Cricket Valley Energy Laydown Site

Phase 1B Archaeological Field Reconnaissance Survey Report

(OPRHP 07PR03272)



Route 22 at County Route 6 (Old Route 22) Town of Dover, Dutchess County New York

Prepared for:

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May 2011

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Route 22 at County Route 6 (Old Route 22) Town of Dover. Dutchess County, New York

TABLE OF CONTENTS

Management Summary
Phase 1B Archaeological Field Reconnaissance Survey
Introduction
Discould A Information
Phase 1A Information
Methodology
Field Methodology
ried Methodology
Field Results
Rockshelters and Mines
ROCKSHCICIS and Willies
Summary and Conclusions

Field Reconnaissance Map

APPENDICES:

Appendix A: Photographs

Appendix B: Soil Description and Map Appendix C: Project Correspondence

Management Summary

SHPO Project Review Number (if available): **OPRHP 07PR03272**

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc): DEC,

Phase of Survey: Phase 1B Archaeological Field Reconnaissance Survey

Location Information:

Location: Route 22 at County Route 6 (Old Route 22)

Minor Civil Division: Town of Dover

County: **Dutchess**

Survey Area (Metric & English)

Length:

Width:

Depth (when appropriate):

Number of Acres Surveyed: ±30 acres (12 hectares)

Number of Square Meters & Feet Excavated (Phase II, Phase III only): N/A

Percentage of the Site Excavated (Phase II, Phase III only):

USGS 7.5 Minute Quadrangle Map: **Dover Plains**

Archaeological Survey Overview

Number & Interval of Shovel Tests 217 @ 50'

Number & Size of Units: N/A

Width of Plowed Strips: 10'(3.3 m)

Surface Survey Transect Interval: 50' (15 m)

Results of Archaeological Survey

Number & name of prehistoric sites identified: 0

Number & name of historic sites identified: 0

Number & name of sites recommended for Phase II/Avoidance: N/A

Results of Architectural Survey

Number of buildings/structures/cemeteries within project area: 0

Number of buildings/structures/cemeteries adjacent to project area: 0

Number of previously determined NR listed or eligible buildings/structures/cemeteries/districts:

 $Number\ of\ identified\ eligible\ buildings/structures/cemeteries/districts:\ N/A$

Report Author (s): Gail T. Guillet, Stephanie Roberg-Lopez M.A., R.P.A. and Beth Selig

Date of Report: May 2011

MAP LIST

Maps

Map 1: 1989 USGS Topographical Map. Dover Plains Quadrangle. 7.5 Minute Series. Blue line indicates APE. Scale: 1"=1500".

Map 2: Location map showing the Cricket Valley Energy Laydown Site. Source: Hagstrom's

Dutchess County Street Atlas 2004. Scale: 1"=2250'.

Figures

Fig. 1: Aerial Image of Cricket Valley Laydown Site. Source: The Chazen Companies. Scale: 1"=750'.

Fig. 2: Cricket Valley Energy Laydown Site. Field Reconnaissance Map. Scale 1"-100'

Introduction

The following represents the final Phase 1B report for the Cricket Valley Energy Laydown Site in the Town of Dover Plains, Dutchess County, New York. (Maps 1 & 2)

On December 15, 2010 CITY/SCAPE: Cultural Resource Consultants began a field reconnaissance level archaeological survey of the Cricket Valley Energy Laydown Site. Work on the Cricket Valley Energy Laydown Site continued through December 20, 2010, when work was suspended due to a precipitous drop in temperature, which froze the ground to a depth of 8 inches, precluding further hand excavation. Following the drop in temperature, almost 2 feet of snow fell, effectively obscuring the ground surface. A site visit on January 3, 2011 confirmed that conditions on the site remained unchanged, despite the insulation of the snow cover and several days of warmer weather.

At the time that the field work was suspended, Cricket Valley Energy Center, LLC requested that an interim report be prepared that outlined the work and reported the findings to date, and that the report be submitted to the New York Office of Parks, Recreation and Historic Preservation (OPRHP) for review. The report was submitted to OPRHP in January of 2011. On February 11, 2011, Douglas Mackey, Program Analyst for OPRHP, wrote to the NYS Department of Environmental Conservation (DEC) with a recommendation that, despite an upcoming DEC deadline, no further work be completed until the weather had improved. The letter did, however, recommend to DEC that the applicant (Cricket Valley Energy Center, LLC) be "... allowed to proceed with their process with you, with the condition that the Phase 1 archaeological investigation is completed as soon as environmental conditions allow, and that if any sites are identified, the applicant will work with our agencies to develop and implement acceptable mitigation measures before actual construction is allowed to proceed." (See Appendix C: OPRHP Letter dated 2-11-11)

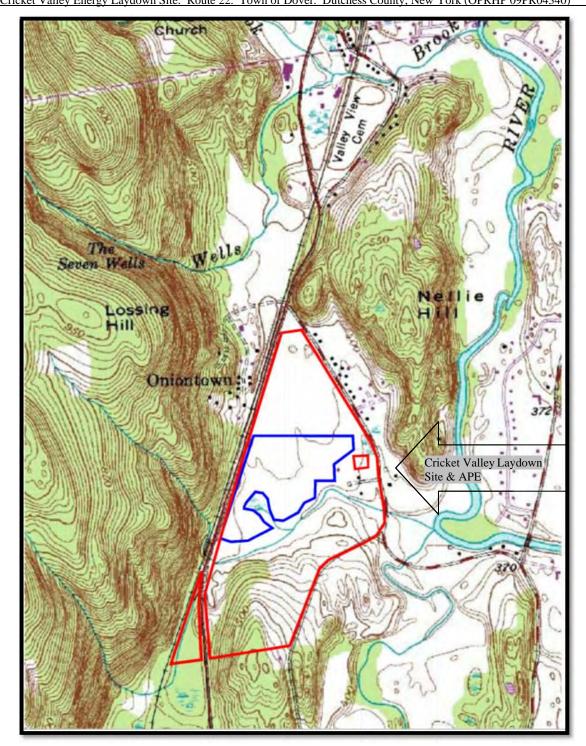
Fieldwork resumed at the Cricket Valley Energy Laydown site on April 25, 2011, with, however, some changes in methodology. In the winter of 2010, the property owner had not been willing to plow the fields within the Area of Potential Effect (APE), precluding walkover survey and surface collection. An alternative field methodology, hand excavated shovel tests at 50 foot intervals along a series of transects, was then employed. Due to the nature of hand excavation, work could not resume on the site until the soils were sufficiently dried out and drained, and could then be easily screened. In mid-April conditions on the site had improved to a point where hand excavation could resume. The day the crew returned to the site, the property owner was in the process of plowing the field, allowing for the walkover and surface collection to begin. Once the plowed soils on the site had been subjected to several hard rains, fieldwork resumed under optimal conditions.

All phases of the archaeological fieldwork were supervised by Stephanie Roberg-Lopez, M.A., R.P.A., Principal Investigator. Stephanie Bower acted as crew chief in December, with Kris Mierisch assuming the lead as crew chief when field work resumed in the spring. Field technicians included Samantha Browne, Stephanie Bower, Kris Mierisch, Tom Wilson and Beth Selig. Writing of the final Phase 1B report was completed by Beth Selig, under the supervision of Stephanie Roberg-Lopez. The preparation of the field reconnaissance map, the shovel test records, site photography and production of the final Phase 1B report were completed by Beth Selig.

