Phase I Archaeological Investigation at 50 Mill House Road
Townships of Newburgh, Orange County and Marlborough, Ulster County, New York

April 2020

Prepared for:
Engineering & Surveying Properties, Montgomery, New York

Alfred G. Cammisa, M.A.
with Alexander Padilla

1016

MANAGEMENT SUMMARY

PR#:
20PR01674

Involved agencies:
Town of Marlborough, Ulster County
Town of Newburgh, Orange County
NYDEC

Phase:
Phase IA & IB

Location:
Town of Newburgh, Orange County
Town of Marlborough, Ulster County

Survey Area:
Length: up to 500 feet (152meters) north-south
Width: about 440 feet (134 m) east-west
Acres Surveyed: 4.5 acres (1.8 hectares) with steep slopes

USGS:
Wappingers Falls, NY

Survey overview:
ST no. & interval: 65 ST's at 50 ft (15m) intervals
Size of freshly plowed area: na
Surface survey transect interval: na

Results:
No prehistoric or historic remains
Structures:
No. Of buildings/structures/cemeteries in project area: overhead utility lines
No. Of buildings/structures/cemeteries adjacent to project area: 4 dwellings
No. Of previously determined NR listed or eligible buildings/structures/cemeteries/districts: none
No. Of identified eligible buildings/structures/cemeteries/districts: none

Authors:
Alfred G. Cammisa, M.A.
Alexander Padilla, B.A.

Date of Report:
Report completed April, 2020

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF PHOTOS

INTRODUCTION

Between April 1 and 16, 2020, TRACKER Archaeology, Inc. conducted a Phase IA and IB Archaeological Investigation at 50 Mill House Road, Townships of Newburgh, Orange County and Marlborough, Ulster County, New York.

The purpose of the Phase IA documentary study was to determine the prehistoric and historic potential of the project area for the recovery of archaeological remains. The Phase IA was implemented by a review of the original and current environmental data, archaeological site files, other archival literature, maps, interviews, and documents. The prehistoric and historic site file search was conducted utilizing the CRIS resources of the New York State Historic Preservation Office in Waterford. Various historic web sites may have been queried via the internet to review any pertinent site information.

These investigations have been conducted in accordance with the standards set forth by the New York Archaeological Council and the New York State Historic Preservation Office.

The Phase IB survey provided actual evidence for the presence or absence of any archaeological sites within the property through ground surface and subsurface field testing.

The project area consists 2 proposed lots, Lots 1 & 4, about 4.5 acres with steep slopes, from a larger property. The property as a whole is located at 50 Millhouse Road, Marlborough, NY. It is bound to the north by Mill House Road and to the remaining sides by private properties.

The investigation was completed by TRACKER Archaeology, Inc. of Monroe, New York. Prehistoric and historic research was conducted by PI, Alfred G. Cammisa, M.A. Field work was conducted by Alfred G. Cammisa, crew chief, Alfred T. Cammisa, and field technicians, Bryan Hague, B.A. and Eric Hague, B.A. Report preparation was by Alfred G. Cammisa with Alexander Padilla (CAD).

The work was performed for Engineering & Surveying Properties, Montgomery, New York.

ENVIRONMENT

Geology

The study area is located in the southeast portion of New York State in the northeast part of Orange County and the southern section of Ulster County.. This region of New York lies within the Ridge and Valley Physiographic Province near the interface of the Hudson Highlands. This province, also known as the Newer Appalachians, extends from Lake Champlain to Alabama. It passes as a narrow lowland belt between the New England Uplands (Taconic Mountains and Hudson Highlands) to the east and the Appalachian Plateau (Catskill and Shawangunk Mountains) and Adirondack Mountains to the west. The characteristic topography is a succession of parallel valleys and ridges trending roughly in a northeasterly direction. This is a region of sedimentary rocks which were easily eroded and subjected to folding or bedding of the rock layers. The eastern limit of the Ridge and Valley Province is a broad, well-defined valley, 300 to 600 feet above sea level, known as the Great Valley. In the vicinity of Ellenville, the Great Valley is called the Wallkill Valley (Schuberth 1968: cover map, 16-18; Isachsen et al 2000: 4, 53-54; New York-New Jersey Trail Conference 1998: cover map).

Soils and Topography

Soils on the project area consist of:

Name	Soil Horizon Depth in(cm)	Color	Texture Inclusion	Slope %	Drainage	Land-form
Bath-Nassau	Ap=0-6n (0-15cm) B=6-11 (-28)	10YR4/3-3/3 10YR5/4	GrSiLo or ShSiLo	8-25	Well	Glacial till
Chenango	Ap= 0-9in (0-22cm) B= 9-15(-38)	10YR343 10YR5/6	GrSiLo	3-8 &8-15	well	glacial outwash
Hoosic	Ap= 0-8in (0-20cm) B2= 8-14(-36)	10YR343 10YR5/6	GrLo & GrSaLo	3-8 & 5-16	Well	Glacial outwash
Mardin	Ap= 0-8in (0-20cm) B2= 8-15(-38)	10YR4/3 10YR5/6	GrSiLo	3-8, 8-15	well	glacial till

(Tornes 1979:map, 16-17, 26, 32, 110,114, 117; Olsson 1981:map#7; 35, 38-39, 93, 95).

