APPENDIX 12

SUPPLEMENTAL CULTURAL RESOURCES INFORMATION INCLUDING NYSOPRHP'S LETTERS OF NO ADVERSE IMPACTS

OFFICE OF PARKS, RECREATION, HISTORIC PRESERVATION
NEW YORK STATE

New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

David A. Paterson
Governor

Carol Ash
Commissioner

April 9, 2010

Kevin Franke
The LA Group
40 Long Alley
Saratoga Springs, NY 12866

Re: **DEC/SEQRA**
Utility Line and K Wells portion
Belleayre Mountain Ski Center &
Modified Resort @ Catskill Park
Middletown, Delaware County/
Shandaken, Ulster County
08PR02035

Dear Mr. Franke:

The Field Services Bureau of the Office of Parks, Recreation and Historic Preservation (OPRHP) has received a Phase 1A/1B cultural Resources Survey, maps and related material for the project noted above. We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law). These comments are those of the Field Services Bureau and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Pert 617).

OPRHP has reviewed the Supplemental Phase IB Cultural Resources Report prepared by Birchwood Archaeological Services in February 2010. Based on this review, OPRHP has no concerns for the proposed utility lines. It is our opinion that the proposed work will have No Adverse Impact on historic resources.

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
Archaeology

Cc: Daniel T. Whitehead< NYSDEC

David A. Paterson
Governor

Carol Ash
Commissioner

New York State Office of Parks,
Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island. PO Box 189. Waterford. New York 12188-0189
518-237-8643
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December 4, 2009

Daniel T Whitehead
NYSDEC/Division of Environmental Permits
625 Broadway, 4th Floor
Albany. NY 12233-1750

Re: **DEC/SEQRA**
Belleayre Mountain Ski Center &
Modified Resort @ Catskill Park
Middletown, Delaware County/
Shandaken, Ulster County
08PR02035

Dear Mr Whitehead:

The Field Services Bureau of the Office of Parks, Recreation and Historic Preservation (OPRHP) has received a Phase 1A/1B cultural Resources Survey, maps and related material for the project noted above We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14 09 of the New York State Parks, Recreation and Historic Preservation Law) These comments are those of the Field Services Bureau and relate only to Historic/Cultural resources They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Pert 617)

The OPRHP does not have additional concerns regarding archeology and the project. additional survey for the project is not recommended Based upon our review of the project, it is the OPRHP's opinion that the proposed project will have No Adverse Impact upon properties in or eligible for inclusion in the National Register of Historic Places This 'No Adverse Impact' is based on the provision that any project work involving historic properties shall be reviewed by the OPRHP prior to undertaking construction

If you have any questions regarding this letter or your project, please feel free to contact me Ext 3273

Sincerely,

Kenneth Markunas
Historic Sites Restoration Coordinator

Cc: Terresa M Bakner: Whiteman, Osterman & Hanna, LLP

OFFICE OF PARKS · RECREATION · HISTORIC PRESERVATION
NEW YORK STATE
Bernadette Castro
Commissioner

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189 518-237-8643

January 6, 2003

Terresa Bakner
Whiteman, Osterman & Hanna
1 Commerce Plaza
Albany, NY 12260

Re: **CORPS,/DEC/SEQRA**
Belleayre Resort at Catskill Park
Shandaken/Middletown, Ulster &
Delaware Counties
99PR4498

Dear Ms. Bakner:

Thank you for requesting the comment of the State Historic Preservation Office (SHPO). We have had an opportunity to review the project in accordance with Section 106 of the National Historic Preservation Act of 1966 and relevant implementing regulations

Based upon our review of the submitted archeological information, the SHPO has no further concerns regarding archeology: additional survey for the project is **not** warranted.

Based upon our review of the submitted plans, drawings and Draft Environmental Impact Statement, it is the SHPO's opinion that the project will have **No Adverse Effect** upon properties in or eligible for inclusion in the State and National Registers of Historic Places. This 'No Adverse Effect' is based upon the provision that the following condition is met:

CONDITION

- All work (interior and exterior) that is proposed for the historic structures on the project site shall be reviewed by the SHPO prior to the initiation of any construction activities.

If you have any questions regarding this letter or any aspect of your project, please feel free to contact me at your convenience. Ext. 3273.

Sincerely,

Kenneth Markunas
Historic Sites
Restoration Coordinator

Cc: Alexander F. Ciesluk, Jr., DEC Region #3
Kenneth Graham, Crossroads Ventures LLC

FAXED: 1/6/03

Supplemental Phase IB
Off-Site Utilities Including the K Wells Portion of the Modified Belleayre Resort at Catskill Park
Towns of Shandaken and Middletown, Ulster County, New York

Prepared for:

Crossroads Ventures, LLC
72 Andrew Lane Road
PO Box 267
Mt. Tremper, NY 12457

Prepared by:

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Birchwood Archaeological Services
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February 2010

Management Summary

Off Site Utilities Including the K Wells Portion of the Modified Belleayre Resort at Catskill Park Project

SHPO Project Review Number: 08PR02035

Involved State and Federal Agencies: DEC, DOH, DOT

Phase of Survey: Supplemental IB

Location Information
Location: on the south side of New York State Route 28 in the in the Towns of Shandaken and Middletown
Minor Civil Division: Towns of Shandaken and Middletown
County: Delaware and Ulster line

Survey Area (Metric & English)
Length: 1,200 ft (365.7 m) (Phase IB tested) + 16,050 ft (4.88 m) disturbed = 17,250 ft (5.18 m)
Depth: 5 ft (1.5 m)
Number of Acres Surveyed: 1.98 (0.80 ha)
Number of Square Meters & Feet Excavated:
Percentage of the Site Excavated:

USGS 7.5-Minute Quadrangle Map: Margaretville/Phoenicia

Archaeological Survey Overview
Number & Interval of Shovel Tests: 24 STPs at 15m (49.2 ft) intervals
Number & Size of Units:
Width of Plowed Strips:
Surface Survey Transect Interval:

Results of Archaeological Survey
Number & name of prehistoric sites identified: None
Number & name of historic sites identified: None
Number & name of sites recommended for Phase II/Avoidance: None

Results of Architectural Survey
Number of buildings/structures/cemeteries within project area: 0
Number of buildings/structures/cemeteries adjacent to project area: 1
Number of previously determined NR listed or eligible buildings/structures/cemeteries/districts: 0
Number of identified eligible buildings/structures/cemeteries/districts: 1

Report Author(s): Anna Blinn Cole, David Moyer and Rebecca Moyer
Date of Report: February 2010

Executive Summary

A supplemental Phase IB cultural resources survey has been completed for the Off Site Utilities including the K Wells Portion of the proposed Modified Belleayre Resort at Catskill Park Project, located in the Towns of Shandaken and Middletown, Ulster and Delaware Counties, New York. The project area lies on the south side of New York State Route 28 in the Towns of Shandaken and Middletown, on the line of Ulster and Delaware Counties, New York (Figures 1-4). The project involves the installation of 1,200 linear feet (365.7 m) of water pipeline between the newly acquired K-Wells property and the Wildacres site, which will include the construction of a small well house on the K well property and will impact soils in the area to depths in excess of five feet (1.5 m).

Additionally, approximately 8,250 linear feet (1.56 miles; 2.51 km) of water main and 9,000 linear feet (1.7 miles; 2.74 km) of sewer main will be installed via directional boring along the south side of NYS Route 28. Water main will be installed between the K-well site and the resort site proper. On December 4, 2009 OPRHP issued a letter of no adverse impact for the resort site proper. The sewer line will be installed in the NYS Route ROW between the resort site proper and an existing manhole in Academy Street in Pine Hill. Figure 1 illustrates the location of the off-site utilities at a larger scale. Ground disturbance associated with the directional drilling will likely be in excess of 5 ft (1.5 m). A Phase IA/IB survey was previously conducted for a 31-acre portion of the proposed resort site proper, and the submission of this report resulted in OPRHP's 12/4/09 no adverse impact letter (Moyer 2008). In this initial survey, no archaeological sites were identified for the resort site proper. These supplemental investigations contained in this report were necessitated in order to survey additional off-site project area where a proposed waterline and a proposed sewer line will be installed to service the resort site proper.

The Phase IA Literature Review and Sensitivity Assessment indicated that there are no prehistoric sites known within one mile of the project area. There are, however, 13 historic archaeological sites and five NRHP listed properties known within one mile of the project, and the APE is considered historically sensitive for these reasons (Moyer 2008).

A Supplemental Phase IB field examination was conducted to test for cultural deposits that may be impacted by the installation of water pipeline and a well. Approximately 1,200 linear ft (366 m) at the K-wells portion of the project were surveyed using subsurface testing, with a total of 24 STPs laid out at 15 m (49.2 ft) intervals (Appendix C). Two STPs (A-3 and A-4) were moved one meter west of their original location due to the presence of a rock pile. Of the 24 STPs excavated, one (4.1%) recovered a cultural material, which entailed two milk glass fragments that were reburied. This historic find is small in scale and does not constitute archaeological sites. No prehistoric or historic archaeological sites were identified. Based on the results of this survey, we recommend that the project be allowed to proceed. These recommendations are subject to the review and concurrence of the New York State Office of Parks, Recreation, and Historic Preservation.

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Introduction

Birchwood Archaeological Services was contracted to conduct a Supplemental Phase IB Cultural Resources Survey for the off site utilities portion of the Modified Belleayre Resort at Catskill Park Project, located in the Towns of Shandaken and Middletown, Ulster and Delaware Counties, New York. The overview had been requested to assess the potential that significant cultural resources may be located within the project area. The investigation was performed in compliance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law.

The project area lies on the south side of New York State Route 28 in the Towns of Shandaken and Middletown, on the line of Ulster and Delaware Counties, New York (Figures 1-4). The project involves the installation of 1,200 linear feet (365.7 m) of water pipeline in the newly acquired K-Wells property, which will include the construction of a small well house and will impact soils in the area to depths in excess of five feet (1.5 m).

Additionally, approximately 8,250 linear feet (1.56 miles; 2.51 km) of water main between the K-well property and the resort site proper, and 9,000 linear feet (1.7 miles; 2.74 km) of sewer main between the resort site proper and Pine Hill, will be installed via directional boring along the south side of NYS Route 28. Ground disturbance associated with the directional drilling will likely be at a depth in excess of 5 ft (1.5 m). This supplemental survey was necessitated in order to expand the project area beyond the resort site proper to include the proposed waterline and will be installed off of the project site and to service the resort.

Part I: Documentary Research

Documentary sources and collections were consulted to gain an overview of the prehistory, history, and environmental setting of the project area and surrounding region. A search was also conducted to locate known archaeological sites, historic structures, and National Register properties within one mile of the project area. Sources of information that were consulted included:

- Office of Parks, Recreation and Historic Preservation (OPRHP) site files and survey reports
- New York State Museum site files (copies at OPRHP)
- National Register of Historic Places
- New York State Library and Archives, Albany
- Milne Library, SUNY Oneonta

Specific documentary references that were consulted are listed in the bibliography.

Environmental Setting

Ulster County consists of low floodplains along the Hudson River Valley in the east, rising to the Catskill Mountains in the west. Two major physiographic provinces occur within the county: the Appalachian Plateau in the northwest and the Hudson Lowlands in the southeast. The project area is located the Catskill Mountains section of the Allegheny Plateau, which is generally underlain by interbedded Devonian sandstone, siltstone, and shale (Tornes 1979:2). This area consists of uplifted and heavily dissected plateau that drains into the Esopus Valley. During the Pleistocene, most of Ulster County was blanketed by a ground moraine deposited by a retreating glacier. Most of the soils in the vicinity were formed from material derived from this moraine (Tornes 1979:3).

Delaware County is situated along the northern foothills of the Catskill Mountains near the West Branch of the Delaware River in central New York State. Its most prominent geographic feature is the Catskill Mountains, which extend northward into the foothills in the northern part of the county. The Delaware section of the Glaciated Allegany Plateau consists of large, U-shaped valleys with topography reflecting both deglacial and postglacial processes. Long, almost continuous outwash terraces flank much of the northern side of the valley bottom.

The eastern half of the current project area is located within the Village of Fleischmanns while the western half runs through the community of Highmount, NY and terminates in the hamlet of Pine Hill (Figure 1). Elevation within the project boundaries ranges from 1,460 to 1,880 ft (445 - 573 m) above mean sea level. The current proposed project lies approximately 2,195 ft (669 m) southwest of Lake Switzerland, 163 ft (50 m) south of Emory Brook, 697 ft (212 m) south of Bush Kill, and 725 ft (221 km) south of the

intersection of Vly Creek with Emory Brook and Bush Kill. The westernmost end of the project area intersects an unnamed tributary of Bush Kill while the easternmost end of the project area intersects Birch Creek. Numerous other water sources lie nearby, including the Esopus Creek (to the east) and several small ponds.

Soils

The NRCS web soil survey (WSS) shows seven soil types as occurring within the project area. Lackawanna and Bath soils (map unit LdE) occur in a western portion of the Delaware County part of the APE. This soil complex is very deep, well drained, medium textured and have a fragipan at 17 to 36 inches. They occupy moderately steep and steep areas in the uplands. Unlimed, they are very strongly to medium acid above the fragipan. A typical soil profile of the Lackawanna and Bath soil series are provided in Tables 1 and 2.

Table 1. Typical profile of Lackawanna channery loam

Horizon	Depth	Description
Ap	0 to 8 inches (0-20 cm)	dark reddish brown (5YR 3/4) channery silt loam; weak fine granular structure; friable; many roots; 25 percent rock fragments; strongly acid; abrupt wavy boundary. (5 to 11 inches thick.)
Bw1	8 to 13 inches (20-33 cm)	reddish brown (5YR 4/4) channery silt loam; weak thin platy structure parting to weak fine granular; friable; many roots; 25 percent rock fragments; very strongly acid; clear wavy boundary.
Bw2	13 to 26 inches (33-66 cm)	reddish brown (2.5YR 4/4) channery loam; weak fine and medium subangular blocky structure; friable, slightly sticky, slightly plastic; few faint clay films on faces of peds; many roots; 25 percent rock fragments; very strongly acid; clear wavy boundary. (Combined thickness 6 to 25 inches.)
Bx	26 to 52 inches (66-132 cm)	reddish brown (2.5YR 4/4) channery loam; weak very coarse prismatic structure parting to weak thick platy; very firm, brittle, slightly sticky, slightly plastic; few faint clay films on plates and in pores; 30 percent rock fragments; strongly acid; diffuse wavy boundary. (20 to 45 inches thick.)
C	52 to 60 inches (132-152 cm)	weak red (10R 4/3) channery loam; massive; firm; 30 percent rock fragments; very strongly acid.

Table 2. Typical profile of the Bath channery loam

Horizon	Depth	Description
Ap	0 to 9 inches (0-23 cm)	very dark grayish brown (10YR 3/2) channery silt loam, pale brown (10YR 6/3) dry; strong medium and fine granular structure; friable;
Bw1	9 to 14 inches (23-36 cm)	yellowish brown (10YR 5/6) channery silt loam; moderate medium subangular blocky structure parting to weak fine granular structure; friable;
Bw2	14 to 20 inches (36-51 cm)	yellowish brown (10YR 5/4) channery silt loam; moderate medium and fine subangular blocky structure; friable; few very fine and common fine roots;
E/B	20 to 26 inches (51-66 cm)	brown (10YR 5/3) 60 percent and brown(7.5YR 4/4) 40 percent; channery loam; friable; few fine roots; common medium tubular and many very fine and common fine vesicular pores;
Bx1	26 to 36 inches (66-91 cm)	brown (7.5YR 4/3) channery silt loam; moderate very coarse prismatic structure; massive within prisms; prisms separated by streaks about 1 inch wide, 10 to 30 inches apart with a pale brown (10YR 6/3) interior and a strong brown (7.5YR 5/6) border;
Bx2	36 to 72 inches (91-183 cm)	brown (7.5YR 4/3) channery silt loam; moderate very coarse prismatic structure, massive within prisms; prisms separated by streaks about 1 inch wide, 10 to 30 inches apart with a pale brown (10YR 6/3).

Mongaup channery loam (map unit MnD) occurs in a small portion of the project area at the eastern end of the Delaware County part of the APE. The Mongaup series consists of moderately deep, well-drained soils formed in till derived from sandstone, siltstone and shale. They are nearly level through very steep soils on hillsides and hilltops in glaciated, bedrock controlled uplands. Depth to hard bedrock is 20 to 40 inches. Slope ranges from 0 to 70 percent. Mean annual temperature is 44 degrees F. and mean annual precipitation is 45 inches. A typical profile of the Mongaup soil series is listed below in Table 3.

Table 3. Typical profile of the Mongaup channery loam

Horizon	Depth	Description
A	0 to 3 inches (0-8 cm)	dark reddish brown (5YR 3/2), pinkish gray (5YR 6/2) dry, loam; weak fine granular structure; friable; many fine and medium roots; 10 percent rock fragments; very strongly acid; abrupt wavy boundary. (2 to 6 inches thick.)
Bw1	3 to 12 inches (8-30 cm)	yellowish red (5YR 5/6) gravelly loam; weak medium subangular blocky structure; friable; many fine and medium roots; few large roots; common fine and medium vesicular pores; a few medium tubular pores; 20 percent rock fragments; very strongly acid; clear wavy boundary.
Bw2	12 to 18 inches (30-46 cm)	strong brown (7.5YR 5/6) gravelly loam; weak medium subangular blocky structure; friable; common fine and medium roots; few large roots; common fine and medium vesicular pores, few medium tubular pores;
BC	18 to 22 inches (46-56 cm)	brown (7.5YR 4/4) sandy loam; weak coarse subangular blocky structure; friable; many fine and medium vesicular pores, common tubular pores;
2R	22 inches (56 cm)	massive, hard grayish brown sandstone bedrock.

Rockrift channery loam (map unit RrF) occurs in a small portion of the project area at the eastern end of Delaware County part of the APE. The Rockrift Series consists of very deep, well-drained soils formed in till and local colluvium derived from sandstone, siltstone and shale. These soils are on glaciated uplands at elevations above 1750 feet. Slope ranges from 15 to 70 percent. The mean annual temperature is 44 degrees F, and mean annual precipitation is 43 inches. A typical profile of the Rockrift soil series is listed below in Table 4.

Table 4. Typical profile of Rockrift channery loam

Horizon	Depth	Description
Oa	0 to 2 inches (0-5 cm)	muck; weak very fine granular structure; very friable; many fine, few medium and coarse roots; very strongly acid; abrupt wavy boundary.
E	2 to 4 inches (5-10 cm)	2 to 4 inches (5-10 cm); reddish gray (5YR 5/2) and reddish brown (5YR 5/3) channery loam; weak very fine and fine granular structure; very friable;
Bw1	4 to 15 inches (10-38 cm)	strong brown (7.5YR 5/6 and 7.5YR 4/6) very channery loam; very weak fine and medium subangular blocky structure parting to weak fine granular structure; very friable; common fine roots, few medium and coarse roots; 35 percent rock fragments; strongly acid; gradual wavy boundary.
Bw2	15 to 35 inches (38-89 cm)	yellowish brown (10YR 5/4) very channery loam; weak medium, parting to fine, subangular blocky structure; very friable; common fine and few medium roots;
BC	35 to 49 inches (89-124 cm)	yellowish brown (10YR 5/4) very channery loam with yellowish brown (10YR 5/6) stains; weak medium and fine subangular blocky structure; friable, slightly firm in place; few fine roots;
C	49 to 72 inches (124-183 cm)	50 percent brown (10YR 5/3), 40 percent yellowish brown (10YR 5/4), and 10 percent dark brown (10YR 4/3) very flaggy sandy loam; massive; friable;

Tunkhannock and Chenango soils (map unit TtB) occur at the westernmost end of the Delaware County portion of the APE. This soil complex is very deep, well drained, gently sloping, and are formed in outwash deposited where tributary streams enter a main valley. These areas can be flooded by the enclosed tributary stream. Flood duration is short and may be the result of trash or ice jams in the stream bed. Permeability is moderately rapid in most soils layers. Typical profiles of the Tunkhannock and Chenango soil series are provided below in Table 5 and Table 6.

Table 5. Typical soil profile of Tunkhannock gravelly loam

Horizon	Depth	Description
Ap	0 to 8 inches (0-20 cm)	brown (10YR 4/3) gravelly loam, pale brown (10YR 6/3) dry; weak fine granular structure; very friable, nonsticky, slightly plastic; common roots; 15 percent rock fragments; slightly acid; abrupt smooth boundary. (5 to 12 inches thick.)
Bw1	8 to 16 inches (20-41 cm)	brown (7.5YR 5/4) gravelly loam; weak medium subangular blocky structure; friable, nonsticky, slightly plastic; common roots; 20 percent rock fragments; slightly acid; clear wavy boundary.
Bw2	16 to 26 inches (41-66 cm)	reddish brown (5YR 4/4) very gravelly loam; weak coarse subangular blocky structure; friable, nonsticky, slightly plastic; common roots; 45 percent rock fragments; moderately acid; gradual wavy boundary. (Combined thickness of the Bw is 13 to 32 inches.)
BC	26 to 30 inches (66-76 cm)	reddish brown (5YR 4/4) extremely gravelly sandy loam; very weak medium subangular blocky structure; very friable, nonsticky, nonplastic; common roots; 60 percent rock fragments; strongly acid; gradual wavy boundary. (0 to 12 inches thick.)
C	30 to 72 inches (76-183 cm)	reddish brown (5YR 4/3) extremely gravelly loamy sand and stratified loamy fine sand; single grain; loose, nonsticky, nonplastic; few roots in upper part; 60 percent rock fragments; strongly acid.

Table 6. Typical soil profile of Chenango gravely silt loam

Horizon	Depth	Description
Ap	0 to 8 inches (0-20 cm)	very dark grayish brown (10YR 3/2) gravelly silt loam, light brownish gray (10YR 6/2) crushed and dry; weak fine and medium granular structure; friable; many fine roots; 20 percent pebbles; moderately acid; abrupt smooth boundary. (4 to 10 inches thick.)
Bw1	8 to 12 inches (20-30 cm)	dark yellowish brown (10YR 4/4) gravelly silt loam; very weak fine subangular blocky and very weak very fine granular structure; very friable; many fine roots; common fine pores; 15 percent dark grayish brown (10YR 4/2) material filling earthworm channels; 30 percent pebbles; strongly acid; gradual smooth boundary.
Bw2	12 to 20 inches (30-51 cm)	dark yellowish brown (10YR 4/4) very gravelly silt loam; very weak fine and medium subangular blocky structure; friable; few fine roots; common fine pores; 40 percent pebbles; strongly acid; gradual wavy boundary. (Combined thickness of the Bw horizon is 4 to 30 inches.)
BC	20 to 30 inches (51-76 cm)	brown (10YR 4/3) very gravelly loam; massive; friable; few fine roots; common fine and medium pores; 50 percent pebbles; strongly acid; clear wavy boundary. (0 to 18 inches thick.)
2C	30 to 72 inches 76-183 cm)	dark grayish brown (10YR 4/2), grayish brown (10YR 5/2), and brown (10YR 4/3) extremely gravelly loamy coarse sand; upper surface of pebbles have thin caps of dark grayish brown (10YR 4/2) loamy material; single grain except massive in caps; loose; few roots in upper part;

Valois very fine sandy loam (map unit VaC) occurs at the easternmost end of the Delaware County portion of the APE. The Valois series consists of very deep, well-drained soils on nearly level to steep lateral moraines along lower valley sides. They formed in till dominated by sandstone, siltstone, or shale. Slope ranges from 0 to 60 percent. Mean annual temperature is 48 degrees F. and mean annual precipitation is 38 inches. A typical profile of the Valois soil series is provided below in Table 7.

Table 7. Typical soil profile of Valois very fine sandy loam

Horizon	Depth	Description
Ap	0 to 7 inches (0-18 cm)	brown (10YR 4/3) gravelly loam, light yellowish brown (10YR 6/4) dry; weak medium granular structure; very friable; many fine roots; 15 percent rock fragments; strongly acid; abrupt smooth boundary. (6 to 12 inches thick.)
Bw1	7 to 30 inches (18-76 cm)	strong brown (7.5YR 5/6) gravelly loam; weak fine granular structure; very friable; common fine roots; 25 percent rock fragments; strongly acid; clear wavy boundary.
Bw2	30 to 47 inches (76-119 cm)	brown (10YR 4/3) gravelly silt loam; weak medium subangular blocky structure; friable; few fine roots; 20 percent rock fragments; fragments of rock and few cobbles; strongly acid; gradual wavy boundary. (Combined thickness of the Bw horizons is 20 to 60 inches.)
2C	47 to 72 inches (119-183 cm)	dark grayish brown (10YR 4/2) very gravelly fine sandy loam; 10 percent gravelly silt loam and gravelly clay loam in lenses and pockets; massive, weakly stratified; friable; clay coats around some pebbles in clay loam pockets; 40 percent rock fragments; few fine faint yellowish brown (10YR 5/4) masses of iron accumulation in finer textured pockets; slightly acid.

Lackawanna and Swartswood very bouldery soils (map unit LCD) occur in the middle and easternmost portions of the Ulster County part of the APE. The Lackawanna series consists of very deep, well-drained soils on uplands. They formed in till derived from reddish colored sandstone, siltstone, and shale. A dense fragipan is present starting at a depth of 17 to 36 inches below the soil surface. Slope ranges from 0 to 55 percent. Mean annual temperature is 48 degrees F. and mean annual precipitation is 41 inches. A typical soil profile of the Lackawanna soil series is listed earlier in this soil section.

The Swartswood series consists of deep and very deep, well drained and moderately well drained soils formed in till derived primarily from gray and brown quartzite, conglomerate, and sandstone. Slope ranges from 0 to 35 percent. Saturated hydraulic conductivity is moderately high or high in the mineral soil above the fragipan and moderately low or moderately high in the fragipan. Mean annual precipitation is 40 inches. Mean annual temperature is 49 degrees F. A typical soil profile of Swartswood sandy loam is listed below in Table 8.

Table 8. Typical soil profile of Swartswood sandy loam

Horizon	Depth	Description
Oi	0 to 1 inches (0-2.5 cm)	brown (7.5YR 4/2) hardwood leaf litter; extremely acid; abrupt smooth boundary. (1 to 2 inches thick.)
Oe	1 to 2 inches (2.5-5 cm)	black (10YR 2/1) leaf mold; roots and fungus mycelia in fibrous mat; extremely acid; abrupt smooth boundary. (0 to 1 inch thick.)
E	2 to 4 inches (5-10 cm)	grayish brown (10YR 5/2) fine sandy loam; weak fine granular structure; very friable; 10 percent sandstone and quartzite pebbles; common stones; extremely acid; abrupt irregular boundary. (0 to 3 inches thick.)
Bs	4 to 7 inches (5-18 cm)	strong brown (7.5YR 5/6) gravelly fine sandy loam; weak fine granular structure; very friable; 15 percent rock fragments; common stones; extremely acid; clear wavy boundary. (0 to 5 inches thick.)
Bw1	7 to 20 inches (18-51 cm)	yellowish brown (10YR 5/4) gravelly fine sandy loam; weak fine subangular blocky structure; friable, slightly sticky; 25 percent rock fragments; extremely acid; clear wavy boundary. (10 to 15 inches thick.)
Bw2	20 to 32 inches (51-81 cm)	brown (10YR 5/3) gravelly sandy loam; some weak plates parting to weak medium subangular blocky structure; firm; 30 percent rock fragments; very strongly acid; clear wavy boundary. (6 to 14 inches thick.)
Bx	32 to 62 inches (81-157 cm)	dark yellowish brown (10YR 4/4) gravelly fine sandy loam; weak very thick platy structure; brittle; very firm; 30 percent rock fragments; few faint clay films in pores; very strongly acid.

Wellsboro and Wurtsboro very bouldery soils (map unit WLB) occur in a moderately-sized portion of the project area at the westernmost end of the Ulster County part of the APE. The Wellsboro series consists of very deep moderately well and somewhat poorly drained soils formed in till derived from red sandstone, siltstone, and shale. Slope ranges from 0 to 50 percent. Permeability is moderate in the surface and upper subsoil layers and slow or very slow in the lower subsoil and substratum. Mean annual precipitation is 41 inches. Mean annual temperature is 48 degrees F. A typical soil profile of Wellsboro gravelly loam can be found below in Table 9.

Table 9. Typical soil profile of Wellsboro gravelly loam

Horizon	Depth	Description
Ap	0 to 7 inches (0-18 cm)	dark brown (7.5YR 3/2) silt loam, light brown (7.5YR 6/3) dry; weak fine granular structure; friable; many roots;
Bw1	7 to 11 inches (18-28 cm)	reddish brown (5YR 4/4) silt loam; weak fine subangular blocky structure; friable; slightly sticky, slightly plastic; many roots;
Bw2	11 to 18 inches (28-46 cm)	reddish brown (2.5YR 4/4) loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; many roots;
Bw3	18 to 22 inches (46-56 cm)	reddish brown (5YR 4/4) channery loam; moderate medium subangular blocky structure; friable; few roots; 15 percent rock fragments; common medium distinct yellowish red (5YR 5/8) iron concentrations and gray (5YR 6/1) iron depletions; very strongly acid;
Bx1	22 to 31 inches (56-79 cm)	dark reddish brown (2.5YR 3/4) gravelly loam; moderate very coarse prismatic structure parting to weak medium subangular blocky; firm; brittle, slightly sticky, slightly plastic; very few faint clay films in pores; weak red (10R 5/2) thin silt coats on faces of prisms;
Bx2	31 to 52 inches (79-132 cm)	dusky red (10R 3/4) gravelly loam; weak very coarse prismatic structure parting to moderate medium platy; firm; brittle; weak red (10R 5/2) coatings on faces of prisms decreasing in thickness with depth;
Cd	52 to 72 inches (132-183 cm)	dusky red (10R 3/4) gravelly loam; moderate medium plate-like divisions; firm; 15 percent rock fragments; very strongly acid.

The Wurtsboro series consists of very deep, moderately well drained and somewhat poorly drained soils formed in till derived from quartzite, conglomerate and sandstone. Slope dominantly ranges from 0 to 25 percent. The saturated hydraulic conductivity is moderately low to high in the mineral soil above the fragipan and moderately high to low in the fragipan. Mean annual precipitation is 41 inches. Mean annual temperature is 49 degrees F. A typical soil profile of Wurtsboro gravelly fine sandy loam is found below in Table10.