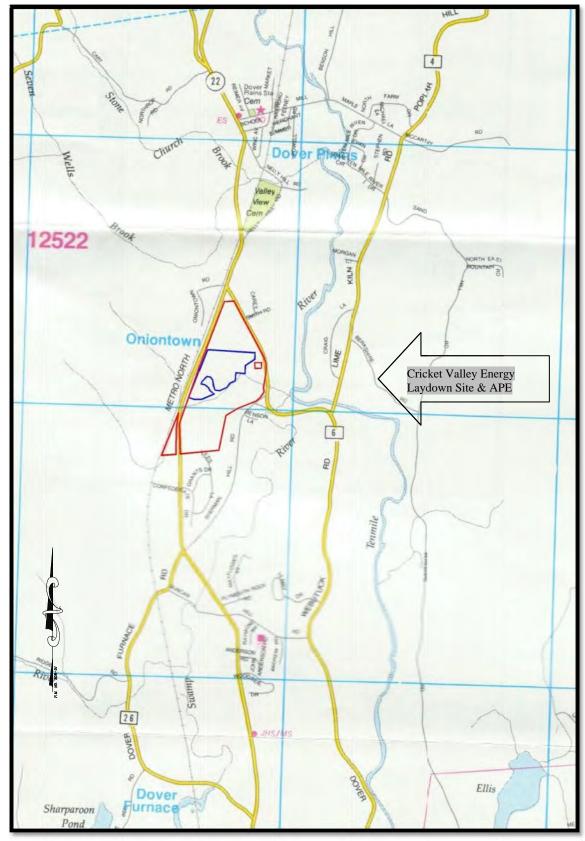
Phase 1A Information

As stated in the Phase 1A, the Cricket Valley Energy Laydown Site is generally level, with elevations on the site sloping gently from 412' (125.6 m) Above Mean Sea Level (AMSL) in the center of the field to 399' (121.6 m) in the southwestern corner of the site, and 380' AMSL (115.8 m) in the southeastern portion of the site.

The characteristics of the soils within the Cricket Valley Energy Laydown Site have an important impact on the potential for the presence of cultural material, since the types of soils present would have affected the ability of an area to support human populations. Topographically, the Cricket Valley Energy Laydown Site is located in an area characterized by level plains with slopes ranging from 0 to 2 percent. With the exception of a small steeper area along Route 22, which contains Copake gravelly silt loam (CuC), the soil complex within the Cricket Valley Energy Laydown Site APE is Copake gravelly silt loam (CuA). Copake gravelly silt loam, formed in glaciofluvial deposits, is very deep to bedrock and well drained. It is found on valley floors and outwash plains. The keyhole outparcel and the land immediately to the north, along the stream corridor, is Pawling silt loam complex (Pg) and Wayland silt loam complex (Wy); both of these soils lie outside the Cricket Valley Energy Laydown Site APE. Pawling silt loam complex is associated with floodplains; it is very deep to bedrock and moderately well drained. Wayland silt loam complex is identified in the *Soil Survey of Dutchess County* as a wetland soil that is very deep to bedrock, nearly level, and poorly to very poorly drained. The soils within the APE, being level and well drained, would have been attractive to prehistoric peoples, particularly since there is fresh water immediately to the south.



Map 1: 1989 USGS Topographical Map. Dover Plains Quadrangle. 7.5 Minute Series. Red line indicates property boundary. Blue line indicates APE. Scale: 1"=1500'.



Map 2: Location map showing Cricket Valley Energy Laydown Site. Source: Hagstrom's *Dutchess County Street Atlas* 2004. Red line indicates property boundary. Blue line indicated APE. Scale: 1"=2250'.

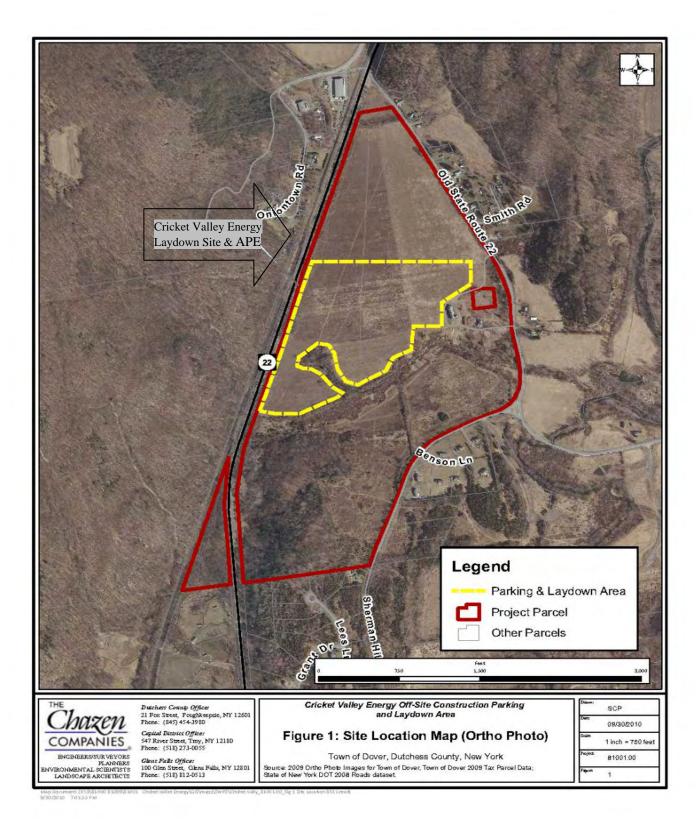


Fig. 1: Aerial photo of Cricket Valley Energy Laydown Site. Source: The Chazen Companies. Red line indicates property boundary. Yellow dashed line indicates APE. Scale: 1"=750'.

Professional surveys and excavations in the Town of Dover indicate the presence of two prehistoric sites that are located on the Swamp River and in the vicinity of the project area. One of the sites, the Jasper Site, was not considered significant, but the other, the Corn Snake Site, was considered significant (i.e., eligible for listing on the National Register of Historic Places). To the north of the Cricket Valley Energy Laydown Site at the intersection of Route 22 and Old State Route 22 (CR 6), a single biface fragment was recovered from the ground surface. Additional shovel testing failed to identify additional prehistoric material, and it was considered that the biface was an isolated find. The identification of prehistoric material in the immediate vicinity of the project area suggest that the Cricket Valley Energy Laydown Site has a moderate to high potential to contain a prehistoric site or sites.

The assessment of the prehistoric potential of the site has been ranked as moderate to high. Among the environmental factors that suggest the potential for prehistoric cultural resources is moderate to high is the presence of an unnamed stream that flows along the southern boundary of the project area APE. The presence of professionally excavated archaeological sites in close proximity to the project area increases the sensitivity of the site. With respect to the potential for historic cultural resources, map research indicates that no Map Documented Structure (MDS) were located within the APE, and it is our assessment that the potential for historic cultural remains within the APE is low. However, because of the identified sensitivity of the site for prehistoric cultural resources, it was the recommendation of CITY/SCAPE Cultural Resources that testing at the level of a Phase 1B Field Reconnaissance Survey be undertaken within the APE to rule out the presence of prehistoric cultural remains.