KEY:

Shade: Lt=Light, Dk=Dark, V=Very
Color: Br=Brown, Blk=Black, Gry=Gray, Gbr=Gray Brown, StBr=Strong Brown, Rbr=Red Brown, Ybr= Yellow Brown
Soils: Si=Silt, Lo=Loam, Sa=Sand, Cl=Clay
Other: Sh=shale, M=Mottle, Gr=Gravelly, Cb=cobbles, Ch=channery, Fi=Fine,/=or

Elevations on the project areas range from approximately 150 to 200 feet above mean sea level.

Hydrology
The project area is about 640 feet east of a tributary of Lattingtown Creek. The tributary and Lattingtown Creek intersect near the mouth of the Hudson River.

Vegetation
The predominant forest community in this area was probably the Oak Hickory. This forest is a nut producing forest with acorns and hickory nuts usually an obvious part of the leaf litter on the forest floor. The Oak Hickory Forest intermingles with virtually all other forest types. The northern extension of this forest community was also originally called the Oak-Chestnut forest, before the historic Chestnut blight (Kricher 1988:38, 57-60).

At the time of the Phase IB field work, the property consisted of a woods and thicket with some high canopy trees, middle story and undergrowth of briars and saplings.

PREHISTORIC POTENTIAL

A prehistoric site file search was conducted at the New York State Historic Preservation Office. The search included a 1 mile radius around the study area. The following sites were recorded:

NYSM Site	NYSHPO Site	Distance from APE ft(m)	Site Type
	11150.000004	4718(1438)	Indian Burial Ground:On hill overlooking creek adjacent to colonial cemetery
Cant read (obscured by 15SR00358/ DEP ACES Architectural survey area)		5053+ (large circle) (1540+)	NA

Assessing the known environmental and prehistoric data, we can summarize the following points:

-The project ares is about 640 feet east of a tributary of Lattingtown Creek.

-The property contains level to steeply sloping terrain with well drained soils.

-Prehistoric sites are situated in the vicinity of the project area.

In our opinion, the study area has an above average potential for the recovery of prehistoric sites. The type of site encountered could be a procurement/processing site from the Woodland or Archaic periods.

HISTORIC POTENTIAL

Seventeenth Century

At the time of European contact and settlement, the study area and surrounding territory were probably occupied by either the Warranawonkongs or the Waoranecks people, both of which interfaced near the study area. Both are branches of the Delaware linguistic group (Hearne Brothers nd:wall map; Becker 1993:19).

At the time of European contact and settlement, the study area was probably occupied by the Minsi group proper. The Waoranecks lived between Stony Point and Danns Kammer (near Newburgh Bay) with their western boundary unknown. The Waoraneck people were likely a sub-branch and/or clan or village related to the large Munsee (Minsi) tribe belonging to the Delawarean linguistic family. The term "Minsi" (or "Munsee") means people of the stony country" or abbreviated as "mountaineers" (Ruttenber 1992A:35, 44-45, 49-50, 93; Ruttenber 1992A:221; Becker 1993:16-22; Hearne Brothers nd:wall map; Weslager 1991:45; Synder 1969:2).

Population estimates for the Munsee are 600 to 800 individuals. The Munsee are described by Becker (1993:18) as possibly horticultural.

According to Ruttenber (1992A:94-95) the Warranawonkongs were an Esopus chieftaincy. The Warranawonkongs occupied a territory which extended from the Dans-Kammer to the Katskill mountains and which included the Wallkill drainage as well as the Shawangunk and Esopus.

Population of the Esopus were approximately 300. They are reported as foragers according to Becker (1993:18).

An Indian fort was supposed to have been constructed along the Shawangunk Kill. The fort was destroyed by Captain Kreiger and his men while pursuing the Indians for the recapture of the prisoners taken at the Esopus and Hurley massacres in 1663 (Foote 1907:377).

After the fort and cornfields were destroyed by Kreiger and his men (outside Indians and Dutch), a second fort was constructed about 4 hours from the original. It was located on the east bank of the Shawangunk Kill in Shawangunk. Kreiger destroyed the second fort as well. Both forts were located along Indian foot trails (Ruttenber 1992A:149-152; Ruttenber 1992B:391).

Eighteenth Century

In 1714, Luis Moses Gomez, the first Sephardic Jew in the county, purchased 2500 acres where several Indian trials converged and built a house near a stream. That stream was a central gathering place and camping ground for the local Indians. Luis and his son conducted a thriving fur trade with the Indians at the Mill House for more than 30 years (Mathews 1983).

