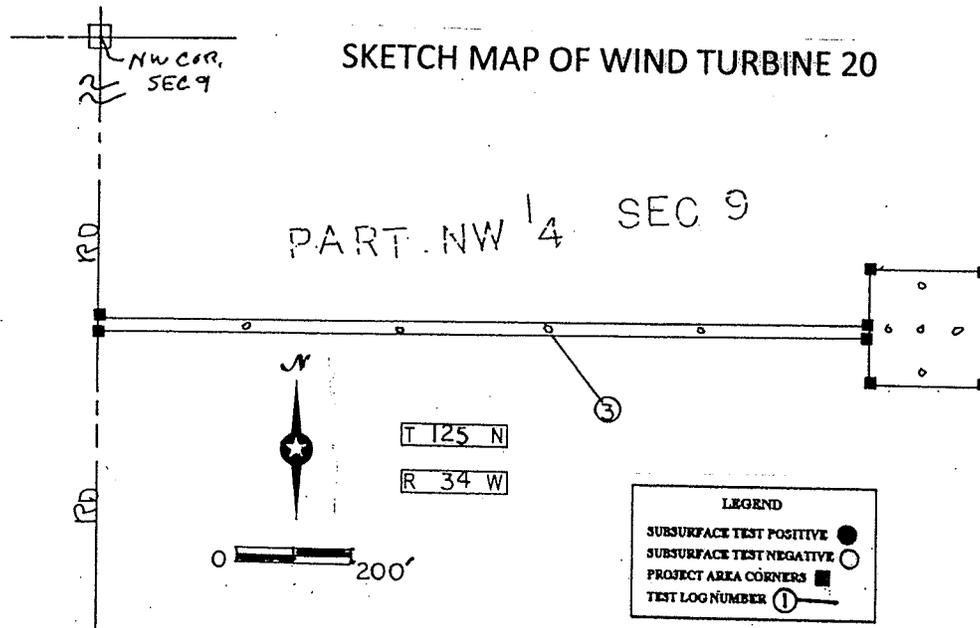


FIGURE 31

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 20 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 20 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 20.

Wind Turbine No. 21

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 21 consists of a service land corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the SW ¹/₄ of Section 9-125-34 and contain a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 21 area of potential effect is 1.7 acres of land. It is .50 mile west of the nearest secondary stream on the uplands. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,325 feet to 1,333 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 7 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 70cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 21 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 21
Subsurface Test No.: 2
Location: SW ¼ Section 9-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-18	Black 10YR2/1 loam
A	18-33	Black 10YR2/1 loam
B	33-70	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 21

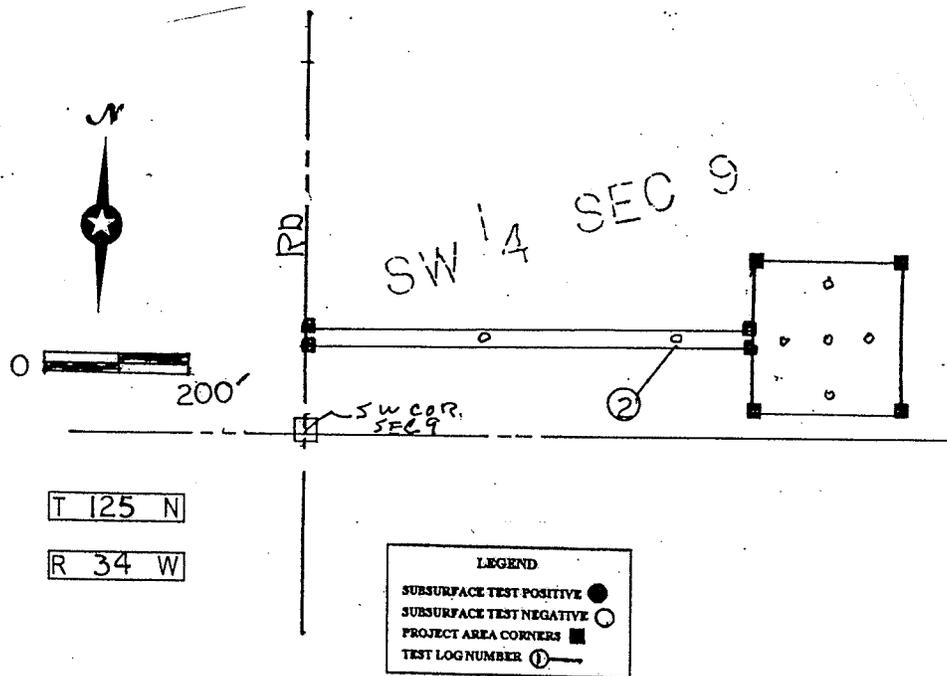


FIGURE 32

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 21 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 21 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 21.

SECTION 16-125-34

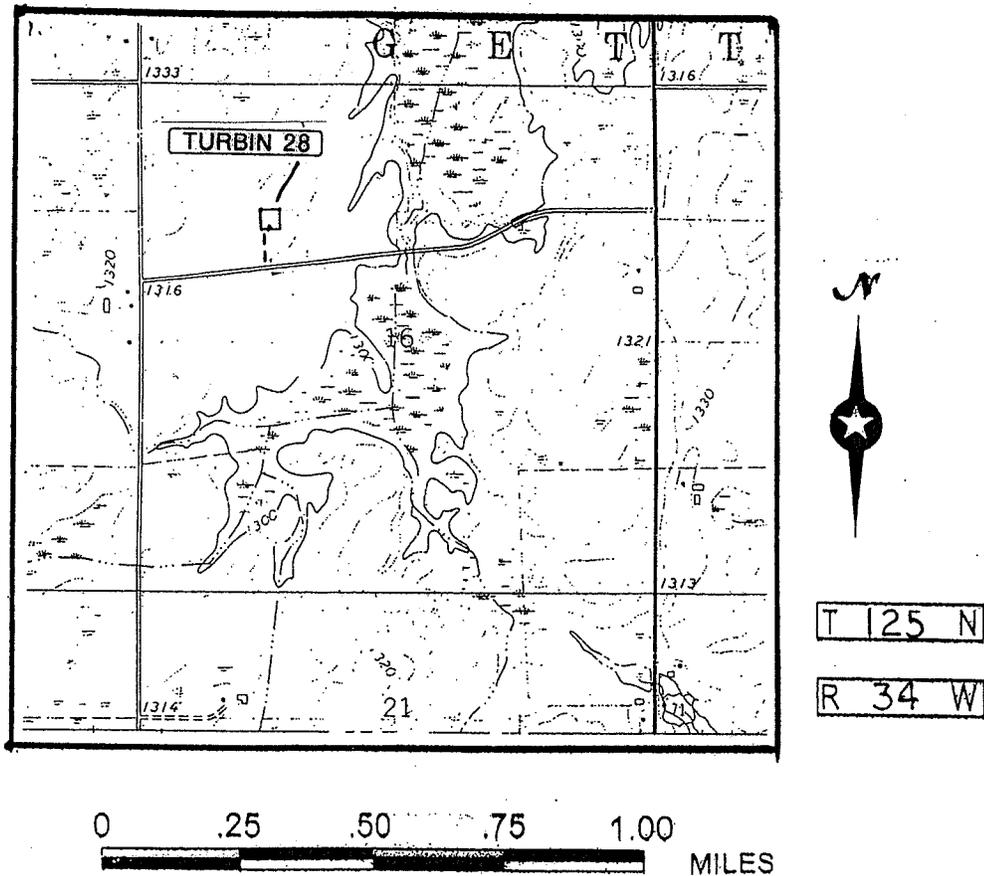


Figure 33. USGS map showing wind turbine 28 on Section 16-125-34 (USGS: Sauk Centre 1965).