Methodology

The Cricket Valley Energy Laydown Site is located in an area where prehistoric archaeological sites have been identified, including one at the intersection of Route 22 and County Route 6 (Old State Route 22), and a second on the south side of Sherman Hill Road south of the Cricket Valley Energy Laydown Site. In addition, the reported presence of prehistoric sites nearby (less than ¼ mile distance) suggests that the potential for the Cricket Valley Energy Laydown Site to contain prehistoric cultural resources is moderate to high. The Cricket Valley Energy Laydown Site closely conforms to an ecological model that suggests the project area is highly sensitive for prehistoric cultural materials. The site consists of a large level corn field with well drained soils. Although the corn had been harvested from the field, in the early winter the owner of the property was unwilling to plow the field prior to the spring planting. As a result, in December of 2010, hand excavation was undertaken in the southern portion of the fields within the APE. When field work resumed in April 2011, the property owner had plowed the fields, and it was, therefore, possible to investigate the remainder of the project area through surface inspection methods. The field was plowed on April 26, 2011, and on April 28, 2011, a series of storms passed through Dover Plains, effectively washing the plowed furrows. The field walking and surface inspection took place on April 29, 2011.

Areas selected for subsurface testing were identified during a comprehensive walkover of the property. This walkover served to evaluate the site, assess any areas of prior disturbance, rule out slope and designated wetlands, assess available raw material and habitation resources, and determine former land usage. For the purposes of the Phase 1B survey, the (APE) is the Cricket Valley Energy Laydown Site, which is located within a larger parcel of land. On the accompanying maps, the parcel boundaries are indicated by a red line, while those of the project area APE are indicated by a blue or, in the case of the aerial photo, a yellow line.

In December 2010, the areas selected for shovel testing were tested at intervals of 50' (15.24 m) along transects conforming to the land surface. The areas selected for testing were identified based on environmental factors, topography and known activity patterns of prehistoric populations. The locations of the tests and the boundaries of the APE are depicted on a large scale map that shows surveyed borders, the locations of structures and the current project boundaries. (Field Reconnaissance Map)

In April 2011, the methodology for surface inspection involved walking plowed and harrowed furrows that were ten feet (3.04 m) wide and spaced 50' (15.24 m) apart within the open fields. Following the hard rain, which took place on April 26, 2010, the ground surface was carefully inspected for the presence of prehistoric and historic cultural remains. Materials recovered from the surface collection were marked with a pin flag, and mapped using GPS (Global Positioning System) on to a large scale map.

Field Methodology

Two methodologies were employed on the Cricket Valley Energy Laydown Site: hand excavation of shovel tests along a series of transects, and the visual inspection of plowed and rain washed furrows. The field methodology employed at the Cricket Valley Energy Laydown Site consisted of several stages of investigation. These included:

- 1. A walkover and visual inspection of the site to assess areas of potential sensitivity for prehistoric cultural remains;
- 2. The excavation of a stratigraphic control test to establish the stratigraphy of the site and to identify the depth and composition of the sterile glacially deposited subsoil;
- 3. Systematic visual inspection of the land surface to rule out the presence of rock faces and overhangs;
- 4. Shovel testing in the areas identified as having a potential sensitivity for prehistoric remains;
- 5. Surface inspection of the plowed and disked areas that had been washed by a heavy rainfall.

As stated above, the field methodology utilized was hand excavation of shovel test pits (STPs) in the sensitive areas on the southern portion of the Cricket Valley Energy Laydown Site and the surface inspection of the plowed northern portion of the project area APE. The hand excavation involved excavating 40cm (16") diameter shovel tests at 50' (15.24 m) intervals. Soils were passed through a ¼ inch (6 mm) steel mesh screen and the materials remaining in the screens were carefully examined for historic and prehistoric artifacts. No cultural material was recovered during the hand excavation of the southern portion of the site, but if items had been recovered from the screens, they would have been assigned to the stratum from which they were obtained, bagged and removed to the CITY/SCAPE laboratory for processing and identification. The stratigraphy of each test was recorded, including the depth and the soil description of each layer. (Appendix B: Shovel Test Record) Once the information had been recorded, the test pit was refilled. The visual inspection of the northern portion of the project area involved the field crew walking and visually inspecting plowed, disced and rain washed furrows. Cultural material was marked by a

pin flag, the location was recorded using a GPS system, and the artifact was bagged for processing in the CITY/SCAPE laboratory.

Field Results

At the time that the fieldwork was suspended at the end of December 2010, a total of 217 shovel tests had been excavated along 24 transects, effectively testing the southern portion of the Cricket Valley Energy Laydown Site APE. This is the area of the Cricket Valley Energy Laydown Site APE in which several of the stormwater management features are to be located, and represents the most extensive area within the Cricket Valley Energy Laydown Site where subsurface excavations related to the Laydown project will take place. Transects began along the eastern boundary of the site, and were aligned east to west terminating at the Cricket Valley Energy Laydown Site's western boundary parallel to Route 22. Soils encountered in the testing completed in December 2010 consisted of dark brown silt loam overlying dark yellowish brown sandy clay with gravel. No cultural material of any kind was recovered from the shovel tests excavated on the southern portion of the site.

At the time of the subsurface freeze, the northern portion of the site had not been tested. The project area was checked during the winter and early spring to determine whether the soils were dry enough to permit field work to resume in the northern portion of the site, where Stormwater Management Area 2 is to be located. It is also in the northern area that parking spaces will be created for the crew working on the Cricket Valley Energy Center site. In mid-April 2011, the property owner plowed the fields within the APE in preparation for spring planting. Because the northern portion of the site was plowed before the field crew resumed shovel testing, that portion of the site was tested by surface reconnaissance methods. The field team completed the visual inspection of the northern portion of the site through the visual inspection of plowed and rain washed furrows that were 10 feet wide and spaced 50 feet apart. All cultural material was flagged and located using GPS technology.

A total of 21 plowed transects were visually inspected on April 29, 2011. On plowed transect 14, a single chert flake was identified. The flake appeared fresh, with a small striking platform, and virtually no bulb of percussion. This chert flake was believed to be plow shatter. Radial confirmation tests were excavated at 5 foot intervals from the location of this find to determine whether a prehistoric site was present. The radial confirmation tests failed to identify any additional prehistoric cultural material, and it was concluded that the chert flake did not represent a prehistoric locus.

The surface inspection recovered a fragment of bottle glass, surface collection point 1 (SC 1), blue transferprint whiteware (SC 8), black plastic (SC 4), two fragments of stoneware (SC 10), clear bottle glass, (SC 6), and a fragment of aqua bottle glass (SC 5). This material was scattered across the northern portion of the field, and is consistent with farming practices in which manure from the barn was spread to fertilize the fields. Given that the material was spread across the field, and in the absence of a MDS within the Cricket Valley Energy Laydown Site APE, it is not considered that this material is associated with an historic locus.

Rockshelters and Mines

The site was carefully inspected for any rock formations with the potential to yield lithic raw materials or shelter. The Cricket Valley Energy Laydown Site APE is a level agricultural field, with no bedrock outcrops or areas of surficial bedrock that could have provided shelter or lithic resources to prehistoric peoples.