The City of Newburgh was founded in 1709 by a group of more than 50 (Palatines) Germans from the Palatine. The area became known as the Palatine Parish Patent. However, by 1740, many soon left for Pennsylvania or died off. By 1743, they were followed by immigrants from England, particularly the Ulster-Scotch to whom were transmitted all previous claims of the Germans, both in territory and church. By 1752 the settlement was given the name of Newburgh, in memory of Newburgh, Scotland. One of the most prominent Scottish residents was Jonathan Hasbrouck, a landowner and businessman, who bought a large tract of land and built a home that would later become George Washington's headquarters (Anonymous 1910:3; www.newburghrevealed 2002).

During the Revolutainary War, the Mill House was sold to a Dutch-American patriot and used as a meeting center for the Patriot army. During the war the house had a second floor built (Mathews 1983).

The 1779 Sauthier map shows the study property located on the Marlborough-Newburgh border along the Albany Post Road (Figure 3).

Nineteenth Century

Newburgh soon became a thriving village. By mid-century, the population approximated seven thousand. There had been some drift of Holland-Dutch from Columbia County, Orange County, Duchess County, Putnam County, Westchester County, and other adjoining counties to Newburgh and it became apparent that a Dutch Reform Church was needed. In 1834 the Reverend Cruikshank was sent to Newburgh as a missionary to try to gather a Dutch church. The beginning of the church in Newburgh was feeble, but by 1835 meetings and services were being held in the Associate Reformed Church at First and Grand Streets (Anonymous 1910:4; www.newburghrevealed 2002).

The 1850 Sydney Map of Newburgh depicts the project area with a structure across Mill House Road (Figure 4).

The 1853 map of Marlborough shows a house across Mill House Road (Figure 5).

The 1875 Beers atlas of Marlborough shows no structures on or immediately adjacent to the project area (Figure 6).

The 1875 Beers atlas of Newburgh shows no structures on or immediately adjacent to the project area (Figure 7).

Local industries included fruit as the principal industry, eiderdown & wool, a crate factory, as well as summer boarding vacation, at this time (Mathews 1983).

Twentieth Century
The 1903 USGS map depicts two structures immediately on or adjacent to the project area (Figure 7).

An historic site file search was conducted at the New York State Historic Preservation Office. The search included a 1 mile radius around the study area. The following sites were recorded:

NYSM Site	NYSHPO Site	Distance from APE ft(m)	Site Type
	7114.000142	967(295)	Gomez Mill House root cellar locus: above ground, 1860-1880 w/ironstone, whiteware, porcelain, stoneware, redware, kaolin pipes, bottle glass, faunal, etc.
	7114.000224	3534(1077)	Conway Tenant house 1: complete superstructure, late19th-early20th century
	1115.000005	4847(1477)	Smith's Burial Ground: on hill overlooking Old Man's Creek

Assessing the known environmental and historic data, we can summarize the following points:

-The project ares is about 640 feet east of a tributary of Lattingtown Creek.

-The property contains to steeply sloping terrain with well drained soils.

-Historic sites are in the neighborhood of the project area and the road is historic.

-Historic map documented structures were on or immediately adjacent to the project area at one time or another.

In our opinion, the project parcel has a higher than average potential for the recovery of nineteenth century sites.

FIELD METHODS

Walkover
Covered ground terrain was reconnoitered at about 15 meter intervals, or less, to observe for any above ground features, such as berms, rock configurations, or depressions, which might be evidence for a prehistoric or historic site. Photographs were taken of the project area.

Shovel Testing

Shovel tests were excavated at 15 meter intervals across the project area. Steep slopes were avoided due to their poor potential for encountering archaeological sites. Each shovel test measured about 30 to 40 cm. in diameter and was dug into the underlying subsoil (B horizon) 10 to 20 cm. when possible. All soils were screened through 1/4 inch wire mesh and observed for artifacts. All shovel tests (ST's) were mapped on the project area map at this time.

Soils stratigraphy was recorded according to texture and color. Soil color was matched against the Munsell color chart for soils. Notes on ST stratigraphy and other information was transcribed on field forms and in a notebook.

FIELD RESULTS

Field testing of the project area included the excavation of 65 shovel tests. No prehistoric artifacts or features were encountered. No historic artifacts or features were encountered. Heavy dumping was evident on proposed Lot 4 consisting of large amounts of cut trees and branches, wood chips and wood chip mulch, discarded trucks, cars, machinery, and wood furniture, braces, etc. Some of the slopes on Lot 4 appeared to have been terraced at some time in the past, possibly to support an apple orchard.

Stratigraphy

Stratigraphy across the project corridor consisted of:

-O horizon -2 to 6 cm. thick of root mat, leaf litter, and humus.

-A horizon - 20 to 25 cm. thick of 10YR4/3 brown gravelly loam.

-B horizon - 10 or more dug into of 10YR5/6, yellow brown gravelly loam.