Wind Turbine No. 28

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 28 consists of a service land corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on the NW ¼ of Section 16-125-34 with a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 28 area of potential effect is 1.7 acres of land. It is located .25 mile west of an upland marsh area. The topography on the area of potential effect Phase I survey area is flat with 0% to 2% slopes with elevations of 1,310 feet to 1,316 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 7 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 28 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 28
Subsurface Test No.: 1
Location: NW ¼ Section 16-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-22	Black 10YR2/1 loam
A	22-34	Black 10YR2/1 loam
B	34-71	Olive brown 2.5Y4/4 loam

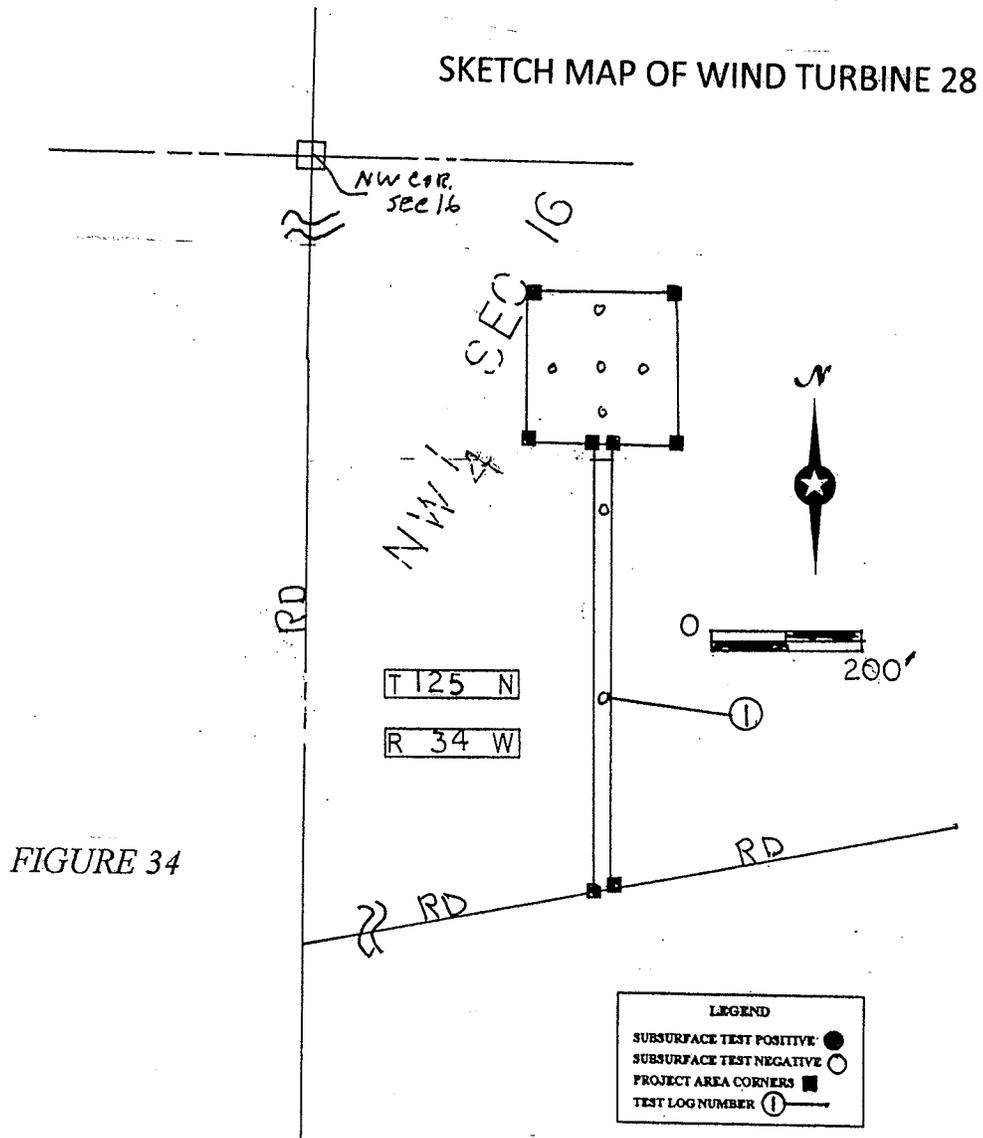


FIGURE 34

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 28 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 28 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 28.

SECTION 17-125-34

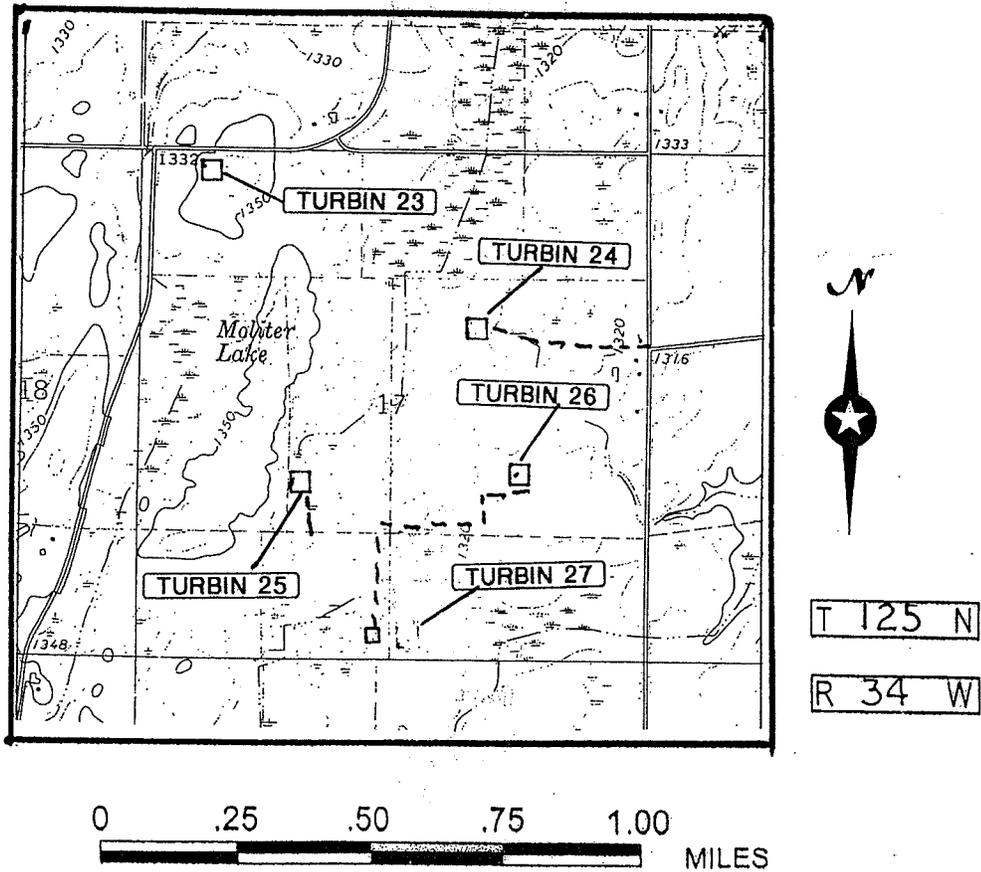


Figure 35. USGS map showing wind turbines 23, 24, 25, 26, 27 on Section 17-125-34 (USGS: Sauk Centre 1965).

Wind Turbine No. 23

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 23 consists of a service land corridor circa 300 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on the NW ¼ Section 17-125-34 and contains 1.34 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 23 area of potential effect is 1.34 acres of land. It is situated on the uplands and .25 mile north of Moliter Lake. The topography on the area of potential effect Phase I survey area is flat with 0% to 2% slopes with elevations of 1,350 feet to 1,345 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 7 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 760-meter intervals on cropland then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 23 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 23
Subsurface Test No.: 4
Location: NW ½ Section 17-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-16	Black 10YR2/1 loam
A	16-33	Black 10YR2/1 loam
B	33-71	Olive brown 2.5Y4/4 loam