Table 10. Typical Profile of the Wurtsboro gravelly fine sandy loam

Horizon	Depth	Description
Oi	0 to 2 inches (0-5 cm)	fibrous leaf material; extremely acid; abrupt wavy boundary. (1 to 3 inches thick.)
E	2 to 4 inches (5-10 cm)	gray (10YR 5/1) gravelly fine sandy loam; weak fine granular structure; very friable, nonsticky, nonplastic; 20 percent rock fragments; extremely acid; abrupt wavy boundary. (1 to 3 inches thick.)
Bs	4 to 10 inches (5-25 cm)	strong brown (7.5YR 5/6) gravelly fine sandy loam; weak fine granular structure; friable, nonsticky, nonplastic; 20 percent rock fragments; extremely acid; clear wavy boundary. (0 to 8 inches thick.)
Bw1	10 to 16 inches (25-41 cm)	yellowish brown (10YR 5/4) gravelly fine sandy loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; 30 percent rock fragments; very strongly acid; gradual wavy boundary.
Bw2	16 to 24 inches (41-61 cm)	yellowish brown (10YR 5/4) gravelly fine sandy loam; moderate medium subangular blocky structure; friable, nonsticky, slightly plastic; common medium distinct grayish brown (10YR 5/2) areas of iron depletion and strong brown (7.5YR 5/6) masses of iron accumulation;
Bx1	24 to 46 inches (61-117 cm)	brown (7.5YR 4/4) gravelly fine sandy loam; moderate very coarse prismatic structure parting to moderate thin and medium platy; very firm, brittle, slightly sticky, slightly plastic; common distinct clay films in pores;
Bx2	46 to 67 inches (117-170 cm)	brown (10YR 4/3) gravelly loam; grayish brown; weak very coarse prismatic structure parting to moderate thick platy; very firm, brittle, slightly sticky, slightly plastic; common distinct clay films in pores;

The above soil profiles suggest that both historic and prehistoric resources may potentially be found in the upper 25-76 cm (9.8-29.9 in) of soil overlaying parent material. Because of its upland context, subsurface testing should be conducted to a minimum depth of 20 cm (8 in.) into the subsoil whenever possible.

This soil information is based upon documentary sources examined prior to the initiation of fieldwork. As a result, it may be necessary to modify the subsurface testing strategy to meet unexpected soils, disturbances and other obstructions. The results of the subsurface testing and how they compare with the above soils information is discussed in the *Results* section of this report.

Current/Past Land Use

The Phase IA survey report indicated that much of the project area has likely seen several past uses prior to the initiation of the proposed project. These changes reflect broader patterns of land use that developed historically through the Catskill high peaks. Much of the project area lies along Route 28, which was constructed in the 1920s to provide better

access to the mountainous region for tourism and export. Because of the rough terrain, many parts of the road in the project area required mountain excavation ultimately creating rock ledges along the shoulder of the road (Photos 35, 38, and 70-71). The K-wells portion of the project area encompasses land that has been used for logging access and railroad traffic. A depot still standing adjacent to the project boundaries and the railroad tracks that intersect the project corridor attest to this past land use (Photos 14, 18-23). Current and past land use has also relied heavily on tourism as evident in a mid-century motel complex adjacent to the project area north of NYS Route 28 (Photos 26 and 27). The current project is a continuation of this recreational land use.

Disturbance

Significant areas of disturbance were noted during the field investigations, with only a portion of the project area (1,200 linear ft: 365.7m) showing little evidence of disturbance. Most of the noted disturbance was in the vicinity of rock ledges created when Route 28 and the railroad grade were carved out of the mountain sides (Photos 35, 38, and 70-71). The project area follows the road's shoulder closely for much of its path from Fleischmanns to the Resort site proper and from the Resort site proper to Pine Hill. Because of this significant disturbance, testing was only carried out in areas where little disturbance was noted, mainly in the K-wells portion of the project area (see Figure 2).

Previous Surveys

The Phase IA Literature Review found that two cultural resource surveys have been conducted within one mile of the project area. No prehistoric or historic archaeological sites were identified as a result of either of these archaeological surveys. For a listing of these surveys, please refer to the Phase IA/IB report (Moyer 2008).

Prehistoric Overview

The Phase IA Literature Review provides a summary of the prehistory of the area, detailing various aspects of cultural change from the Paleo-Indian period through the Archaic and Transitional Periods and into the Woodland and Contact Periods. This discussion incorporates data from throughout eastern New York State, with emphasis on the Catskill region. Individuals interested in learning more about the prehistory of the region are referred to the Phase IA/IB report (Moyer 2008).

Known Prehistoric Sites

Research conducted as part of the Phase IA study identified no previously recorded prehistoric sites within one mile of the project area (Moyer 2008).

Historic Overview

The Phase IA report provides a background into the history of the counties of Delaware and Ulster, as well as the Towns of Middletown and Shandaken, NY. This overview provides information on early exploration and settlement and the development of the

region and its various industries. Individuals interested in learning more about the history of the area are referred to the Phase IA report.

Known Historic Sites and Structures

Research conducted as part of the Phase IA survey indicated that 13 historic archaeological sites are known within one mile of the project area. In addition, there are five National Register-listed properties within one mile of the project area. For these reasons the additional project area to be tested in the Supplemental Phase IB is considered highly sensitive for historic remains.

Assessment of Sensitivity for Cultural Resources

A Phase IA review indicated the project vicinity is moderately sensitive for prehistoric resources, due to the lack of prehistoric sites previously identified within one mile of the project area. The area is considered highly sensitive for historic resources due to the proximity to a high number of historic sites and several National Register listed properties.

Part II: Field Assessment

Field investigations were conducted to identify any historic or prehistoric cultural resources that may be impacted by the proposed project. The Supplemental Phase IB fieldwork was conducted January 20th, 2010, and was supervised by David Moyer, RPA. Royce Duda and Douglas Idleman assisted in the subsurface investigations. The weather was cool and moderate with a temperature of about 40 degrees. Approximately 3-9 inches of snow blanketed the project area. No adjacent landowners were aware of any historic or prehistoric resources within the APE boundaries. Photographs were taken of the project area, adjacent visible structures, and areas of disturbance (Appendix B).

Methodology

Field Walkover and Surface Collection

The entire supplemental project area was initially examined through a walkover designed to identify visible features and artifact scatters, areas of disturbance, and the general terrain and ground cover. The project involves the installation of 1,200 linear feet (365.7 m) of water pipeline in the newly acquired K-Wells property, which will include the construction of a small well house and will impact soils in the area to depths in excess of five feet (1.5 m). Additionally, approximately 8,250 linear feet (1.56 miles; 2.51 km) of water main and 9,000 linear feet (1.7 miles; 2.74 km) of sewer main will be installed via directional boring along the south side of NYS Route 28. Ground disturbance associated with the directional drilling will likely be at a depth in excess of 5 ft (1.5 m). Only 1,200 linear feet of the total APE was tested; areas outside of this are already significantly disturbed and will be installed via directional drilling.

Subsurface Testing

Standard shovel test pits (STPs) were used to test for buried cultural deposits. STPs are small (about 40 cm or 16 inch diameter) holes excavated with a shovel; sediments are screened through 1/4-inch mesh to look for artifacts. STPs are excavated in natural soil layers, as much as possible, and are dug through the topsoil to at least 20 cm (~ 8 inches) into culturally sterile subsoil.

STPs were placed using a compass and tape at 15 m (49.2 foot) intervals over the entire tested area. A list of the STPs and their soil profiles is provided in Appendix C. Excavation of STPs was halted 20 cm (8 in.) into culturally sterile subsoil unless noted in the STP records (Appendix C).

Results

Surface Inspection

The area of potential effects (APE) was first subjected to a pedestrian walkover of all of all areas of proposed ground disturbance. The project area lies on the south side of New York State Route 28 in the Towns of Shandaken and Middletown, on the line of Ulster and Delaware Counties, New York (Figures 1-4). The project involves the installation of 1,200 linear feet (365.7 m) of water pipeline in the newly acquired K-Wells property, which will include the construction of a small well house and will impact soils in the area to depths in excess of five feet (1.5 m). Additionally, approximately 8,250 linear feet (1.56 miles; 2.51 km) of water main and 9,000 linear feet (1.7 miles; 2.74 km) of sewer main will be installed via directional boring along the south side of NYS Route 28 to connect the proposed resort with existing utilities. Ground disturbance associated with the directional drilling will likely be at a depth in excess of 5 ft (1.5 m). Only 1,200 linear feet of the total APE was tested; areas outside of this are already significantly disturbed and will be installed via directional drilling.

The K-wells project area will connect three existing wells to a single water main. These test wells were readily identifiable (Photos 1, 6 and 9). Vegetation consisted of mature hemlocks with occasional birch and maple growth (Photos 1-11). A thin blanket of 3-9 inches of snow covered the K-wells project area at the time of the investigations. Likely a result of the combination of tree growth, snow cover and sandy soil, no evidence of any ground frost was noted in any of the STPs. A small well house is proposed near test well K-3 (Photo 7). Water lines will extend to the northeast to connect with the main water line, which will extend northwest along the west side of a gravel access road (Photos 4 and 10). The access road turns abruptly eastward (Photo 11) to connect with Fleischmanns Heights Road/Todd Mountain Road (Photo 12), and the proposed water main will be installed via directional boring from this point forward in the discussion.

From the roadway, the water main will extend northeast towards NYS Route 28, crossing beneath railroad tracks at the edge of a short bridge (Photos 14 and 16). Other structures are visible from this area, including a railroad depot (Photos 18-22), a stone culvert (Photo 17), a railroad track switch (Photo 23) and a house on Depitts Lane to the east (Photo 15). More information about these buildings is provided in the *Structures* section below. The water main continues northeast beneath the street to the right-of-way of NYS Route 28.

From the intersection of NYS Route 28, a motel is visible to the north on the opposite side of the road (Photo 26). From this point the line will continue to be directionally bored eastward along the south side of NYS Route 28 (Photo 28). The shoulder along the south side of road is wide and grades to a ditch between the roadway and the railroad right-of way located directly to the south (Photos 30-40). Rock outcrops occur in several areas, showing where the railroad and Route 28 were blasted out of the mountainside (Photos 32, 35, 38 and 41). A culvert crosses the proposed water main (Photo 34). The roadway turns south and then east again, passing by two structures dating to the early 20th century (Photos 41 and 42). The proposed water main continues along the south side of

NYS Route 28, and then turns southward at the intersection of Moran Road (Photos 43 and 44). The APE corridor ends at the bottom of an existing quarry on the south side of Moran Road (Photos 45-50). An existing test well is visible at the bottom of the quarry (Photo 51).

The west end of the proposed sewer main will extend from a relatively flat point marked by flagging along the south side of NYS Route 28 (Photos 52-57). From this point the proposed sewer main extends southeastward along the south side of NYS Route 28 (Photo 57). All of the proposed sewer main will be directionally bored in its entirety.

The line continues up the slope to the Ulster County line and the intersection of NYS Route 28 and Ulster County Route 49A at the crest of the slope (Photos 58-63). From this point the line continues to follow the south side of NYS Route 28 as it continues eastward down the mountain. Much of this area also appears disturbed by ditch work conducted as past of the construction of the railroad and highway (Photos 64-69). Rock outcropping is also visible from along the proposed sewer main (Photos 70 and 71). The line continues southeastward down the slope past Pine Hill Road (Photo 71) to the edge of the community of Pine Hill. From this point the proposed sewer main continues to follow the southern edge of the highway, then extends away from NYS Route 28 as it approaches a large overpass (Photos 72 and 73). The eastern proposed sewer main corridor ends at the bottom of the overpass where NYS Route 28 crosses Academy Street in the village of Pine Hill (Photos 74-79).

Structures

No structures exist within the project area, although several historic and modern structures are visible from the project area. The closest and most notable of these structures is the 1870 Fleischmanns Railroad Depot (Photos 18-22). Located approximately 501 feet (153 m) west of the intersection of Rt. 28 and Depot Street, the depot is a framed, rectangular building with board-and-batten siding. A gable roof protrudes on the building's southern and eastern sides creating a deep eave supported by simple brackets. A platform on the depot's eastern gable end provides entry to two doors, one a large sliding cargo door, and the other a human-sized paneled door. The platform is approached only by a ramp (Photo 18). The depot is situated on a steep side hill that drops to the north where NYS Rt. 28 lies. The Delaware and Ulster Railroad runs parallel to the depot's southern façade, approximately 20 feet (6 m) away from the building, with a spur line drawing closer to the building's southern façade. Under the minimal shelter provided by the extending eave passengers would have waited at this façade for their train (Photo 20). The interior of the depot was not accessible.

Railroad architecture reached its height of importance in the fourth quarter of the 19th century as the railroad surged in popularity for both passenger and product transportation. Depots and train stations were necessary facilitators of railroad transportation creating a place for ticket transactions, shelter for waiting passengers, and small-scale train maintenance. The stylization of the buildings varied drastically between utilitarian, cost-effective buildings and grandiose, stylized buildings where cost was not a concern (Meeks 1995). The depot at Fleischmanns falls in the former category being a utilitarian structure lacking in expensive stylistic details. The building has no decorative trim and

its massing is simple and rectangular in form. Over-extending eaves on the buildings southern and eastern elevations provide the basic function of cover for waiting passengers.

The Ulster & Delaware Railroad opened in 1866 under the name Rondout & Oswego (Ulster & Delaware RR Historical Society). The line eventually received its final name in 1875. The depot was built in 1870 and the first train ran through Fleischmanns on October 24, 1871. The railroad not only facilitated the export of natural resources such as timber, bluestone and farm products, but it also helped to usher in long-term interest in the Catskills for recreation and tourism. The depot at Fleischmanns is a representation of both the significance of the railroad in this small mountain crossroads and also the connection between the rural Catskills with the larger region. Tourist interest in the Catskills today is in large part due to early transportation networks forged into the mountain valleys not unlike the Ulster & Delaware Railroad and the Fleischmanns Depot.

No structures will be impacted by the proposed construction.

Visual Impacts

Several modern and historic structures are visible near the proposed project area corridor including a mid-20th century motel and a mid-19th century residence (Photos 15, 26-27). Five NRHP listed properties occur within one mile of the proposed water pipeline and well installation.

The project involves the installation of buried water and sewer pipeline and a small (20 feet by 20 feet) well house, which should pose no blatant visual impacts because it is located within a wooded area on the K-well property. The current proposed pipeline and well tested, as part of these supplemental investigations will create little change to the landscape in the vicinity. In addition, the buried pipeline follows existing roadway for a majority of the project area therefore keeping the proposed project in line with the current land use. For these reasons, the visual impacts presented by the proposed project to any historic properties in the viewshed are minimal.

Subsurface Examinations

Subsurface testing was conducted on a 1,200 linear foot (366 m) area in the K-Wells portion of the project area. A total of 24 STPs were laid out 15 m (49.2 ft) intervals across the tested area. Two STPs (A-3 and A-4) were moved one meter west of their original location due to the presence of a rock pile. Of the 24 STPs excavated, one (4.1%) recovered a cultural material; two milk glass fragments that were reburied. This small historic find does not constitute an archaeological site.

STPs ranged in depth between 40 and 57 cm (15.7 and 22.4 in) below the ground surface, with the average STP depth equaling 48.6 cm (19.1 in). Nine STPs (37.5%) were stopped by the presence of impenetrable rock at depths ranging from 20-45 cm (7.8-17.7 in). Soils largely conformed to the profiles examined prior to fieldwork (Tables 1-9), especially with Lackawanna channery loam, which is mapped as occurring in the vicinity (Figure 5). Topsoil consisted of 7.5 YR 3/4 dark brown silty loam overlaying subsoil

consisting of 7.5YR 5/4 brown silty loam. These soil color and texture changes likely reflect the A/Bw1 and /Bw2/Bx progressions shown in the typical soil profile (Table 1). Soils appeared to possess good stratigraphy with no evidence of disturbance, and no buried A horizons or soil anomalies were noted.

Part III: Summary and Recommendations

A Supplemental Phase IB Cultural Resources Survey has been completed for the K Wells Portion of the proposed Modified Belleayre Resort at Catskill Park Project, located in the Towns of Shandaken and Middletown, Ulster and Delaware Counties, New York. The project area lies on the south side of New York State Route 28 in the Towns of Shandaken and Middletown, on the line of Ulster and Delaware Counties, New York (Figure 1). The project area lies on the south side of New York State Route 28 in the Towns of Shandaken and Middletown, on the line of Ulster and Delaware Counties, New York (Figures 1-4). The project involves the installation of 1,200 linear feet (365.7 m) of water pipeline in the recently optioned K-Wells property, which will include the construction of a small well house and will impact soils in the area to depths in excess of five feet (1.5 m).

Additionally, approximately 8,250 linear feet (1.56 miles; 2.51 km) of water main and 9,000 linear feet (1.7 miles; 2.74 km) of sewer main will be installed via directional boring along the south side of NYS Route 28. Ground disturbance associated with the directional drilling will likely be in excess of 5 ft (1.5 m). A Phase IA/IB survey was previously conducted for a 31-acre portion. In this previous survey, no archaeological sites were identified. These supplemental investigations were necessitated in order to survey additional off-site project area where a proposed waterline and a proposed sewer line will be installed to service the resort area.

The Phase IA Literature Review and Sensitivity Assessment indicated that there are no prehistoric sites known within one mile of the project area. There are, however, 13 historic archaeological sites and five NRHP listed properties known within one mile of the project, and the APE is considered historically sensitive for these reasons (Moyer 2008).

A Supplemental Phase IB field examination was conducted to test for cultural deposits that may be impacted by the installation of water pipeline and a well. Approximately 1,200 linear ft (366 m) at the K-wells portion of the project were surveyed using subsurface testing, with a total of 24 STPs laid out at 15 m (49.2 ft) intervals (Appendix C). Two STPs (A-3 and A-4) were moved one meter west of their original location due to the presence of a rock pile. Of the 24 STPs excavated, one (4.1%) recovered a cultural material, which entailed two milk glass fragments that were reburied. This historic find is small in scale and does not constitute archaeological sites. No prehistoric or historic archaeological sites were identified.

Based on the results of this survey, we recommend that the project be allowed to proceed. These recommendations are subject to the review and concurrence of the New York State Office of Parks, Recreation, and Historic Preservation.

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Appendix A.

Figures

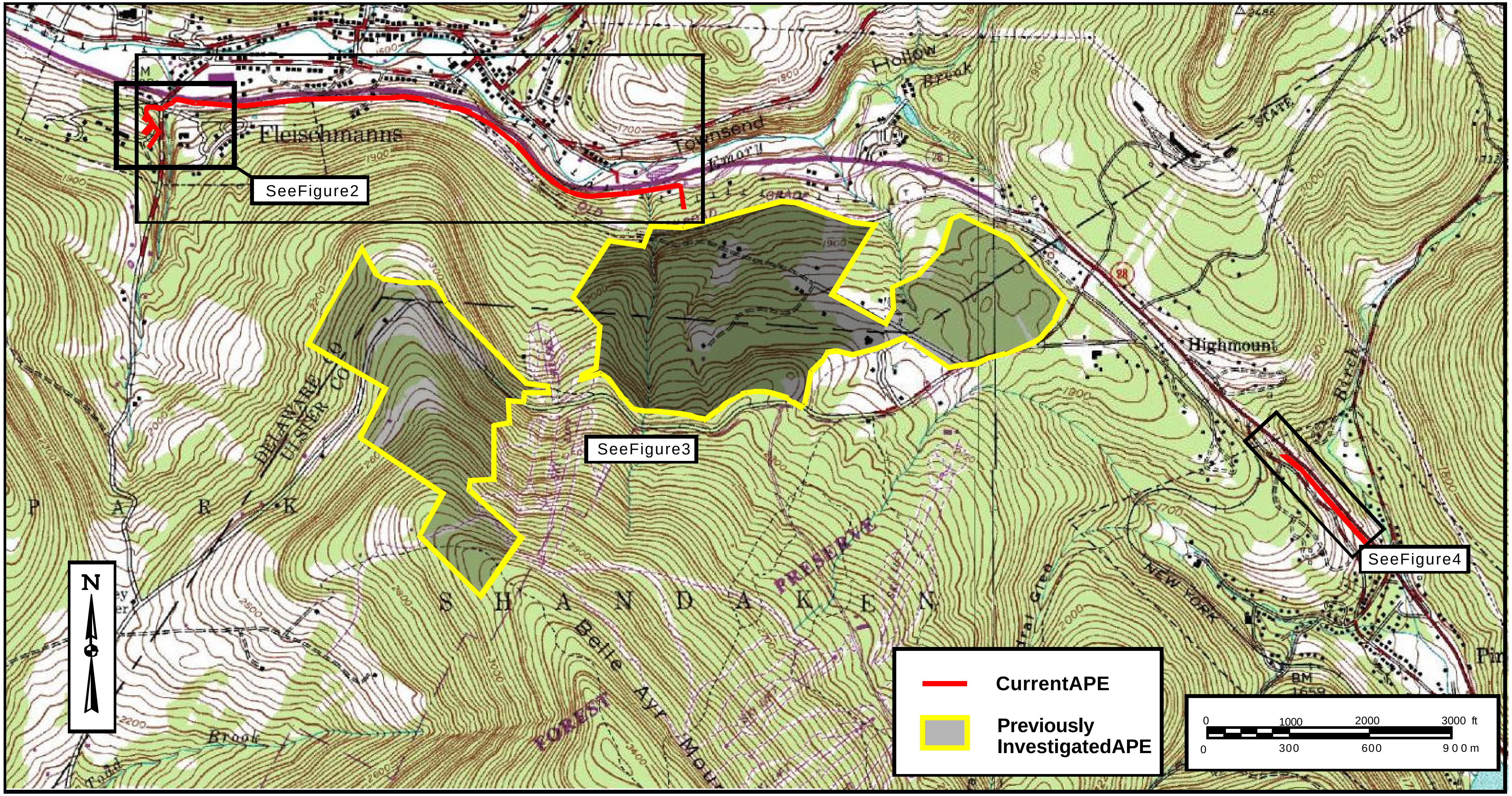

Figure 1. Map showing the location of the project on composite Margaretville/Phoenicia USGS topographic map.

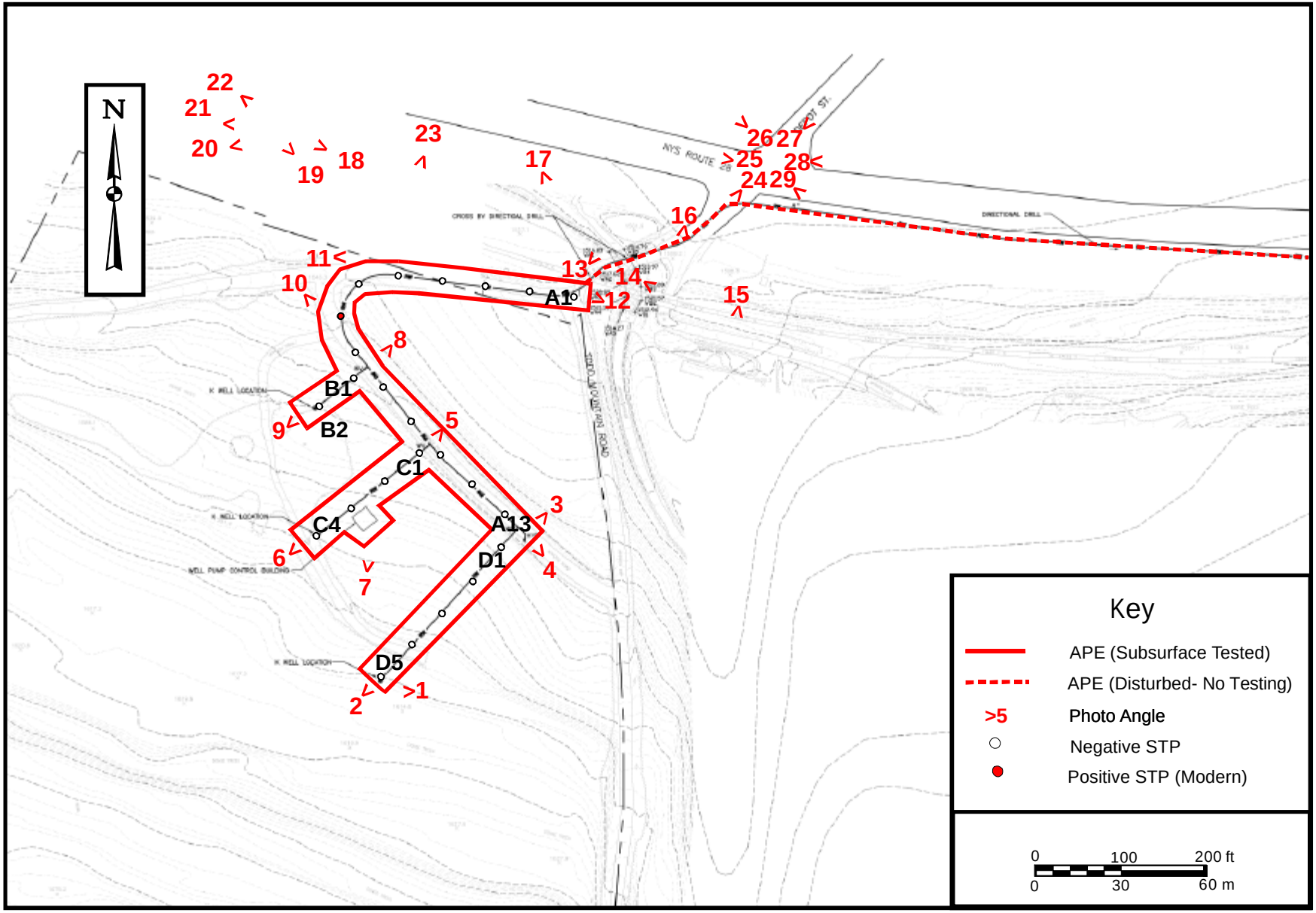

Figure 2. Map of the K-wells portion of the project area with STPs and photo angles indicated.

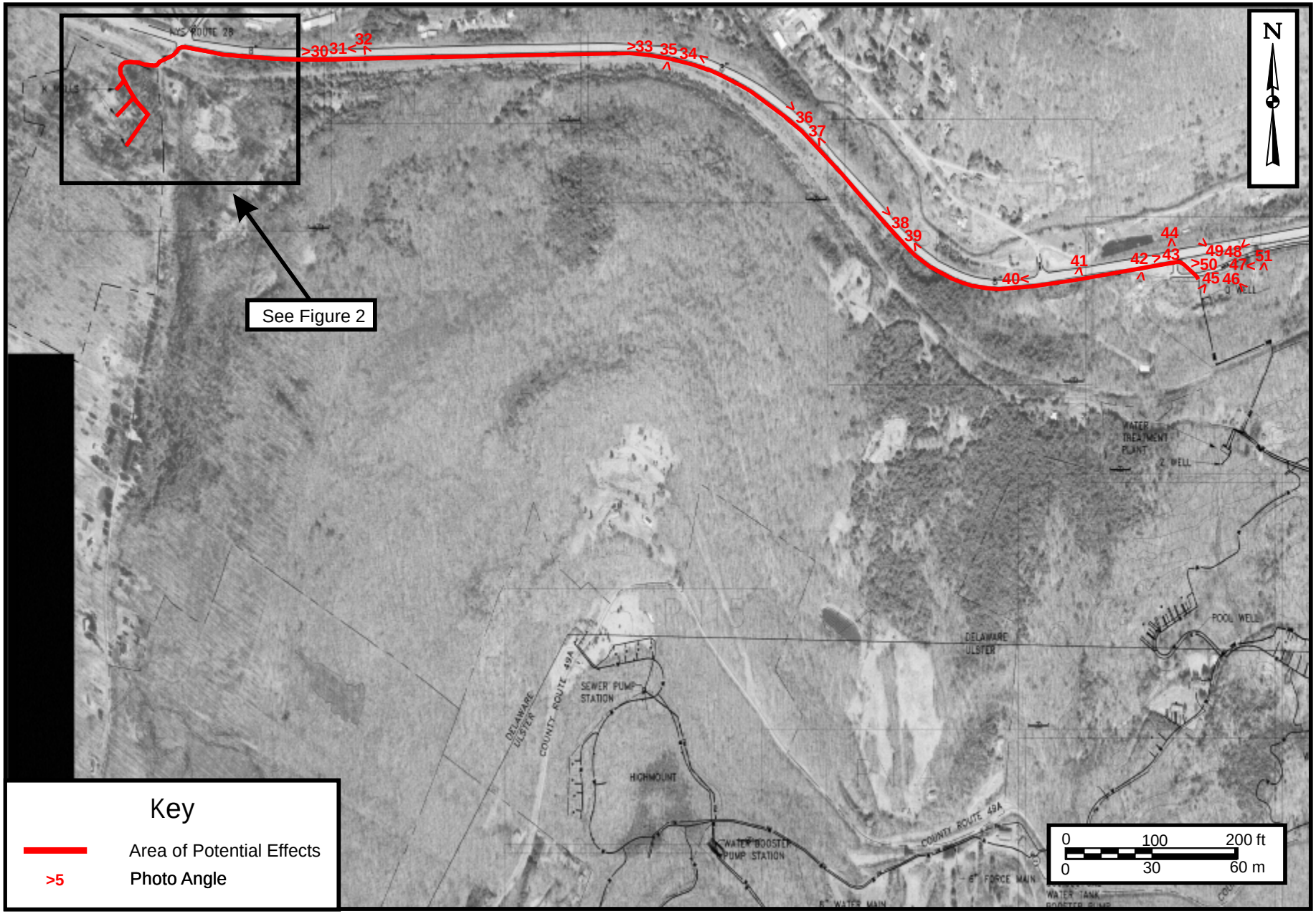

Figure 3. Map of the eastern half of the project area with the project location indicated.