CONCLUSIONS AND RECOMMENDATIONS

The Phase IA had determined that based upon topographic characteristics and proximity to prehistoric sites, the property was assessed as having an above average potential for encountering prehistoric sites. Based upon topographic characteristics and proximity to historic sites, historic map documented structures and roads, the property was assessed as having a higher than average potential for encountering historic sites.

During the course of the Phase IB archaeological field survey, 65 ST’s were excavated. No prehistoric artifacts or features were encountered. No historic artifacts or features were encountered. No further work is recommended.

BIBLIOGRAPHY

Anonymous
1910 A Brief History, Prepared for the seventy fifth anniversary celebration. American Reformed Church, Newburgh, New York.

Becker, Marshall Joseph
1993 The Lenape and Other “Delawarean” Peoples at the time of European Contact: Populations Estimates Derived from Archaeological and Historical sources, in Journal of the New York State Archaeological Association, #105 Spring.

Eagers, Samuel W.
1847 An Outline History of Orange County. S.T. Callahan, Newburgh.

Foote, Charles E.
1907 *History of Ulster County.* Alfonso T. Clearwater, editor.

Hasbrouck, Kenneth E.
1983 *History of Ulster County with emphasis on the Last 100 Years, 1883-1983.* Historians of Ulster County.

Kricher, John C. and Gordon Morison
1988 The Peterson Field Guide Series: Eastern Forests of North America. Houghton Mifflin Company, Boston.

Mathews, John
1983 The Town of Marlborough, in *The History of Ulster County with emphasis on the last 10 years.* Compiled by the Historians of Ulster County for the tercentenary Year

Morrison, David A.
1908 History of Orange County, New York. Van Deusen and Elms. Editor, Russell Headley.

New York-New Jersey Trail Conference
1998 New York Walk Book. New York-New Jersey Trail Conference.

Olsson, Karl S.
1981 Soil Survey of Orange County, New York. U.S. Department of Agriculture, Soil Conservation Service in Cooperation with Cornell University Agricultural Experimental Station.

Ruttenber, E.M.
1992A Indian Tribes of Hudson's River - to 1700. Hope Farm Press, Saugerties, New York.

1992B Indian Tribes of Hudson's River - 1700-1850. Hope Farm Press, Saugerties, New York.

Ruttenber, E.M. and L.H. Clarke
1881 History of Orange County, New York. Everts and Peck, Philadelphia.

Schuberth, Christopher J.
1968 The Geology of New York State and Environs. New York: Natural History Press.

Synder, John P.
1969 The Story of New Jersey's Civil Boundaries: 1606-1968.
Bureau of Geology-Topography, New Jersey.

Tornes, Lawrence, A.
1979 *Soil Survey of Ulster County, New York.* U.S.D.A., soil conservation Service in cooperation with Cornell University Agricultural Experimental Station.

Town of Newburgh
2002 Newburgh's History. http://www.newburghrevealed.org/historypalatine.htm.

Weslager, C.A.
1991 The Delaware Indians - A History. Rutgers University Press, New Jersey.

Maps

Beers, F.W.

1875 County Atlas of Orange County, New York. F.W. Beers, New York.

1875 County Atlas of Ulster County, New York. F.W. Beers, New York.

Hearne Brothers

no date Indians of New York. Earth Science Projection Map. Hearne Brothers, Michigan.

Sauthier, Claude Joseph

1779 A Chronological Map of the Province of New York in North America, Divided into Counties, manors, Patents, Townships, and Grants of Land. William Faden, London.

Sidney, J.H.