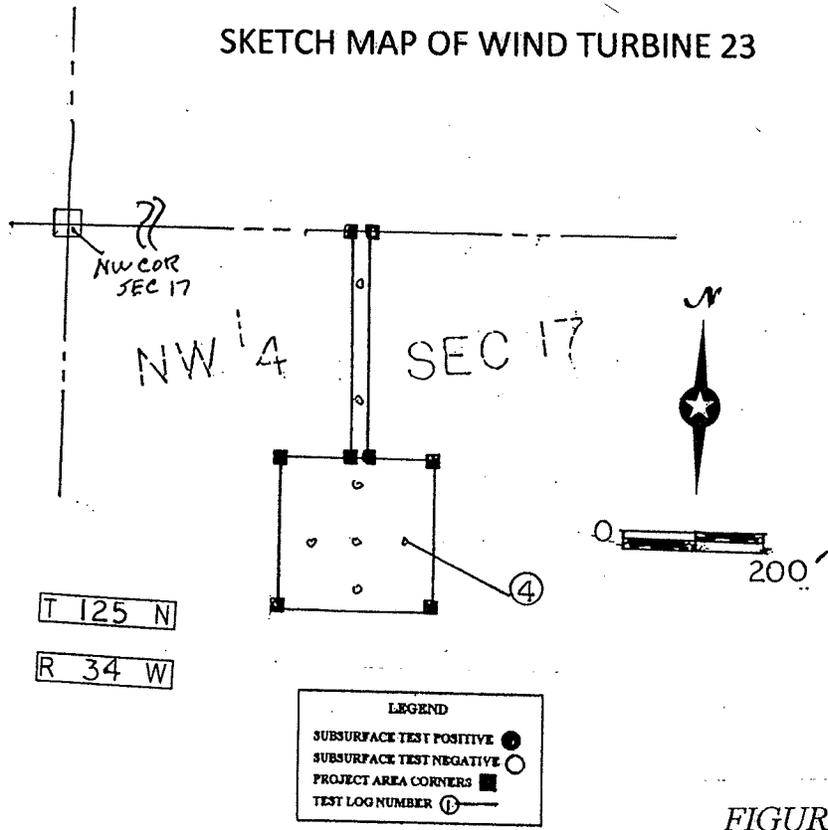


FIGURE 36

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 23 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 23 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 23.

Wind Turbine No. 24

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 24 consists of a service land corridor .25 mile in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the NE 1/4 of Section 17-125-34 and contain 2.5 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 24 area of potential effect is 2.5 acres of land. It is situated .50 mile east of Moliter Lake. The topography on the area of potential effect Phase I survey area is flat with 0% to 2% slopes with elevations of 1,316 feet to 1,320 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 10 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 69cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 24 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 24
Subsurface Test No.: 5
Location: NE ¼ Section 17-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-20	Black 10YR2/1 loam
A	20-33	Black 10YR2/1 loam
B	33-69	Olive brown 2.5Y4/4 loam

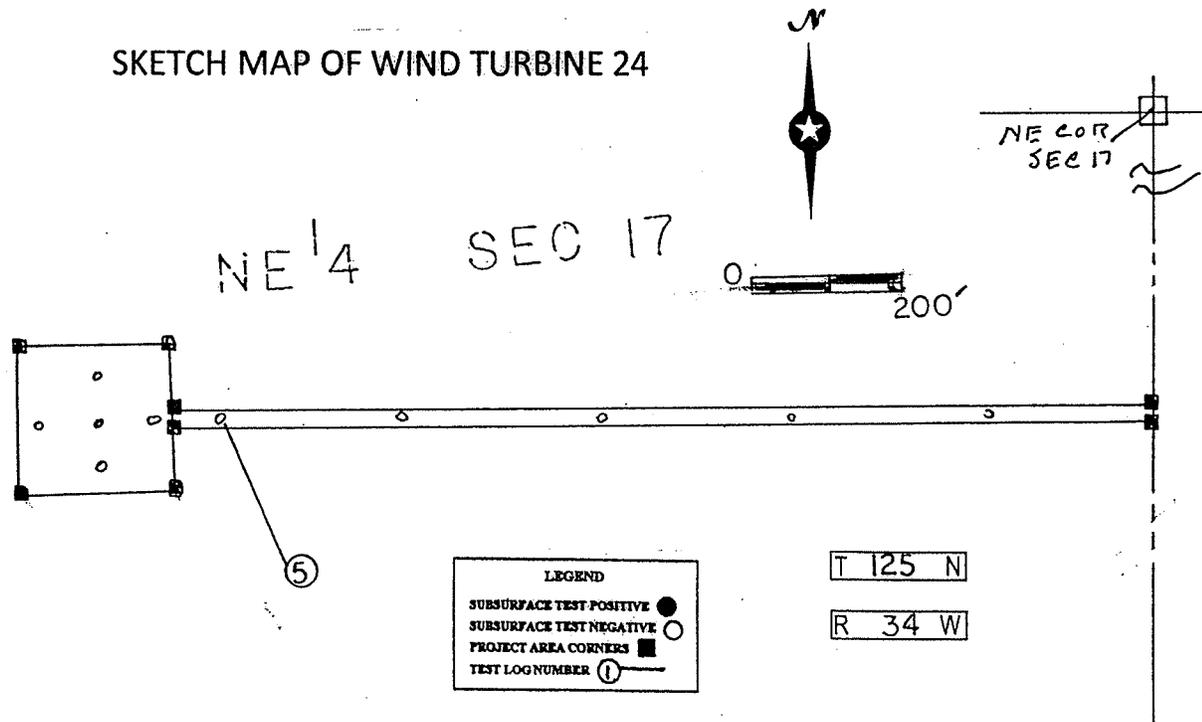


FIGURE 37

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 24 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 24 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 24.

Wind Turbine No. 25

Area of Potential Effect/Phase I Archaeological Field Investigation Location: wind turbine 25 consists of a service land corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. The land corridor and wind turbine site are located on part of the SW ¼ of Section 17-125-34 and contain a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 25 area of potential effect is 1.7 acres of land. It is situated on the uplands 300 feet east of Moliter Lake. The topography on the area of potential effect Phase I survey area is flat with 0% to 2% slopes with elevations of 1,320 feet to 1,325 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 8 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 25 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 25
Subsurface Test No.: 3
Location: SW ¼ Section 17-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-21	Black 10YR2/1 loam
A	21-32	Black 10YR2/1 loam
B	32-71	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 25

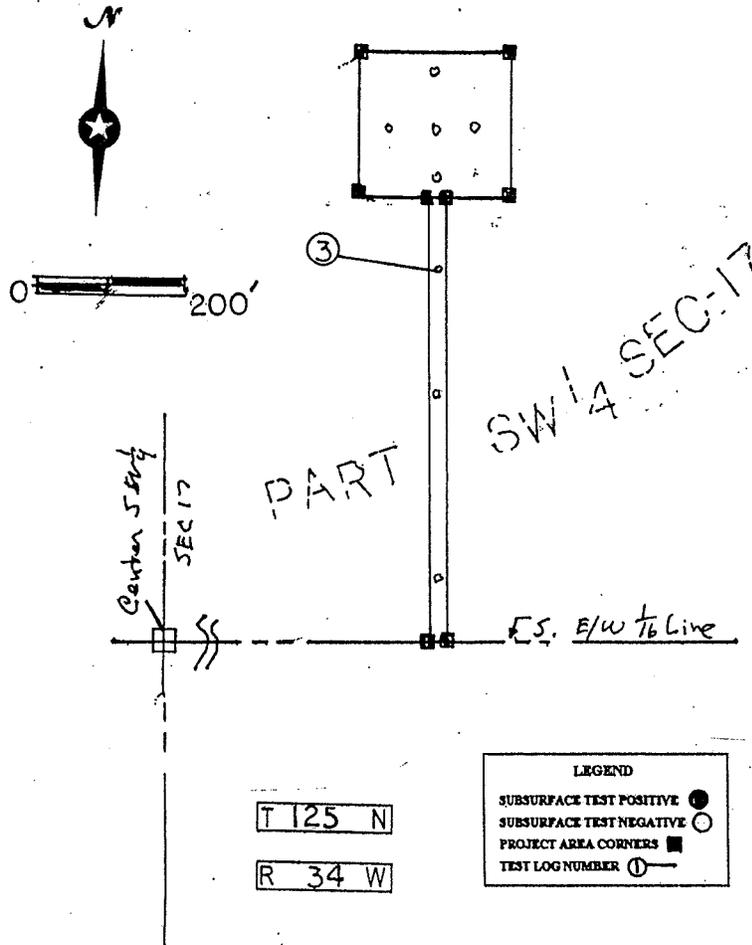


FIGURE 38

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 25 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 25 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 25.