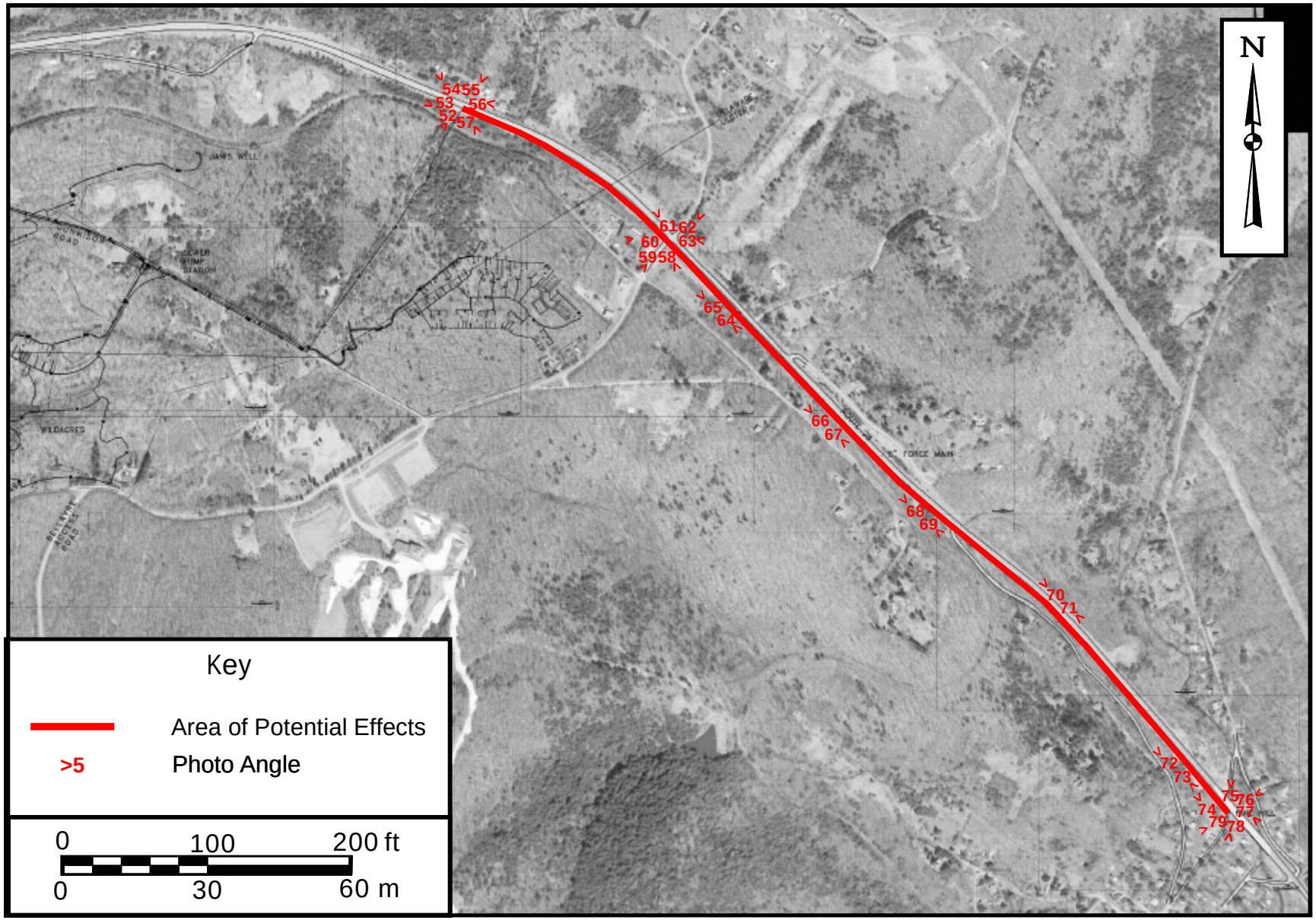

Figure 4. Map of the western half of the project area with the project location indicated.

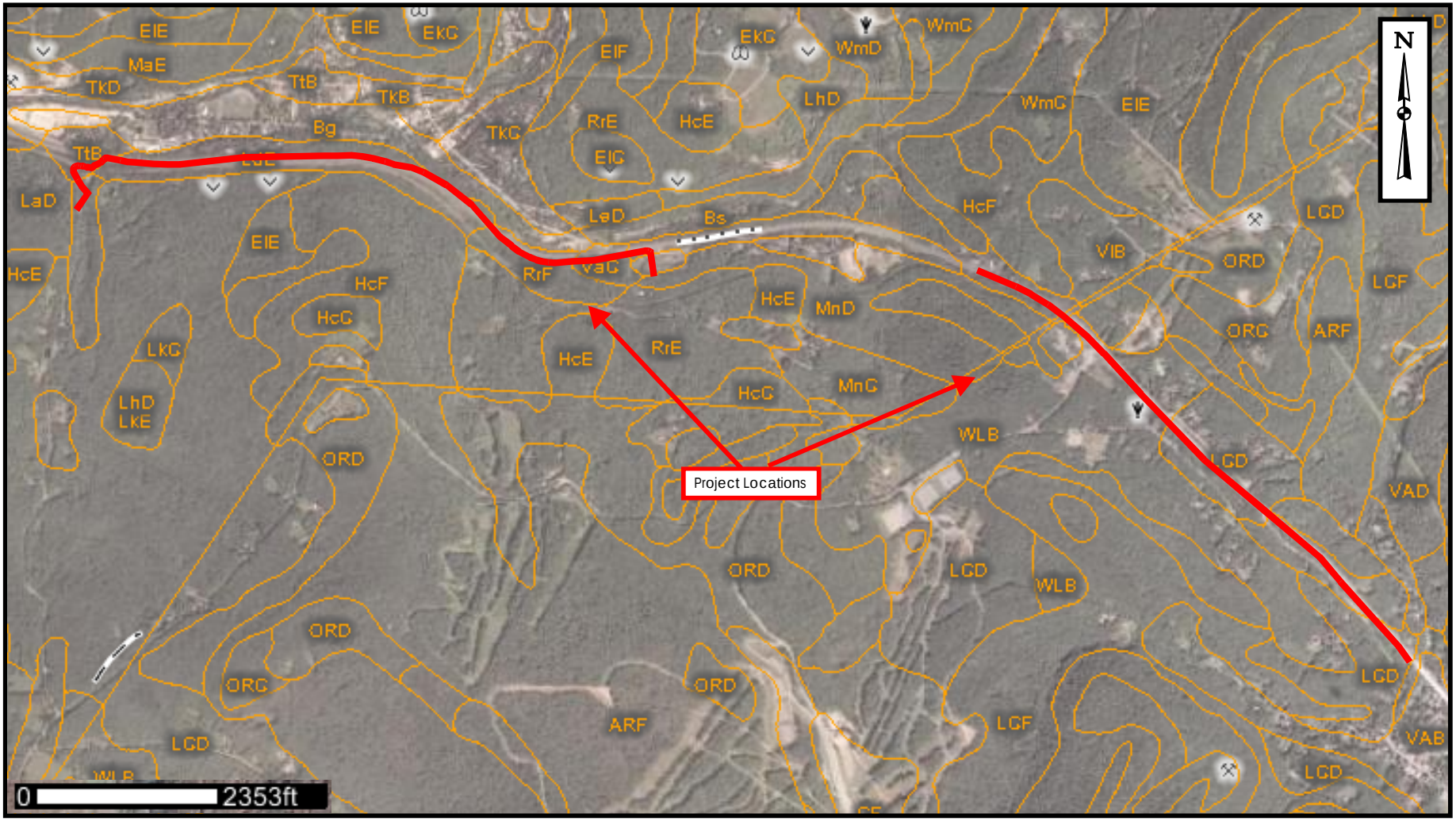

Figure 5. Portions of the Delaware and Ulster Counties NRCS soil map with the project area indicated.

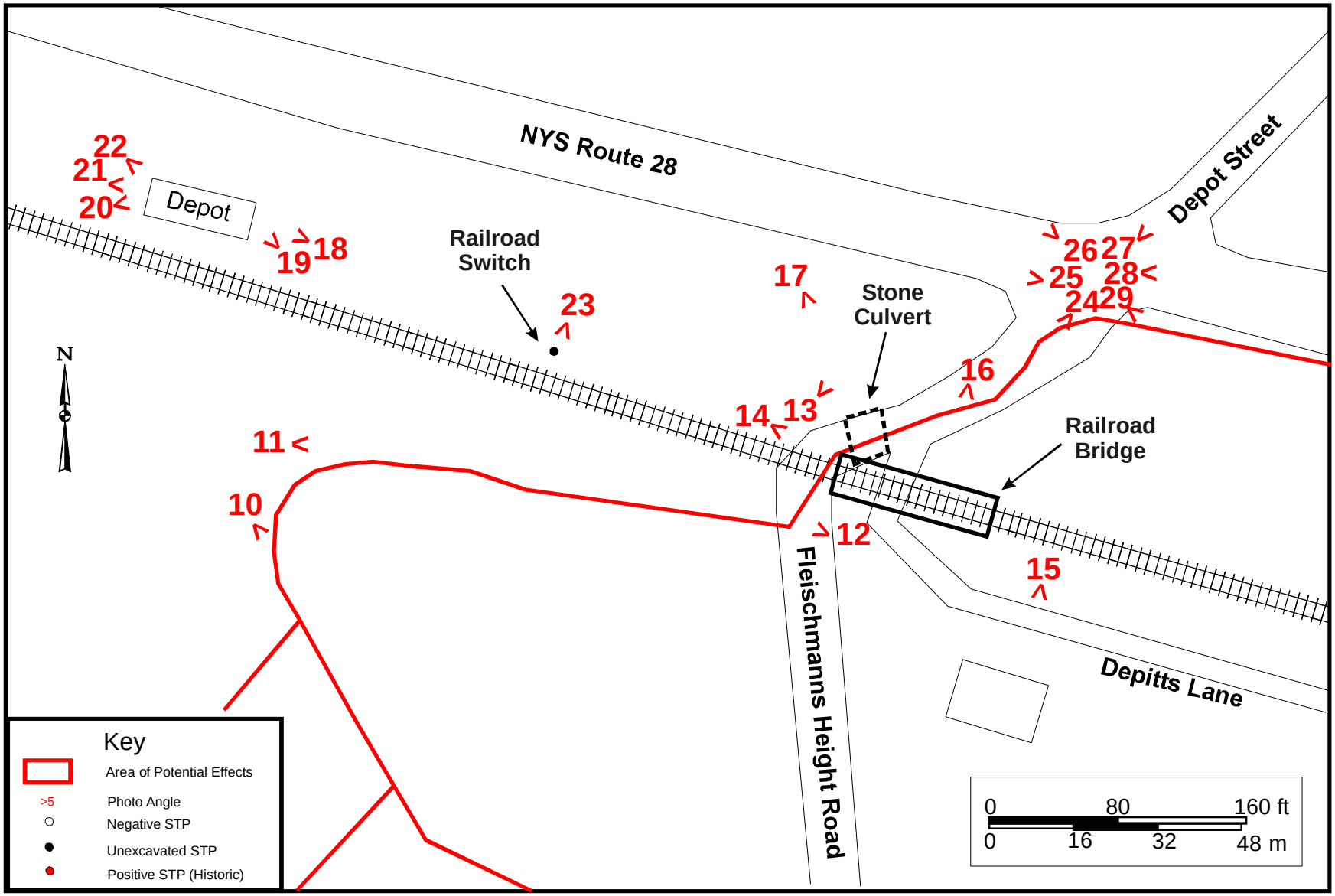

Figure 6. Map of the railroad depot vicinity.

Appendix B.

Photographs

Photo 1. View of Well #4 at the K-Wells project area, facing west.

Photo 2. View along the proposed water main corridor at the K-Wells project area, facing northeast.

Photo 3. View along the proposed water main corridor at the K-Wells project area, facing southwest.

Photo 4. View along the proposed water main corridor at the K-Wells project area, facing northwest.

Photo 5. View of Well #2 at the K-Wells project area, facing southwest.

Photo 6. View of corridor connecting Well #2 at the K-Wells project area, facing northeast.

Photo 7. View of the location of the proposed well house at the K-Wells project area, facing north.

Photo 8. View of Well #3 at the K-Wells project area, facing southwest.

Photo 9. View of corridor connecting Well #3 at the K-Wells project area, facing northeast.

Photo 10. View of proposed water main corridor following the access road from the K-Wells, facing southeast.

Photo 11. View of proposed water main corridor following the access road from the K-Wells, facing east.

Photo 12. View from the intersection of the K-Wells access road and Fleischmanns Heights Road, facing west.

Photo 13. View from the intersection of the K-Wells access road and Fleischmanns Heights Road, facing northeast.

Photo 14. View of railroad bridge crossing Fleischmanns Heights Road and Depitts Lane, facing east.

Photo 15. View historic structure on the south side of Depitts Lane, facing south.

Photo 16. View of railroad bridge crossing Fleischmanns Heights Road and Depitts Lane, facing southwest.

Photo 17. View of stone culvert under Fleischmanns Heights Road, facing southeast.

Photo 18. View of Fleischmanns railroad depot, facing west.

Photo 19. View of historic sign on the east side of the railroad depot, facing northwest.

Photo 20. View of Fleischmanns railroad depot, facing northeast.

Photo 21. View of collapsing sill on the northwest corner of the Fleischmanns railroad depot, facing east.

Photo 22. View of railroad ties supporting the floor of the depot, facing southeast.

Photo 23. View of railroad switch between the depot and Fleischmanns Heights Road, facing southwest.

Photo 24. Portion of panoramic view from the intersection of Depot Street and NYS Route 28, facing southwest.

Photo 25. Portion of panoramic view from the intersection of Depot Street and NYS Route 28, facing west.

Photo 26. Portion of panoramic view from the intersection of Depot Street and NYS Route 28, facing northwest.

Photo 27. Portion of panoramic view from the intersection of Depot Street and NYS Route 28, facing northeast.

Photo 28. Portion of panoramic view from the intersection of Depot Street and NYS Route 28, facing east.

Photo 29. Portion of panoramic view from the intersection of Depot Street and NYS Route 28, facing southeast.

Photo 30. View along the proposed water main route on the south side of NYS Route 28, facing west.

Photo 31. View along the proposed water main route on the south side of NYS Route 28, facing east.

Photo 32. View of railroad tracks to the south of the proposed water main, facing southeast.

Photo 33. View along the proposed water main route on the south side of NYS Route 28, facing west.

Photo 34. View of culvert along the proposed water main route on the south side of NYS Route 28, facing southeast.

Photo 35. View of exposed rock cuts long the railroad grade to the south of the proposed water main, facing south.

Photo 36. View along the proposed water main route on the south side of NYS Route 28, facing northwest.

Photo 37. View along the proposed water main route on the south side of NYS Route 28, facing southeast.

Photo 38. View of exposed rock cuts along the water main route along NYS Route 28, facing northwest.

Photo 39. View along the proposed water main route on the south side of NYS Route 28, facing southeast.

Photo 40. View along the proposed water main route on the south side of NYS Route 28, facing east.

Photo 41. View of early 20th century structure on the south side of NYS Route 28, facing southwest.

Photo 42. View of early 20th century structure on the south side of NYS Route 28, facing southwest.

Photo 43. View of the water main route from the intersection of NYS Route 28 and Moran Road, facing west.

Photo 44. View of the water main route from the intersection of NYS Route 28 and Moran Road, facing south.

Photo 45. Portion of panoramic view from the gravel mine on the south side of Moran Road, facing southwest.

Photo 46. Portion of panoramic view from the gravel mine on the south side of Moran Road, facing southeast.

Photo 47. Portion of panoramic view from the gravel mine on the south side of Moran Road, facing east.

Photo 48. Portion of panoramic view from the gravel mine on the south side of Moran Road, facing northeast.

Photo 49. Portion of panoramic view from the gravel mine on the south side of Moran Road, facing northwest.

Photo 50. Portion of panoramic view from the gravel mine on the south side of Moran Road, facing west.

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Photo 79. Portion of panoramic view from the east end of the proposed sewer main route, facing southwest.

Appendix C.

Shovel Test Pit Records

Appendix C.

Shovel Test Pit Record

STP	Lvl	from (cm)		to (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
A - 1	1	0	-	29	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
A - 1	2	29	-	54	10YR 3/2 dark brown sandy loam	Bw Horizon	N	
A - 2	1	0	-	28	7.5YR 3/4 dark brown sandy loam	Ap Horizon	N	stopped by rocks
A - 3	1	0	-	30	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	moved 1m W due to rock pile; stopped by rocks
A - 4	1	0	-	20	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	moved 1m W due to rock pile; stopped by rocks
A - 5	1	0	-	30	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
A - 5	2	30	-	57	7.5YR 5/4 brown silty loam	Bw Horizon	N	
A - 6	1	0	-	23	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
A - 6	2	23	-	31	7.5YR 5/4 brown silty loam	Bw Horizon	N	stopped by rocks
A - 7	1	0	-	15	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
A - 7	2	15	-	50	7.5YR 5/4 brown silty loam	Bw Horizon	N	
A - 8	1	0	-	28	7.5YR 3/4 dark brown silty loam	Ap Horizon	Y	milk glass fragments (2) - reburied
A - 8	2	28	-	35	7.5YR 5/4 brown silty loam	Bw Horizon	N	stopped by rocks
A - 9	1	0	-	8	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
A - 9	2	8	-	40	7.5YR 5/4 brown silty loam	Bw Horizon	N	
A - 10	1	0	-	17	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
A - 10	2	17	-	49	7.5YR 5/4 brown silty loam	Bw Horizon	N	
A - 11	1	0	-	20	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
A - 11	2	20	-	46	7.5YR 5/4 brown silty loam	Bw Horizon	N	
A - 12	1	0	-	16	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
A - 12	2	16	-	39	7.5YR 5/4 brown silty loam	Bw Horizon	N	stopped by rocks

STP	Lvl	from (cm)		to (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
A - 13	1	0	-	13	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
A - 13	2	13	-	43	7.5YR 5/4 brown silty loam	Bw Horizon	N	
B - 1	1	0	-	27	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
B - 1	2	27	-	45	7.5YR 5/4 brown silty loam	Bw Horizon	N	stopped by rocks
B - 2	1	0	-	21	7.5YR 5/4 brown silty loam	Ap Horizon	N	
B - 2	2	21	-	46	7.5YR 5/2 brown silty loam	Bw Horizon	N	
C - 1	1	0	-	11	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
C - 1	2	11	-	40	7.5YR 5/4 brown loamy silt	Bw Horizon	N	stopped by rocks
C - 2	1	0	-	17	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
C - 2	2	17	-	50	7.5YR 5/4 brown loamy silt	Bw Horizon	N	
C - 3	1	0	-	11	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
C - 3	2	11	-	50	7.5YR 5/4 brown loamy silt	Bw Horizon	N	
C - 4	1	0	-	13	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
C - 4	2	13	-	45	7.5YR 5/4 brown loamy silt	Bw Horizon	N	
D - 1	1	0	-	25	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
D - 1	2	25	-	51	7.5YR 5/4 brown silty loam	Bw Horizon	N	
D - 2	1	0	-	20	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
D - 2	2	20	-	50	7.5YR 5/4 brown loamy silt	Bw Horizon	N	
D - 3	1	0	-	22	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
D - 3	2	22	-	53	7.5YR 5/4 brown silty loam	Bw Horizon	N	
D - 4	1	0	-	8	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
D - 4	2	8	-	43	7.5YR 5/4 brown loamy silt	Bw Horizon	N	stopped by rocks
D - 5	1	0	-	18	7.5YR 3/4 dark brown silty loam	Ap Horizon	N	
D - 5	2	18	-	45	7.5YR 5/4 brown silty loam	Bw Horizon	N	

Note: Excavation of all STPs was stopped after the removal of at least 20cm of culturally sterile subsoil unless otherwise stated.

Phase IA/IB Cultural Resources Survey
Additional Lands
Of the
Modified Belleayre Resort
at Catskill Park Project,
Towns of Shandaken and Middletown,
Ulster and Delaware Counties
New York

prepared for

Crossroads Ventures, LLC

prepared by

David Moyer and Rebecca Moyer

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November 2008

Management Summary

Belleayre Resort at Catskill Park, Wildacres Resort and Highmount Spa Resort Project

SHPO Project Review Number: 99PR4498

Involved State and Federal Agencies: NYSDEC, NYSDOT, NYSDOH, USACOE

Phase of Survey: IA/IB

Location Information
Location: north and south sides of New York State Route 49A
Minor Civil Division: Towns of Shandaken and Middletown
County: Ulster and Delaware

Survey Area (Metric & English)
Length
Width:
Depth: in excess of 5 ft (1.5 m)
Number of Acres Surveyed: 31.0 acres
Number of Square Meters & Feet Excavated:
Percentage of the Site Excavated:

USGS 7.5 Minute Quadrangle Map: Fleishmanns

Archaeological Survey Overview
Number & Interval of Shovel Tests: 1,019 STPs were laid out 15 m (49.2 ft) intervals
Number & Size of Units:
Width of Plowed Strips:
Surface Survey Transect Interval:

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: 0

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: 0
Number of identified eligible buildings/structures/cemeteries/districts: 0

Report Author(s): David Moyer and Rebecca Moyer

Date of Report: November 2008

BACKGROUND INFORMATION

In 2003 the Belleayre Resort at Catskill Park project (the Original Project) was proposed and was the subject of a Draft Environmental Impact Statement (DEIS) prepared under the State Environmental Quality Review Act (SEQRA). The Original Project was also the subject of permit applications to the New York State Department of Environmental Conservation (NYSDEC), the SEQRA Lead Agency. The DEIS for the Original Project included cultural resources assessments that were provided to NYS Office of Parks Recreation and Historic Preservation's Historic Preservation Field Services Bureau (SHPO) for review.

In September 2005 an Agreement In Principle (AIP) was entered into by a number of parties, including the Applicant (Crossroads Ventures, LLC), NYSDEC, New York City Department of Environmental Protection (NYCDEP), and various non-governmental organizations (NGO's). The result of this AIP is the proposal of the Modified Belleayre Resort at Catskill Park Project (the Modified Project) and a Supplemental Environmental Impact Statement for the Modified Project.

The project site and areas of potential effect (APEs) for the Modified Project are a little different than the Original Project due to the addition of some lands to the project site and an expanded area to be developed as part of the Modified Project site. Changes to the lands that make up the project site and changes to the development areas under the Modified Project include the following.

- The eastern portion of the original project, approximately 1,240 acres, that contained the Big Indian Plateau and Belleayre Highlands developments, is no longer part of the project site under the Modified Project.
- The overall Modified Project consists of two resort developments proposed in the western portion of the Original Project site.
- In the western portion of the Original Project site, Wildacres Resort continues to be part of the Modified Project, although on a slightly reconfigured property. Some lands are no longer included in the Wildacres site, and some additional lands have been added to the Wildacres site. The additional lands added to the Wildacres site had not been previously evaluated for cultural resources.
- Also in the western portion of the original project site, the area that was originally proposed for the 21-lot subdivision known as Highmount Estates, is now the location of the proposed Highmount Spa Resort under the Modified Project. The portion of the project site to be developed as the new Highmount Spa and Resort is larger than the originally proposed subdivision, and contains lands not previously evaluated for cultural resources.

The report that follows is an evaluation of the cultural resources of these additional lands to be affected under the Modified Project. This report is a supplement to earlier project

reports on cultural resources investigations for the Original Project contained in the DEIS that included the following:

- Hartgen Archeological Associates, March 2000, Phase 1A Literature Review and Archeological Sensitivity Assessment Belleayre Resort at the Catskill Park;
- Greenhouse Consultants Inc., August 2001, Stage 1B Cultural Resources Survey of the Proposed Belleayre Resort at Catskill Park;
- Hartgen Archeological Consultants, October 2001, Review of the Phase 1B Archeological Field Reconnaissance Report for the Belleayre Resort at Catskill Park; and
- Hartgen Archeological Associates, February 2002, Phase 1B Archeological Field Reconnaissance Lasher Road Parking Lot.

On February 6, 2003 SHPO issued a letter of No Adverse Effect for the Original Project.

Executive Summary

A Phase IA/IB Cultural Resources Survey has been completed for additional lands that are part of the Modified Belleayre Resort at Catskill Park Project, comprised of the Wildacres Resort and Highmount Spa Resort, located in the Towns of Shandaken and Middletown, Ulster and Delaware Counties, New York. The original Belleayre Resort at Catskill Park Project was reviewed by the NYSOPRHP, and a No Adverse Effect letter was issued (99PR4498). The modified project no longer includes the eastern, or Big Indian, portion or the previously tested lands. The current proposed project involves the creation of two recreational resort developments impacting approximately 76.0 additional acres, thirty-one of which were surveyed as part of this undertaking. The remaining additional acreage lies on sloped grounds that will not be impacted by any proposed construction activities. This additional area of potential effects (APE) includes the listed acreage described, which will be impacted to a depth in excess of 5 ft (1.5 m) below the ground surface in the installation of related utilities.

Prior to the current archaeological undertaking, the Modified Belleayre Resort at Catskill Park was subjected to a series of studies as follows: A Phase IA Literature Review and Archaeological Sensitivity Assessment (Hartgen Archaeological Associates 2001), a Stage IB Cultural Resources Survey (Greenhouse Consultants, Inc 2001), a review of the Stage IB Field Reconnaissance Report (Hartgen Archaeological Associates 2001), and a Phase IB Archaeological Field Reconnaissance (Hartgen Archaeological Associates 2002). On January 6, 2003, the NYSOPRHP issued a No Adverse Effect letter for the project as originally proposed.

The Phase IA review indicated that there are no listed prehistoric archaeological sites within one mile of the project area, although this is likely a result of the fewer number of surveys performed in the immediate area. Due to these factors the area is considered moderately sensitive for prehistoric remains. This review also found twelve historic archaeological sites and five National Register listed properties have been identified within one mile of the project area, attesting to the vicinity's participation and importance in the growth and history of the Catskills, in particular that of the tourist industry. Due to these factors, any undisturbed areas of the project would be considered highly sensitive for historic remains.

A Phase IB field examination was conducted within the additional lands to test for cultural deposits that may be impacted by the proposed modified project. Thirty-one acres of the larger 76.0 acre property was surveyed as part of this archaeological undertaking. The project area was divided into three separate APEs according to each section's position in relevance to the Wildacres Resort and Highmount Spa Resort Project plans. Following this division, each APE was subjected to subsurface testing. In total, 1,019 STPs were placed at 15 m (49.2 ft) intervals along transects spaced 15 m (49.2 ft) apart over the entire area of proposed ground disturbance for the proposed resorts. 24 STPs (3.5%) could not be excavated for a variety of reasons including the presence of a ski lift, exposed bedrock and tree stumps, and twelve STPs were relocated due to stone walls, bedrock, and trees. Of the 995 STPs excavated, fourteen (1.4%) identified cultural

material including porcelain, glass, metal, and whiteware. Six of the STPs contained varying amounts of charcoal, although none appeared part culturally related. No prehistoric materials were recovered, and no archaeological sites were identified.

Based on the results of this survey, as well as the NYSOPRHPs January 6, 2003, finding of No Adverse Effect for the previously conducted archaeological survey, we recommend that this modified project be allowed to proceed. These recommendations are subject to the review and concurrence of the New York State Office of Parks, Recreation, and Historic Preservation.

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Introduction

Birchwood Archaeological Services was contracted to conduct a Phase IA/IB Cultural Resources Survey encompassing the additional lands that are part of the Modified Belleayre Resort at Catskill Park Project, comprised of the Wildacres Resort and the Highmount Spa Resort, located in the Towns of Shandaken and Middletown, Ulster and Delaware Counties, New York. The overview had been requested to assess the potential that significant cultural resources may be located within this additional impact area. The investigation was performed in compliance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law.

Prior to the current archaeological undertaking, the Modified Belleayre Resort at Catskill Park was subjected to a series of studies as follows: A Phase IA Literature Review and Archaeological Sensitivity Assessment (Hartgen Archaeological Associates 2001), a Stage IB Cultural Resources Survey (Greenhouse Consultants, Inc 2001), a review of the Stage IB Field Reconnaissance Report (Hartgen Archaeological Associates 2001), and a Phase IB Archaeological Field Reconnaissance (Hartgen Archaeological Associates 2002). On January 6, 2003, the NYSOPRHP issued a No Adverse Effect letter for the project as originally proposed.

The additional project area lies on the north and south sides of New York State Route 49A, south of New York State Route 28 in the Towns of Shandaken and Middletown, on the line of Ulster and Delaware Counties, New York (Figure 1). The current proposed project involves the creation of two recreational resort developments impacting approximately 76.0 additional acres, thirty-one of which were surveyed as part of this undertaking. The remaining acreage lies on sloped grounds that will not be impacted by any proposed construction activities. The area of potential effects (APE) includes the listed acreage described, which will be impacted to a depth in excess of 5 ft (1.5 m) below the ground surface in the installation of related utilities. Although the additional APE boundaries will not change, building footprints depicted (Figures 3-7) may be altered as the project progresses.

Background research was conducted to assess the potential for prehistoric and historic resources on the property and provide contexts with which to interpret any findings (see Part I: Documentary Research). Field investigations were conducted by the principal investigator to identify any surface features in the project area (see Part II: Field Reconnaissance).

Part I: Documentary Research

Documentary sources and collections were consulted to gain an overview of the prehistory, history, and environmental setting of the additional project area and surrounding region. A search was also conducted to locate known archaeological sites, historic structures, and National Register properties within one mile of the project area. Sources of information that were consulted included:

- Office of Parks, Recreation and Historic Preservation (OPRHP) site files and survey reports
- New York State Museum site files (copies at OPRHP)
- New York State Historical Association Research Library, Cooperstown
- National Register of Historic Places
- New York State Library and Archives, Albany
- Glenn Bartle Library, Binghamton University
- Milne Library, SUNY Oneonta

Specific documentary references that were consulted are listed in the bibliography.

Environmental Setting

Ulster County consists of low floodplains along the Hudson River Valley in the east, rising to the Catskill Mountains in the west. Two major physiographic provinces occur within the county: the Appalachian Plateau in the northwest and the Hudson Lowlands in the southeast. The project area is located the Catskill Mountains section of the Allegheny Plateau, which is generally underlain by interbedded Devonian sandstone, siltstone, and shale (Tornes 1979:2). This area consists of uplifted and heavily dissected plateau that drains into the Esopus Valley. During the Pleistocene, a ground moraine deposited by a retreating glacier blanketed most of Ulster County. Most of the soils in the vicinity were formed from material derived from this moraine (Tornes 1979:3). Delaware County is situated along the northern foothills of the Catskill Mountains near the West Branch of the Delaware River in central New York State. Its most prominent geographic feature is the Catskill Mountains, which extend northward into the foothills in the northern part of the county. The Delaware section of the Glaciated Allegany Plateau consists of large, U-shaped valleys with topography reflecting both deglacial and postglacial processes (Bureau of Soil Chemistry 1930:14). Long, almost continuous outwash terraces flank much of the northern side of the valley bottom.

The current project area is located 0.81 miles (1.3km) southwest of the Village of Fleishmanns, and 1.3 miles (2.09km) west of the Village of Highmount, NY (Figure 1).

Elevation within the project boundaries ranges from 1,870 feet to 3,090 feet (570.1-941.8m) above mean sea level. The current proposed project lies 3,783.3 ft (1,153.1m) northwest of Birch Creek, 2327.74 ft (709.5m) south of Emory Creek, and 0.92 miles (1.5km) southeast of Lake Switzerland. Numerous other water sources lie nearby, including the Esopus Creek (to the east), Vly Creek (to the northwest), and the Bush Kill (west of the project area).

Soils

The additional project area is divided up into three individual sections of development, with the largest one straddling the Delaware/Ulster County border within the Towns of Middletown and Shandaken (see Figure 1). The first area (APE-1) is located at the northeast end of the property being developed. According to the NRCS Web Soil Survey (WSS), there is two different soil types found within this APE's boundaries: the Arnot-Oquaga-Rock outcrop complex and the Oquaga-Arnot-Rock outcrop complex (Figure 8). These two soil types are similar, with the Arnot and Oquaga series being lithic analogues of one another. Typical soil profiles of both the Arnot and Oquaga series are presented below (Tables 1 and 2).

The Arnot series consists of shallow, somewhat excessively to moderately well drained soils formed in loamy till. Arnot soils developed in a thin mantle of till of Wisconsin age. The till is derived mainly from acid sandstone, siltstone, and shale. In some places the regolith is a mixture of till and residuum. Bedrock is at depths of to 10 to 20 inches. Slope ranges from 0 to 70 percent. Saturated hydraulic conductivity in the mineral soil is moderately high or high. Mean annual temperature is 47 degrees F, and mean annual precipitation is 38 inches. A typical soil profile of Arnot silt loam is listed below in Table 1.