Summary and Conclusions

In late December 2010, an interim Phase 1B Archaeological Field Reconnaissance Survey report for the Cricket Valley Energy Laydown Site APE was prepared at the request of Cricket Valley Energy Center, LLC of Boston, MA. At that time the Phase 1B Archaeological Field Reconnaissance Survey had not been completed due to weather conditions that had frozen the soil to a depth of 8 inches. In addition, almost 2 feet of snow had covered the field, effectively obscuring the ground surface.

Field work resumed in late April 2011, when the snow had melted, the soil had thawed, and the soils were sufficiently drained and dry to allow for field excavation. The northern portion of the site, the area that had not been tested in 2010, was plowed on April 26, 2011. There was a heavy rain on April 27 and April 28, 2011 that washed the soils clean. The Cricket Valley Energy Laydown Site was surface inspected on April 29, 2011. A single chert flake was recovered from TR 14 in the northern portion of the site. Based on our examination of the flake, which revealed that it was fresh, had only a small striking platform, and exhibited virtually no bulb of percussion, it is believed that this represents plow shatter. A limited number of historic cultural artifacts were recovered from the field; these artifacts were spread across the field, and are the result of farming practices, and do not represent an historic locus.

In December of 2010, the Phase 1B Archaeological Field Reconnaissance Survey excavated 217 shovel test pits within an area representing approximately half of the Cricket Valley Energy Laydown Site APE. On April 29, 2011, the balance of the site was inspected through surface reconnaissance. Based on the findings discussed above, it not considered that there is any evidence of either a prehistoric or historic site within the Cricket Valley Energy Laydown Site, and it is recommended that no additional work be required for the Cricket Valley Energy Laydown Site.

Bibliography

Bachman, Charles & G. H. Corey

1858 Map of Dutchess County. . . . John E. Gillette: Philadelphia, PA.

Beauchamp, William

1900 Aboriginal Occupation of New York. New York State Museum Bulletin No. 32. New York State Museum: Albany, NY.

Beers, Frederick W.

1867 Atlas f New York and Vicinity F. W. Beers, A. D. Ellis & G. G. Soule: New York, NY.

CITY/SCAPE: Cultural Resource Consultants

- 2008 Phase 3 Data Recovery. Marriott-Fairfield Inn Site. Route 22 & Hardscrabble Road. Town of North Salem. Westchester County, New York.
- 2007 Phase 1B Archaeological Field Reconnaissance Survey. Martin Road Property. Martin Road. Town of Beekman. Dutchess County, New York.
- 2005a Phase 2 Archaeological Investigation. Marriott-Fairfield Inn Site. Route 22 & Hardscrabble Road. Town of North Salem. Westchester County, New York.
- 2005b Phase 1A Literature Review and Sensitivity Analysis. Marriott-Fairfield Inn Site. Route 22 & Hardscrabble Road. Town of North Salem. Westchester County, New York.

Eisenberg, Leonard

1978 Paleo-Indian Settlement Pattern in the Hudson and Delaware River Drainages. Occasional Publications in Northeastern Anthropology. Franklin Pierce College: Rindge, NH.

Fisher, D.W., et al

1970 Geologic Map of New York: Lower Hudson Sheet. University of the State of New York, The State Education Department Albany, NY

Funk, Robert

- 1976a Recent Contributions to Hudson Valley Prehistory. New York State Museum Memoir 22: Albany, NY.
- 1976b *Sylvan Lake Rockshelter*. New York State Office of Park, Recreation and Historic Preservation. Unpublished Report.

Gray, O. W. and Son, and F. A. Davis

176 New Illustrated Atlas of Dutchess County, New York. S. A. Matthieu: Poughkeepsie, NY.

Greenhouse Consultants Incorporated (GCI)

- 2003a Stage 1 and Stage 2 Archaeological Survey. River Valley Estates. Town of Dover. Dutchess County, New York. (Prepared for Dover Hill Associates, LLC)
- 2003b Additional Stage 1 and Stage 2 Archaeological Survey. River Valley Estates. Town of Dover. Dutchess County, New York. (Prepared for Dover Hill Associates, LLC)

Küchler, August W.

1964 Potential Natural Vegetation of the Conterminus United States. American Geographical Society, New York.

Parker, Arthur C.

1922 *The Archaeological History of New York.* New York State Museum Bulletin. The University of the State of New York: Albany, NY.

Public Archaeology Facility (PAF)

2002 Cultural Resources Reconnaissance. 2001-2002 Highway Program. PIN 8756.77.101/Oniontown Road Railroad Elimination Project. Town of Dover. Dutchess County, New York. MCD 02704. (Prepared for NYSM State Education Department)

Reith, Christina B. (editor)

2008 "Current Approaches to the Analysis and Interpretation of Small Lithic Scatters in the Northeast." *New York State Museum Bulletin Series 506.* New York State Education Department: Albany, NY.

Ritchie, William A.

1958 An Introduction to Hudson Valley Prehistory. New York State Museum Bulletin 367. Albany, NY.

1980 The Archaeology of New York State. Harbor Hill Books: Harrison, NY. [Revised edition]

1989 *A Typology and Nomenclature for New York Projectile Points*. New York State Museum Bulletin Number 384. The University of the State of New York: Albany, NY. [Reprinted edition]

Ritchie, William A. & Robert Funk.

1973 Aboriginal Settlement Patterns in the Northeast. New York State Museum and Science Service Memoir 20. Albany, NY.

Sidney, J. C.

1850 *Map of Dutchess County, New-York.* John G. Gillette: Philadelphia, PA.

Schuberth, Christopher J.

1968 The Geology of New York City and Environs. The Natural History Press: Garden City NY

Smith, James H.

1882 History of Dutchess County, New York. D. Mason and Company: Syracuse, NY.

STRATA Cultural Resource Management

2008 Phase 1A/1B Archeological Investigation. Palumbo Block Mine Expansion. Town of Dover. Dutchess County, New York. (OPRHP 08PR03056)

United States Agricultural Department (Cornell University)