1850 Map of Orange County, New York. Newell S. Brown, Newburgh and Philadelphia.

United States Geologic Survey

1957 Newburgh, New York quadrangle map, 7.5 minute series.

1903 Newburgh, New York quadrangle map, 15 minutes series.

APPENDIX 1

Figure 1

Wappingers Falls, NY USGS

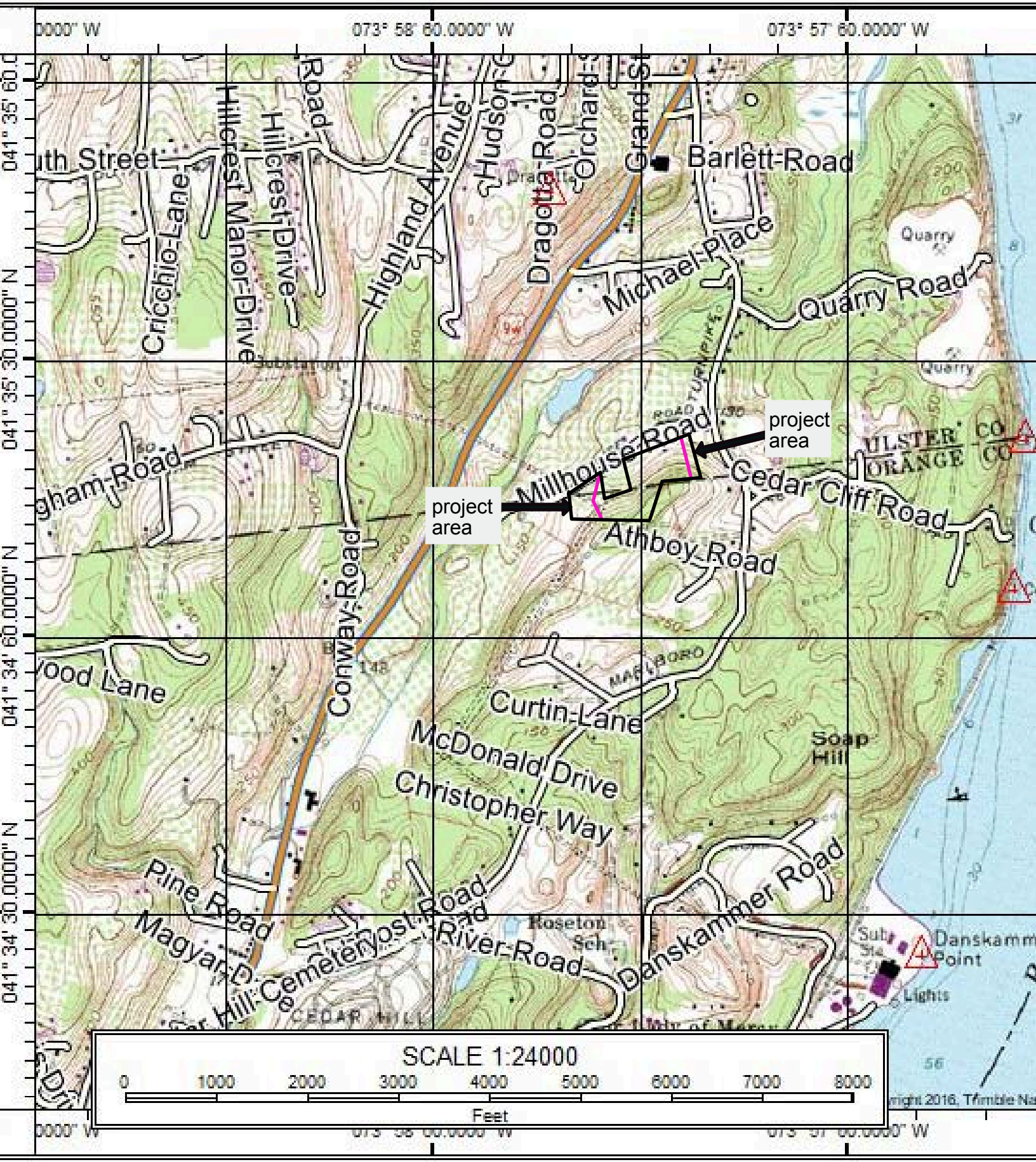

FIGURE 2: LOCATION OF SHOVEL TESTS

PHOTO ANGLE

NEGATIVE SHOVEL TEST

PROJECT BOUNDARY(A.P.E.)

SCALE: 1 INCH = 50 FEET

100' 75' 50' 25' 0 50' 100'

REPUTED OWNER:
YOUNG
TAX MAP ID: 109.004-5-20.11
DEED BOOK 4209, PAGE 179
(FILED MAP 04-329, LOT 1)

DUMP

DUMP

DUMP

STEEP SLOPE

PROJECT NAME: 50 MILL HOUSE RD

TRACKER
Archaeology Services, Inc.
Tracking the Footsteps of the Ancestors


Figure 3
1779 Sauthier map
N
Project vicinity
Fishkill
New Windsor
Wallkill
Wilmington
Goshen
Haverstraw
Minisink Angle


Figure 4
1850 Sydney map
N
project area
project area
Wyman
Sarah H. Armstr
B. Ground
W. Cosman
Henry Cosman's G.M.
D.E. Fowler
John Tooker
I.E. Conklin
James Conklin
N. Tooker
D. Tooker
N. Barnes
N. Barnes
Sarah H. Armstrong Estate
Jesse Wood
David Mayln
A. & W. Young
HAMP


Figure 5
1853 Landownership map
N
MARLBOROUGH
project area
project area
project area