Table 1. A typical soil profile of the Arnot silt loam

Horizon	Depth	Description
Ap	0-6in. (0-15cm.)	Very dark grayish brown (10YR 3/2), light brownish gray (10YR 6/2) dry, channery silt loam; weak medium and fine granular structure; friable; many fine and medium roots; 20 percent rock fragments; strongly acid; abrupt smooth boundary. (2 to 10 inches thick.)
Bw1	6-15in. (15-38cm.)	Dark yellowish brown (10YR 4/4) very channery silt loam; weak fine and medium subangular blocky parting to weak fine granular structure; friable; many fine and medium roots; 35 percent rock fragments; strongly acid; abrupt smooth boundary.
Bw2	15-17in. (38-43cm.)	Light olive brown (2.5Y 5/4) very channery silt loam; weak thin platy structure; friable; common fine roots; many fine pores; 50 percent rock fragments; few medium faint yellowish brown (10YR 5/6) soft masses of iron accumulation; strongly acid; abrupt smooth boundary.
2R	17in. (43cm.)	Gray (5Y 5/1) fine grained sandstone bedrock

The Oquaga series consists of moderately deep, somewhat excessively drained soils formed in a thin mantle of till over sandstone, siltstone, and shale bedrock on nearly level to very steep uplands. Oquaga soils are in uplands and formed in a thin mantle of reddish till with lithology dominated by the local and underlying reddish sandstone, siltstone, and shale. Slope ranges from 0 to 70 percent. Permeability is moderate. Mean annual air

temperature is 49 degrees F. and mean annual precipitation is 42 inches. A typical soil profile of Oquaga channery silt loam is listed below in Table 2.

Table 2. A typical soil profile of Oquaga channery silt loam.

Horizon	Depth	Description
A	0-4in. (0-10cm.)	Dark reddish brown (5YR 3/3) very channery silt loam, light reddish brown (5YR 6/3) dry; weak fine subangular blocky structure; very friable; many fine, common medium and coarse roots; 40 percent rock fragments; strongly acid; clear smooth boundary.
Bw1	4-11in. (10-28cm.)	Dark red (2.5YR 3/6) and red (2.5YR 4/6) very channery loam; weak coarse subangular blocky structure parting to fine granular structure; very friable; many fine, common medium and coarse roots; many fine irregular pores; 36 percent coarse fragments; strongly acid; clear wavy boundary.
Bw2	11-28in. (28-71cm.)	Reddish brown (2.5YR 4/4) very channery loam; weak medium subangular blocky structure; very friable; many fine and few medium roots in the upper part of the horizon, many fine roots in the lower part; many fine irregular pores; 45 percent rock fragments; strongly acid; gradual wavy boundary.
BC	28-34in. (71-97cm.)	Reddish brown (2.5YR 4/4) and dark reddish brown (2.5YR 3/4) very channery loam; massive; friable; few medium roots; 45 percent rock fragments; strongly acid; abrupt smooth boundary. (0 to 6 inches thick.)
2R	34in.+ (97cm.+)	Weak red (10R 4/3) thinly bedded shale bedrock.

The second area (APE-2) within the current proposed project boundaries is located due north of the first, and shares part of its southern border. This area also shares some of the same soils, with the Arnot-Oquaga-Rock outcrop complex and the Oquaga-Arnot-Rock outcrop complex both being found. Lackawanna and Swartswood very bouldery soils are also found within this project area.

The Lackawanna series consists of very deep, well-drained soils on uplands. They formed in till derived from reddish colored sandstone, siltstone, and shale. A dense fragipan is present starting at a depth of 17 to 36 inches below the soil surface. Slope ranges from 0 to 55 percent. Mean annual temperature is 48 degrees F. and mean annual precipitation is 41 inches. A typical soil profile of Lackawanna channery silt loam is listed below in Table 3.

Table 3. A typical soil profile of Lackawanna channery silt loam.

Horizon	Depth	Description
Ap	0-8in. (0-20cm.)	Dark reddish brown (5YR 3/4) channery silt loam; weak fine granular structure; friable; many roots; 25 percent rock fragments; strongly acid; abrupt wavy boundary. (5-11 inches thick.)
Bw1	8-13in. (20-33cm.)	Reddish brown (5YR 4/4) channery silt loam; weak thin platy structure parting to weak fine granular; friable; many roots; 25 percent rock fragments; very strongly acid; clear wavy boundary.
Bw2	13-26in. (33-66cm.)	Reddish brown (2.5YR 4/4) channery loam; weak fine and medium subangular blocky structure; friable, slightly sticky, slightly plastic; 25 percent rock fragments; very strongly acid; clear wavy boundary. (Combined thickness 6 to 25 inches.)
Bx	26-52in. (66-132cm.)	26 to 52 inches; reddish brown (2.5YR 4/4) channery loam; weak very coarse prismatic structure parting to weak thick platy; very firm; 30 percent rock fragments; strongly acid; diffuse wavy boundary. (20 to 45 inches thick.)
C	52-60in. (132-152cm.)	Weak red (10R 4/3) channery loam; massive; firm; 30 percent rock fragments; very strongly acid.

The Swartswood series consists of deep and very deep, well drained and moderately well drained soils formed in till derived primarily from gray and brown quartzite, conglomerate, and sandstone. Slope ranges from 0 to 35 percent. Saturated hydraulic conductivity is moderately high or high in the mineral soil above the fragipan and moderately low or moderately high in the fragipan. Mean annual precipitation is 40 inches. Mean annual temperature is 49 degrees F. A typical soil profile of Swartswood sandy loam is listed below in Table 4.

Table 4. A typical soil profile of Swartswood sandy loam.

Horizon	Depth	Description
Oi	0-1in. (0-3cm.)	Brown (7.5YR 4/2) hardwood leaf litter; extremely acid; abrupt smooth boundary. (1 to 2 inches thick.)
Oe	1-2in. (3-5cm.)	Black (10YR 2/1) leaf mold; roots and fungus mycelia in fibrous mat; extremely acid; abrupt smooth boundary. (0 to 1 inch thick.)
E	2-4in. (5-10cm.)	Grayish brown (10YR 5/2) fine sandy loam; weak fine granular structure; very friable; 10 percent sandstone and quartzite pebbles; common stones; extremely acid; abrupt irregular boundary. (0 to 3 inches thick.)
Bs	4-7in. (10-18cm.)	Strong brown (7.5YR 5/6) gravelly fine sandy loam; weak fine granular structure; very friable; 15 percent rock fragments; common stones; extremely acid; clear wavy boundary. (0 to 5 inches thick.)
Bw1	7-20in. (18-51cm.)	Yellowish brown (10YR 5/4) gravelly fine sandy loam; weak fine subangular blocky structure; friable, slightly sticky; 25 percent rock fragments; extremely acid; clear wavy boundary. (10 to 15 inches thick.)
Bw2	20-32in. (51-81cm.)	Brown (10YR 5/3) gravelly sandy loam; some weak plates parting to weak medium subangular blocky structure; firm; 30 percent rock fragments; very strongly acid; clear wavy boundary. (6 to 14 inches thick.)
Bx	32-62in. (81-157cm.)	Dark yellowish brown (10YR 4/4) gravelly fine sandy loam; weak very thick platy structure; brittle; very firm; 30 percent rock fragments; few faint clay films in pores; very strongly acid.

The third and final area (APE-3) is located to the far east of the other two that have been mentioned above. Within its boundaries are found two soil types, Wellsboro and Wurtsboro very bouldery soils, and Monagaup channery loam.

The Wellsboro series consists of very deep moderately well and somewhat poorly drained soils formed in till derived from red sandstone, siltstone, and shale. Slope ranges from 0 to 50 percent. Permeability is moderate in the surface and upper subsoil layers and slow or very slow in the lower subsoil and substratum. Mean annual precipitation is 41 inches. Mean annual temperature is 48 degrees F. A typical soil profile of Wellsboro Complex can be found below in Table 5.

Table 5. A typical soil profile of Wellsboro Complex

Horizon	Depth	Description
Ap	0-7in. (0-18cm.)	Dark brown (7.5YR 3/2) silt loam, light brown (7.5YR 6/3) dry; weak fine granular structure; friable; slightly sticky; slightly plastic; many roots; 10 percent rock fragments; moderately acid (limed); abrupt smooth boundary. (5 to 12 inches thick.)
Bw1	7-11in. (18-28cm.)	Reddish brown (5YR 4/4) silt loam; weak fine subangular blocky structure; friable; slightly sticky, slightly plastic; many roots; 10 percent rock fragments; moderately acid: clear wavy boundary.
Bw2	11-18in. (28-46cm.)	Reddish brown (2.5YR 4/4) loam; moderate medium subangular blocky structure; friable; slightly sticky, slightly plastic; many roots; 10 percent rock fragments; strongly acid; abrupt wavy boundary.
Bw3	18-22in. (46-56cm.)	Reddish brown (5YR 4/4) channery loam; moderate medium subangular blocky structure; friable; few roots; 15 percent rock fragments; medium distinct yellowish red (5YR 5/8) iron concentrations and gray (5YR 6/1) iron depletions; very strongly acid; abrupt wavy boundary. (Combined thickness of the Bw horizons is 5 to 26 inches.)
Bx1	22-31in. (56-79cm.)	Dark reddish brown (2.5YR 3/4) gravelly loam; moderate very coarse prismatic structure parting to weak medium subangular blocky; firm; brittle, slightly sticky, slightly plastic; very few faint clay films in pores; weak red (10R 5/2) thin silt coats on faces of prisms; 20 percent rock fragments; very strongly acid; diffuse boundary. (5 to 30 inches thick.)
Bx2	31-52in. (79-132cm.)	Dusky red (10R 3/4) gravelly loam; weak very coarse prismatic structure parting to moderate medium platy; firm; brittle; weak red (10R 5/2) coatings on faces of prisms decreasing in thickness with depth; few faint clay films and few black Mn coats on face of plates and in pores in the interior of prisms; 25 percent rock fragments; very strongly acid; diffuse boundary. (0 to 30 inches thick.)
Cd	52-72in. (132-183cm.)	Dusky red (10R 3/4) gravelly loam; moderate medium plate-like divisions; firm; 15 percent rock fragments; very strongly acid.

The Wurtsboro series consists of very deep, moderately well drained and somewhat poorly drained soils formed in till derived from quartzite, conglomerate and sandstone. Slope dominantly ranges from 0 to 25 percent. The saturated hydraulic conductivity is moderately low to high in the mineral soil above the fragipan and moderately high to low in the fragipan. Mean annual precipitation is 41 inches. Mean annual temperature is 49 degrees F. A typical soil profile of Wurtsboro gravelly fine sandy loam is found below in Table 6.

Table 6. A typical soil profile of Wurtsboro gravelly fine sandy loam

Horizon	Depth	Description
Oi	0-2in. (0-5cm.)	Fibrous leaf material; extremely acid; abrupt wavy boundary. (1 to 3 inches thick.)
E	2-4in. (5-10cm.)	Gray (10YR 5/1 gravelly fine sandy loam; weak fine granular structure; very friable, nonsticky, nonplastic; 20 percent rock fragments; extremely acid; abrupt wavy boundary. (1 to 3 inches thick.)
Bs	4-10in. (10-25cm.)	Strong brown (7.5YR 5/6) gravelly fine sandy loam; weak fine granular structure; friable, nonsticky, nonplastic; 20 percent rock fragments; extremely acid; clear wavy boundary. (0 to 8 inches thick.)
Bw1	10-16in. (25-41cm.)	Yellowish brown (10YR 5/4) gravelly fine sandy loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; 30 percent rock fragments; very strongly acid; gradual wavy boundary.

Table 6. A typical soil profile of the Wurtsboro Series (continued).

Bw2	16-24in. (41-61cm.)	Yellowish brown (10YR 5/4) gravelly fine sandy loam; moderate medium subangular blocky structure; friable, nonsticky, slightly plastic; common medium distinct grayish brown (10YR 5/2) areas of iron depletion and strong brown (7.5YR 5/6) masses of iron accumulation; 20 percent rock fragments; very strongly acid; clear wavy boundary. (The combined thickness of the Bw horizon is 8 to 20 inches thick.)
Bx1	24-46in. (61-117cm.)	Brown (7.5YR 4/4) gravelly fine sandy loam; moderate very coarse prismatic structure parting to moderate thin and medium platy; very firm, brittle, slightly sticky, slightly plastic; common distinct clay films in pores; common faint black coatings on faces of peds; common medium distinct grayish brown (10YR 5/2) areas of iron depletion on faces of prisms; 20 percent rock fragments; very strongly acid; gradual wavy boundary.
Bx2	46-67in. (117-170cm.)	Brown (10YR 4/3) gravelly loam; grayish brown; weak very coarse prismatic structure parting to moderate thick platy; very firm, brittle, slightly sticky, slightly plastic; common distinct clay films in pores; continuous grayish brown (10YR 5/2) areas of iron depletion on faces of prisms; common medium distinct grayish brown (10YR 5/2) areas of iron depletion and strong brown (7.5YR 5/6) masses of iron accumulation within prisms; 25 percent rock fragments; very strongly acid. (The combined thickness of the Bx horizon is 20 to 70 inches thick.)

The Mongaup series consists of moderately deep, well-drained soils formed in till derived from sandstone, siltstone and shale. They are nearly level through very steep soils on hillsides and hilltops in glaciated, bedrock controlled uplands. Depth to hard bedrock is 20 to 40 inches. Slope ranges from 0 to 70 percent. A typical soil profile of Mongaup gravelly loam is found below in table 7.

Table 7. A Typical soil profile of Mongaup gravelly loam.

Horizon	Depth	Description
A	0-3in. (0-8cm.)	Dark reddish brown (5YR 3/2), pinkish gray (5YR 6/2) dry, loam; weak fine granular structure; friable; many fine and medium roots; 10 percent rock fragments; very strongly acid; abrupt wavy boundary. (2 to 6 inches thick.)
Bw1	3-12in. (8-30cm.)	Yellowish red (5YR 5/6) gravelly loam; weak medium subangular blocky structure; friable; many fine and medium roots; few large roots; common fine and medium vesicular pores; a few medium tubular pores; 20 percent rock fragments; very strongly acid; clear wavy boundary.
Bw2	12-18in. (30-46cm.)	Strong brown (7.5YR 5/6) gravelly loam; weak medium subangular blocky structure; friable; common fine and medium roots; few large roots; common fine and medium vesicular pores, few medium tubular pores; 20 percent rock fragments; strongly acid; clear smooth boundary. (Combined thickness of the Bw horizons is 10 to 34 inches.)
BC	18-22in. (46-56cm.)	Brown (7.5YR 4/4) sandy loam; weak coarse subangular blocky structure; friable; many fine and medium vesicular pores, common tubular pores; 10 percent rock fragments; common coarse distinct pale brown (10YR 6/3) and prominent reddish yellow (7.5YR 6/8) masses of iron accumulation; strongly acid. (0 to 10 inches thick.)
2R	22in. (56cm.)	Massive, hard grayish brown sandstone bedrock.

The above soil profiles suggest that both historic and prehistoric resources may potentially be found in approximately the first 30-56 cm of soil overlaying parent material. The soil survey did not indicate the presence of any buried A horizons in the soil profiles within or adjacent to the current project. Testing should extend at least 20

cm (8 inches) below the Bw or Bg horizons. All resources are expected to be confined to the upper A and B-horizons.

This soil information is based upon documentary sources examined prior to the initiation of fieldwork. As a result, it may be necessary to modify the subsurface testing strategy in the field to meet unexpected soils, disturbances and other obstructions. The results of the subsurface testing and how they compare with the above soils information is discussed in the *Results* section of this report.

Current/Past Land Use

The additional project area has likely seen several past uses prior to the initiation of the proposed modified project. These changes reflect broader patterns of land use that developed historically through the Catskill high peaks. Logging has long been an important industry, and the remains of tree stumps and faint logging roads reflect this past land use. Past agricultural use is reflected by the presence of stone walls in the northern and eastern APE areas (Photos 33 and 92) as well a 19th century farm complex located directly north of the project boundaries (Photos 68-78). Finally, recreational land use is reflected by presence of an abandoned ski lift in the southern APE area (Photos 1-4). The current project is a continuation of this recreational land use. For more details regarding land use within the original Belleayre Resort at Catskill Park, refer to the previously mentioned archaeological reports prepared by Hartgen Archaeological Associates and Greenhouse Consultants, Incorporated.

Disturbance

Most of the additional project area appears relatively undisturbed, although isolated pockets of mechanized ground disturbance were noted in the northern and southern APE areas, reflecting testing (Photos 17 and 18). These areas are relatively small, measuring approximately 10 x 10 ft (3 x 3 m), and could easily be avoided by shifting the location of STPs that fall into these areas to avoid the disturbances.

Despite these minor disturbances, the vast majority of the project area appears relatively undisturbed. Because intact stratigraphy can sometimes be found in areas which might appear disturbed on the surface, the subsurface testing strategy should remain constant through the project area to endure for adequate testing of all potentially cultural bearing strata.

Previous Surveys

Five cultural resource surveys have been conducted within one mile of the project area (Table 8). The first survey listed was a Phase IA/IB survey completed by Joseph Sopko in 1991 as part of highway project PIN 8018.27.107/BIN 1-01973-0, on Academy Street in the Village of Pine Hill, NY. Dean and Barbour Associates, Incorporated as part of the Pine Hill Sewage Disposal Facility project Ulster County conducted the second survey in 1995. Three surveys were performed for the Belleayre Resort at Catskill Park as

originally planned. First, Hartgen Archaeological Associates performed a Phase IA Literature Review and Archaeological Sensitivity Assessment in 2000, which was followed by a Stage IB Cultural Resources Survey performed by Greenhouse Consultants Incorporated. Hartgen Archaeological Associates then reviewed the report prepared by Greenhouse Consultants, and ultimately completed a Phase IB Field Reconnaissance for the Usher Road Parking Lot. No prehistoric or historic archaeological sites were identified by any of these surveys.

Table 8. Previous cultural resource surveys within one mile of the project area.

Project Name	Reference	No. of Sites Identified
PIN 8018.27.107/BIN 1-01973-0	(Sopko 1991)	0
Pine Hill Sewage Disposal Facility	(Dean and Barbour 1995)	0
Phase IA Belleayre Resort at Catskill Park	(Hartgen Archaeological Associates 2000)	0
Stage IB Belleayre Resort at Catskill Park	(Greenhouse Consultants, Inc 2001)	0
Phase IB Belleayre Resort at Catskill Park, Usher Road Parking Lot	(Hartgen Archaeological Associates 2002)	0

Prehistoric Overview

Glaciers covered much of central and southern New York during the Wisconsin glaciation, which ended about 12,000 years ago. People may have begun occupying the area soon after the glaciers retreated. These Paleoindians were organized in highly mobile bands adapted to the tundra and boreal forest environments present at the end of the Pleistocene. While archaeologists have traditionally emphasized the hunting of large megafauna such as mammoth and bison, there is increasing evidence that Paleoindians exploited a diverse array of small game and wild plants. Ritchie (1994: 4–5) notes several fluted point finds indicative of Paleoindian occupation along the western banks of the Hudson River in Ulster County. In addition to large fluted points commonly thought to be used in hunting large game, unfluted lanceolate points became more common in the latter part of the Paleoindian Period.

Around 7000 B.C., stands of Spruce and Fir rapidly gave way to a denser forest of Pine and deciduous trees, with Oak becoming a dominant species (Salwen 1975). This drier climate supported less game and provided fewer plant resources for human populations. As a result, few sites dating from this Early and Middle Archaic period have been discovered in the region (Funk 1991). Those few sites that have been found dating to this period are often found near water sources and suggest that people lived in small mobile bands and subsisted on gathered and hunted wild resources.

Beginning around 6500 B.C., the climate became increasingly wetter, resulting in an environment similar to ours today (Salwen 1975). The large number of sites from this period suggests that Late Archaic populations increased significantly at this time. While

people continued to live in small, mobile bands, there was an increasing trend toward sedentism. Subsistence practices were highly diverse and included a wide variety of aquatic and terrestrial resources. Late Archaic sites range from small upland camps to large villages near the confluences of major streams.

The Transitional Period (ca. 1300-1000 B.C.) is characterized by the use of steatite vessels and smoking pipes, which gradually give way to large, thick pottery vessels. This period is very much a continuation of Late Archaic life ways, with increasing sedentism and reliance on plant resources. The Woodland Period begins about 1000 B.C. and is marked by the introduction of pottery and the development of an elaborate trade and ceremonial complex. It is during this time that people gradually began to cultivate plants.

The Late Woodland Period began around A.D. 1000 and is differentiated from its predecessor primarily on the basis of projectile point types, pottery styles and diet (Funk 1976). Hoe cultivation also appears during Late Woodland times. Diet was largely made up of cultigens (corn, beans and squash) and game supplemented by fishing and the gathering of aquatic and terrestrial resources. Large, permanent village sites occur along major rivers as well as defensive locations (Ritchie 1994). Small, ephemeral sites also occur, probably used as camps for resource extraction. These smaller sites are located in a wide variety of geographic contexts, ranging from wetlands and backwater drainages to forested uplands. After about A.D. 1400, two distinct cultures emerge in the Hudson River Valley: Proto-Munsee speakers along the western banks of the river and ancestral Wappinger populations located east of the Hudson in Dutchess and Westchester counties (Ritchie and Funk 1973). In historic times, the Esopus tribe, an Algonkian speaking people that occupied the western banks of the Hudson including the area around Saugerties, occupied the area around Ulster County in the vicinity of Kingston.

Known Prehistoric Sites

A check of site files of the Office of Parks, Recreation, and Historic Preservation and the New York State Museum indicated that no prehistoric sites are known within one mile of the current project area.

Historic Overview

The current project area lies within Ulster and Delaware Counties, in the Towns of Shandaken and Middletown, NY. Lands comprising Ulster County were first settled at Rondout in 1614 by Dutch pioneers; however settlement did not begin to increase until the mid 1600s. The County was officially formed in 1683, spanning from the Hudson River in the east to the Delaware River in the west, with the southern border comprised of Murders Creek and the northern border drawn along Sawyer's Creek. The Catskill Mountains and the Shawangunk Mountains cross the county, with rolling hillsides and waterways covering the county. In 1658, a proposition to purchase these lands from the Esopus Indians was made by General Stuyvesant. Rather than sell the territory, the

Esopus gave the lands to be settled in an apparent effort to display amicability, although suspicion and mistrust remained for all involved. At one time it was set in law that the Indians were not to be permitted alcohol near any settlements since it had an undesirable affect on relations. In the late 1660s, settlement in the region began to grow. The earliest recorded exploration of Delaware County was conducted by the Dutchman Kleytjen who prior to 1616, moved inland from the Dutch settlement at Fort Nassau (near Albany), to trade with the Mahicans living to the west (Westlanger 1961:112-113). In 1740, Arent Brant received a grant of land along both sides of the west branch of the Delaware River. Delaware County consists of lands ceded by the Iroquois Six Nations in 1768 (Gould 1856:6–10). Richard Smith's account of his travels through the Hudson, Mohawk, Susquehanna and Delaware Valleys illustrates that the Delaware County area was sparsely populated in the 18th Century (Beauregard 1984:14). Delaware County was formed from part of Albany County in 1797 (Gould 1856:210). Leading up to the Revolution, there were few permanent settlements in this portion of the county.

The Town of Shandaken was formed from the Town of Woodstock in 1804; a full eight years following a unanimous vote to further divide the town. The town's name refers to the numerous streams flowing through the gorges and ravines prominent in the vicinity, with the local Native American peoples calling the area the land of rapid waters (Griffeth 1804). The Esopus Creek flows through the Shandaken Valley traveling to the Hudson River in Saugerties, exemplifying the waters referred to (Child 1871). A variety of wildlife and natural resources occupied the land, providing ample opportunity for exploitation. However, the entire vicinity was extremely dense forest at the time of its earliest settlement. This added to the hostility of the Esopus Indians, lead to slow population growth and development in the area. Shandaken is comprised of lands originally inclusive of Woodstock, Shandaken, and Denning, as well as a large part of Hardenburgh and a smaller section of the Town of Olive. In 1779, a fort large enough to hold two hundred troops was built in Shandaken at the order of General Clinton, having been intended to provide protection from conflict with local Indians and soldiers.

Aaron Adams built his home Pine Hill, just before the turn of the 19th Century, and later (in 1810) became the Town of Shandaken supervisor. Around the same time he became supervisor, Adams built a framed hotel/tavern that he kept in operation until 1816 when he moved to Rochester with his family. This lathe and plaster structure was the first of its kind in town, with log structures prevailing as typical in areas newly settled. Peter Crispell erected a stone house in town just before 1800, also the first of its kind in town. A store was opened in the Phoenicia area in 1826 (Griffeth 1804), and in 1874, early businesswoman Mabala Floyd, had The Glen Hall Hotel built. In 1831 Augustus A. Guigou, a French immigrant, built the first tannery in town on Birch Creek. Over the early part of the 19th Century, many more tanneries sprung up along the Esopus, fueled by the plethora of trees available. Most if not all of these tanneries have long since disappeared.

In 1789 the Town of Middletown was formed, initially encompassing what is now Ulster County, just west of the Delaware River (Munsell 1880). Now part of Delaware County, Middletown was much the same as Shandaken in its early days. The thick foresting of

the region as well as the hostile local native inhabitants made for the slow settling of the general area. Following the Revolutionary and French and Indian Wars, settlement in what is now the Middletown area began to increase as soldiers retiring from the war efforts began settling and bringing their families together. One of these was Colonel John Grant, who built a house in Middletown in 1791 (Munsell). Colonel Grant's house later served as the town's post office. In 1807 a gristmill was built. Benjamin Akerly built the first sawmill in town around the same time, which later became a store operated by Abel Sands. In addition to these operations, a tannery and more gristmills were opened. One particular mill of interesting note was known as Wench Mill, which employed female slaves who provided power for the mill's operation.

Other early industry in these two towns included farming, lumbering, quarrying bluestone and tourism. At one time there was a chair factory and a general furniture manufacturing facility in Shandaken. Tourism remains a draw to the area with both summer and winter recreational activities available to a broad spectrum of visitors.

Known Historic Sites and Structures

A check of site files of the Office of Parks, Recreation, and Historic Preservation and the New York State Museum indicated that thirteen historic archaeological sites are known within one mile of the project area (Table 9). The first of these sites, The Van Loan Road Cellar Hole Site (A11116.000080), was identified as a collection of metal buckets and pails during a surface inspection performed for the proposed Belleayre Resort at Catskill Park in 2000. The remaining sites were also located during this Phase IB survey (a Phase IA was performed in 2000 by Hartgen Archaeological Associates). A Dump Site (A1116.000081) was identified adjacent to cabin ruins (site number A02514.000095), with a large amount of 20th Century material evidenced. Site number A11116.000082, the late 18th-early 19th Century Leach Farmstead, includes many outbuildings in addition to the framed farmhouse itself, for example, a maple syrup house, a springhouse, and a chicken coop. Sixteen STPs were excavated at this site, with a Starlite refrigerator, paint cans, tar cans, and various bottles, including milk bottles, recovered. The next site, the P. Robison site is a 19th century site with a dry laid stone cellar apparent, as well as a cistern, a barn with a stone and earth bank foundation, and the ruins of a pole barn. Two springhouse ruins sites (A11116.000084 and A11116.000085) were also identified, although no shovel testing was performed at either. One springhouse has an entirely stone foundation (A11116.000085), while the other has a combined dry laid stone and poured concrete foundation. Neither of these sites have any cultural materials recorded, while the Leach Rockshelter site (A11116.000088), yielded a fragment of Ironstone. Next is the 3 Cabin Ruins Site (A02514.000095), at which the remains of three dry laid stone foundations were recorded. Five STPs were excavated at this site, with 20th Century hotelware, tin cans, twist top bottles, cut and wire nails, mortar, bone, ironstone and slat glazed stoneware recovered. The Monroe House Site (A02514.000098) is comprised of a 19th Century cement blockhouse with concrete foundation, a coach house with a stone foundation, a stone icehouse and a greenhouse. Although no STPs were performed at this site, a refrigerator, a "Quaker" stove (in the greenhouse), and a stone stockpile were noted. The Wildacres Reservoir 1 Site (A02514.000098) was located on a

steep slope near extant railroad beds, and is remembered by local museum staff member Mabel West. Site number A02514.000099, the Ruttson Greene Site, was recorded as a standing frame house with a stone foundation and sidewalk that bears the date 1904. A framed barn with a stone foundation and a mason's storage area and well were also noted. Shovel testing performed recovered cut and wire nails, a 1981-penny, screw top bottles, cans, and 1950s ironstone. The final listed historic site is the Hiram Robinson Site (A02514.000100), a late 19th Century farmstead, a framed and stone-founded domicile with two framed outbuildings, a stone well and a galvanized windmill.

A survey of the State Historic Preservation Information Exchange system (SPHINX) and the National Register Information System (NRIS) revealed that there are five listed National Register properties within one mile of the project area. The Morton Memorial Library (97NR01156) was built in 1903 with funds provided by William S. Morton, and is a 1½ story Georgian Revival style structure with a hipped slate roof. The roofline has a denticulated cornice, and broad frieze as well as gabled dormers. Next is District School Number 14 (97NR01152). The early 20th Century Schoolhouse was erected in 1924, opening in 1925 and continued to be used until 1960. This two story building exhibits both Colonial Revival and Craftsmen styles in its exposed rafter ends, six over one sashes, a central belfry, and a hipped roof. Both the Morton Memorial Library and the District School Number 14 lie in the Hamlet of Pine Hill. The Skene Memorial Library (01NR01776) is in the Village of Fleishmanns, Delaware County, New York. The late Victorian Era library has a stone foundation and consists of a single story. The façade has an engaged octagonal tower just off center, and a broad gable roofed porch. Doric posts support the entrance, which also has a wide frieze with triglyph and dentil moldings. The porch has wrought iron railings and a decorative balustrade. The Skene Library was built in 1901 by Crosby and Kelly, being named in memory of Dr. Alexander Skene. The Bnai Israel Synagogue (02NR04909) is also in the village of Fleishmanns, and is a distinctive example of a 20th Century synagogue, having been founded in 1918 by farmers, merchants and resort owners, serving both local and summer residents. The structure utilizes classical and gothic motifs, as well as geometric colored glass windows. It has a broad overhanging gable roof with brackets, pilasters and lancet arched windows. The Synagogue's most unusual feature is its exposed wooden truss framing. The last remaining national register listed property within a mile of the current project area is the Ulster House Hotel (02NR04925). The three story Italianate hotel was constructed in 1882 in the locally popular style. This hotel was one of fourteen hotels in Pine Hill in its day, playing a part in the growth of tourism in the Catskill region.