2001 Soil Survey of Dutchess County, New York. United Stated Government Printing Office: Washington, DC.

United States Geological Survey

1958 Dover Plains, New York-Connecticut Quadrangle. 7.5 Minute Series. Photorevised 1984.

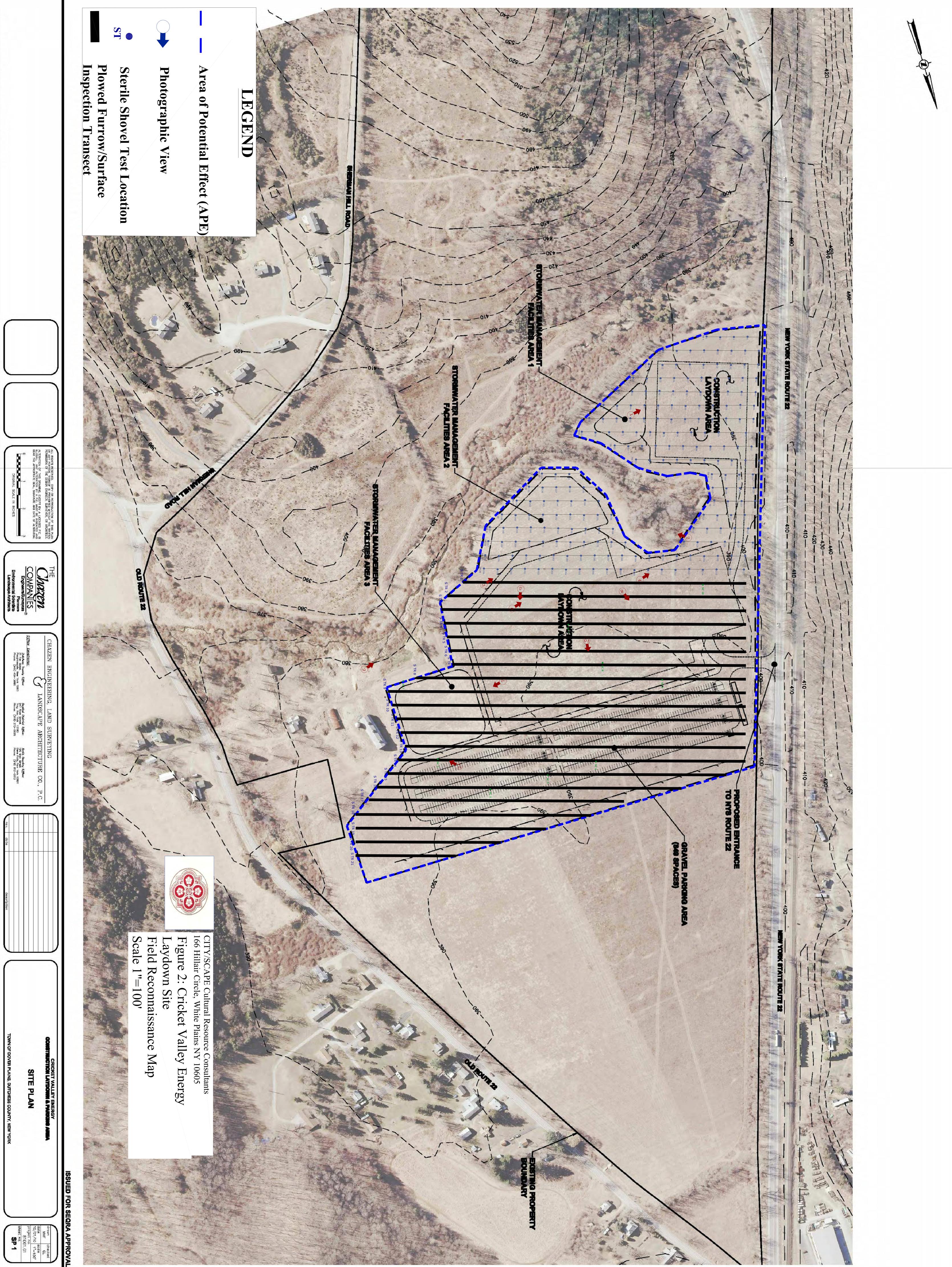
1947 Dover Plains (NY-CT) Quadrangle.

Versaggi, Ph.D., Nina M.

2002 *Upland Sites: The View from the Northern Tier and Southern New York.* Paper presented at Pennbyways Conference, Harrisburg, PA. Accessed on August 8, 2008 at www.pennbyways.net.

2008 "Small Lithic Sites: Linking Significance with Context." *Current Approaches to the Analysis and Interpretation of Small Lithic Sites in the Northeast.* NYSM Bulletin 508. The University of the State of New York state Education Department: Albany, NY.

FIELD RECONNAISSANCE MAP



APPENDICES

LIST OF APPENDICES

Appendix A: Photographs

Appendix B: Shovel Test Records Appendix C: Project Correspondence

APPENDIX A

PHOTOGRAPHS



Photo 1: Field crew excavating shovel tests in southern portion of site. View south.



Photo 2: Wetland area located outside the southeastern portion of the APE. View south.



Photo 3: Southern portion of Cricket Valley Laydown Energy Site APE was shovel tested. View southwest.



Photo 4: View south west of location of TR 24 in southern portion of Cricket Valley Energy Laydown Site.



Photo 5: View of fresh plow cut showing depth of A horizon, and 10YR5/6 subsoil (B horizon). View north.



Photo 6: Plow cut to a depth over 14" below ground surface. View west.



Photo 7: Plow working in northern field. Barn in rear is outside the project APE. View east.



Photo 8: Northern portion of the Cricket Valley Energy Laydown Site prior to plowing. View northwest.



Photo 9: Stream borders the southern extent of project APE. View southwest.



Photo 10: Field crew completing the surface reconnaissance of the northern portion of the Cricket Energy Laydown site. View north.



Photo 11: Kris Mierisch marks the location of chert flake find. View northwest.



Photo 12: Samantha brown excavates radial confirmation tests at location of find SC point 2 (possible chert flake). View east.