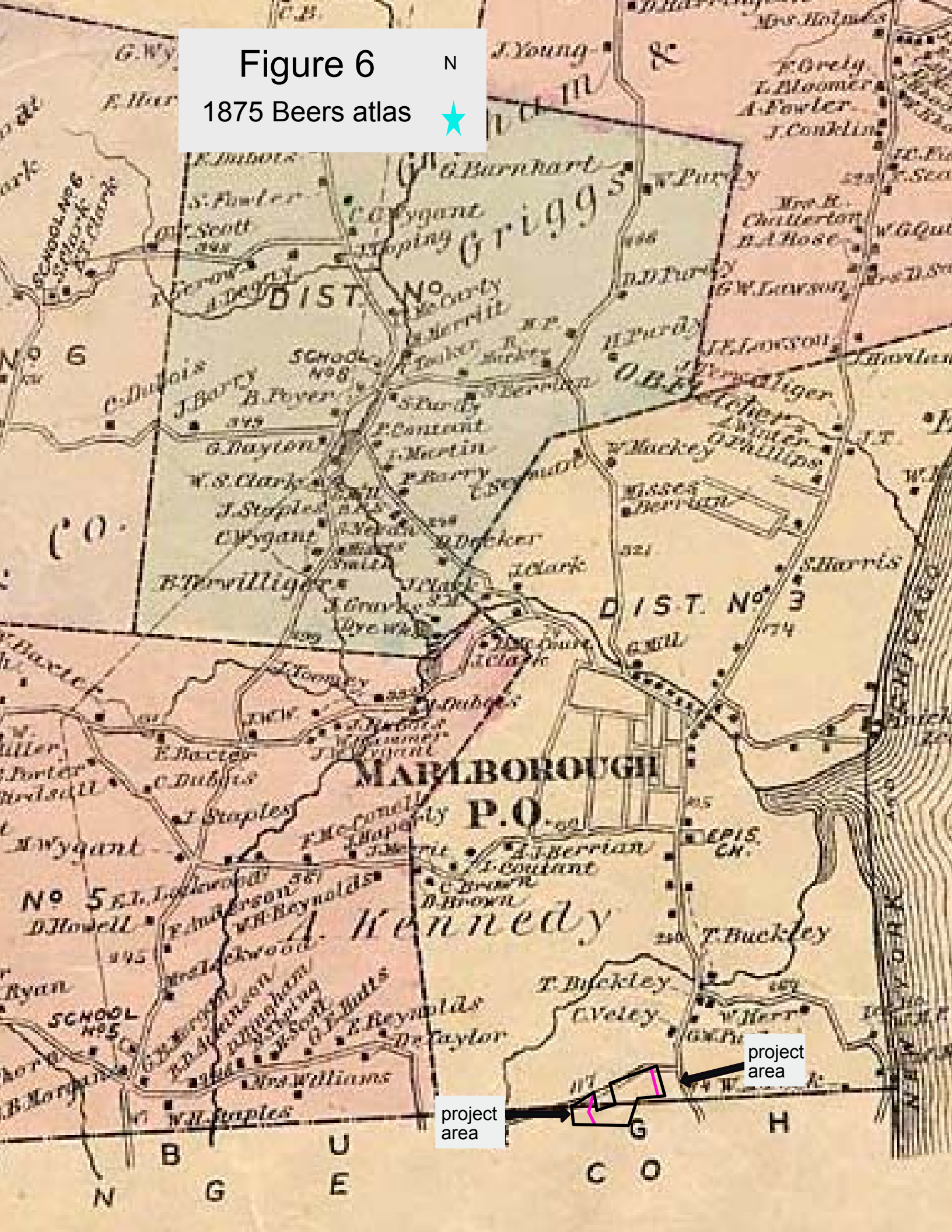
Figure 6
1875 Beers atlas
N
project area
project area
MARLBOROUGH
P.O.
DIST. No 3
DIST. No 6
No 5
SCHOOL No 5
SCHOOL No 6
A. Kennedy
Griggs
N
G
E
B
U
C O
G
H


Figure 7
1875 Beers atlas-Newburgh
N
project area
project area
Mrs. Albertson
W Henderson
W. Peck
Mrs. Smith
W. Peck
A. Young
W. H. Armstrong
C E Bingham
D.E Fowler
Armstrong
Lodge
Armstrong
Dan. Skammler
J.J. Hovey
CEDAR HILL CEMETERY
J.B. Davis
Barns Jr.
D.T. Weed
270
360
162
450
175
45


Figure 8
1903 USGS
N
Peggs Point
Marlboro Station
Marlboro
495
293
441
270
200
project area
project area
Hampton Ferry
35'
NEWBURGH
DANSKAMMER
LIGHT