Wind Turbine No. 26

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 26 consists of a service land corridor .25 mile in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the SE ¼ of Section 17-125-34 and contain a total of 2.5 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 26 area of potential effect is 2.5 acres in size. It is located .75 mile east of Moliter Lake. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,318 feet to 1,320 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 10 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 26 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 26
Subsurface Test No.: 2
Location: SE ¼ Section 17-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-23	Black 10YR2/1 loam
A	23-35	Black 10YR2/1 loam
B	35-71	Olive brown 2.5Y4/4 loam

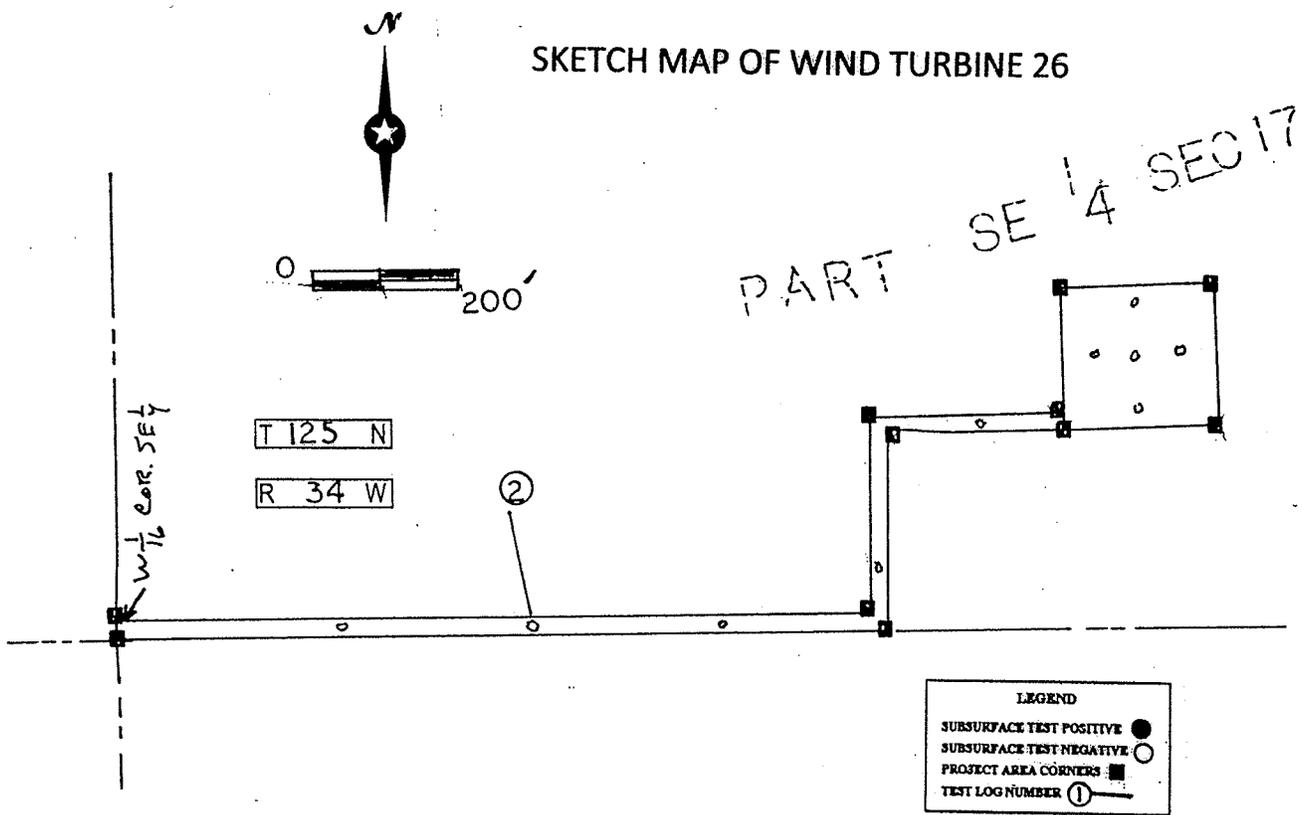


FIGURE 39

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 26 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 26 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 26:

Wind Turbine No. 27

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 27 consists of a service land corridor .25 mile in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the SW 1/4 of Section 17-125-34 and contain a total of 2.5 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 27 area of potential effect is 2.5 acres in size. It is situated .50 mile southeast of Moliter Lake. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,318 feet to 1,320 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 9 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 69cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 27 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 27
Subsurface Test No.: 6
Location: SW ¼ Section 17-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-21	Black 10YR2/1 loam
A	21-32	Black 10YR2/1 loam
B	32-69	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 27

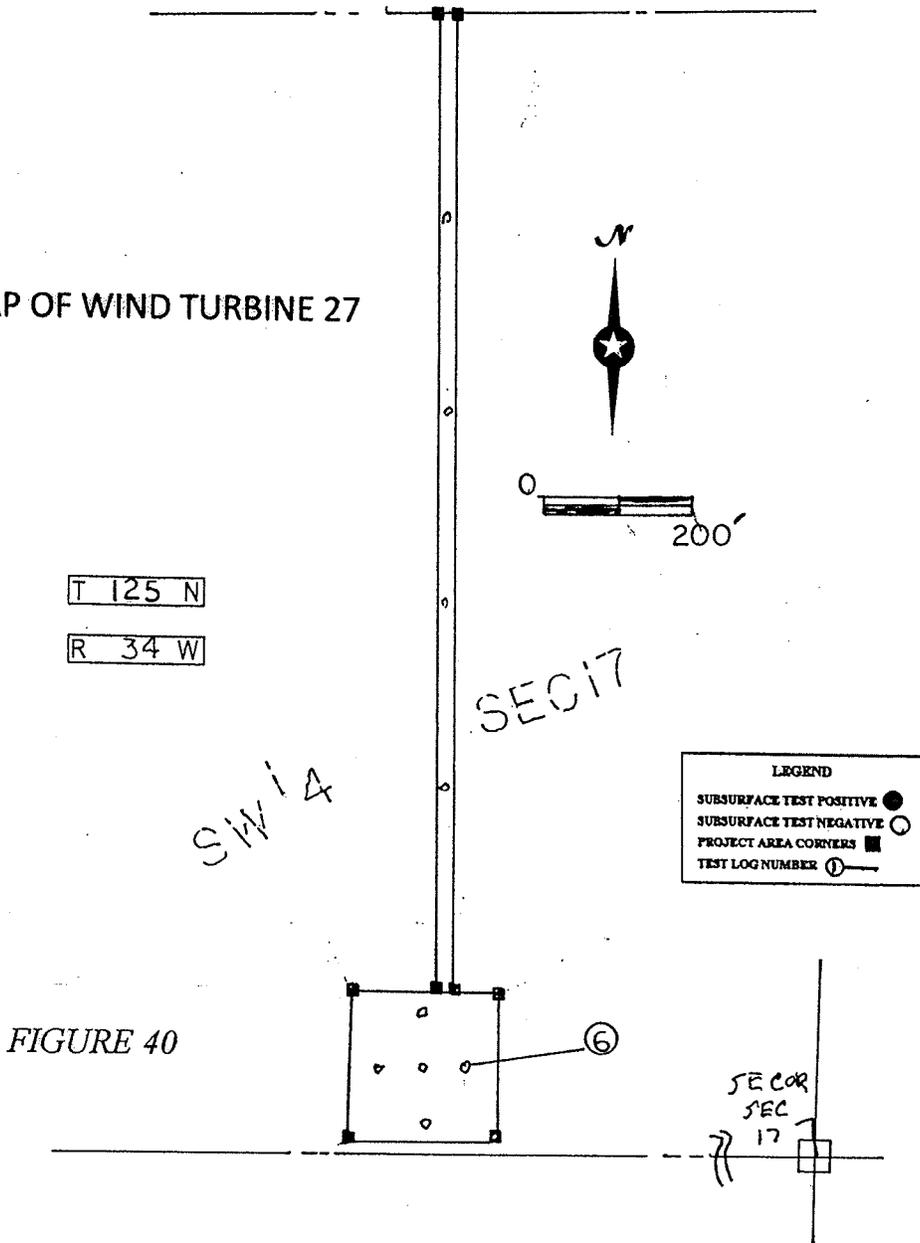


FIGURE 40

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 27 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 27 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 27.