APPENDIX B

SHOVEL TEST RECORDS

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
TR 1	1	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-17	33-14	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	2	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-10	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	3	1	0-14	0-35	10YR3/3	Dk Brn Sa Lo	NCM
		2	14-18	35-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	4	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	5	1	0-15	0-38	10YR3/3	Dk Brn Sa Lo	NCM
		2	15-20	38-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 2	6	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-18	33-48	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	7	1	0-16	0-40	10YR3/3	Dk Brn Sa Lo	NCM
		2	16-20	40-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	8	1	0-18	0-48	10YR3/3	Dk Brn Sa Lo	NCM
		2	18-22	48-52	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	9	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-18	33-48	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	10	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	11	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-17	33-43	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	12	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	13	1	0-14	0-35	10YR3/3	Dk Brn Sa Lo	NCM
		2	14-18	35-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 3	14	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	15	1	0-8	0-20	10YR3/3	Dk Brn Si Lo	NCM
		2	8-12	20-30	10YR4/6	DkY Brn Sa Cl	NCM
	16	1	0-8	0-2	10YR3/3	Dk Brn Si Lo	NCM
		2	8-10	020-30	10YR4/6	DkY Brn Sa Cl	NCM
	17	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-13	30-33	10YR4/6	DkY Brn Sa Cl	NCM
	18	1	0-10	0-25	10YR3/3	Dk Brn Si Lo	NCM
		2	10-14	25-35	10YR4/6	DkY Brn Sa Cl	NCM
	19	1	0-8	0-20	10YR3/3	Dk Brn Si Lo	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
		2	8-12	20-30	10YR4/6	DkY Brn Sa Cl	NCM
	20	1	0-7	0-18	10YR3/3	Dk Brn Si Lo	NCM
		2	7-11	18-28	10YR4/6	DkY Brn Sa Cl	NCM
	21	1	0-8	0-20	10YR3/3	Dk Brn Si Lo	NCM
		2	8-12	20-30	10YR4/6	DkY Brn Sa Cl	NCM
	22	1	0-10	0-25	10YR3/3	Dk Brn Si Lo	NCM
		2	10-16	25-40	10YR4/6	DkY Brn Sa Cl	NCM
ΓR 4	23	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	24	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-430	10YR4/6	DkY Brn Sa Cl	NCM
	25	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	26	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-16	28-40	10YR4/6	DkY Brn Sa Cl	NCM
	27	1	0-16	0-40	10YR3/3	Dk Brn Si Lo	NCM
		2	16-20	40-50	10YR4/6	DkY Brn Sa Cl	NCM
	28	1	0-15	0-38	10YR3/3	Dk Brn Si Lo	NCM
		2	15-19	38-49	10YR4/6	DkY Brn Sa Cl	NCM
	29	1	0-18	0-45	10YR3/3	Dk Brn Si Lo	NCM
		2	18-22	45-55	10YR4/6	DkY Brn Sa Cl	NCM
	30	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-20	35-50	10YR4/6	DkY Brn Sa Cl	NCM
	31	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-43	10YR4/6	DkY Brn Sa Cl	NCM
	32	1	0-18	0-45	10YR3/3	Dk Brn Si Lo	NCM
		2	18-22	45-55	10YR4/6	DkY Brn Sa Cl	NCM
ΓR 5	33	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-18	35-45	10YR4/6	DkY Brn Sa Cl	NCM
	34	1	0-15	0-38	10YR3/3	Dk Brn Si Lo	NCM
		2	15-19	38-48	10YR4/6	DkY Brn Sa Cl	NCM
	35	1	0-8	0-20	10YR3/3	Dk Brn Si Lo	NCM
		2	8-14	20-35	10YR4/6	DkY Brn Sa Cl	NCM
	36	1	0-10	0-25	10YR3/3	Dk Brn Si Lo	NCM
		2	10-16	25-40	10YR4/6	DkY Brn Sa Cl	NCM
	37	1	0-15	0-38	10YR3/2	V Dk Brn Si Cl	NCM
		2	15-20	38-50	10YR6/1	G and Dk Y Brn mottled Sa	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
		3	20-23	50-58	10YR3/2	V Dk Brn Si Cl	NCM
	38	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-21	28-52	10YR4/6	DkY Brn Sa Cl	NCM
	39	1	0-12	0-30	10YR6/1	G and Dk Y Brn mottled Sa	NCM
		2	12-16	30-40	10YR3/2	V Dk Brn Si Cl	NCM
		3	16-21	40-51	10YR6/1	G and Dk Y Brn mottled Sa	NCM
	40	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-18	35-45	10YR4/6	DkY Brn Sa Cl	NCM
	41	1	0-16	0-40	10YR3/3	Dk Brn Si Lo	NCM
		2	16-22	40-55	10YR3/1	V Dk Gry Brn Si LO	NCM
		3	22-25	55-63	10YR4/6	DkY Brn Sa Cl	NCM
	42	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-17	28-43	10YR3/1	V Dk Gry Brn Si LO	NCM
	43	1	0-16	0-40	10YR3/3	Dk Brn Si Lo	NCM
		2	16-20	40-50	10YR3/1	V Dk Gry Brn Si LO	NCM
		3	20-23	50-63	10YR4/6	DkY Brn Sa Cl	NCM
TR 6	44	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-18	35-45	10YR4/6	DkY Brn Sa Cl	NCM
	45	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	46	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	47	1	0-17	0-38	10YR3/3	Dk Brn Si Lo	NCM
		2	17-21	38-50	10YR4/6	DkY Brn Sa Cl	NCM
	48	1	0-16	0-40	10YR3/3	Dk Brn Si Lo	NCM
		2	16-20	40-50	10YR4/6	DkY Brn Sa Cl	NCM
	49	1	0-20	0-50	10YR3/3	Dk Brn Si Lo	NCM
		2	20-23	50-63	10YR3/1	V Dk Gry Brn Si LO	NCM
		3	23-27	63-68	10YR4/6	DkY Brn Sa Cl	NCM
	50	1	0-16	0-40	10YR3/3	Dk Brn Si Lo	NCM
		2	16-20	40-50	10YR4/6	DkY Brn Sa Cl	NCM
	51	1	0-20	0-50	10YR3/3	Dk Brn Si Lo	NCM
		2	20-24	50-60	10YR4/6	DkY Brn Sa Cl	NCM
	52	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-23	35-58	10YR3/1	V Dk Gry Brn Si LO	NCM
		3	23-27	58-68	10YR4/6	DkY Brn Sa Cl	NCM
	53	1	0-20	0-50	10YR3/3	Dk Brn Si Lo	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
		2	20-24	50-60	10YR3/1	V Dk Gry Brn Si LO	NCM
		3	24-28	60-70	10YR4/6	DkY Brn Sa Cl	NCM
	54	1	0-18	0-	10YR3/3	Dk Brn Si Lo	NCM
		2	18-23	45-58	10YR4/6	DkY Brn Sa Cl	NCM
	55	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR4/6	DkY Brn Sa Cl	NCM
TR 7	56	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-16	33-40	10YR4/6	DkY Brn Sa Cl	NCM
	57	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-19	33-49	10YR4/6	DkY Brn Sa Cl	NCM
	58	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	59	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR4/6	DkY Brn Sa Cl	NCM
	60	1	0-18	0-45	10YR3/3	Dk Brn Si Lo	NCM
		2	18-22	45-55	10YR4/6	DkY Brn Sa Cl	NCM
	61	1	0-14	0-35	10YR5/4	Y Brn Sa Cl	NCM
		2	14-17	35-48	10YR6/4	Lt Y Brn Sa	NCM
		3	17-21	48-52	10YR4/2	Dk G Brn Si Lo	NCM
	62	1	0-20	0-50	10YR3/3	Dk Brn Si Lo	NCM
		2	20-24	50-60	10YR4/6	DkY Brn Sa Cl	NCM
	63	1	0-15	0-38	10YR3/3	Dk Brn Si Lo	NCM
		2	15-20	38-60	10YR4/6	DkY Brn Sa Cl	NCM
	64	1	0-24	0-60	10YR3/3	Dk Brn Si Lo	NCM
		2	24-28	60-70	10YR4/6	DkY Brn Sa Cl	NCM
	65	1	0-15	0-38	10YR3/3	Dk Brn Si Lo	NCM
		2	15-20	38-50	10YR4/6	DkY Brn Sa Cl	NCM
	66	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-18	35-45	10YR4/6	DkY Brn Sa Cl	NCM
	67	1	0-10	0-25	10YR3/3	Dk Brn Si Lo	NCM
		2	10-14	25-35	10YR4/6	DkY Brn Sa Cl	NCM
	68	1	0-8	0-20	10YR3/3	Dk Brn Si Lo	NCM
		2	8-10	20-30	10YR4/6	DkY Brn Sa Cl	NCM
TR 8	69	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR4/6	DkY Brn Sa Cl	NCM
	70	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-16	33-40	10YR4/6	DkY Brn Sa Cl	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
	71	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-19	33-49	10YR4/6	DkY Brn Sa Cl	NCM
	72	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	73	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR4/6	DkY Brn Sa Cl	NCM
	74	1	0-18	0-45	10YR3/3	Dk Brn Si Lo	NCM
		2	18-22	45-55	10YR4/6	DkY Brn Sa Cl	NCM
	75	1	0-14	0-35	10YR5/4	Y Brn Sa Cl	NCM
		2	14-17	35-43	10YR6/4	Lt Y Brn Sa	NCM
		3	17-21	43-52	10YR4/2	Dk G Brn Si Lo	NCM
	76	1	0-20	0-50	10YR3/3	Dk Brn Si Lo	NCM
		2	20-24	50-60	10YR4/6	DkY Brn Sa Cl	NCM
	77	1	0-15	0-38	10YR3/3	Dk Brn Si Lo	NCM
		2	15-20	38-50	10YR4/6	DkY Brn Sa Cl	NCM
	78	1	0-24	0-60	10YR3/3	Dk Brn Si Lo	NCM
		2	24-28	60-70	10YR4/6	DkY Brn Sa Cl	NCM
	79	1	0-15	0-38	10YR3/3	Dk Brn Si Lo	NCM
		2	15-20	38-50	10YR4/6	DkY Brn Sa Cl	NCM
	80	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-18	35-45	10YR4/6	DkY Brn Sa Cl	NCM
	81	1	0-10	0-25	10YR3/3	Dk Brn Si Lo	NCM
		2	10-14	25-35	10YR4/6	DkY Brn Sa Cl	NCM
ΓR 9	82	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	83	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	84	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	85	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	86	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-14	23-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	87	1	0-16	0-40	10YR3/3	Dk Brn Sa Lo	NCM
		2	16-20	40-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	88	1	0-11	0-28	10YR3/3	Dk Brn Sa Lo	NCM
		2	11-15	28-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
	89	1	0-15	0-38	10YR3/3	Dk Brn Sa Lo	NCM
		2	15-20	38-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	90	1	0-10	0-25	10YR3/3	Dk Brn Sa Lo	NCM
		2	10-14	25-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	91	1	0-10	0-25	10YR3/3	Dk Brn Sa Lo	NCM
		2	10-14	25-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	92	1	0-10	0-25	10YR3/3	Dk Brn Sa Lo	NCM
		2	10-14	25-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	93	1	0-15	0-38	10YR3/3	Dk Brn Si Lo	NCM
		2	15-20	38-50	10YR4/6	DkY Brn Sa Cl	NCM
ΓR 10	94	1	0-24	0-60	10YR3/3	Dk Brn Si Lo	NCM
		2	24-27	60-68	10YR4/6	DkY Brn Sa Cl	NCM
	95	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-19	35-49	10YR4/6	DkY Brn Sa Cl	NCM
	96	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-16	28-40	10YR4/6	DkY Brn Sa Cl	NCM
	97	1	0-16	0-40	10YR3/3	Dk Brn Si Lo	NCM
		2	16-20	40-50	10YR4/6	DkY Brn Sa Cl	NCM
	98	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-43	10YR4/6	DkY Brn Sa Cl	NCM