In addition, a review of historic maps available provides documentation of structures previously located in the vicinity of this additional project area. The 1854 Tillson and Bink map (Figure 11), the 1858 French map (Figure 12), the 1869 and 1875 Beers Atlas' (Figures 13 and 14), and the 1904 Margaretville and 1904 Phoenicia USGS topographic maps demonstrate a variety of structures over time including residences, and mills in the immediate vicinity, and a chair factory, school and the Highmount Grand Hotel further east of the current impact boundary.

Table 9. Previously identified historic sites and National Register listed properties within one mile of project area.

Site Number	Cultural Affiliation	Status	Site Name	Distance	Reference
A1111.000080	19th C.	I	Van Loan Road Cellar Hole	Onsite @ Gunnison Road/NYS Rte. 28	(OPRHP files)
A1111.000081	20th C.	I	Dump	Onsite @ Gunnison Road/NYS Rte. 28	(OPRHP files)
A1111.000082	19th C.	I	Leach Farmstead	Onsite @Highmount Ski Entrance	(OPRHP files)
A1111.000083	19th C.	I	P. Robison Site	Onsite @Highmount Ski Entrance	(OPRHP files)
A1111.000084	No info	I	Springhouse Ruin 1	Onsite @Highmount Ski Entrance	(OPRHP files)
A1111.000085	No info	I	Springhouse Ruin 2	Onsite @Highmount Ski Entrance	(OPRHP files)
A1111.000088	No Info	I	Leach Rockshelter	Onsite @Highmount Ski Entrance	(OPRHP files)
A02514.000095	19th C.	I	3 Cabin ruins site	Onsite near Gunnison & Kraft Road	(OPRHP files)
A02514.000096	19th C.	I	Monroe House Site	Onsite near Gunnison & Kraft Road	(OPRHP files)
A02514.000098	No info	I	Wildacres Reservoir 1 Site	Onsite near Gunnison & Kraft Road	(OPRHP files)
A02514.000099	20th C.	I	Ruttson Greene Site	Onsite near Gunnison & Kraft Road	(OPRHP files)
A02514.000100	19th C.	I	Hiram Robinson Site	Onsite near Gunnison & Kraft Road	(OPRHP files)
97NR01152	19th C.	L	District School Number 14	5,074 feet southeast	(SPHINX)
97NR01156	20th C.	L	Morton Memorial Library	5,209 feet southeast	(SPHINX)
01NR01776	20th C.	L	Skene Memorial Library	3,011 feet north	(SPHINX)
02NR04909	20th C.	L	Bnai Israel Synagogue	3,236 feet north	(SPHINX)
02NR04925	19th C.	L	Ulster House Hotel	5,056 feet southeast	(SPHINX)

Assessment of Sensitivity for Cultural Resources

An assessment of whether significant cultural resources are likely to be present within a project area must consider what is known of the prehistory of the area, including likely locations of archaeological sites and proximity to known sites; and the history of the immediate area, including whether any historic structures or features are known to exist within the project boundaries. An assessment must also consider that if cultural resources *are* located on a parcel, will they likely retain *integrity* (without which they would not be considered significant). Modifications to the land may serve to destroy all or portions of any cultural deposits that may exist.

Prehistoric Sensitivity

There are no listed prehistoric archaeological sites within one mile of the project area, although this is likely a result of the fewer number of surveys performed in the immediate area. Due to these factors the area is considered moderately sensitive for prehistoric remains.

Historic Sensitivity

Twelve historic archaeological sites and five National Register listed properties have been identified within one mile of the project area, attesting to the vicinity's participation and importance in the growth and history of the Catskills, in particular that of the tourist industry. Due to these factors, any undisturbed areas of the project would be considered highly sensitive for historic remains.

Part II: Field Assessment

Field investigations were conducted to identify any historic or prehistoric cultural resources that may be impacted by the proposed modified project. The initial Phase IB fieldwork was conducted from June 5th through the 23rd of 2008 and was supervised by David Moyer, RPA. Royce Duda, Brian Broad Rose, Nick Ulfik and Doug Idleman all assisted in the subsurface investigations. The weather ranged from warm and humid to windy and cool with high temperatures ranging between 50-75 degrees. No adjacent landowners or employee of the DEC ski area we spoke with were aware of any historic or prehistoric resources within the APE boundaries. Photographs were taken of the project area, adjacent visible structures, and areas of disturbance (Appendix B).

Methodology

Field Walkover and Surface Collection

The project area was subjected to a pedestrian walkover of all areas of proposed ground disturbance prior to the initiation of subsurface testing. The project is located on the north and south sides of New York State Route 49A, south of New York State Route 28 in the Towns of Shandaken and Middletown, in Ulster County, New York (Figure 1). The current proposed modified project involves the creation of two recreational resort developments impacting approximately 76.0 additional acres, thirty-one of which were surveyed as part of this undertaking. The remaining additional acreage lies on sloped grounds that will not be impacted by any proposed construction activities. This additional area of potential effects (APE) includes the listed acreage described, which will be impacted to a depth in excess of 5 ft (1.5 m) below the ground surface in the installation of related utilities. Ground visibility was poor throughout most of the project area due to leaf litter and fallen pine needles (Photos 1-94).

Subsurface Testing

Standard shovel test pits (STPs) were used to test for buried cultural deposits. STPs are small (about 40 cm or 16 inch diameter) holes excavated with a shovel; sediments are screened through ¼ inch mesh to look for artifacts. STPs are excavated in natural soil layers, as much as possible, and are dug through the topsoil to at least 20 cm (~ 8 inches) into culturally sterile subsoil.

STPs were placed using a compass and tape at 15 m (49.2 foot) intervals to form a uniform grid over all additional areas of proposed ground disturbance. When an STP was placed in an area that was obviously disturbed (e.g., in a ditch along side the road), an attempt was made to move the shovel test beyond the area of disturbance, to a maximum distance of 3 meters from its original location. A list of the STPs and their soil profiles is provided in Appendix C. Appendix D contains the Artifact Catalog. Artifacts recovered consisted of modern refuse and isolated historic artifacts not associated with archaeological sites and were noted and reburied in the field. Excavation of STPs was

halted 20 cm (8 in.) into culturally sterile subsoil unless noted in the STP records (Appendix C).

Results

Surface Inspection

The additional area of potential effects (APE) was first subjected to a pedestrian walkover of all of all areas of proposed ground disturbance. The project is located on the north and south sides of New York State Route 49A, south of New York State Route 28 in the Towns of Shandaken and Middletown, on the line of Ulster and Delaware Counties, New York (Figures 1-7; Photos 1–95). The project involves the creation of two recreational resort developments impacting approximately 76.0 additional acres, thirty-one of which were surveyed as part of this undertaking. The remaining additional acreage lies on sloped grounds that will not be impacted by any proposed construction activities. The area of potential effects (APE) includes the listed acreage described, which will be impacted to a depth in excess of 5 ft (1.5 m) below the ground surface in the installation of related utilities.

The southern APE area is situated near the western end of Belleayre Mountain at the top of the old Highmount Ski Area, including an existing ski lift (Figure 3; Photos 1-6). The ski lift still stands abandoned at the southern end of the project (Photo 4). The southeastern corner of the project affords a wide view to the north (Photo 7). Outside of the clearing, vegetation consisted of brush under tree growth (Photos 8-16). While rock outcroppings were common along the top of the mountain, the southern APE area was relatively level. Isolated areas of mechanized soil disturbance were encountered in the southern APE area, reflecting previous soil testing (Photos 17 and 18). A roadway of bedrock and sparse grass occurs along the eastern edge of the southern APE (Photos 18 and 20). A cellular communications tower is partially visible to the north of the southern APE area on an adjacent parcel (Photo 21).

The northern APE is occurs just north of the southern APE area. The southern and central parts of the northern APE area were steeply sloped, with occasional level benches where subsurface testing was conducted (Figures 4 and 5). These benches ranged in size from small areas created by tree throws to large terraces capable of supporting camps or other prehistoric sites. The first bench encountered was located at the southern boundary of the APE are boundary (Photos 22-26). A second sizable bench was encountered further north (Photos 27-32). Vegetation in the northern APE area largely consisted of pines, maples and birch trees with little undergrowth. A third bench was encountered to the north further down the slope (Photos 34-43). This bench was quite large measuring approximately 200 ft wide and almost 1,250 ft in length (Figure 5). A stonewall borders the edge of this bench, reflecting past agricultural use (Photo 33).

A fourth bench occurs further south along steep slope (Photos 44-49 and 52-57). This bench was quite wide in the central part of the APE, but tapered toward the west. An old roadway extends along the length of this bench near the edge of the slope (Photos 48 and 50). A modern residence is partially visible from the western end of the bench (Photo 51). This structure will not be directly impacted by the proposed construction.

The slope ends in an open field at the northern end of the northern APE area (Photos 58-60 and 62-63). This area appears rocky but relatively level. Deer and other wildlife occur in the vicinity (Photo 61). A small springhouse occurs at the southern edge of the open field at the base of the slope (Photo 64). This springhouse appeared to still be functioning, as it appeared by at full capacity (Photo 65).

A dirt access road currently provides access to this open field in the northern APE area (Photos 66 and 67). A historic farm complex is visible on the north side of the road opposite the northern boundary of the APE (Photo 68). This farm complex includes a house (Photos 68, 69, 71 and 78), a small dairy barn (Photos 70, 76 and 77), an icehouse (Photos 72 and 73), a poultry house (Photo 74), and a collapsed shed or other outbuilding (Photo 75). This complex is documented in the Phase IA Review performed by Hartgen Archaeological Associates in 2000; please refer to this report on file at the NYSOPRHP for further details. A sign for the proposed development is located near where the new entrance will be constructed (Photo 79).

The eastern APE area is located on the north side of County Route 49A opposite the entrance to the Belleayre Ski Area (Figure 7). No structures are readily visible from the roadway (Photos 80-85). Vegetation within the project boundaries was wooded, with pines, birch and hemlocks dominant (Photos 86-91 and 93-94). Surface visibility was poor due to fallen leaves and pine litter. A stonewall bisects the project area along a roughly north/south axis (Photo 92). No evidence of ground disturbance was readily noted in the eastern APE area.

Structures

Two structures occur within the project boundaries. The first structure is the abandoned ski lift located in the southeastern corner of the southern APE area (Photos 1-4). This structure will be removed to make room for new development. The second structure is a small springhouse located at the northern end of the northern APE area at the edge of a steep slope (Photo 64). This structure appears to still be active and was holding water at full capacity at the time of our investigations in June (Photo 65). The walls and foundation of the springhouse are made of concrete blocks and likely date to the early 20th century.

In addition to the structures located within the APE boundaries, other structures are visible on adjacent parcels. A recent residence is partially visible from the western boundary of the northern APE area (Photo 51). This structure will not be directly impacted by the proposed construction. In addition, a farm complex occurs on the north side of NYS Route 49A just opposite the northern tip of the northern APE area. Buildings associated with the complex include a house (Photos 68, 69, 71 and 78), a small diary barn (Photos 70, 76 and 77), an icehouse (Photos 72 and 73), a partially collapsed poultry house (Photo 74), and a collapsed shed or other outbuilding (Photo 75). Most of the buildings appear greater than 50 years old. This farmstead is located outside of the current additional APE boundaries.

Visual Impacts

The project area is located on both sides of New York State Route 49A, south of New York State Route 28 on the line of Ulster and Delaware Counties (Figure 1; Photos 1-94). The project involves the creation of a resort complex including hotels, a golf course, and a spa. Visually, the southern APE affords a fine view to the north (Photos 1-7). While five NRHP listed properties within a mile of the proposed developments, all of these structures occur in the village of Fleishmanns and Pine Hill and are not readily visible from the project boundaries. The proposed project is visually in keeping with the past land use on the property, since the abandoned ski lifts of the former Highmount ski area are still standing at the southern APE area (Photo 4).

Subsurface Examinations

Subsurface testing was conducted in all areas of proposed ground disturbance. Thirty-one acres of the larger 76.0 acre additional project site was surveyed as part of this archaeological undertaking. The additional project area was divided into three separate APEs according to each section's position in relevance to the Wildacres Resort and Highmount Spa Resort Project plans. Following this division, each APE was subjected to subsurface testing. In total, 1,019 STPs were placed at 15 m (49.2 foot) intervals along transects spaced 15 m (49.2 ft) apart over the entire additional area of proposed ground disturbance for the proposed resorts. Each STP was labeled according to transect, with numerical labels used to further designate individual holes. 24 STPs (3.5%) could not be excavated for a variety of reasons including the presence of a ski lift, exposed bedrock and tree stumps, and twelve STPs were relocated due to stone walls, bedrock, trees and a testpit.

Of the 995 STPs excavated, fourteen (1.4%) identified cultural material including porcelain, glass, metal, and whiteware. These artifacts appeared scattered over a wide area, and do not appear to constitute archaeological sites. Two STPs (K-4 and K-5) recovered glass and fragments of thick restaurant-style porcelain along the roadway. Six of the STPs contained varying amounts of charcoal, although none appeared to have any evidence of prehistoric activity. Charcoal was noted in both STPs KK-2 and KK-3, although the presence of modern beer bottle glass in STP KK-3 suggests a relatively recent date for the burning. No prehistoric materials were recovered, and no archaeological sites were identified.

STPs ranged in depth from 13-65 cm (5.1 to 25.6 in) below the ground surface, with an average STP depth of 47.8 cm (19.2 in), and the shallowest STP depth a result of impassable bedrock, which presented an issue throughout the project's excavation. 10 STPs were prevented from deeper excavation by large root networks, A total of 256 STPs were prevented from deeper excavation as a result of impassable bedrock, prevalent in many areas, at depths ranging from 30-62 cm (22- 24 in) below ground surface, while eleven were stopped by thick root networks. Overall, soils largely conformed to the soil profiles examined prior to fieldwork, with reddish brown and yellow brown loamy soils noted in the majority of STPs, while fewer STPs noted grey brown sandy loams (most noted in the flat open clearing in the northern part of the northern APE area (Figure 6).

Soils appeared to follow a natural stratigraphic progression with isolated evidence of ground disturbance in the vicinity of STPs DD-9, RR-6, and XX-19 where backhoe disturbance was noted, and near STP DDD-1, where a perc test caused the STP's location to be adjusted.

Part III: Summary and Recommendations

A Phase IA/IB Cultural Resources Survey has been completed for the additional lands that are part of the Modified Belleayre Resort at Catskill Park Project, comprised of the Wildacres Resort and the Highmount Spa Resort, located in the Towns of Shandaken and Middletown, Ulster and Delaware Counties, New York. The current proposed project involves the creation of two recreational resort developments impacting approximately 76.0 additional acres, thirty-one of which were surveyed as part of this undertaking. The remaining additional acreage lies on sloped grounds that will not be impacted by any proposed construction activities. The area of potential effects (APE) includes the listed acreage described, which will be impacted to a depth in excess of 5 ft (1.5 m) below the ground surface in the installation of related utilities.

The Phase IA review indicated that there are no listed prehistoric archaeological sites within one mile of the project area, although this is likely a result of the fewer number of surveys performed in the immediate area. Due to these factors the area is considered moderately sensitive for prehistoric remains. This review also found twelve historic archaeological sites and five National Register listed properties have been identified within one mile of the project area, attesting to the vicinity's participation and importance in the growth and history of the Catskills, in particular that of the tourist industry. Due to these factors, any undisturbed areas of the project would be considered highly sensitive for historic remains.

A Phase IB field examination was conducted to test for cultural deposits that may be impacted by the proposed project. Thirty-one acres of the larger 76.0 acre additional project site were surveyed as part of this archaeological undertaking. The additional project area was divided into three separate APEs according to each section's position in relevance to the modified Belleayre Resort at Catskill Park Project plans. Following this division, each APE was subjected to subsurface testing. In total, 1,019 STPs were placed at 15 m (49.2 foot) intervals along transects spaced 15m (49.2 ft) apart over the entire area of proposed ground disturbance for the proposed resorts. 24 STPs (3.5%) could not be excavated for a variety of reasons including the presence of a ski lift, exposed bedrock and tree stumps, and twelve STPs were relocated due to stone walls, bedrock, trees and a perc test. Of the 995 STPs excavated, fourteen (1.4%) identified cultural material including porcelain, glass, metal, and whiteware. Six of the STPs contained varying amounts of charcoal, although none appeared part culturally related. No prehistoric materials were recovered, and no archaeological sites were identified.

Based on the results of this survey, we recommend that the project be allowed to proceed. These recommendations are subject to the review and concurrence of the New York State Office of Parks, Recreation, and Historic Preservation.

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Appendix A.

Figures

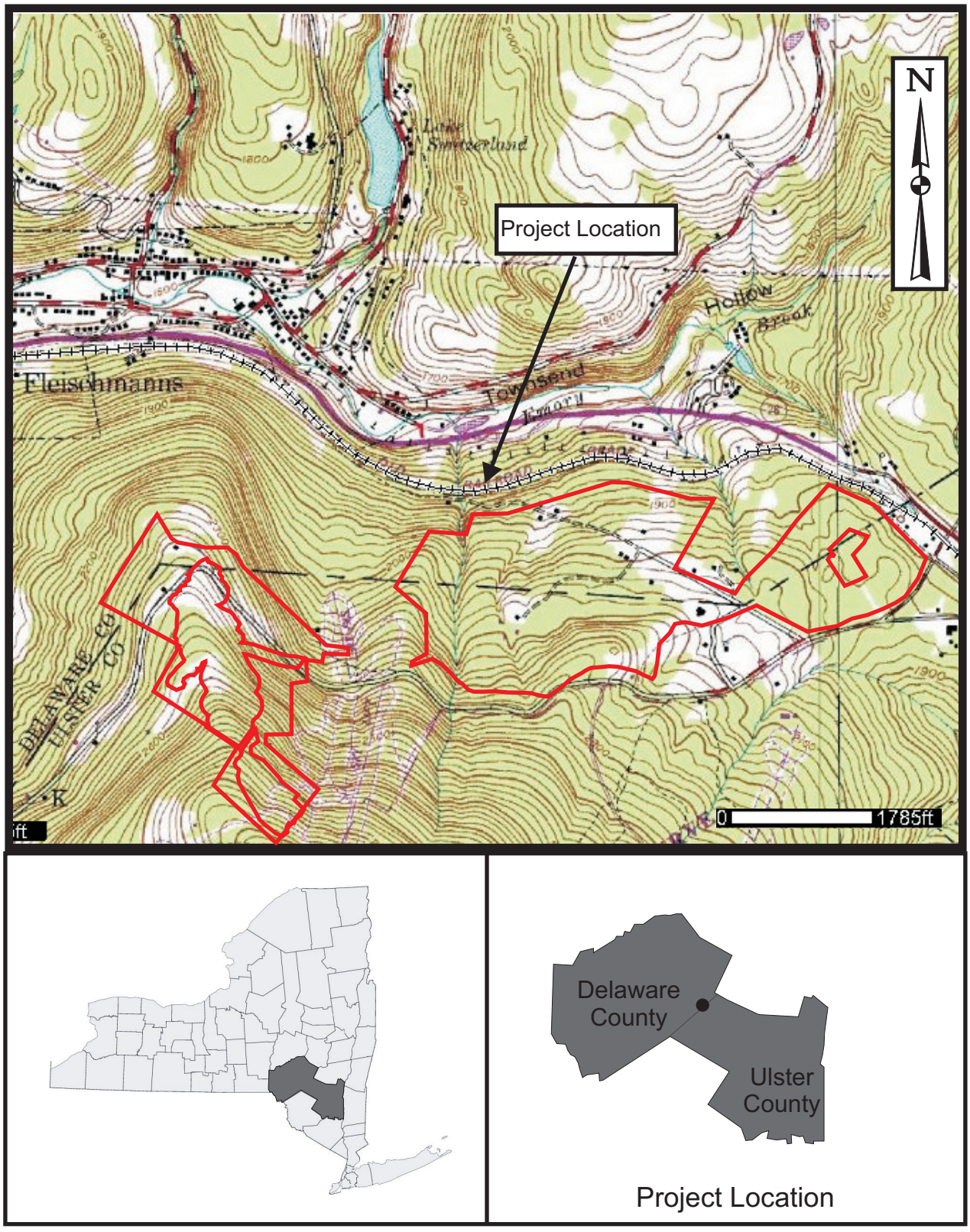

Figure 1. Map showing the location of the additional project area on Fleishmanns 7.5 minute USGS Topographic map.

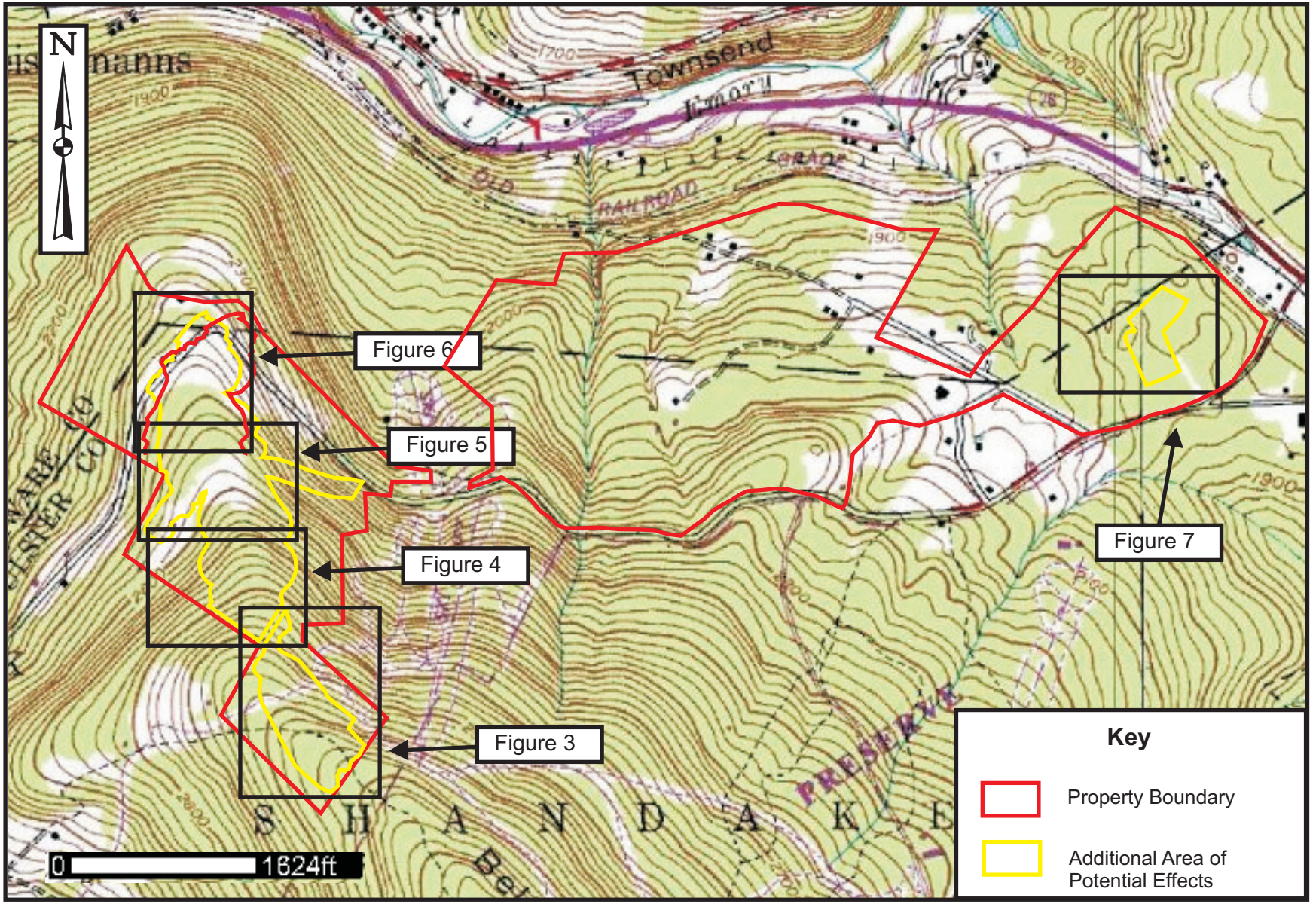

Figure 2. Map showing the location of Figures 3 through 7 on Fleischmanns USGS topographic map.

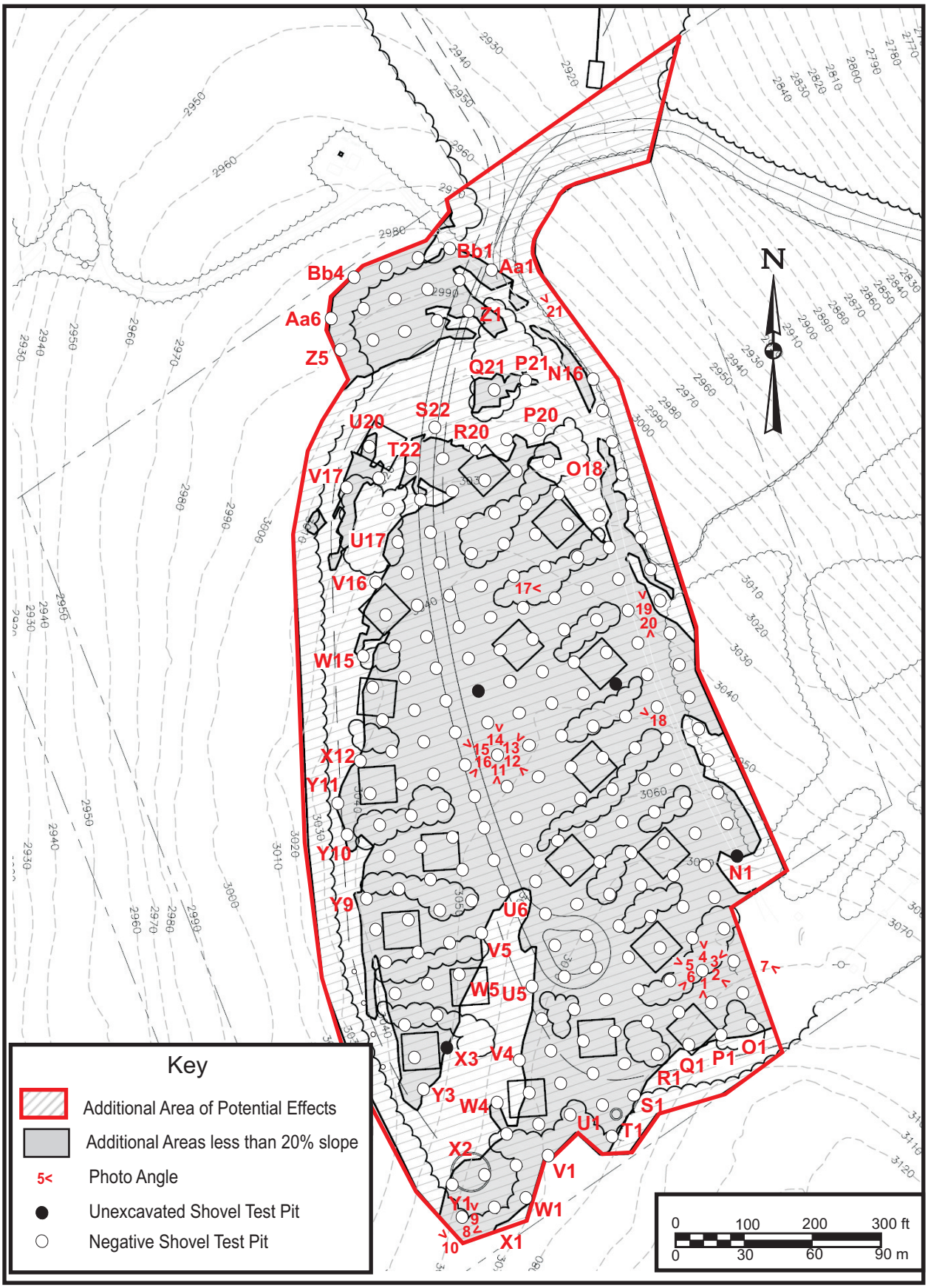

Figure 3. Map showing the location of subsurface testing at the southern additional APE area.

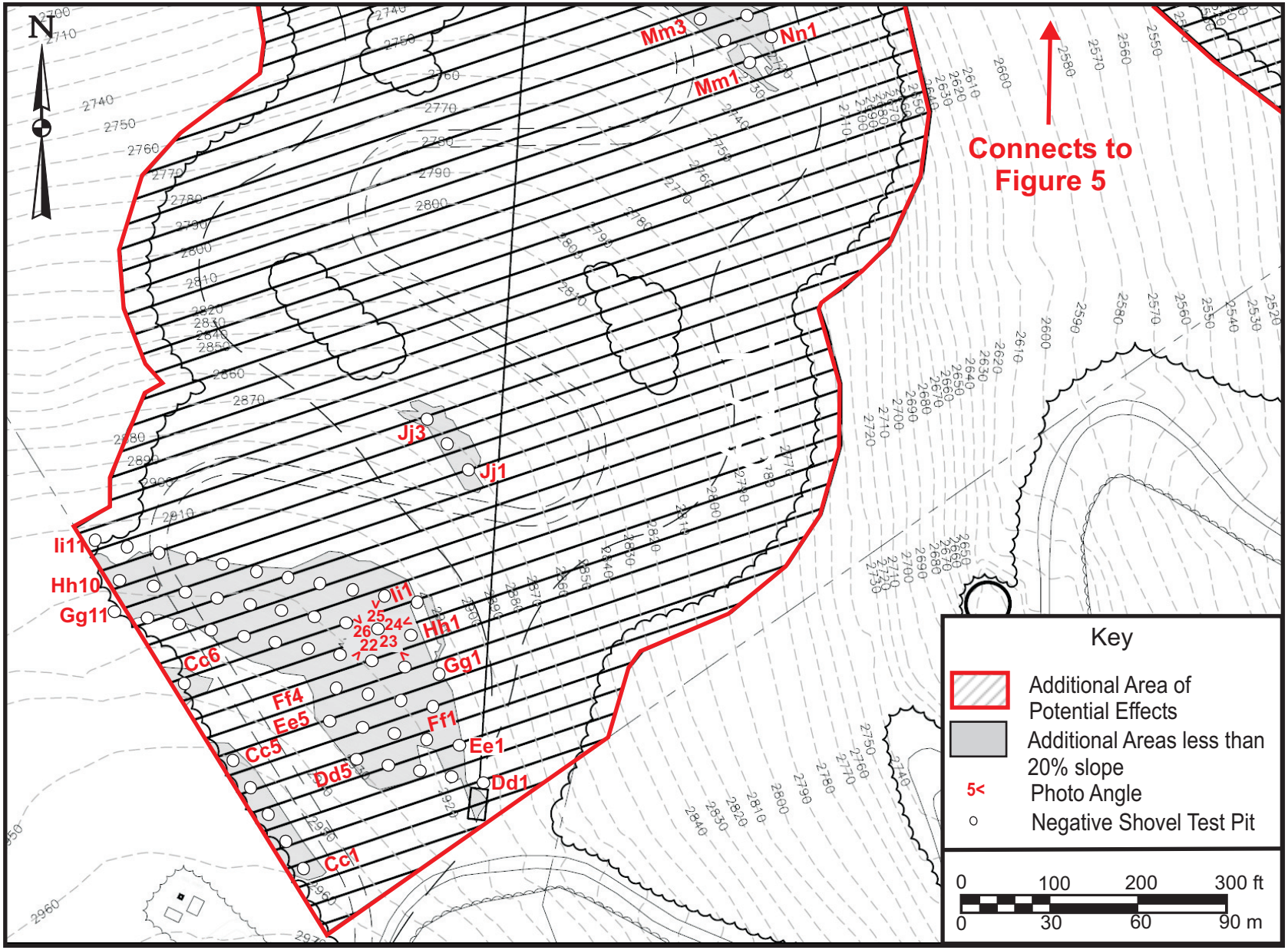

Figure 4. Map showing the location of subsurface testing in the southern part of the northern additional APE area.