SECTION 18-125-34

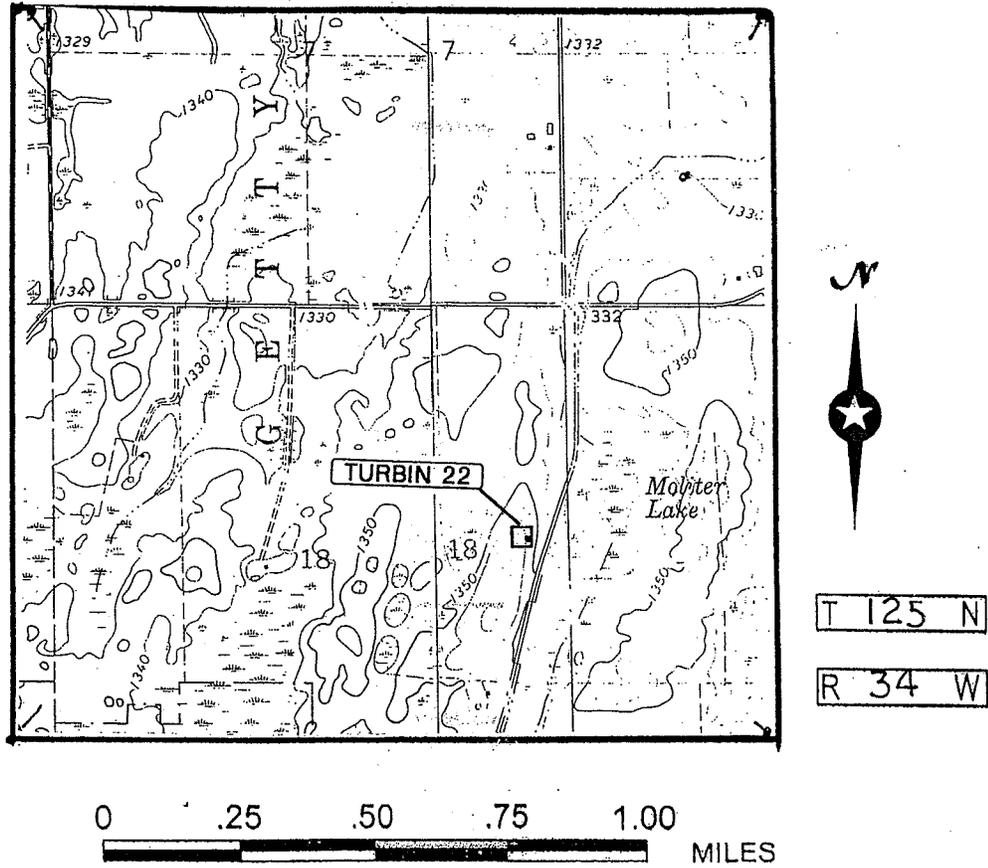


Figure 41. USGS map showing wind turbine 22 on Section 18-125-34 (USGS: Sauk Centre 1965).

Wind Turbine No. 22

Area of Potential Effect/Phase I Archaeological Field Investigation Location: Wind Turbine No. 22 consists of a service land corridor 600 feet in length and 50 feet wide to the 1-acre wind turbine site. The wind turbine and land corridor are located on part of the NE $\frac{1}{4}$ of Section 18-125-34 and contain a total of 1.7 acres of land.

Survey Type: Phase I

Records Check (OSA): 2011

Previously Surveyed: No

Previously Recorded Sites/300 feet from Project Area of Potential Effect: None

Previously Recorded Sites/One Mile from Project Area of Potential Effect: None

National Register of Historic Places Sites/300 feet from Project Area of Potential Effect: None

Plat Maps Used: 1858 (GLO), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT)

Historic Cultural Resources Previously Platted: None

Field Survey: Wind Turbine No. 22 area of potential effect is 1.7 acres in size. It is located 800 feet west of Moliter Lake. The topography on the area of potential effect Phase I survey area is flat to gently sloping with 0% to 6% slopes with elevations of 1,350 feet to 1,352 feet. Land use at the time of fieldwork consisted of 100% cropland. A surface reconnaissance was conducted over 100% of the area of potential effect at 7-meter intervals. The survey line landscape was carefully observed for burial mounds, non-mound ground features, surface artifacts or historic properties. The pedestrian survey traversed through cropland with a ground surface visibility of 90% to 100%, with an average of 95%. Limited subsurface tests were placed on the area of potential effect for a representative sample of the survey area landform. A total of 7 shovel and auger tests were placed within the area of potential effect dimensions and spaced at 15-meter and 76-meter intervals on cropland then excavated to an average depth of 71cm or well below human cultural bearing horizons. The soils were moist or wet therefore troweled for artifacts or feature-attributed soils, then backfilled when completed. Subsurface test soils showed an upper black loam then an olive brown clayey loam. The subsurface tests conducted along Wind Turbine No. 22 showed no evidence of buried paleosols within the excavated soils.

TEST LOG

Wind Turbine No.: 22
Subsurface Test No.: 7
Location: NW ¼ Section 18-125-34
Landuse: Cropland
Method: Auger
Cultural Strata/Depth: None

Soil Horizon	Depth (cm)	Description
Ap	0-23	Black 10YR2/1 loam
A	23-35	Black 10YR2/1 loam
B	35-71	Olive brown 2.5Y4/4 loam

SKETCH MAP OF WIND TURBINE 22

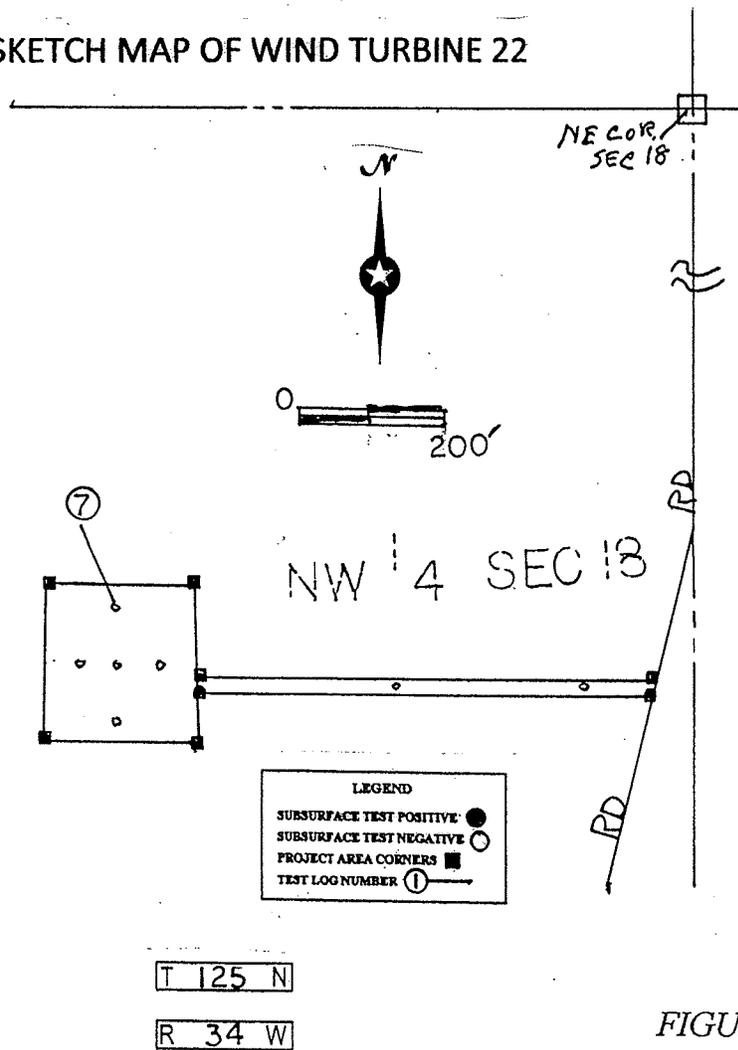


FIGURE 42

Results/Site Data: The surface reconnaissance and subsurface testing along Wind Turbine No. 22 found no evidence of prehistoric properties or any indication of prehistoric burial mounds or non-mound ground features within the area of potential effect.