	99	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR4/6	DkY Brn Sa Cl	NCM
	100	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR3/1	V Dk Gry Brn Si LO	NCM
		3	18-22	45-55	10YR4/6	DkY Brn Sa Cl	NCM
	101	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-19	30-49	10YR3/1	V Dk Gry Brn Si Lo	NCM
		3	19-22	49-52	10YR4/6	DkY Brn Sa Cl	NCM
	102	1	0-20	0-50	10YR3/3	Dk Brn Si Lo	NCM
		2	20-24	50-60	10YR3/1	V Dk Gry Brn Si LO	NCM
		3	24-27	60-68	10YR4/6	DkY Brn Sa Cl	NCM
TR 11	103	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-19	33-49	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	104	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	105	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-18	33-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
	106	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 12	107	1	0-10	0-25	10YR3/3	Dk Brn Sa Lo	NCM
		2	10-14	25-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	108	1	0-11	0-28	10YR3/3	Dk Brn Sa Lo	NCM
		2	11-16	28-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	109	1	0-8	0-20	10YR3/3	Dk Brn Sa Lo	NCM
		2	8-12	20-30	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	110	1	0-11	0-28	10YR3/3	Dk Brn Si Lo, w/ gravel and	NCM
		2	11-15	28-38	10YR4/4	DK Y Brn Si w/ gravel	NCM
TR 13	111	1	0-11	0-28	10YR3/3	Dk Brn Si Lo, w/ gravel and	NCM
		2	11-15	28-38	10YR4/4	DK Y Brn Si w/ gravel	NCM
	112	1	0-12	0-30	10YR3/3	Dk Brn Si Lo, w/ gravel and	NCM
		2	12-16	30-40	10YR4/4	DK Y Brn Si w/ gravel	NCM
	113	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-17	33-43	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	114	1	0-14	0-35	10YR3/3	Dk Brn Sa Lo	NCM
		2	14-18	35-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR14	115	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-17	33-43	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	116	1	0-15	0-38	10YR3/3	Dk Brn Sa Lo	NCM
		2	15-18	38-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	117	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-17	33-43	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	118	1	0-14	0-35	10YR3/3	Dk Brn Sa Lo	NCM
		2	14-18	35-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	119	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-17	33-43	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 15	120	1	0-15	0-38	10YR3/3	Dk Brn Sa Lo	NCM
		2	15-18	38-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	121	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-17	33-43	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	122	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	123	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	124	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
		2	13-17	33-43	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 16	125	1	0-14	0-35	10YR3/3	Dk Brn Sa Lo	NCM
		2	14-16	35-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	127	1	0-8	0-20	10YR3/3	Dk Brn Sa Lo	NCM
		2	8-12	20-30	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	128	1	0-16	0-40	10YR3/3	Dk Brn Sa Lo	NCM
		2	16-20	40-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	129	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-17	33-43	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	130	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 17	131	1	0-11	0-28	10YR3/3	Dk Brn Sa Lo	NCM
		2	11-15	28-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	132	1	0-11	0-28	10YR3/3	Dk Brn Sa Lo	NCM
		2	11-15	28-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	133	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-18	35-45	10YR4/6	DkY Brn Sa Cl	NCM
	134	1	0-10	0-25	10YR3/3	Dk Brn Si Lo	NCM
		2	10-24	25-60	10YR4/6	DkY Brn Sa Cl	NCM
TR 18	135	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-43	10YR4/6	DkY Brn Sa Cl	NCM
	136	1	0-16	0-40	10YR3/3	Dk Brn Si Lo	NCM
		2	16-20	40-50	10YR4/6	DkY Brn Sa Cl	NCM
	137	1	0-8	0-20	10YR3/3	Dk Brn Sa Lo	NCM
		2	8-12	20-30	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	138	1	0-16	0-40	10YR3/3	Dk Brn Sa Lo	NCM
		2	16-20	40-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	139	1	0-13	0-33	10YR3/3	Dk Brn Sa Lo	NCM
		2	13-17	33-43	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	140	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 19	141	1	0-11	0-28	10YR3/3	Dk Brn Sa Lo	NCM
		2	11-15	28-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	142	1	0-11	0-28	10YR3/3	Dk Brn Sa Lo	NCM
		2	11-15	28-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	143	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
	144	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-43	10YR4/6	DkY Brn Sa Cl	NCM
	145	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	146	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR4/6	DkY Brn Sa Cl	NCM
	147	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
TR 20	148	1	0-10	0-25	10YR3/3	Dk Brn Si Lo	NCM
		2	10-14	25-35	10YR4/6	DkY Brn Sa Cl	NCM
	149	1	0-6	0-15	10YR3/3	Dk Brn Si Lo	NCM
		2	6-12	15-30	10YR4/6	DkY Brn Sa Cl	NCM
	150	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-43	10YR4/6	DkY Brn Sa Cl	NCM
	151	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	152	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	153	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	154	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
TR 17		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	155	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-14	23-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	156	1	0-16	0-40	10YR3/3	Dk Brn Sa Lo	NCM
		2	16-20	40-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	157	1	0-11	0-28	10YR3/3	Dk Brn Sa Lo	NCM
		2	15-20	38-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	158	1	0-10	0-25	10YR3/3	Dk Brn Sa Lo	NCM
		2	10-14	25-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	159	1	0-10	0-25	10YR3/3	Dk Brn Sa Lo	NCM
		2	10-14	25-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	160	1	0-10	0-25	10YR3/3	Dk Brn Sa Lo	NCM
		2	10-14	25-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 21	161	1	0-15	0-38	10YR3/3	Dk Brn Sa Lo	NCM
		2	15-18	38-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	162	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	163	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	164	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	165	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	166	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-14	23-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 22	167	1	0-16	0-40	10YR3/3	Dk Brn Sa Lo	NCM
		2	16-20	40-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	168	1	0-15	0-38	10YR3/3	Dk Brn Sa Lo	NCM
		2	15-20	38-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	169	1	0-14	0-35	10YR3/3	Dk Brn Sa Lo	NCM
		2	14-18	35-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	170	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	171	1	0-15	0-38	10YR3/3	Dk Brn Sa Lo	NCM
		2	15-18	38-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	172	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	173	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	174	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	175	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-15	23-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	176	1	0-9	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	9-14	23-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	177	1	0-16	0-40	10YR3/3	Dk Brn Sa Lo	NCM
		2	16-20	40-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
TR 23	178	1	0-15	0-38	10YR3/3	Dk Brn Sa Lo	NCM
		2	15-20	38-50	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	179	1	0-14	0-35	10YR3/3	Dk Brn Sa Lo	NCM
		2	14-18	35-45	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	180	1	0-12	0-30	10YR3/3	Dk Brn Sa Lo	NCM
		2	12-16	30-40	10YR6/4	Lt Y Brn Si Cl w gravel	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
	181	1	0-10	0-23	10YR3/3	Dk Brn Sa Lo	NCM
		2	10-14	25-35	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	182	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	183	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	184	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR4/6	DkY Brn Sa Cl	NCM
	185	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	186	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	187	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	188	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-43	10YR4/6	DkY Brn Sa Cl	NCM
	189	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR4/6	DkY Brn Sa Cl	NCM
	190	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-17	28-43	10YR4/6	DkY Brn Sa Cl	NCM
	191	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-43	10YR4/6	DkY Brn Sa Cl	NCM
	192	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-18	35-45	10YR4/6	DkY Brn Sa Cl	NCM
	193	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	194	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	195	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	196	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	197	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
TR 24	198	1	0-24	0-60	10YR3/3	Dk Brn Si Lo	NCM
		2	24-28	60-70	10YR4/6	DkY Brn Sa Cl	NCM
	199	1	0-23	0-58	10YR3/3	Dk Brn Si Lo	NCM