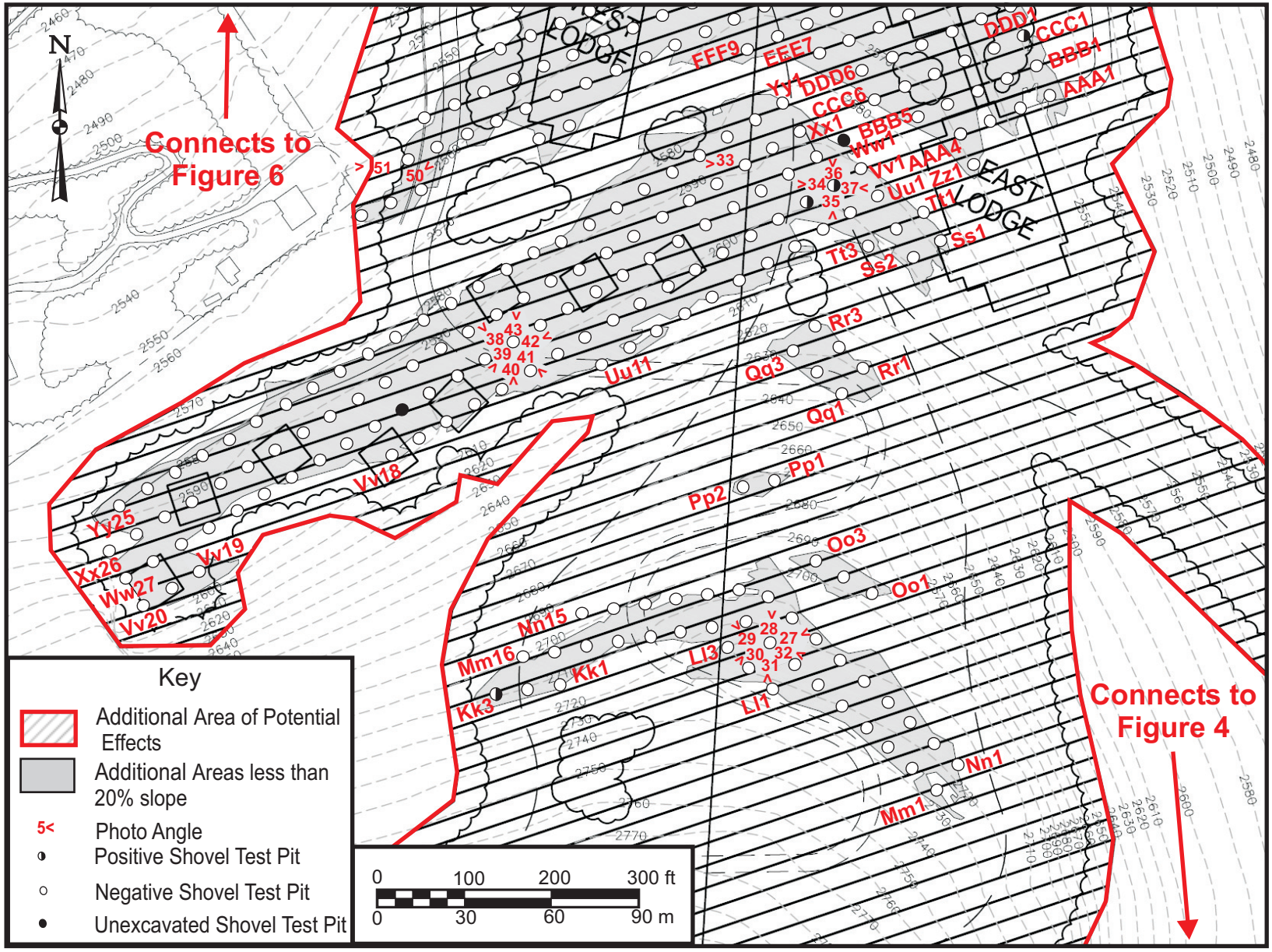

Figure 5. Map showing the location of subsurface testing in the central part of the northern additional APE area.

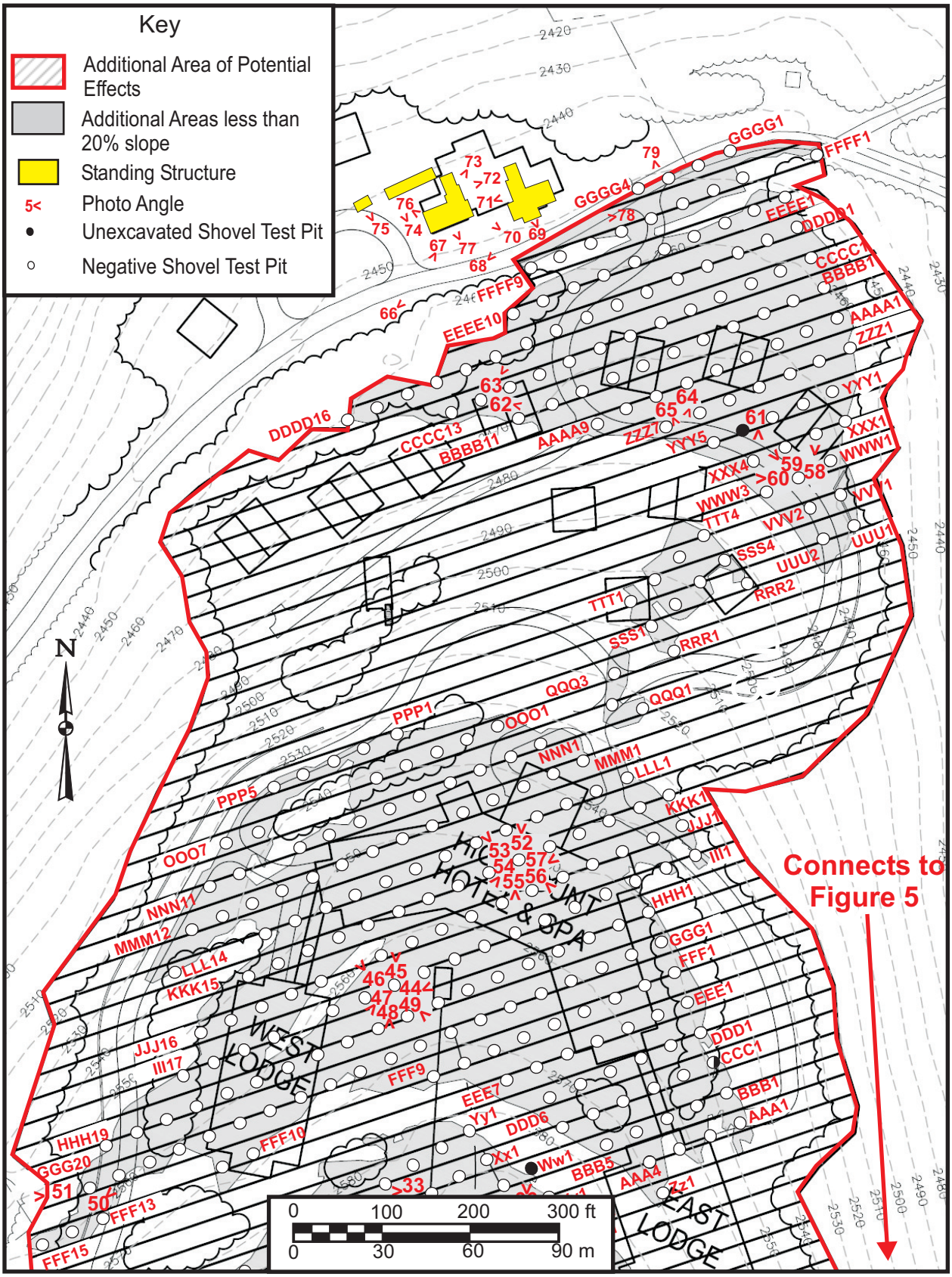

Figure 6. Map showing the location of subsurface testing in the northern part of the northern additional APE area.

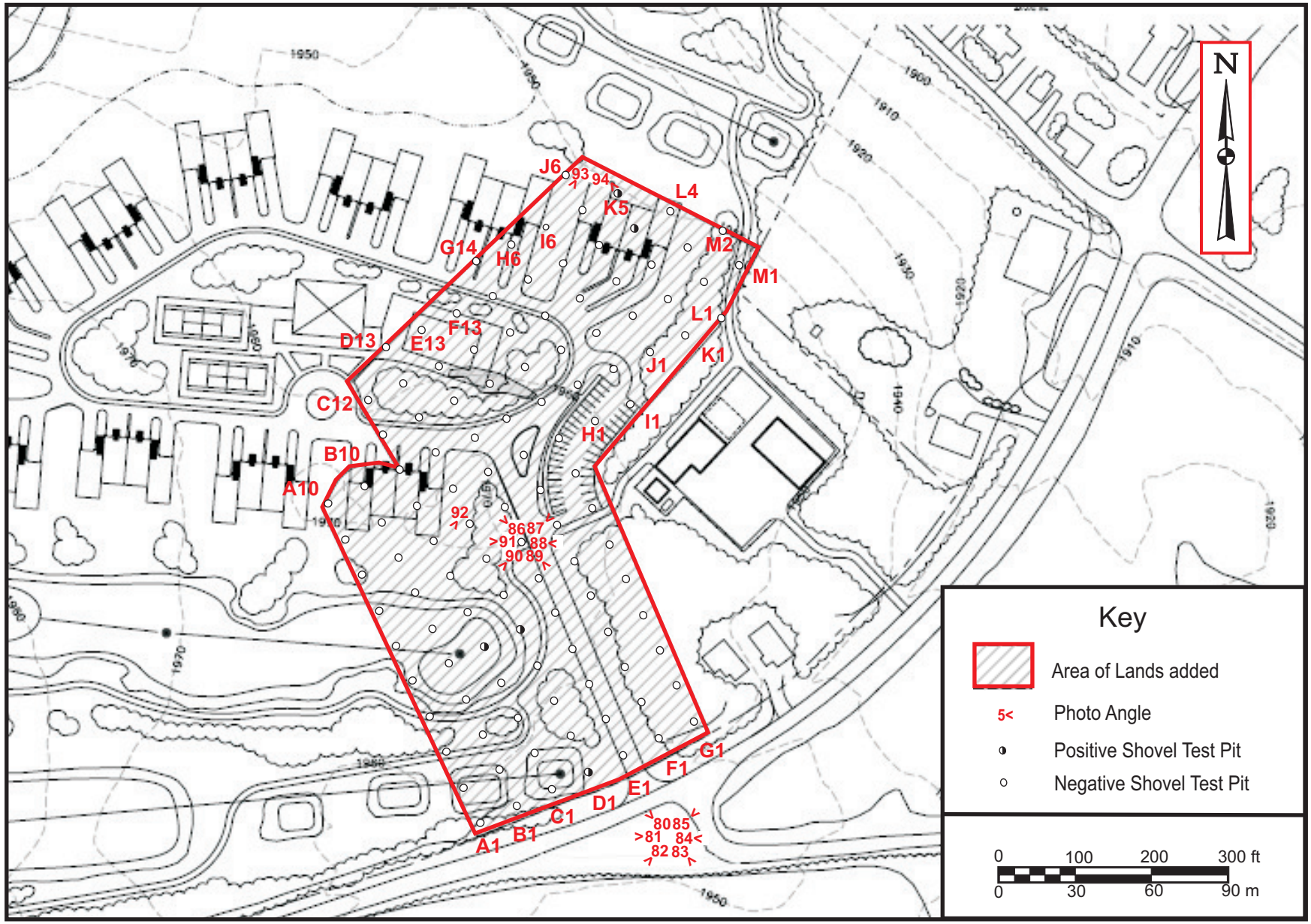

Figure 7. Map showing the location of subsurface testing at the eastern additional APE area.

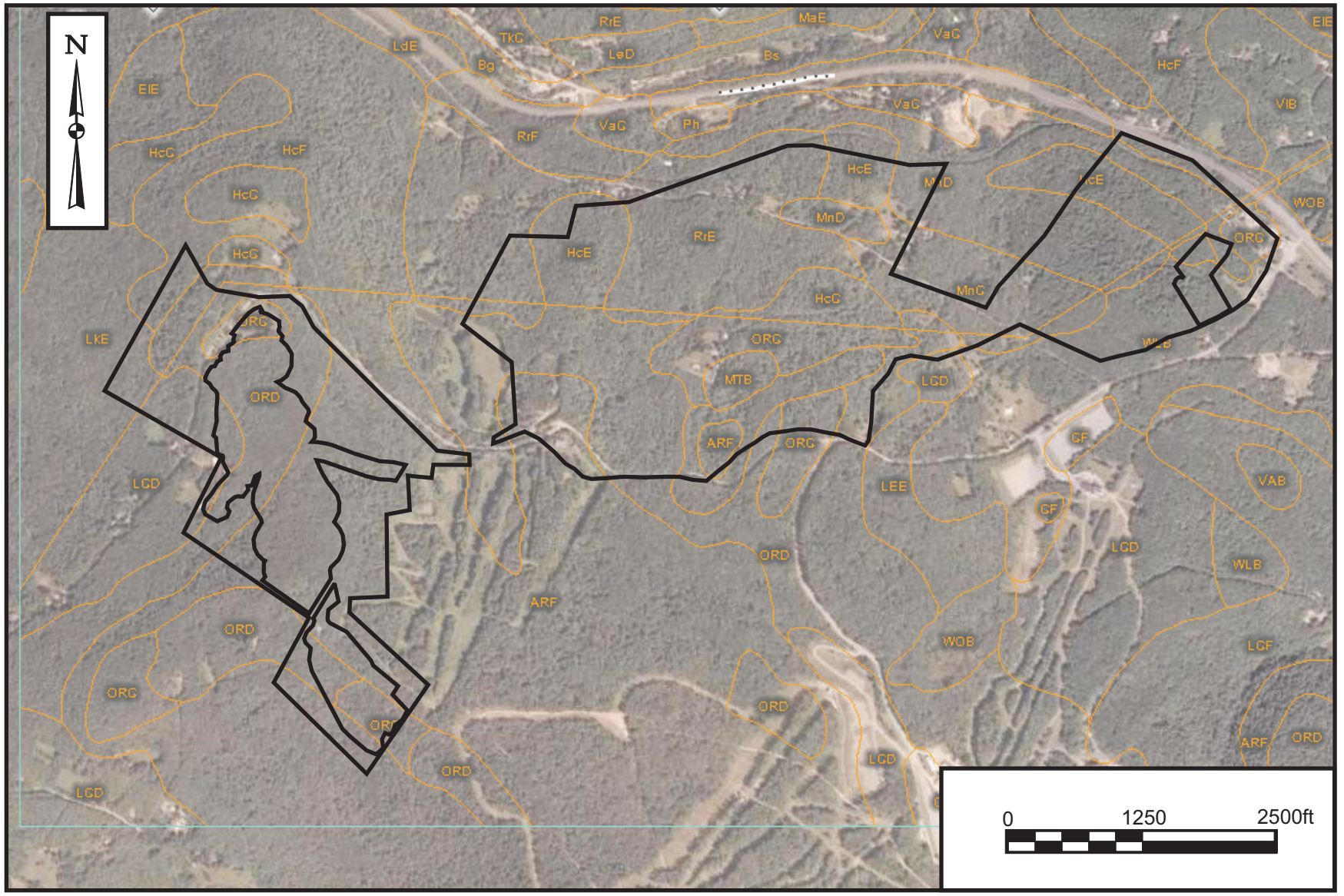

Figure 8. NRCS soil survey map with the additional project location indicated.

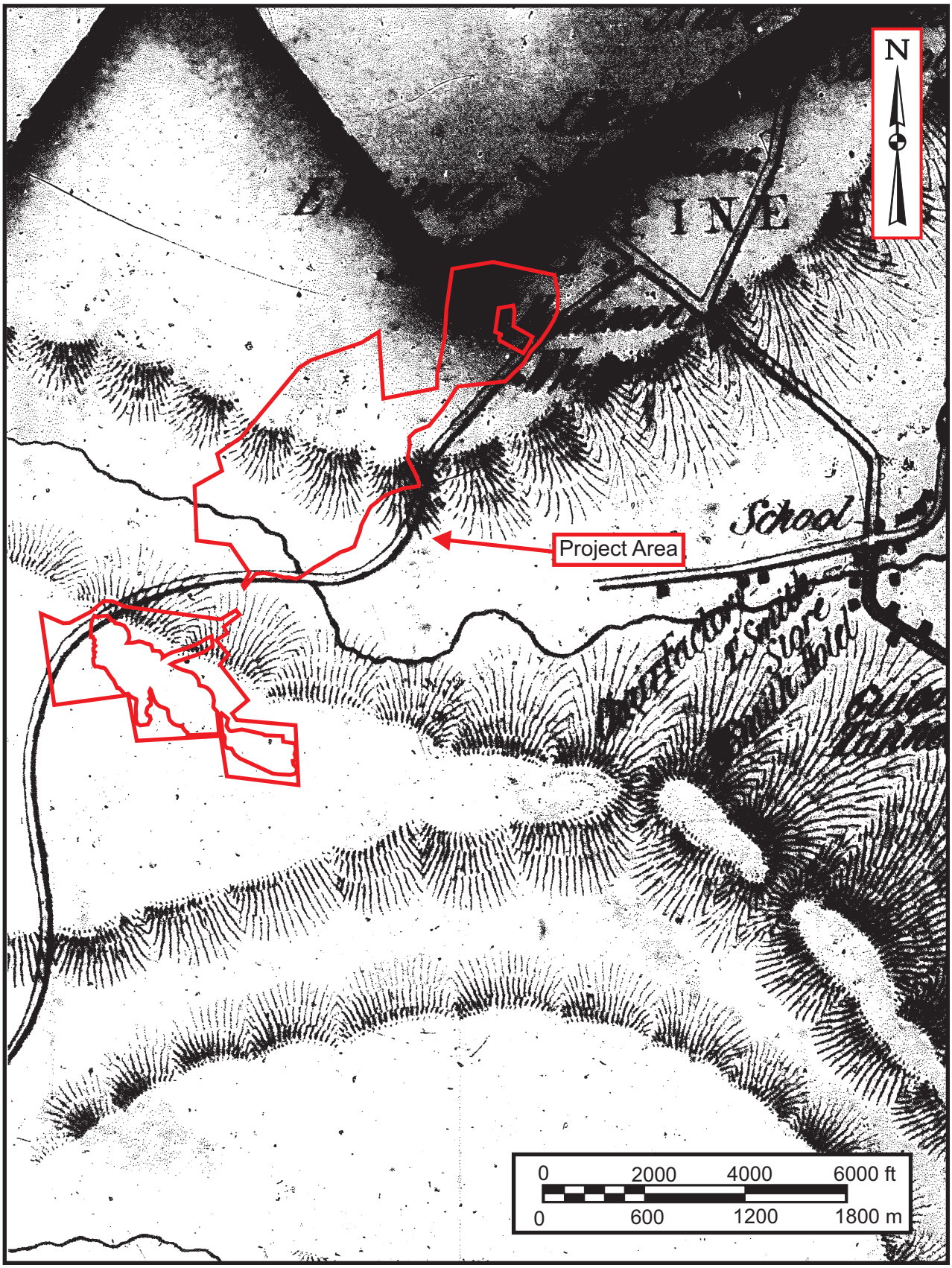

Figure 9. Detail of 1853 Tillson and Brink map of Ulster County with a portion of the additional project area indicated.

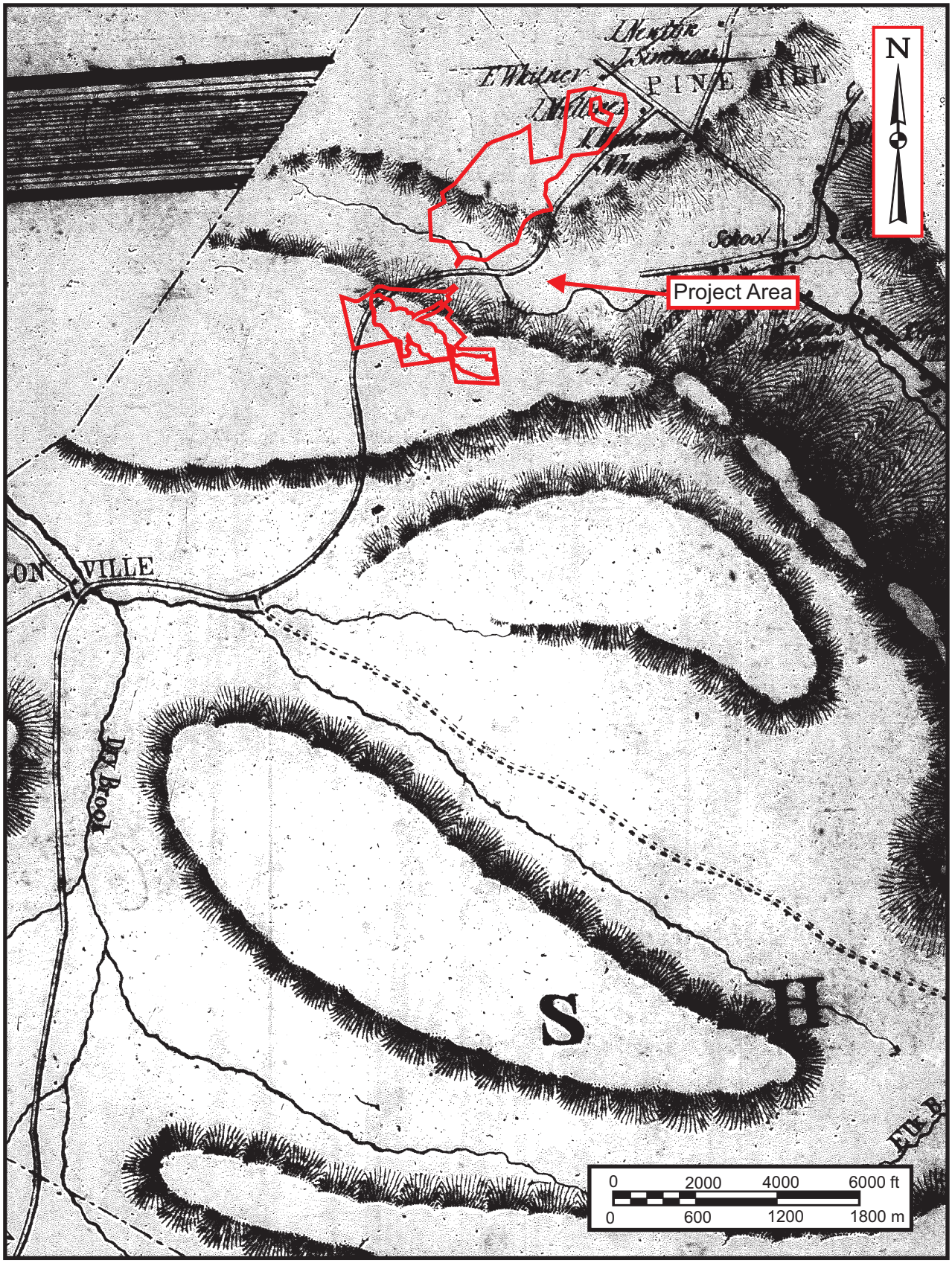

Figure 10. Detail of 1854 Tillson and Brink map of Ulster County with a portion of the additional project Area indicated.

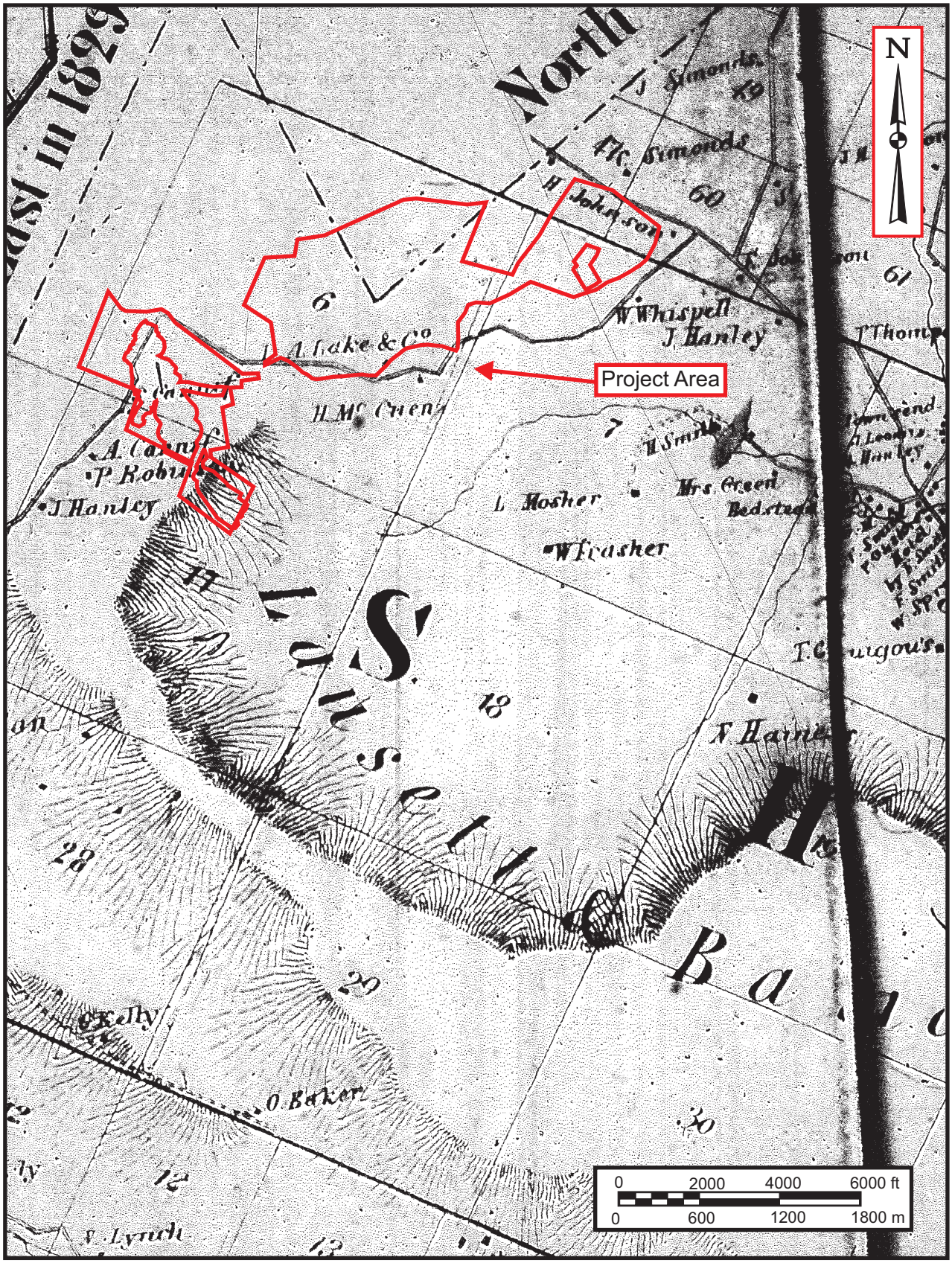

Figure 11. Detail of 1858 J.H. French map of Ulster County with a portion of the additional project area Indicated.

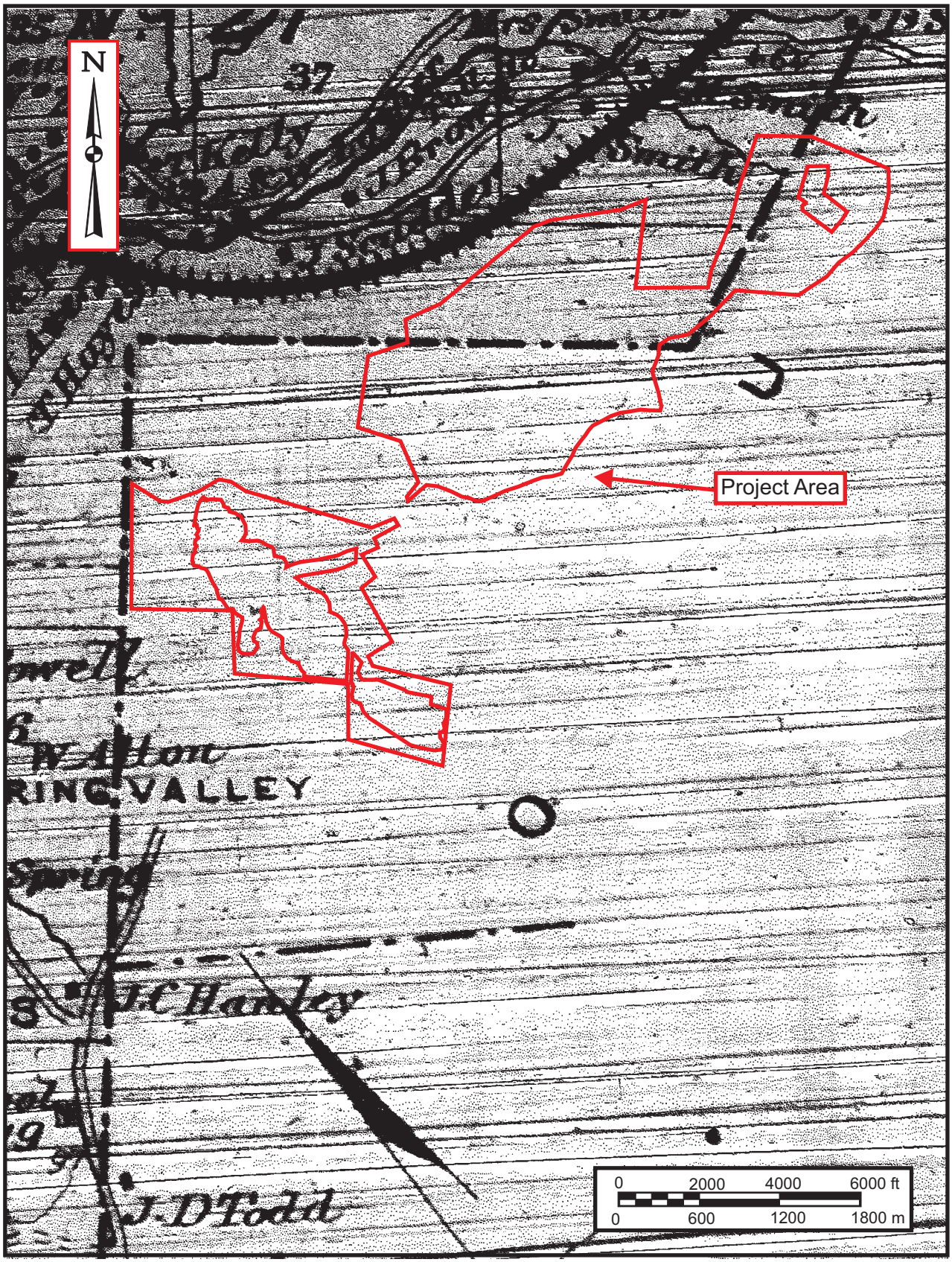

Figure 12. Detail of 1869 Beers Atlas of Delaware County with a portion of the additional project area Indicated.