Recommendations: The survey along Wind Turbine No. 22 determined that no prehistoric or historic properties will be impacted and no further work would be required along Wind Turbine No. 22.

View Shed: The view shed is the number of structures previously platted within .50 mile of the wind turbine farm. A total of 21 previously platted structures were cited during the review and evaluated for the National Register of Historic Places (NRHP). They are listed below on Table 1.

TABLE 1
INVENTORY OF PREVIOUSLY PLATTED STRUCTURES
WITHIN THE GETTY WIND PROJECT AREA

STRUCTURE NO.	EXTANT	>1950	POTENTIALLY ELIGIBLE NRHP	NOT POTENTIALLY ELIGIBLE NRHP
51201	Yes			X
51202	Yes			X
51203	Yes			X
51204	Yes	X		X
51205	Yes			X
51206	Yes			X
51207	Yes			X
51208	Yes			X
51209	Yes			X
51210	Yes			X
51211	Yes	X		X
51212	Yes	X		X
51213	Yes			X
51214	Yes	X		X
51215	Yes			X
51216	Yes	X		X
51217	No			X
51218	No			X
51219	Yes			X
51220	Yes	X		X
51221	Yes	X		X
TOTAL: 21				

A drive-over evaluation determined that no surrounding structures are potentially eligible for the National Register of Historic Places (NRHP) due to a mixed context in architecture, modified, non-existent or new in design and construction (>1950).

RECOMMENDATIONS

DeWild Grant Reckert Associates Co., located in Rock Rapids, Iowa, requested a Phase I archaeological survey for a proposed wind farm on 27 wind turbine sites and service land corridors. The 1-acre wind turbine sites and service land corridors of varying lengths are located on parts of Sections 31, 32, T126N-R39W; and, Sections 4, 5, 6, 7, 8, 9, 16, 17 and 18, T125N-R34W with a total area of potential effect of 59.35 acres of land in northwestern Stearns County, Minnesota.

The Phase I archaeological field investigation records check showed no previously recorded archaeological properties, National Register of Historic Places properties or previously platted historic properties on the areas of potential effect (APE). The Phase I archaeological field investigation found no new prehistoric or historic properties within the area of potential effect wind turbine areas examined.

The view shed area of .50 mile radius showed 21 structures previously platted and near the proposed wind turbines. The drive-over examined these previously platted sites and they are either new (<1950), modified from original context or non-existent. They would not be potentially eligible for the National Register of Historic Places (NRHP).

It should be noted no archaeological survey technique is completely adequate for locating all prehistoric or historic properties within a given area. Should any prehistoric or historic properties not located during this survey be encountered during the implementation of the proposed construction activities, the Office of the State Archaeologist should be notified. It is the responsibility of the developer to protect the prehistoric or historic properties until a professional examination can be made and authorization to proceed is granted.

REFERENCES CITED

Andreas, A. T.

- 1874 *Illustrated Historical Atlas of the State of Minnesota*. A. T. Andreas, 1874. On file Minnesota State University, Mankato, MN.

Busch, E. M.

- 1977 *The History of Stearns County*. Minnesota State University, Mankato, MN.

DeWild Grant Reckert Co.

- 2011 Proposed Building Maps. DeWild Grant Reckert Co., Engineers and Surveyors, Rock Rapids, IA.

Office of the State Archaeologist

- 2011 Stearns County Site Files. On file with the Office of the State Archaeologist, St. Paul, MN.

Trygg, J. W.

- 1964 *c.1858 Composite Map of the United States Land Surveyors Original Plats and Field Notes*. Sheet No. 2, Minnesota Series, J. W. Trygg, Ely, MN. On file Minnesota State University, Mankato, MN.

USDA

- 1985 *Soil Survey of Stearns County, Minnesota*. United States Dept of Agriculture, Washington, D.C. Dept of Soil Conservation, Minnesota.

USDOT

- 1985 *Polyconic Projection General Highway and Transportation Map of Stearns County, Minnesota*. Minnesota State Highway Commission.

USGS

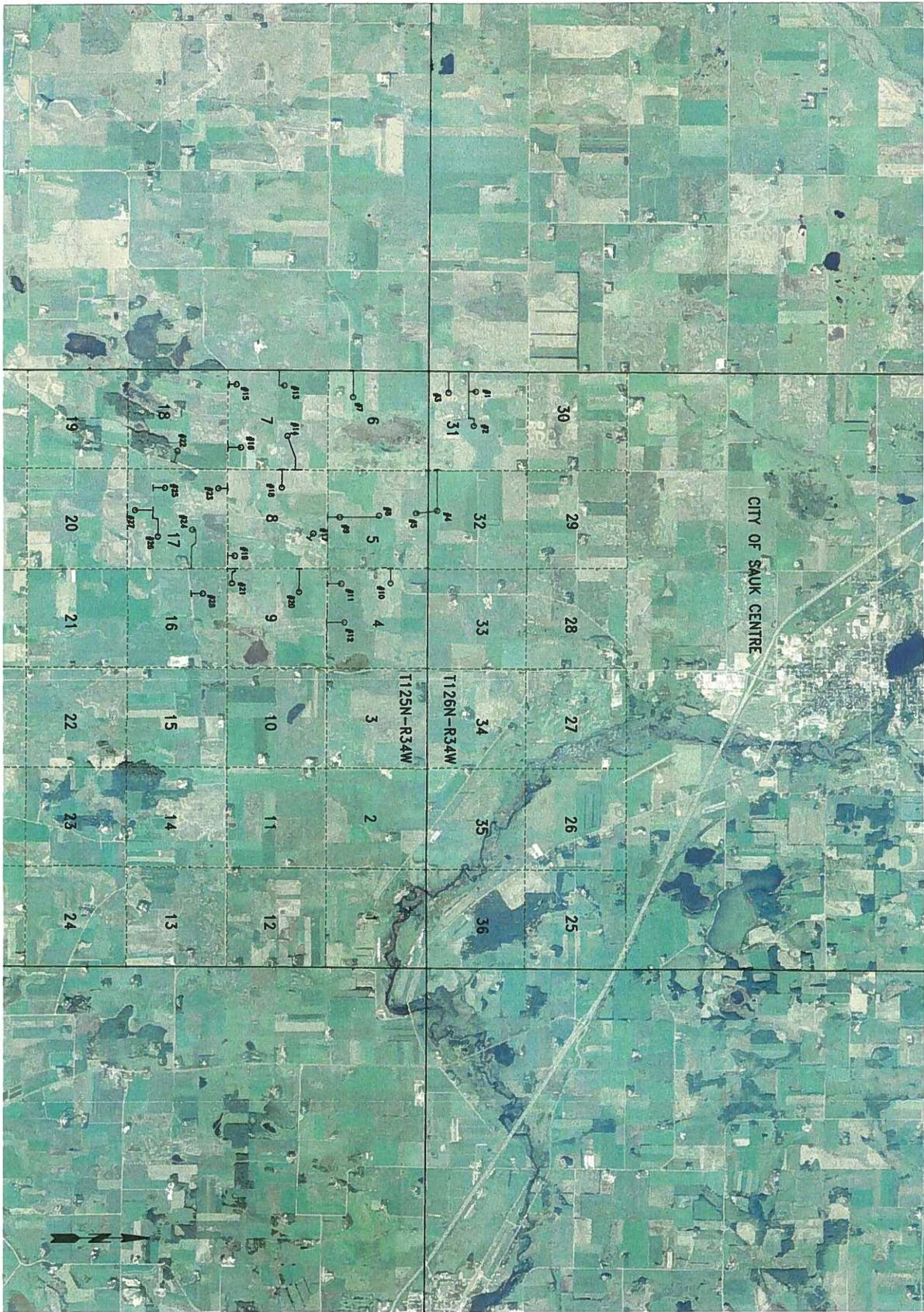
- 1965 *Raymond Lake, Minnesota*. 7.5' series quad map, USGS, Denver, CO.
1965 *Sauk Centre, Minnesota*. 7.5' series quad map, USGS, Denver, CO.