Transect	STP	Level	Depth (in)	Depth (cm)	Munsell	Soil Description	Cultural Material
		2	2-16	5-40	10YR4/6	DkY Brn Sa Cl	NCM
	200	1	0-8	0-20	10YR3/3	Dk Brn Si Lo	NCM
		2	8-10	20-30	10YR4/6	DkY Brn Sa Cl	NCM
	201	1	0-8	0-02	10YR3/3	Dk Brn Si Lo	NCM
		2	8-10	20-30	10YR4/6	DkY Brn Sa Cl	NCM
	202	1	0-16	0-40	10YR3/3	Dk Brn Sa Lo	NCM
		2	16-22	40-52	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	203	1	0-16	0-40	10YR3/3	Dk Brn Sa Lo	NCM
		2	16-22	40-52	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	204	1	0-11	0-28	10YR3/3	Dk Brn Sa Lo	NCM
		2	11-15	28-38	10YR6/4	Lt Y Brn Si Cl w gravel	NCM
	205	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	206	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	207	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	208	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-43	10YR4/6	DkY Brn Sa Cl	NCM
	209	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-18	33-45	10YR4/6	DkY Brn Sa Cl	NCM
	210	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-17	28-43	10YR4/6	DkY Brn Sa Cl	NCM
	211	1	0-13	0-33	10YR3/3	Dk Brn Si Lo	NCM
		2	13-17	33-43	10YR4/6	DkY Brn Sa Cl	NCM
	212	1	0-14	0-35	10YR3/3	Dk Brn Si Lo	NCM
		2	14-18	35-45	10YR4/6	DkY Brn Sa Cl	NCM
	213	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	214	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	215	1	0-11	0-28	10YR3/3	Dk Brn Si Lo	NCM
		2	11-15	28-38	10YR4/6	DkY Brn Sa Cl	NCM
	216	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM
	217	1	0-12	0-30	10YR3/3	Dk Brn Si Lo	NCM
		2	12-16	30-40	10YR4/6	DkY Brn Sa Cl	NCM

APPENDIX C

PROJECT CORRESPONDENCE



New York State Office of Parks, Recreation and Historic Preservation

Andrew M. Cuomo Governor

Andy Beers
Acting Commissioner

Historic Preservation Field Services Bureau P.O. Box 189, Waterford, New York 12188-0189 518-237-8643

February 11, 2011

Stephen Tomasik
Project Manager
Major Projects Management Section
Division of Environmental Permits
NYS Department of Environmental Conservation
625 Broadway - 4th Floor
Albany, NY 12233-1750

Dear Mr. Tomasik

RE: DEC

Main Site/Laydown Area Cricket Valley Energy Project Town of Dover, Dutchess County, NY 09PR04340

Thank your for requesting the comments of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) with regard to the potential for this project to affect significant historical/cultural resources. As you may be aware, OPRHP has been reviewing this project and working with the project sponsors for several years. During that time we have reviewed the main project site and previously provided a finding of No Impact/Effect for that property. More recently, it was recognized that a separate 'Laydown" site would be needed to successfully complete the project's construction. The applicant and their archaeological consultant have been working with us to complete the examination of that additional area so that we could provide a No Impact/Effect finding for that parcel as well. However, due to the unusual weather conditions this season, it has not been possibly to complete the testing needed to allow us to provide a final determination.

We understand that the applicant now finds that they are in a time bind. Field/weather conditions will not allow the field testing to be completed for a number of weeks, but there is a deadline approaching for your processes which requires a statement from our office or else the project will be put on hold until the next such cycle in 2012. While OPHRP is often reluctant to seek conditional responses from other agencies before we have a full grasp of a projects impacts, in this case we are willing to make an exception. The Applicant has shown a good faith effort to complete the study, and has been willing to ask their archaeologists to work in the adverse weather, however it is our recommendation that work not be done under these conditions as we have seen how such conditions affect the quality of archaeological research at this scale.

Therefore, ORPHP it is the opinion of OPRHP that this project is unlikely to have an adverse impact on historic resources and would have no objection to the applicant being allowed to proceed in their process with you, with the condition that the Phase I archaeological

investigation is completed as soon as environmental conditions allow, and that if any sites are identified, the applicant will work with our agencies to develop and implement acceptable mitigation measures before actual construction is allowed to proceed.

I hope you find this correspondence helpful in your efforts to evaluate the applicants proposals with regard to being allow to proceed in the process.

Please contact me at extension 3291, or by e-mail at douglas.mackey@oprhp.state.ny.us, if you have any questions regarding these comments.

Sincerely

Douglas P. Mackey

Historic Preservation Program Analyst

Jonglo P. Marky

Archaeology