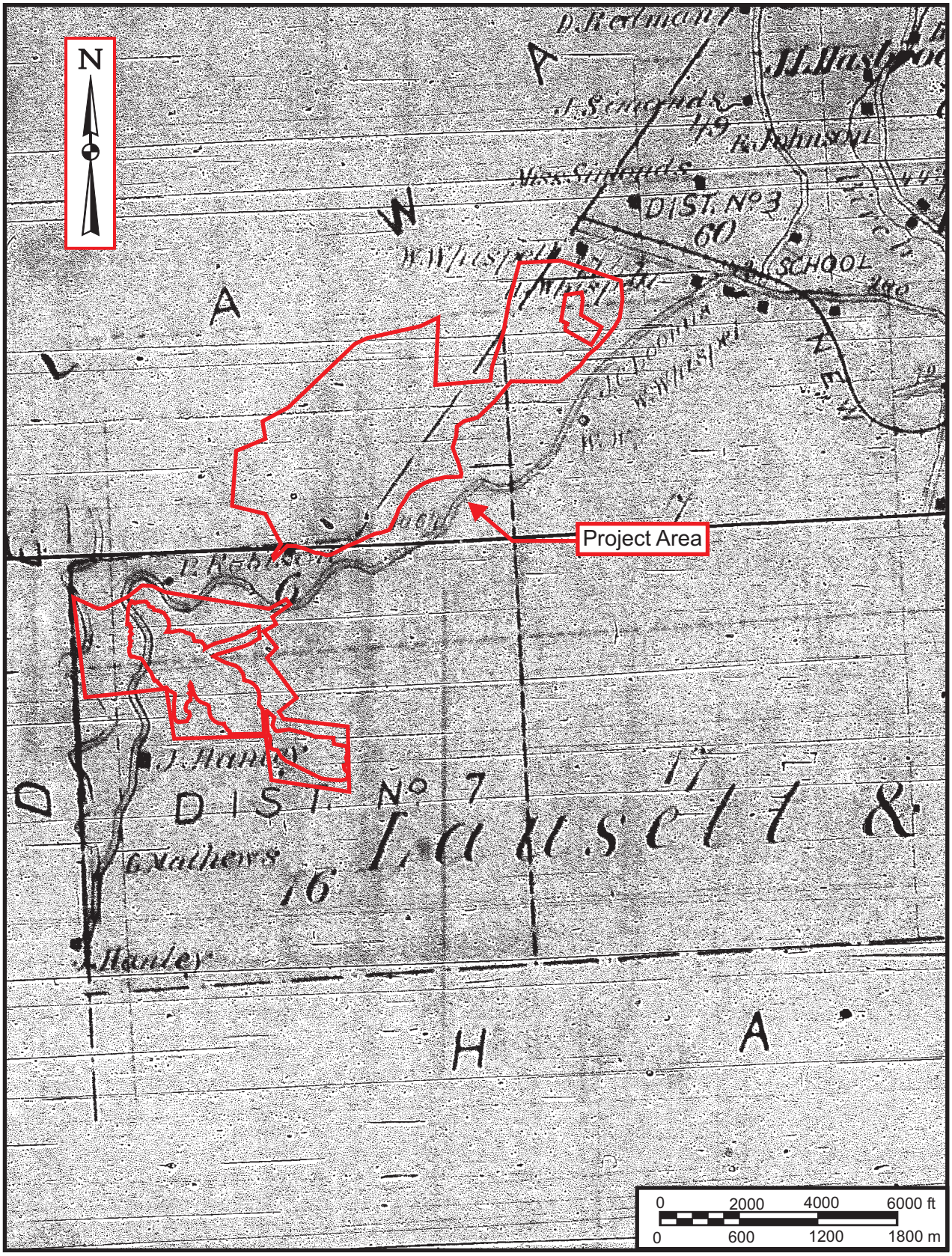

Figure 13. Detail of 1875 Beers Atlas of Ulster County with a portion of the additional project area Indicated.

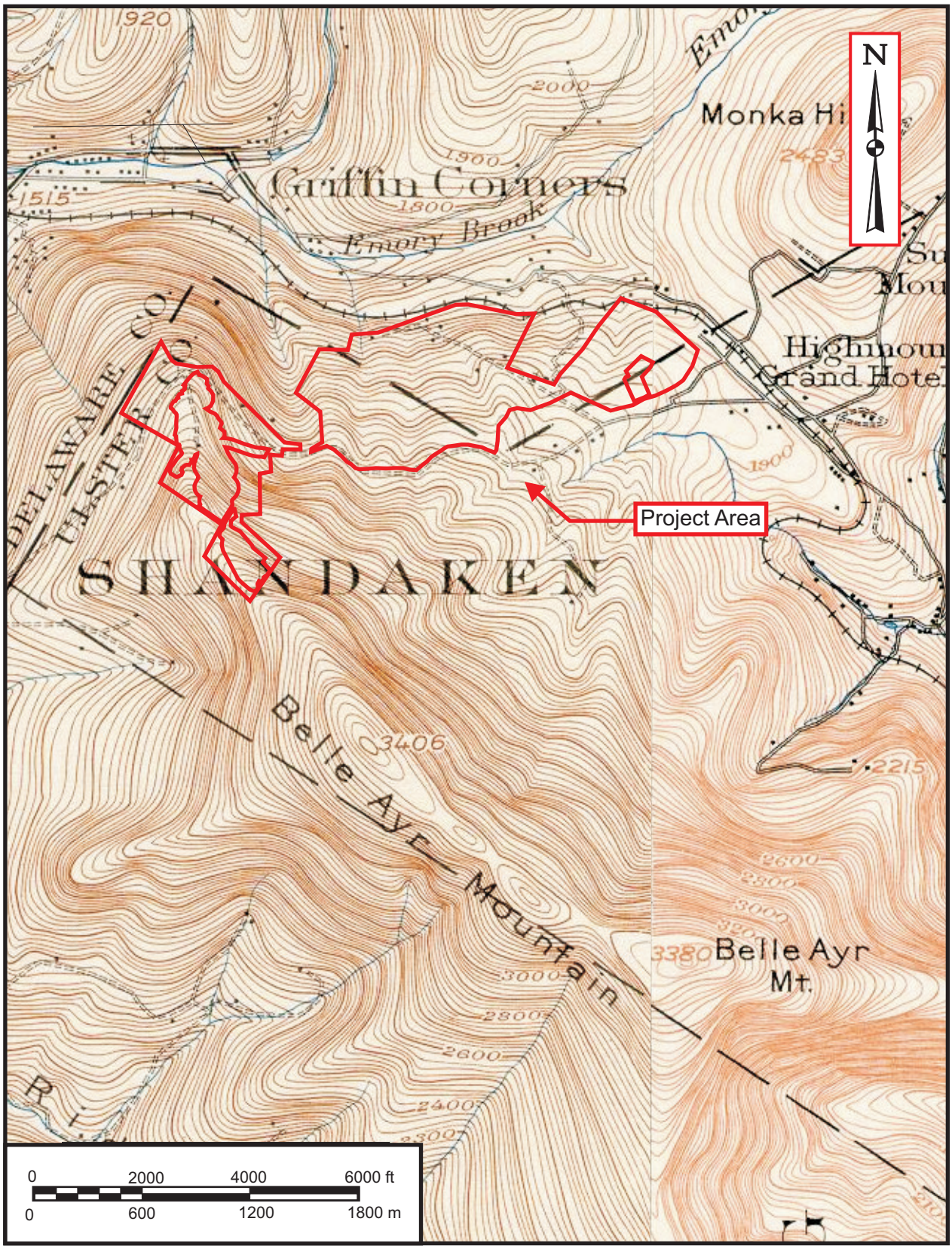

Figure 14. Composite 1904 Margaretville and 1904 Phoenicia USGS topographic maps with additional Project indicated.

Appendix B.

Photographs

Photo 1. Portion of panoramic view from the project area, facing south.

Photo 2. Portion of panoramic view from the project area, facing southeast.

Photo 3. Portion of panoramic view from the project area, facing northeast.

Photo 4. Portion of panoramic view from the project area, facing north.

Photo 5. Portion of panoramic view from the project area, facing northwest.

Photo 6. Portion of panoramic view from the project area, facing southwest.

Photo 7. View from the southern end of the project area, facing south.

Photo 8. View from the southwest corner of the southern APE area, facing northeast.

Photo 9. View from the southwest corner of the southern APE area, facing north.

Photo 10. View from the southwest corner of the southern APE area, facing northwest.

Photo 11. Portion of panoramic view from the southern APE area, facing south.

Photo 12. Portion of panoramic view from the southern APE area, facing southeast.

Photo 13. Portion of panoramic view from the southern APE area, facing northeast.

Photo 14. Portion of panoramic view from the southern APE area, facing north.

Photo 15. Portion of panoramic view from the southern APE area, facing northwest.

Photo 16. Portion of panoramic view from the southern APE area, facing southwest.

Photo 17. View of ground disturbance at the southern APE area, facing east.

Photo 18. View of ground disturbance at the southern APE area, facing northwest.

Photo 19. View of gravel access road along the eastern boundary of the southern APE area, facing north.

Photo 20. View of gravel access road along the eastern boundary of the southern APE area, facing south.

Photo 21. View of cellular tower from the northern end of the southern APE area, facing northwest.

Photo 22. Portion of panoramic view from the southern end of the northern APE area, facing southwest.

Photo 23. Portion of panoramic view from the southern end of the northern APE area, facing southeast.

Photo 24. Portion of panoramic view from the southern end of the northern APE area, facing northeast.

Photo 25. Portion of panoramic view from the southern end of the northern APE area, facing north.

Photo 26. Portion of panoramic view from the southern end of the northern APE area, facing northwest.

Photo 27. Portion of panoramic view from wooded bench at the northern APE area, facing northeast.

Photo 28. Portion of panoramic view from wooded bench at the northern APE area, facing north.

Photo 29. Portion of panoramic view from wooded bench at the northern APE area, facing northwest.

Photo 30. Portion of panoramic view from wooded bench at the northern APE area, facing southwest.

Photo 31. Portion of panoramic view from wooded bench at the northern APE area, facing south.

Photo 32. Portion of panoramic view from wooded bench at the northern APE area, facing southeast.

Photo 33. View of stone wall in the central part of the northern APE area, facing west.

Photo 34. View from the eastern part of the northern APE area, facing west.

Photo 35. View from the eastern part of the northern APE area, facing south.

Photo 36. View from the eastern part of the northern APE area, facing north.

Photo 37. View from the eastern part of the northern APE area, facing east.

Photo 38. Portion of panoramic view from the central part of the northern project area, facing northwest.

Photo 39. Portion of panoramic view from the central part of the northern project area, facing southwest.

Photo 40. Portion of panoramic view from the central part of the northern project area, facing south.

Photo 41. Portion of panoramic view from the central part of the northern project area, facing southeast.

Photo 42. Portion of panoramic view from the central part of the northern project area, facing northeast.

Photo 43. Portion of panoramic view from the central part of the northern project area, facing north.

Photo 44. Portion of panoramic view of woods in the northern part of the northern APE area, facing northeast.

Photo 45. Portion of panoramic view of woods in the northern part of the northern APE area, facing north.

Photo 46. Portion of panoramic view of woods in the northern part of the northern APE area, facing northwest.

Photo 47. Portion of panoramic view of woods in the northern part of the northern APE area, facing southwest.

Photo 48. Portion of panoramic view of woods in the northern part of the northern APE area, facing south.

Photo 49. Portion of panoramic view of woods in the northern part of the northern APE area, facing southeast.

Photo 50. View from the western end of the project boundary in the northern APE area, facing northeast.

Photo 51. View of structure partially visible from the western boundary of the APE, facing west.

Photo 52. Portion of panoramic view from the proposed hotel/spa facility, facing north.

Photo 53. Portion of panoramic view from the proposed hotel/spa facility, facing northwest.

Photo 54. Portion of panoramic view from the proposed hotel/spa facility, facing southwest.

Photo 55. Portion of panoramic view from the proposed hotel/spa facility, facing south.

Photo 56. Portion of panoramic view from the proposed hotel/spa facility, facing southeast.

Photo 57. Portion of panoramic view from the proposed hotel/spa facility, facing northeast.

Photo 58. View from corner of open clearing in the northern end of the project area, facing north.

Photo 59. View from corner of open clearing in the northern end of the project area, facing northwest.

Photo 60. View from corner of open clearing in the northern end of the project area, facing west.

Photo 61. View of deer in open field in the northern end of the project area, facing south.

Photo 62. View from the west end of the open field at the north end of the northern APE area, facing southeast.

Photo 63. View from the west end of the open field at the north end of the northern APE area, facing northeast.

Photo 64. View of spring house in the northern part of the northern APE area, facing southwest.

Photo 65. View of the interior of spring house in the northern part of the northern APE area, facing southeast.

Photo 66. View of field entrance to the northern end of the northern APE area, facing northeast.

Photo 67. View of field entrance to the northern APE area from NYS Route 44A, facing southwest.

Photo 68. View of historic farm house on the north side of NYS Route 44A, facing north.

Photo 69. View of front (south) façade of farm house on the north side of NYS Route 44A, facing north.

Photo 70. View of barn on the north side of NYS Route 44A, facing northwest.

Photo 71. View of east façade of farm house on the north side of NYS Route 44A, facing east.

Photo 72. View of barn addition and ice house on the north side of NYS Route 44A, facing west.

Photo 73. Interior of ice house at the farm complex on the north side of NYS Route 44A, facing southwest.

Photo 74. View of poultry house at the farm complex on the north side of NYS Route 44A, facing northwest.

Photo 75. View of collapsed outbuilding at the farm complex on the north side of NYS Route 44A, facing north.

Photo 76. View of the south façade of the historic barn on the north side of NYS Route 44A, facing southeast.

Photo 77. View of decorative ventilator on the barn located on the north side of NYS Route 44A, facing north.

Photo 78. View of historic farm house on the north side of NYS Route 44A, facing west.

Photo 79. View of sign for new project on the south side of NYS Route 49A, facing southeast.


Photo 80. Portion of panoramic view from the eastern APE area along County Route 49A, facing northwest.

Photo 81. Portion of panoramic view from the eastern APE area along County Route 49A, facing west.

Photo 82. Portion of panoramic view from the eastern APE area along County Route 49A, facing southwest.

Photo 83. Portion of panoramic view from the eastern APE area along County Route 49A, facing southeast.

Photo 84. Portion of panoramic view from the eastern APE area along County Route 49A, facing east.

Photo 85. Portion of panoramic view from the eastern APE area along County Route 49A, facing northeast.

Photo 86. Portion of panoramic view from the eastern APE area, facing northwest.

Photo 87. Portion of panoramic view from the eastern APE area, facing northeast.

Photo 88. Portion of panoramic view from the eastern APE area, facing east.

Photo 89. Portion of panoramic view from the eastern APE area, facing southeast.

Photo 90. Portion of panoramic view from the eastern APE area, facing southwest.

Photo 91. Portion of panoramic view from the eastern APE area, facing west.

Photo 92. View of stone wall in the eastern APE area, facing southwest.

Photo 93. View from the northern end of the eastern APE area, facing southwest.

Photo 94. View from the northern end of the eastern APE area, facing southeast.

Appendix C.

Shovel Test Pit Records

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Appendix C.