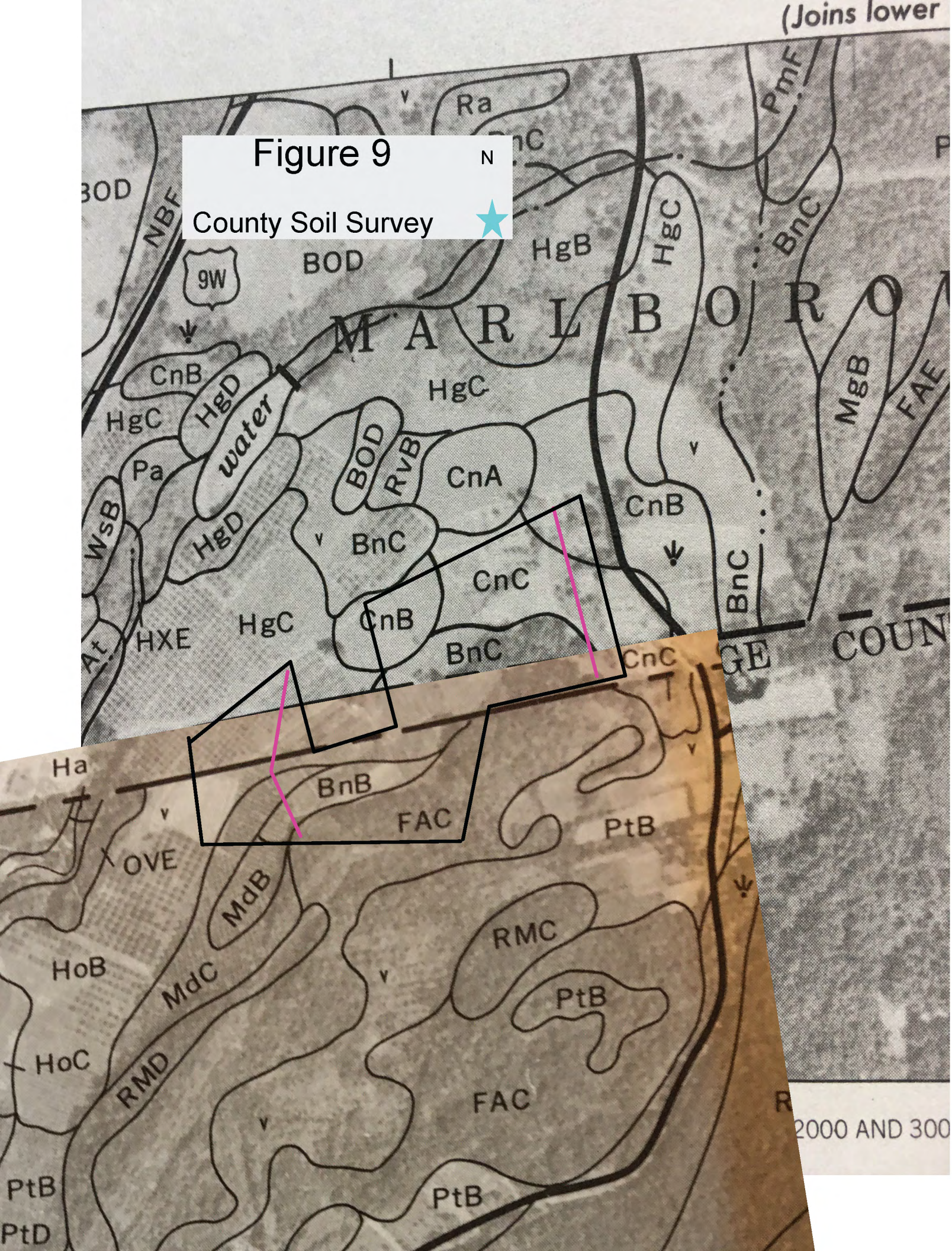
Figure 9
N
County Soil Survey
(Joins lower
Ra
PmF
BOD
NBF
HgB
HgC
BnC
9W
MARLBORO
CnB
HgD
water
HgC
Pa
BOD
RvB
CnA
MgB
FAE
WsB
HgD
BnC
CnB
CnC
BnC
HXE
HgC
CnB
BnC
BnC
CnC
Ha
BnB
FAC
PtB
OVE
MdB
RMC
HoB
MdC
PtB
HoC
RMD
FAC
PtB
PtB
PtD
2000 AND 300


Photo 1
From Mill House Road at Lot 4


Photo 2
Looking at dumping area


Photo 3
From Mill House Road at Lot 1


Photo 4
Steep slope

APPENDIX 2

SHOVEL TESTS

STP	Lv	Depth(cm)	Texture	Color	Hor.	Comments
1	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-27	GrLo	10YR4/3	A	NCM
	3	27-37	GrLo	10YR5/6	B	NCM
2	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-27	GrLo	10YR4/3	A	NCM
	3	27-37	GrLo	10YR5/6	B	NCM
3	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-28	GrLo	10YR4/3	A	NCM
	3	28-38	GrLo	10YR5/6	B	NCM
4	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-26	GrLo	10YR4/3	A	NCM
	3	26-36	GrLo	10YR5/6	B	NCM
5	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-26	GrLo	10YR4/3	A	NCM
	3	26-36	GrLo	10YR5/6	B	NCM
6	1	0-6	rootmat,leaves,humus		A/O	NCM
	2	6-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
7	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-27	GrLo	10YR4/3	A	NCM
	3	27–37	GrLo	10YR5/6	B	NCM
8	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-25	GrLo	10YR4/3	A	NCM
	3	25-40	GrLo	10YR5/6	B	NCM
9	1	0-3	rootmat,leave,humus		A/O	NCM
	2	3-27	GrLo	10YR4/3	A	NCM
	3	27-30	GrLo	10YR5/6	B	NCM
10	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-24	GrLo	10YR4/3	A	NCM
	3	24-36	GrLo	10YR5/6	B	NCM
11	1	0-2	rootmat,leaves,humus		A/O	NCM
	2	2-26	GrLo,wet	10YR4/3	A	NCM
	3	26-37	GrLo	10YR5/6	B	NCM
12	1	0-2	rootmat,leaves,humus		A/O	NCM
	2	2-24	GrLo,wet	10YR4/3	A	NCM
	3	24-34	GrLo	10YR5/6	B	NCM