Winchell, N. H.

- 1911 *Aborigines of Minnesota-1906-1911*. Collections of Brower, Hill and Lewis. Published by the Minnesota Historical Society, St. Paul, MN.

APPENDIX A

Aerial Photo Map of the Project Area



Sheet
1

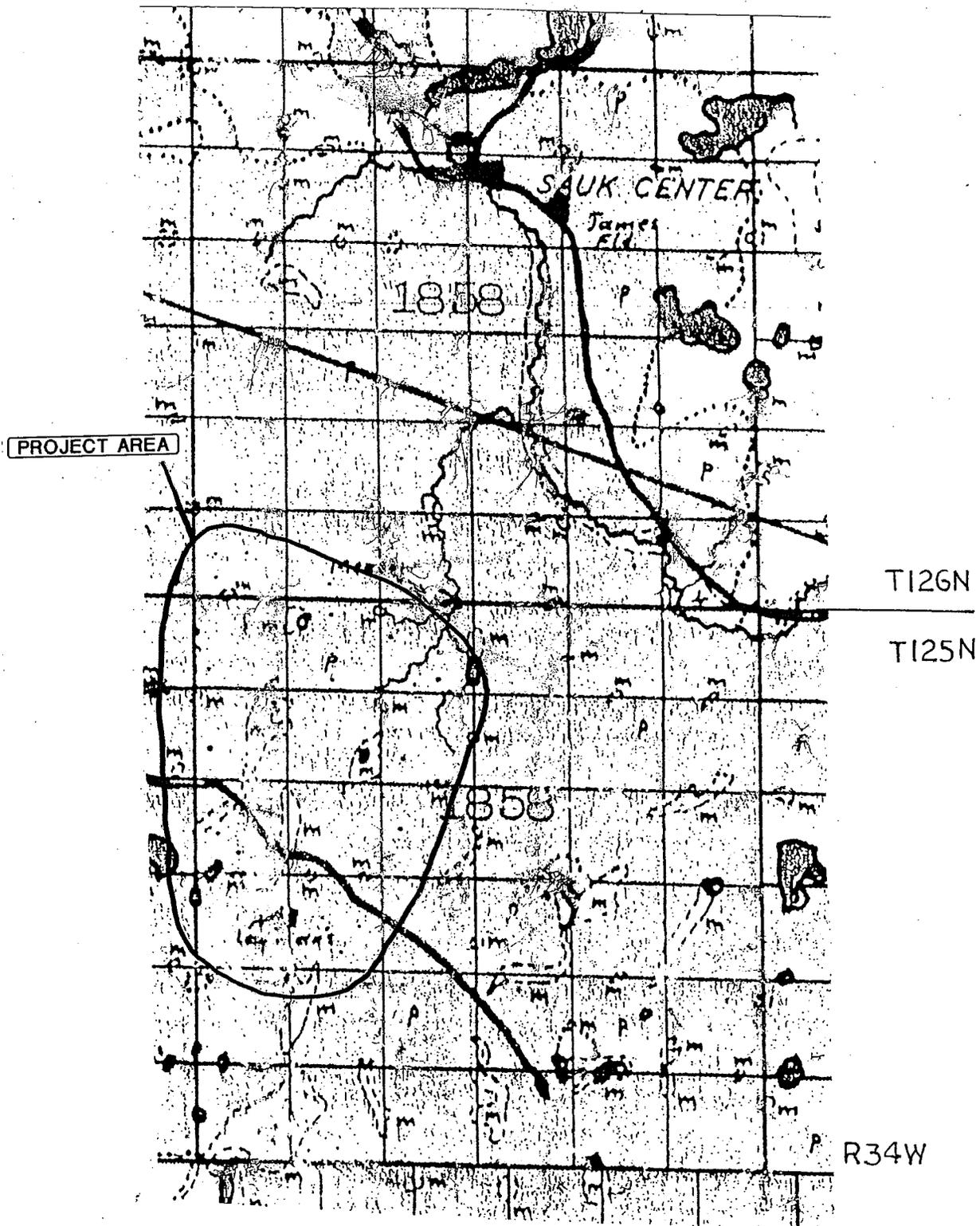
CARSTENSEN
CONTRACTING, INC.
PIPESTONE, MINNESOTA PH. 507-825-2026

Date 7-1-09
Drawn By JMG
Approved KLT
Revision

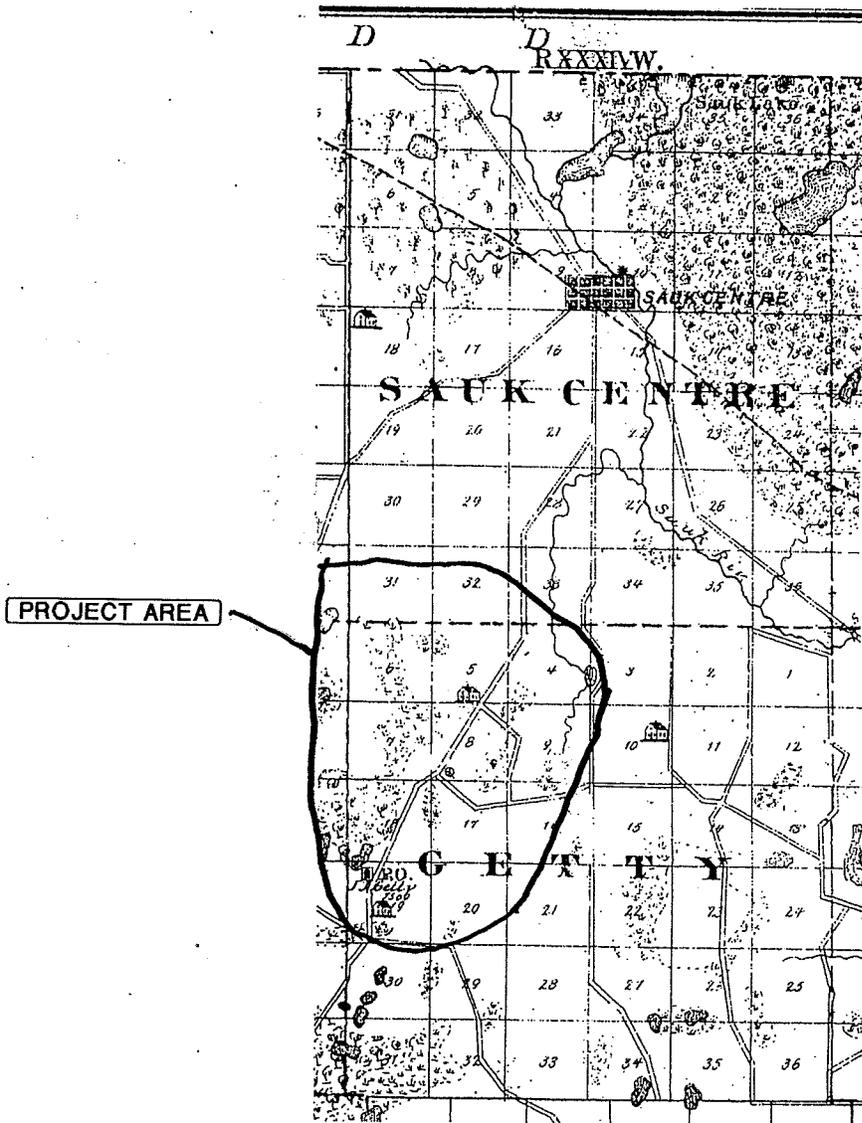
GETTY WIND LLC
INDEX

APPENDIX B

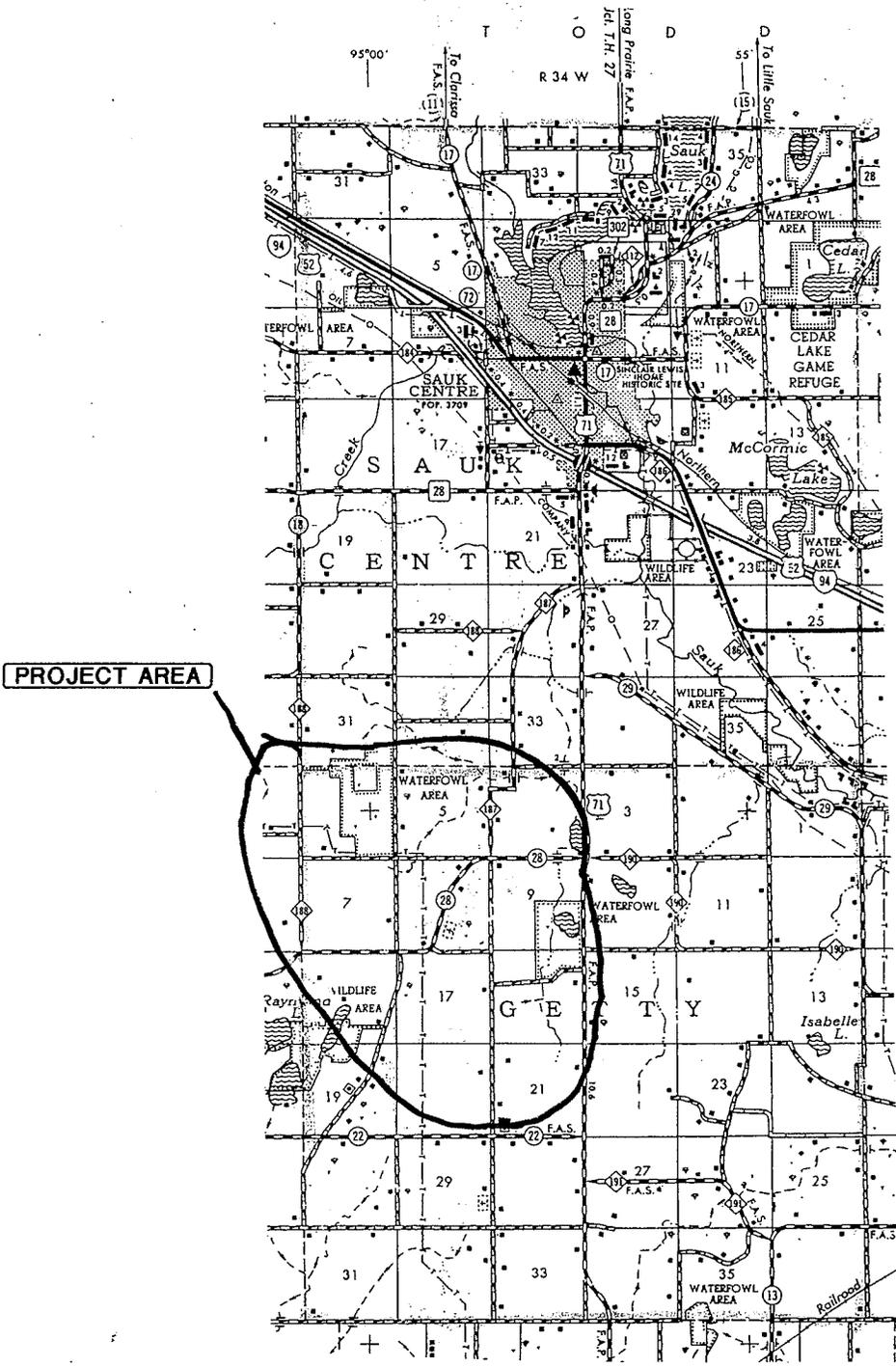
Plat Maps of the Project Area



The 1858 map showed the general project area (GLO: 1858).



The 1874 map showed the general project area (Andreas: 1874).



The 1985 map showed the general project area (USDOT: 1985).

APPENDIX C

Project Area Photographs



Upper view shows part of service land corridor or wind turbine site 1 and lower view shows part of land corridor or wind turbine site 2.



Upper view shows part of service land corridor or wind turbine site 3 and lower view shows part of land corridor or wind turbine site 4.



Upper view shows part of service land corridor or wind turbine site 5 and lower view shows part of land corridor or wind turbine site 7.



Upper view shows part of service land corridor or wind turbine site 8 and lower view shows part of land corridor or wind turbine site 9.