13	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-27	GrLo	10YR4/3	A	NCM
	3	27-40	GrLo	10YR5/6	B	NCM
14	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
15	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-28	GrLo	10YR4/3	A	NCM
	3	28-38	GrLo	10YR5/6	B	NCM
16	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-28	GrLo	10YR4/3	A	NCM
	3	28-38	GrLo	10YR5/6	B	NCM
17	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-27	GrLo	10YR4/3	A	NCM
	3	27-37	GrLo	10YR5/6	B	NCM
18	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-27	GrLo	10YR4/3	A	NCM
	3	27-37	GrLo	10YR5/6	B	NCM
19	impeded by dumped wood					
20	impeded by dumped wood					
21	impeded by dumped wood					
22	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
23	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
24	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-26	GrLo	10YR4/3	A	NCM
	3	26-36	GrLo	10YR5/6	B	NCM
25	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-26	GrLo	10YR4/3	A	NCM
	3	26-36	GrLo	10YR5/6	B	NCM
26	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-26	GrLo	10YR4/3	A	NCM
	3	26-36	GrLo	10YR5/6	B	NCM
27	1	0-6	rootmat,leaves,humus		A/O	NCM
	2	6-27	GrLo	10YR4/3	A	NCM
	3	27-37	GrLo	10YR5/6	B	NCM

28	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-26	GrLo	10YR4/3	A	NCM
	3	26-36	GrLo	10YR5/6	B	NCM
29	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-29	GrLo	10YR4/3	A	NCM
	3	29-40	GrLo	10YR5/6	B	NCM
30	impeded by dumped wood					
31	impeded by dumped wood					
32	impeded by dumped wood					
33	impeded by dumped wood					
34	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
35	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
36	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
37	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-30	wood mulch		fill	NCM
38	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-30	wood mulch		fill	NCM
39	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-60	wood mulch		fill	NCM
40	impeded by dumped wood					
41	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-23	GrLo	10YR4/3	A	NCM
	3	23-rock				
42	1	0-2	rootmat,leaves,humus		A/O	NCM
	2	2-24	GrLo	10YR4/3	A	NCM
	3	24-34	GrLo	10YR5/6	B	NCM
43	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-24	GrLo	10YR4/3	A	NCM
	3	24-34	GrLo	10YR5/6	B	NCM

44	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-25	GrLo	10YR4/3	A	NCM
	3	25-40	GrLo	10YR5/6	B	NCM
45	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
46	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-24	GrLo	10YR4/3	A	NCM
	3	24-34	GrLo	10YR5/6	B	NCM
47	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-40	GrLo	10YR5/6	B	NCM
48	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-25	GrLo	10YR4/3	A	NCM
	3	25-40	GrLo	10YR5/6	B	NCM
49	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
50	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
51	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-26	GrLo	10YR4/3	A	NCM
	3	26-36	GrLo	10YR5/6	B	NCM
52	1	0-5	rootmat,leave,humus		A/O	NCM
	2	5-26	GrLo	10YR4/3	A	NCM
	3	26-37	GrLo	10YR5/6	B	NCM
53	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-27	GrLo	10YR4/3	A	NCM
	3	27-39	GrLo	10YR5/6	B	NCM
54	1	0-3	rootmat,leaves,humus		A/O	NCM
	2	3-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
55	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-27	GrLo	10YR4/3	A	NCM
	3	27-37	GrLo	10YR5/6	B	NCM
56	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-27	GrLo	10YR4/3	A	NCM
	3	27-37	GrLo	10YR5/6	B	NCM

57	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-27	GrLo	10YR4/3	A	NCM
	3	27-37	GrLo	10YR5/6	B	NCM
58	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-27	GrLo	10YR4/3	A	NCM
	3	27-37	GrLo	10YR5/6	B	NCM
59	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
60	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
61	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
62	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
63	1	0-5	rootmat,leaves,humus		A/O	NCM
	2	5-25	GrLo	10YR4/3	A	NCM
	3	25-35	GrLo	10YR5/6	B	NCM
64	1	0-2	rootmat,leaves,humus		A/O	NCM
	2	2-27	GrLo	10YR4/3	A	NCM
	3	27-roots				
65	1	0-4	rootmat,leaves,humus		A/O	NCM
	2	4-24	GrLo	10YR4/3	A	NCM
	3	24-35	GrLo	10YR5/6	B	NCM