Upper view shows part of service land corridor or wind turbine site 10 and lower view shows part of land corridor or wind turbine site 11.



Upper view shows part of service land corridor or wind turbine site 12 and lower view shows part of land corridor or wind turbine site 13.



Upper view shows part of service land corridor or wind turbine site 14 and lower view shows part of land corridor or wind turbine site 15.



Upper view shows part of service land corridor or wind turbine site 16 and lower view shows part of land corridor or wind turbine site 17.



Upper view shows part of service land corridor or wind turbine site 18 and lower view shows part of land corridor or wind turbine site 19.



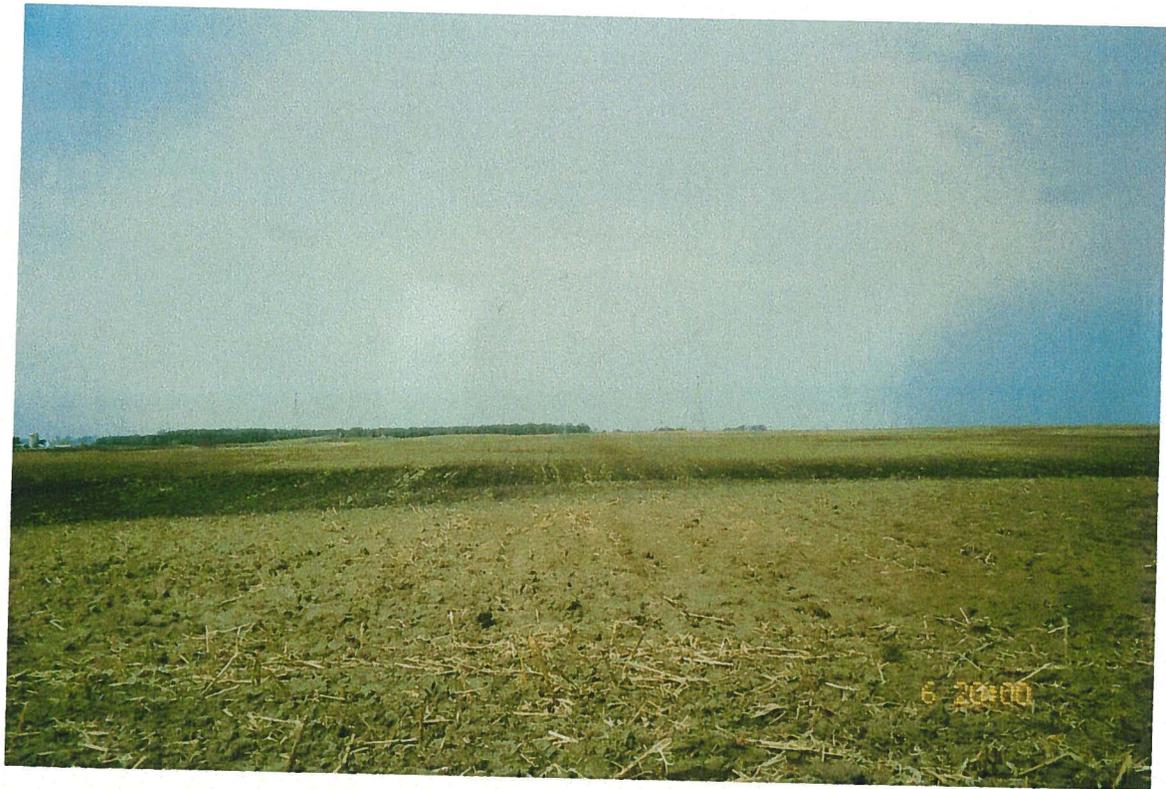
Upper view shows part of service land corridor or wind turbine site 20 and lower view shows part of land corridor or wind turbine site 21.



Upper view shows part of service land corridor or wind turbine site 22 and lower view shows part of land corridor or wind turbine site 23.



Upper view shows part of service land corridor or wind turbine site 24 and lower view shows part of land corridor or wind turbine site 25.



Upper view shows part of service land corridor or wind turbine site 26 and lower view shows part of land corridor or wind turbine site 27.



Upper view shows part of service land corridor or wind turbine site 28.