Shovel Test Pit Record

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
A – 1	1	0 – 33	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Stopped by rocks
A – 2	1	0 – 33	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Stopped by rocks
A – 3	1	0 – 33	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Stopped by rocks
A – 4	1	0 – 16	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
A – 4	2	16 – 33	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
A – 5	1	0 – 23	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
A – 5	2	23 – 30	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
A – 6	1	0 – 30	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Stopped by rocks
A – 7	1	0 – 17	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
A – 7	2	17 – 45	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
A – 8	1	0 – 19	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
A – 8	2	19 – 41	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
A – 9	1	0 – 19	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
A – 9	2	19 - 3 9	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
A - 10	1	0 – 36	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Stopped by rocks
B – 1	1	0 – 21	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
B – 1	2	21 – 42	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
B – 2	1	0 – 17	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
B – 2	2	17 – 44	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
B – 3	1	0 – 13	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
B – 3	2	13 – 45	10YR 3/2 very dark grayish brown silty loam	Bw Horizon	N	
B – 4	1	0 – 24	7.5YR 5/6 strong brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
B – 4	2	24 – 39	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
B – 5	1	0 – 21	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
B – 5	2	21 – 45	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
B – 6	1	0 – 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
B – 6	2	14 – 44	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
B – 7	1	0 – 17	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
B – 7	2	17 – 33	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
B – 8	1	0 – 6	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
B – 8	2	6 – 31	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by roots
B – 9	1	0 – 18	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
B – 9	2	18 – 47	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
B - 10	1	0 – 15	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
B - 10	2	15 – 45	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
C – 1	1	0 – 31	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
C – 1	2	31 – 56	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
C – 2	1	0 – 16	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
C – 2	2	16 – 45	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
C – 3	1	0 – 18	7.5YR 4/2 dark brown silty loam	A Horizon	N	
C – 3	2	18 – 46	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
C – 4	1	0 – 17	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Moved 1m W due to tree
C – 4	2	17 – 40	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
C – 5	1	0 – 44	10YR 2/2 very dark brown coarse sandy silt loam	A Horizon	Y	Hole dug on eastern edge of stone wall; tile fragment (1); brick fragment (4)
C – 5	2	44 – 60	10YR 3/2 very dark grayish brown silty loam	Bw Horizon	N	Stopped by rocks
C – 6	1	0 – 18	7.5YR 4/2 dark brown silty loam	A Horizon	N	
C – 6	2	18 – 31	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
C – 7	1	0 – 19	7.5YR 4/2 dark brown silty loam	A Horizon	N	
C – 7	2	19 – 36	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
C – 8	1	0 – 15	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
C – 8	2	15 – 30	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
C – 9	1	0 – 22	7.5YR 4/2 dark brown silty loam	A Horizon	N	
C – 9	2	22 – 43	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
C - 10	1	0 – 32	7.5YR 3/1 very dark gray silty loam	A Horizon	N	Stopped by rocks
C - 11	1	0 – 27	7.5YR 4/2 dark brown silty loam	A Horizon	N	
C - 11	2	27 – 33	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by roots
C - 12	1	0 – 11	7.5YR 4/2 dark brown silty loam	A Horizon	N	
C - 12	2	11 – 39	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
D – 1	1	0 – 30	10YR 3/2 very dark grayish brown silty loam	A Horizon	Y	metal cans (5); glass bottle fragment (1)
D – 1	2	30 – 52	7.5YR 4/6 strong brown silty loam	Bw Horizon	N	
D – 2	1	0 – 20	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
D – 2	2	20 – 50	7.5YR 4/6 strong brown silty loam	Bw Horizon	N	
D – 3	1	0 – 23	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
D – 3	2	23 – 55	7.5YR 4/6 strong brown silty loam	Bw Horizon	N	
D – 4	1	0 – 19	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
D – 4	2	19 – 51	7.5YR 4/6 strong brown silty loam	Bw Horizon	N	
D – 5	1	0 – 20	10YR 3/2 very dark grayish brown silty loam	A Horizon	Y	Glass, clear and brown (8), modern (1970s) can.
D – 5	2	20 – 53	7.5YR 4/6 strong brown silty loam	Bw Horizon	N	
D – 6	1	0 – 25	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
D – 6	2	25 – 47	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
D – 7	1	0 – 8	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Moved 2mW due to stone wall
D – 7	2	8 – 40	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
D – 8	1	0 – 27	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
D – 8	2	27 – 50	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
D – 9	1	0 – 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
D – 9	2	14 – 48	7.5YR 4/6 strong brown silty loam	Bw Horizon	N	
D - 10	1	0 – 16	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
D - 10	2	16 – 34	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
D - 11	1	0 – 15	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
D - 11	2	15 – 38	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
D - 12	1	0 – 36	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Stopped by rocks
D - 13	1	0 – 26	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
D - 13	2	26 – 35	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by roots
E – 1	1	0 – 31	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Stopped by rocks
E – 2	1	0 – 23	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E – 2	2	23 – 55	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
E – 3	1	0 – 13	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E – 3	2	13 – 60	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
E – 4	1	0 – 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E – 4	2	14 – 47	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
E – 5	1	0 – 17	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E – 5	2	17 – 54	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
E – 6	1	0 – 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E – 6	2	14 – 44	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
E – 7	1	0 – 17	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E – 7	2	17 – 52	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
E – 8	1	0 – 11	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E – 8	2	11 – 29	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by roots
E – 9	1	0 – 31	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	Stopped by rocks
E - 10	1	0 – 7	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E - 10	2	7 – 49	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
E - 11	1	0 – 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E - 11	2	14 – 55	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
E - 12	1	0 – 6	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E - 12	2	6 – 42	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
E - 13	1	0 – 6	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
E - 13	2	6 – 31	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
F – 1	1	0 – 5	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
F – 1	2	5 – 38	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F – 2	1	0 – 21	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F – 2	2	12 – 49	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F – 3	1	0 – 5	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F – 3	2	5 – 42	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F – 4	1	0 – 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F – 4	2	14 – 44	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
F – 5	1	0 – 6	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F – 5	2	6 – 40	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F – 6	1	0 – 11	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F – 6	2	11 – 42	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F – 7	1	0 – 11	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F – 7	2	11 – 42	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F – 8	1	0 – 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F – 8	2	14 – 46	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F – 9	1	0 – 4	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F – 9	2	4 – 40	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F - 10	1	0 – 8	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F - 10	2	8 – 42	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F - 11	1	0 – 12	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F - 11	2	12 – 48	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
F - 12	1	0 – 5	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F - 12	2	5 – 37	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
F - 13	1	0 – 11	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
F - 13	2	11 – 43	10YR 6/2 light brownish gray silty loam	Bw Horizon	N	
G – 1	1	0 – 20	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 1	2	20 – 53	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G – 2	1	0 – 23	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 2	2	23 – 54	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G – 3	1	0 – 12	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 3	2	12 – 43	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
G – 4	1	0 – 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 4	2	14 – 50	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G – 5	1	0 – 19	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 5	2	19 – 51	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G – 6	1	0 – 20	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 6	2	20 – 51	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G – 7	1	0 – 22	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 7	2	22 – 53	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G – 8	1	0 – 18	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 8	2	18 – 48	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G – 9	1	0 – 23	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 9	2	23 – 55	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G - 10	1	0 – 20	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G - 10	2	20 – 50	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G - 11	1	0 – 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G - 11	2	14 – 44	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G - 12	1	0 – 15	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 12	2	15 – 47	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G – 13	1	0 – 13	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 13	2	13 – 45	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
G – 14	1	0 – 20	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
G – 14	2	20 – 56	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
H – 1	1	0 - 21	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
H – 1	2	21 - 49	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
H – 2	1	0 - 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
H – 2	2	14 - 45	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
H – 3	1	0 - 23	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
H – 3	2	23 - 55	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
H – 4	1	0 - 18	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
H – 4	2	18 - 52	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
H – 5	1	0 - 18	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
H – 5	2	18 - 47	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
H – 6	1	0 - 26	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
H – 6	2	26 - 60	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
I – 1	1	0 - 6	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
I – 1	2	6 - 40	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
I – 2	1	0 - 4	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
I – 2	2	4 - 39	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
I – 3	1	0 - 5	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
I – 3	2	5 - 40	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
I – 4	1	0 - 11	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
I – 4	2	11 - 43	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
I – 5	1	0 - 7	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
I – 5	2	7 - 38	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
I – 6	1	0 - 4	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
I – 6	2	4 - 38	10YR 6/2 light brownish gray silty loam	Bw Horizon	N	Stopped by rocks
J – 1	1	0 - 19	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
J – 1	2	19 - 48	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks
J – 2	1	0 - 17	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
J – 2	2	17 - 48	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
J – 3	1	0 - 16	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
J – 3	2	16 - 46	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
J – 4	1	0 - 18	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
J – 4	2	18 - 47	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
J – 5	1	0 - 18	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
J – 5	2	18 - 45	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
J – 6	1	0 - 21	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
J – 6	2	21 - 35	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
K – 1	1	0 - 7	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
K – 1	2	7 - 42	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
K – 2	1	0 - 6	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
K – 2	2	6 - 45	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
K – 3	1	0 - 5	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
K – 3	2	5 - 40	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
K – 4	1	0 - 5	10YR 3/2 very dark grayish brown silty loam	A Horizon	Y	Glass, clear; porcelain
K – 4	2	5 - 41	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
K – 5	1	0 - 5	10YR 3/2 very dark grayish brown silty loam	A Horizon	Y	Glass, clear
K – 5	2	5 - 40	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
L – 1	1	0 - 24	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
L – 1	2	24 - 46	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
L – 2	1	0 - 12	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
L – 2	2	12 - 53	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
L – 3	1	0 - 10	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
L – 3	2	10 - 50	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
L – 4	1	0 - 5	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
L – 4	2	5 - 40	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
M - 1	1	0 - 17	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
M - 1	2	17 - 44	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
M - 2	1	0 - 19	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
M - 2	2	19 - 45	7.5YR 5/6 strong brown silty loam	Bw Horizon	N	
N – 1			Not dug			Ski lift
N – 2	1	0 - 46	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by bedrock
N – 3	1	0 - 49	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N – 4	1	0 - 37	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N – 5	1	0 - 27	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N – 6	1	0 - 31	5YR 5/1 gray silty loam	A Horizon	N	Stopped by rocks
N – 7	1	0 - 39	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
N – 8	1	0 - 30	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N – 9	1	0 - 32	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N - 10	1	0 - 34	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N - 11	1	0 - 34	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N - 12	1	0 - 37	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N - 13	1	0 - 41	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N - 14	1	0 - 32	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N - 15	1	0 - 43	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
N - 16	1	0 - 33	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
O – 1	1	0 - 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 1	2	3 - 25	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
O – 2	1	0 - 2	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 2	2	2 - 29	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
O – 3	1	0 - 2	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 3	2	2 - 30	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
O – 4	1	0 - 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 4	2	3 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
O – 5	1	0 - 2	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 5	2	2 - 22	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
O – 6	1	0 - 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 6	2	3 - 29	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
O – 7	1	0 - 2	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 7	2	2 - 20	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
O – 8	1	0 - 2	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 8	2	2 - 20	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
O – 9	1	0 - 2	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 9	2	2 - 22	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
O - 10	1	0 - 1	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O - 10	2	1 - 11	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
O - 11			Not dug			Located on bedrock road
O - 12	1	0 - 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O - 12	2	3 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
O - 13	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O - 13	2	4 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
O - 14	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O - 14	2	4 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
O - 15	1	0 - 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	Y	Non-cultural quartzite found
O - 15	2	3 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
O - 16	1	0 - 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O - 16	2	3 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
O - 17	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 17	2	4 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
O – 18	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
O – 18	2	4 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 1	1	0 - 33	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by bedrock
P – 2	1	0 - 35	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by bedrock
P – 3	1	0 - 35	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by bedrock
P – 4	1	0 - 5	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 4	2	5 - 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
P – 5	1	0 - 5	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 5	2	5 - 38	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
P – 6	1	0 - 7	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 6	2	7 - 36	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
P – 7	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 7	2	4 - 37	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 8	1	0 - 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 8	2	21 - 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 9	1	0 - 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 9	2	15 - 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
P – 10	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 10	2	11 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 11	1	0 - 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 11	2	12 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 12	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 12	2	11 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 13	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 13	2	14 - 37	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 14	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 14	2	11 - 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 15	1	0 - 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 15	2	22 - 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 16	1	0 - 25	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 16	2	25 - 30	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
P – 17	1	0 - 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 17	2	21 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 18	1	0 - 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 18	2	12 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 19	1	0 - 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 19	2	21 - 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
P – 20	1	0 - 23	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
P – 21	1	0 - 24	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
P – 21	2	24 - 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Q – 1	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 1	2	14 - 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Q – 2	1	0 - 28	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by bedrock
Q – 3	1	0 - 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 3	2	20 - 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
Q – 4	1	0 - 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
Q – 4	2	16 - 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Q – 5	1	0 - 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 5	2	21 - 52	7.5YR 4/4 dark brown silty loam	Bw Horizon	N	
Q – 6	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 6	2	14 - 53	7.5YR 4/4 dark brown silty loam	Bw Horizon	N	
Q – 7	1	0 - 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 7	2	16 - 45	7.5YR 4/4 dark brown silty loam	Bw Horizon	N	Stopped by rocks
Q – 8	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 8	2	10 - 46	5YR 5/1 gray silty loam	Bw Horizon	N	Stopped by rocks
Q – 9	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 9	2	11 - 45	5YR 5/1 gray silty loam	Bw Horizon	N	Stopped by rocks
Q – 10	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 10	2	14 - 50	5YR 5/1 gray silty loam	Bw Horizon	N	
Q – 11	1	0 - 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 11	2	8 - 43	5YR 5/1 gray silty loam	Bw Horizon	N	
Q – 12	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 12	2	11 - 50	5YR 5/1 gray silty loam	Bw Horizon	N	
Q – 13	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 13	2	14 - 50	5YR 5/1 gray silty loam	Bw Horizon	N	Stopped by rocks
Q – 14	1	0 - 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 14	2	8 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
Q – 15	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 15	2	10 - 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Q – 16	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 16	2	11 - 45	5YR 5/1 gray silty loam	Bw Horizon	N	
Q – 17	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 17	2	10 - 41	5YR 5/1 gray silty loam	Bw Horizon	N	
Q – 18	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 18	2	4 - 20	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
Q – 19	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 19	2	11 - 47	5YR 5/1 gray silty loam	Bw Horizon	N	
Q – 20	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 20	2	20 – 55	5YR 5/1 gray silty loam	Bw Horizon	N	
Q – 21	1	0 – 23	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Q – 21	2	23 - 53	5YR 5/1 gray silty loam	Bw Horizon	N	
R – 1	1	0 – 10	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R – 1	2	10 - 36	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
R – 2	1	0 - 20	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R – 2	2	20 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R – 3	1	0 - 20	5YR 5/1 gray silty loam	A Horizon	N	
R – 3	2	20 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R – 4	1	0 - 10	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R – 4	2	10 - 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R – 5	1	0 - 28	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R – 5	2	28 - 39	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
R – 6	1	0 - 14	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R – 6	2	14 - 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R – 7	1	0 - 33	5YR 3/3 dark reddish brown silty loam	A Horizon	N	Stopped by rocks
R – 8	1	0 - 25	5YR 5/1 gray coarse sandy loam	A Horizon	N	
R – 8	2	25 - 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R – 9	1	0 - 30	5YR 3/3 dark reddish brown silty loam	A Horizon	N	moved 1mW due to tree; stopped by rocks
R - 10	1	0 - 14	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R - 10	2	14 - 34	5YR 4/3 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
R - 11	1	0 - 11	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R - 11	2	11 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R - 12	1	0 - 47	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
R - 13	1	0 - 11	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R - 13	2	11 - 30	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
R - 14	1	0 - 7	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R - 14	2	7 - 31	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
R - 15	1	0 - 9	5YR 5/1 gray silty loam	A Horizon	N	
R - 15	2	9 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R - 16	1	0 - 12	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R - 16	2	12 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R - 17	1	0 - 23	5YR 5/1 gray silty loam	A Horizon	N	
R - 17	2	23 - 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R - 18	1	0 - 8	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
R - 18	2	8 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
R - 19	1	0 - 23	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
R - 20	1	0 - 19	5YR 5/1 gray silty loam	A Horizon	N	
R - 20	2	19 - 39	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S – 1	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S – 1	2	10 - 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S – 2	1	0 - 6	10YR 2/1 black silty loam	A Horizon	N	
S – 2	2	6 - 31	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
S – 3	1	0 - 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S – 3	2	8 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
S – 4	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S – 4	2	10 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S – 5	1	0 - 5	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S – 5	2	5 - 34	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
S – 6	1	0 - 43	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
S – 7	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S – 7	2	14 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S – 8	1	0 - 33	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
S – 9	1	0 - 42	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
S - 10	1	0 - 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
S - 10	2	18 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 11	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 11	2	11 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 12	1	0 - 9	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 12	2	9 - 39	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 13	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 13	2	14 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 14	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 14	2	11 - 38	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 15	1	0 - 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 15	2	19 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 16	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 16	2	14 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 17	1	0 - 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 17	2	17 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 18	1	0 - 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 18	2	21 - 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 19	1	0 - 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 19	2	22 - 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 20	1	0 - 13	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
S - 20	2	13 - 39	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
S - 21	1	0 - 16	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
S - 21	2	16 - 41	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
S - 22	1	0 - 24	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
S - 22	2	24 - 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T – 1	1	0 - 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T – 1	2	12 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T – 2	1	0 - 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T – 2	2	18 - 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
T – 3	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T – 3	2	10 - 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T – 4	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T – 4	2	11 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
T – 5	1	0 - 41	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
T – 6	1	0 - 37	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
T – 7	1	0 - 43	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
T – 8	1	0 - 43	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
T – 9	1	0 - 44	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
T - 10	1	0 - 33	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
T - 11	1	0 - 41	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
T - 12	1	0 - 12	5YR 5/1 gray silty loam	A Horizon	N	
T - 12	2	12 - 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T - 13	1	0 - 44	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
T - 14			Not dug			Exposed bedrock
T - 15	1	0 - 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T - 15	2	3 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T - 16	1	0 - 43	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
T – 17	1	0 – 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T – 17	2	21 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T – 18	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T – 18	2	20 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T – 19	1	0 – 28	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T – 19	2	28 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T – 20	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T – 20	2	19 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T – 21	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
T – 21	2	22 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
T – 22	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
T – 22	2	20 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 1	1	0 – 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U – 1	2	8 – 41	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
U – 2	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Located on rotted stump
U – 2	2	15 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 3	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U – 3	2	11 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 4	1	0 – 4	10YR 5/1 gray silty loam	A Horizon	N	
U – 4	2	4 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 5	1	0 – 4	10YR 5/1 gray silty loam	A Horizon	N	
U – 5	2	4 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 6	1	0 – 5	10YR 5/1 gray silty loam	A Horizon	N	
U – 6	2	5 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 7	1	0 – 5	10YR 5/1 gray silty loam	A Horizon	N	
U – 7	2	5 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 8	1	0 – 4	10YR 5/1 gray silty loam	A Horizon	N	
U – 8	2	4 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 9	1	0 – 4	10YR 5/1 gray silty loam	A Horizon	N	
U – 9	2	4 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U - 10	1	0 – 4	10YR 5/1 gray silty loam	A Horizon	N	
U - 10	2	4 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U - 11	1	0 – 4	10YR 5/1 gray silty loam	A Horizon	N	
U - 11	2	4 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U - 12	1	0 – 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U - 12	2	3 – 40	5YR 5/1 gray silty loam	Bw Horizon	N	
U - 13	1	0 – 2	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U - 13	2	2 – 22	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
U - 14	1	0 – 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U - 14	2	3 – 38	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
U – 15	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U – 15	2	12 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 16	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U – 16	2	22 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 17	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U – 17	2	10 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 18	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U – 18	2	16 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 19	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U – 19	2	13 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
U – 20	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
U – 20	2	20 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
V – 1	1	0 – 18	10YR 2/1 black silty loam	A Horizon	N	Moved 2mS due to bedrock
V – 1	2	18 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
V – 2	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
V – 2	2	10 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
V – 3	1	0 – 6	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
V – 3	2	6 – 32	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
V – 4	1	0 – 43	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
V – 5	1	0 – 13	5YR 5/1 gray silty loam	A Horizon	N	
V – 5	2	13 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
V – 6	1	0 - 39	5YR 3/3 dark reddish brown silty loam	A Horizon	N	Stopped by rocks
V – 7	1	0 - 2	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
V – 7	2	2 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
V – 8	1	0 – 5	5YR 5/4 reddish brown silty loam	A Horizon	N	
V – 8	2	5 – 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
V – 9	1	0 – 7	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
V – 9	2	7 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
V – 10	1	0 – 4	5YR 3/3 dark reddish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
V – 10	2	4 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
V – 11	1	0 – 5	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
V – 11	2	5 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
V – 12	1	0 – 18	5YR 5/1 gray silty loam	A Horizon	N	
V – 12	2	18 – 42	5YR 3/1 very dark gray fine sandy pebbly loam	Bw Horizon	N	
V – 12	3	42 – 44	5YR 4/4 reddish brown silty loam	C Horizon	N	Stopped by rocks
V – 13	1	0 – 19	5YR 5/1 gray silty loam	A Horizon	N	
V – 13	2	19 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
V – 14	1	0 – 16	5YR 5/1 gray silty loam	A Horizon	N	
V – 14	2	16 – 38	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
V – 15	1	0 – 30	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
V – 16	1	0 – 20	5YR 5/1 gray silty loam	A Horizon	N	
V – 16	2	20 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
V – 17	1	0 – 21	5YR 5/1 gray silty loam	A Horizon	N	
V – 17	2	21 – 60	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W – 1	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
W – 1	2	11 – 36	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
W – 2	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
W – 2	2	11 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W – 3	1	0 – 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
W – 3	2	8 – 41	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W – 4	1	0 – 2	10YR 5/1 gray silty loam	A Horizon	N	
W – 4	2	2 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W – 5	1	0 – 4	10YR 5/1 gray silty loam	A Horizon	N	
W – 5	2	4 – 41	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W – 6	1	0 – 3	10YR 5/1 gray silty loam	A Horizon	N	
W – 6	2	3 – 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W – 7	1	0 – 3	10YR 5/1 gray silty loam	A Horizon	N	
W – 7	2	3 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
W – 8	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
W – 8	2	14 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W – 9	1	0 – 3	10YR 5/1 gray silty loam	A Horizon	N	
W - 9	2	3 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W - 10	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
W - 10	2	22 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W - 11	1	0 – 14	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
W - 11	2	14 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W - 12	1	0 – 3	10YR 5/1 gray silty loam	A Horizon	N	
W - 12	2	3 – 30	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
W – 13	1	0 – 23	10YR 5/1 gray silty loam	A Horizon	N	
W – 13	2	23 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W – 14	1	0 – 20	10YR 5/1 gray silty loam	A Horizon	N	
W – 14	2	20 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
W – 15	1	0 – 18	10YR 5/1 gray silty loam	A Horizon	N	
W - 15	2	18 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
X – 1	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
X – 1	2	10 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
X – 2	1	0 - 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
X – 2	2	12 - 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
X – 3			Not dug			Due to slope
X – 4	1	0 - 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
X – 4	2	15 - 39	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
X – 5	1	0 - 35	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
X – 6	1	0 - 17	5YR 5/1 gray silty loam	A Horizon	N	
X – 6	2	17 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
X – 7	1	0 - 34	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
X – 8	1	0 - 10	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
X – 8	2	10 - 39	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
X – 9	1	0 - 42	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
X - 10	1	0 - 38	5YR 5/1 gray silty loam with gravel	A Horizon	N	Stopped by rocks
X - 11	1	0 - 7	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by bedrock
X - 12	1	0 - 57	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
Y – 1	1	0 - 35	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
Y – 2	1	0 - 20	5YR 3/3 dark reddish brown silty loam	A Horizon	N	Stopped by bedrock
Y – 3	1	0 - 40	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
Y – 4	1	0 - 9	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
Y – 4	2	9 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Y – 5	1	0 - 36	5YR 3/3 dark reddish brown silty loam	A Horizon	N	Stopped by rocks
Y – 6	1	0 – 14	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
Y – 6	2	14 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Y – 7	1	0 – 21	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
Y – 7	2	21 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Y – 8	1	0 – 18	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
Y – 8	2	18 – 53	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Y – 9	1	0 – 16	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
Y – 9	2	16 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Y – 10	1	0 – 21	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
Y – 10	2	21 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Y – 11	1	0 – 41	5YR 3/3 dark reddish brown silty loam	A Horizon	N	Stopped by rocks
Y – 11	2	41 - 57	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Z – 1	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
Z – 1	2	2 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Z – 2	1	0 - 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
Z – 2	2	13 - 39	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Z – 3	1	0 2	10YR 5/1 gray silty loam	A Horizon	N	
Z – 3	2	2 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Z – 4	1	0 - 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
Z – 4	2	15 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
Z – 5	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
Z – 5	2	2 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AA – 1	1	0 - 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AA – 1	2	8 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
AA – 2	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AA – 2	2	10 - 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AA – 3	1	0 - 9	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AA – 3	2	9 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AA – 4	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AA – 4	2	10 - 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
AA – 5	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AA – 5	2	11 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AA – 6	1	0 - 16	5YR 4/4 reddish brown silty loam	A Horizon	N	
AA – 6	2	16 - 45	5YR 5/1 gray silty loam	Bw Horizon	N	Stopped by rocks
BB – 1	1	0 - 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BB – 1	2	12 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
BB – 2	1	0 - 40	5YR 4/4 reddish brown silty loam with gravel	A Horizon	N	Stopped by rocks
BB – 3	1	0 - 39	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
BB – 4	1	0 - 38	5YR 5/1 gray silty loam	A Horizon	N	Stopped by rocks
CC – 1	1	0 - 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CC – 1	2	13 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CC – 2	1	0 - 2	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CC – 2	2	2 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CC – 3	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
CC – 3	2	2 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CC – 4	1	0 - 10	Large rocks	A Horizon	N	
CC – 4	2	10 - 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
CC – 5	1	0 - 41	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
CC – 6	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
CC – 6	2	2 - 12	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
DD - 1	1	0 - 24	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DD - 1	2	24 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DD - 2	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DD - 2	2	10 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by roots
DD - 3	1	0 - 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DD - 3	2	18 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DD - 4	1	0 - 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DD - 4	2	22- 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DD - 5	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DD - 5	2	10 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EE – 1	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EE – 1	2	4 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EE – 2	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EE – 2	2	11 - 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EE – 3	1	0 - 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EE – 3	2	21 - 55	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
EE – 4	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EE – 4	2	10 - 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
EE – 5	1	0 - 9	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EE – 5	2	9 - 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FF – 1	1	0 - 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FF – 1	2	15 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FF – 2	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
FF – 2	2	2 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FF – 3	1	0 - 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FF – 3	2	17 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FF – 4	1	0 - 3	10YR 5/1 gray silty loam	A Horizon	N	
FF – 4	2	3 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
GG – 1	1	0 - 26	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GG – 1	2	26 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GG – 2	1	0 - 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GG – 2	2	18 - 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GG – 3	1	0 - 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GG – 3	2	15 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GG – 4	1	0 - 27	5YR 4/4 reddish brown silty loam	A Horizon	N	
GG – 5	1	0 - 38	5YR 5/1 gray silty loam	A Horizon	N	
GG – 6	1	0 - 50	Rocks	A Horizon	N	
GG – 7	1	0 - 31	5YR 5/1 gray silty loam	A Horizon	N	
GG – 8	1	0 - 36	5YR 4/4 reddish brown silty loam	A Horizon	N	
GG – 9	1	0 - 41	5YR 4/4 reddish brown silty loam	A Horizon	N	
GG – 10	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
GG – 10	2	2 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GG – 11	1	0 - 42	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
HH – 1	1	0 - 3	10YR 5/1 gray silty loam	A Horizon	N	
HH – 1	2	3 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HH – 2	1	0 - 36	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
HH - 4	1	0 - 26	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
HH - 5	1	0 - 3	10YR 5/1 gray silty loam	A Horizon	N	
HH - 5	2	3 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HH - 6	1	0 - 41	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
HH - 7	1	0 - 31	5YR 3/3 dark reddish brown silty loam	A Horizon	N	Stopped by rocks
HH - 8	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
HH - 8	2	2 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HH - 9	1	0 - 33	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
HH - 10	1	0 - 7	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HH - 10	2	7 - 29	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
II – 1	1	0 - 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
II – 1	2	18 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
II – 2	1	0 - 11	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
II – 2	2	11 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
II – 3	1	0 - 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
II – 3	2	13 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
II – 4	1	0 - 25	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
II – 4	2	25 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
II – 5	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
II – 5	2	11 - 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
II – 6	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
II – 6	2	14 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
II – 7	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
II – 7	2	14 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
II – 8	1	0 - 17	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
II – 8	2	17 – 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
II – 9	1	0 – 21	10YR 5/1 gray silty loam	A Horizon	N	
II – 9	2	21 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
II - 10	1	0 – 17	10YR 5/1 gray silty loam	A Horizon	N	
II - 10	2	17 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
II - 11	1	0 – 20	10YR 5/1 gray silty loam	A Horizon	N	
II - 11	2	20 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJ – 1	1	0 - 16	10YR 4/4 dark yellowish brown	A Horizon	N	Stopped by bedrock
JJ – 2	1	0 – 30	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
JJ – 3	1	0 – 15	10YR 5/1 gray silty loam	A Horizon	N	
JJ – 3	2	15 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
KK - 1	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
KK - 1	2	11 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
KK – 2	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	Y	Charcoal
KK – 2	2	2 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
KK – 3	1	0 - 5	5YR 3/3 dark reddish brown silty loam	A Horizon	Y	Glass, brown; charcoal

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
KK – 3	2	5 - 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
LL – 1	1	0 - 47	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks; charcoal
LL – 2	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
LL – 2	2	11 - 56	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by roots
LL – 3	1	0 - 53	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
MM - 1	1	0 - 47	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
MM - 2	1	0 - 45	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by bedrock
MM - 3	1	0 - 50	5YR 4/4 reddish brown silty loam	A Horizon	N	
MM - 4	1	0 - 38	5YR 4/4 reddish brown silty loam	A Horizon	N	moved 1mN due to tree; stopped by rocks
MM - 5	1	0 - 4	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
MM - 5	2	4 - 36	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
MM - 6	1	0 - 37	5YR 5/1 gray rocks	A Horizon	N	Stopped by rocks
MM - 7	1	0 - 11	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
MM - 7	2	11 - 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
MM - 8	1	0 - 29	5YR 5/1 gray rocks	A Horizon	N	moved 1mSW due to tree; stopped by bedrock
MM - 9	1	0 - 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
MM - 9	2	14 - 39	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
MM - 10	1	0 - 32	5YR 4/4 reddish brown silty loam	A Horizon	N	moved 1mS due to tree; stopped by rocks
MM - 11	1	0 - 6	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
MM - 11	2	6 - 38	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
MM - 12	1	0 - 14	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
MM - 12	2	14 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
MM - 13	1	0 - 5	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
MM - 13	2	5 - 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
MM - 14	1	0 - 9	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
MM - 14	2	9 - 45	5YR 4/4 reddish brown silty loam with gravel	Bw Horizon	N	
MM - 15	1	0 - 8	10YR 3/2 very dark grayish brown loam	A Horizon	N	
MM - 15	2	8 - 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
MM - 16	1	0 - 26	5YR 3/2 rocks	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
MM - 16	2	26 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NN – 1	1	0 - 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NN – 1	2	19 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NN – 2	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	Y	Charcoal
NN – 2	2	2 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NN – 3	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
NN – 3	2	2 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NN – 4	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NN – 4	2	11 - 40	5YR 4/1 dark gray silty loam	Bw Horizon	N	
NN – 5	1	0 - 3	10YR 5/1 gray silty loam	A Horizon	N	
NN – 5	2	3 - 45	5YR 4/1 dark gray silty loam	Bw Horizon	N	
NN – 6	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NN – 6	2	14 - 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NN – 7	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
NN – 7	2	2 - 45	5YR 4/1 dark gray silty loam	Bw Horizon	N	
NN – 8	1	0 - 24	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NN – 8	2	24 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NN – 9	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	Stopped by rocks
NN - 10	1	0 - 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NN - 10	2	15 - 33	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
NN - 11	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
NN - 11	2	2 - 25	5YR 4/1 dark gray silty loam	Bw Horizon	N	Stopped by rocks
NN - 12	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NN - 12	2	14 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NN - 13	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
NN - 13	2	2 - 44	5YR 4/1 dark gray silty loam	Bw Horizon	N	
NN - 14	1	0 - 23	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NN - 14	2	23 - 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NN - 15	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
NN - 15	2	2 - 45	5YR 4/1 dark gray silty loam	Bw Horizon	N	
OO – 1	1	0 - 34	5YR 4/4 reddish brown clay silt	A Horizon	N	Stopped by roots
OO – 2	1	0 - 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
OO – 2	2	8 - 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
OO – 3	1	0 - 43	5YR 4/4 reddish brown clay silt	A Horizon	N	Stopped by rocks
PP – 1	1	0 - 38	5YR 4/4 reddish brown silty loam	A Horizon	N	
PP – 2	1	0 - 19	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
QQ – 1	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
QQ – 1	2	2 - 40	5YR 4/1 gray silty loam	Bw Horizon	N	
QQ – 2	1	0 - 39	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
QQ – 3	1	0 - 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
QQ – 3	2	16 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
RR – 1	1	0 - 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
RR – 1	2	8 - 50	5YR 4/4 reddish brown silty sand	Bw Horizon	N	
RR – 2	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
RR – 2	2	10 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
RR – 3	1	0 - 9	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
RR – 3	2	9 - 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
SS – 1	1	0 - 5	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
SS – 1	2	5 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
SS – 2	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
SS – 2	2	4 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
TT – 1	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
TT – 1	2	14 - 33	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
TT – 2	1	0 - 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
TT – 2	2	15 - 36	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
TT – 3	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
TT – 3	2	11 - 32	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
UU – 1	1	0 - 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
UU – 1	2	12 - 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
UU – 2	1	0 - 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
UU – 2	2	21 - 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
UU – 3	1	0 - 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
UU – 3	2	18 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
UU – 4	1	0 - 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
UU – 4	2	17 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
UU – 5	1	0 - 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
UU – 5	2	18 - 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
UU – 6	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
UU – 6	2	11 - 21	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
UU – 6	1	0 - 7	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
UU – 6	2	7 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
UU – 7	1	0 - 10	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
UU – 7	2	10 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
UU – 8	1	0 - 33	5YR 3/3 dark reddish brown silty loam	A Horizon	N	Stopped by rocks
UU – 9	1	0 - 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
UU – 9	2	15 - 50	5YR 4/4 reddish brown clay loam	Bw Horizon	N	
UU – 10	1	0 – 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
UU – 10	2	21 - 50	5YR 4/4 reddish brown clay loam	Bw Horizon	N	
UU-11	1	0 - 23	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
VV – 1	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
VV – 1	2	4 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
VV – 2	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	Y	Porcelain (1); charcoal
VV – 2	2	4 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
VV – 3	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	Y	Porcelain, white (15); glass, clear; charcoal
VV – 3	2	4 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
VV – 4	1	0 - 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
VV – 4	2	13 - 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
VV – 5	1	0 - 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
VV – 5	2	17 - 37	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
VV – 6	1	0 - 18	10YR 3/4 dark yellowish brown silty loam	A Horizon	N	
VV – 6	2	18 - 32	5YR 4/4 reddish brown silty loam	Bw Horizon	N	moved 1mNW due to tree; stopped by rocks
VV – 7	1	0 - 33	10YR 3/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
VV – 8	1	0 - 10	10YR 3/4 dark yellowish brown silty loam	A Horizon	N	
VV – 8	2	10 - 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
VV – 9	1	0 - 10	10YR 3/4 dark yellowish brown silty loam	A Horizon	N	
VV – 9	2	10 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
VV – 9	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
VV – 9	2	2 - 42	5YR 4/1 dark gray silty loam	Bw Horizon	N	
VV – 10	1	0 - 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
VV – 10	2	14 - 41	5YR 4/4 reddish brown clay silt	Bw Horizon	N	Stopped by rocks
VV – 11	1	0 - 2	10YR 5/1 gray silty loam	A Horizon	N	
VV – 11	2	2 - 40	5YR 4/1 dark gray silty loam	Bw Horizon	N	
VV – 12	1	0 - 11	5YR 3/2 dark yellowish brown silty loam with rocks	A Horizon	N	
VV – 12	2	11 - 39	5YR 3/3 dark reddish brown silty loam with rocks	Bw Horizon	N	Stopped by rocks
VV – 13	1	0 - 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by bedrock
VV – 14	1	0 - 43	5YR 3/2 rocks	A Horizon	N	Stopped by rocks
VV – 15	1	0 - 6	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
VV – 15	2	6 - 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
VV – 16	1	0 - 62	5YR 4/4 reddish brown clay silt	A Horizon	N	
VV – 17	1	0 - 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
VV – 17	2	10 - 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
VV – 18	1	0 - 42	5YR 4/4 reddish brown clay silt	A Horizon	N	Stopped by rocks
VV – 19	1	0 - 11	5YR 4/4 reddish brown clay silt	A Horizon	N	
VV – 19	2	11 - 48	5YR 5/4 reddish brown fine sand	Bw Horizon	N	
VV – 20	1	0 - 26	5YR 4/4 reddish brown clay silt	A Horizon	N	Stopped by rocks
WW – 1			Not dug			Slope

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
WW – 2	1	0 - 43	5YR 4/4 reddish brown loamy silt	A Horizon	N	Stopped by rocks
WW – 3	1	0 -47	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
WW – 4	1	0 - 7	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
WW – 4	2	7 - 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
WW – 5	1	0 - 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
WW – 5	2	17 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
WW – 6	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
WW – 6	2	11 - 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
WW – 7	1	0 - 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
WW – 7	2	8 - 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
WW – 8	1	0 - 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
WW – 8	2	12 - 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
WW – 9	1	0 - 45	5YR 4/4 reddish brown clay silt	A Horizon	N	Stopped by rocks
WW – 10	1	0 - 23	5YR 4/4 reddish brown clay silt	A Horizon	N	
WW – 10	2	23 - 47	5YR 5/4 reddish brown fine sand	Bw Horizon	N	
WW – 11	1	0 - 46	5YR 4/4 reddish brown clay silt	A Horizon	N	Stopped by rocks
WW – 12	1	0 - 38	5YR 4/4 reddish brown clay silt	A Horizon	N	Stopped by rocks
WW – 13	1	0 - 63	5YR 4/4 reddish brown silty clay	A Horizon	N	
WW – 14	1	0 - 35	5YR 4/4 reddish brown silty clay	A Horizon	N	
WW – 15	1	0 - 38	5YR 4/4 reddish brown silty clay	A Horizon	N	
WW – 16	1	0 - 14	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
WW – 16	2	14 - 36	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
WW – 17			Not dug			Due to bedrock
WW – 18	1	0 - 29	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
WW – 19	1	0 - 20	10YR 3/2 very dark grayish brown silty loam	A Horizon	N	
WW – 19	2	20 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
WW – 20	1	0 – 43	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
WW – 21	1	0 – 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
WW – 21	2	8 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
WW – 22	1	0 – 33	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
WW – 23	1	0 – 2	10YR 5/1 gray silty loam	A Horizon	N	
WW – 23	2	2 – 25	5YR 4/1 dark gray silty loam	Bw Horizon	N	
WW – 24	1	0 – 25	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
WW – 24	2	25 – 32	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
WW – 25	1	0 – 29	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
WW – 26	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
WW – 26	2	4 – 41	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
WW – 27	1	0 – 27	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
XX – 1	1	0 – 45	5YR 4/4 reddish brown clay silt	A Horizon	N	Stopped by rocks
XX – 2	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 2	2	4 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
XX – 3	1	0 – 50	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
XX – 4	1	0 – 49	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
XX – 5	1	0 – 47	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
XX – 6	1	0 – 28	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 6	2	28 – 55	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
XX – 7	1	0 – 15	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
XX – 8	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 8	2	11 – 22	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
XX – 9	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 9	2	14 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
XX – 10	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 10	2	15 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
XX – 11	1	0 – 15	5YR 3/3 dark reddish brown silty loam	A Horizon	N	
XX – 11	2	15 – 43	5YR 5/1 gray fine sandy silt	Bw Horizon	N	Stopped by rocks
XX – 12	1	0 – 2	10YR 5/1 gray silty loam	A Horizon	N	
XX – 12	2	2 – 40	5YR 4/1 gray silty loam	Bw Horizon	N	
XX – 13	1	0 – 9	5YR 3/3 dark reddish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
XX – 13	2	9 – 39	5YR 4/4 dark yellowish brown silty loam	Bw Horizon	N	
XX – 14	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 14	2	17 – 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
XX – 15	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 15	2	12 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
XX – 16	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 16	2	19 – 49	5YR 4/4 reddish brown fine sandy silt loam	Bw Horizon	N	
XX – 17	1	0 – 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 17	2	8 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
XX – 18	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 18	2	10 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
XX – 19	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Located in disturbed area
XX – 19	2	14 – 56	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
XX – 20	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 20	2	4 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
XX – 21	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 21	2	11 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
XX – 22	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 22	2	12 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by bedrock
XX – 23	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 23	2	11 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
XX – 24	1	0 – 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 24	2	3 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
XX – 25	1	0 – 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 25	2	21 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
XX – 26	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XX – 26	2	4 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 1	1	0 – 37	5YR 4/4 reddish brown silty loam	A Horizon	Y	Whiteware (4); stopped by roots
YY – 2	1	0 – 31	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
YY – 3	1	0 – 35	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
YY – 4	1	0 – 61	5YR 4/4 reddish brown silty loam	A Horizon	N	
YY – 5	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 5	2	13 – 34	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
YY – 6	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 6	2	4 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 7	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 7	2	14 – 31	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
YY – 8	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 8	2	4 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 9	1	0 – 33	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
YY – 10	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 10	2	19 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 11	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 11	2	12 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 12	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 12	2	10 – 23	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 13	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 13	2	10 – 23	5YR 6/8 reddish yellow silty loam	Bw Horizon	N	
YY – 13	3	23 – 46	5YR 4/4 reddish brown silty loam	C Horizon	N	
YY – 14	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 14	2	14 – 39	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
YY – 15	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 15	2	20 – 38	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
YY – 16	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 16	2	12 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
YY – 17	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 17	2	13 – 34	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
YY – 18	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
YY – 18	2	4 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 19	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 19	2	14 – 31	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
YY – 20	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 20	2	4 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 21	1	0 – 30	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
YY – 22	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 22	2	19 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 23	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 23	2	12 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 24	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 24	2	10 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YY – 25	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
YY – 25	2	10 – 47	5YR 6/8 reddish yellow silty loam	Bw Horizon	N	
ZZ – 1	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
ZZ – 1	2	4 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAA – 1	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAA – 1	2	15 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAA – 2	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAA – 2	2	16 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAA – 3	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAA – 3	2	11 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAA – 4	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAA – 4	2	16 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBB – 1	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBB – 1	2	10 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
BBB – 2	1	0 – 6	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBB – 2	2	6 – 41	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
BBB – 3	1	0 – 3	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
BBB – 3	2	3 – 30	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBB – 4	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBB – 4	2	4 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBB – 5	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBB – 5	2	14 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCC – 1	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	Y	Porcelain fragments (8); imperial bowl fragment
CCC – 1	2	14 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCC – 2	1	0 – 46	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
CCC – 3	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCC – 3	2	11 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by roots
CCC – 4	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCC – 4	2	20 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by roots
CCC – 5	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCC – 5	2	18 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by roots
CCC – 6	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCC – 6	2	19 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by roots
DDD – 1	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	moved 3mW due to perc test
DDD – 1	2	15 – 38	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDD – 2	1	0 – 49	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
DDD – 3	1	0 – 23	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDD – 3	2	23 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDD – 4	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDD – 4	2	17 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDD – 5	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDD – 5	2	20 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDD – 6	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDD – 6	2	14 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEE – 1	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEE – 1	2	4 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEE – 2	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
EEE – 2	2	4 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEE – 3	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEE – 3	2	12 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEE – 4	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEE – 4	2	16 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEE – 5	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEE – 5	2	20 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEE – 6	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEE – 6	2	15 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEE – 7	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEE – 7	2	19 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 1	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 1	2	4 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 2	1	0 – 37	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
FFF – 3	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 3	2	16 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 4	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 4	2	18 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 5	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 5	2	15 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 6	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 6	2	10 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 7	1	0 – 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 7	2	21 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 8	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 8	2	15 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 9	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 9	2	20 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 10	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
FFF – 10	2	12 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 11	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 11	2	14 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 12	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 12	2	13 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 13	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 13	2	20 – 41	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 14	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 14	2	22 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFF – 15	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFF – 15	2	20 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 1	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 1	2	11 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 2	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 2	2	14 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 3	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 3	2	19 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 4	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 4	2	15 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 5	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 5	2	20 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 6	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 6	2	15 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 7	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 7	2	20 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 8	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 8	2	18 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 9	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 9	2	17 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
GGG – 10	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 10	2	19 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 11	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 11	2	22 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 12	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 12	2	12 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 13	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 13	2	18 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 14	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 14	2	11 – 41	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 15	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 15	2	10 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 16	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 16	2	17 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 17	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 17	2	16 – 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 18	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 18	2	10 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 19	1	0 – 23	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 19	2	23 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGG – 20	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGG – 20	2	13 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 1	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 1	2	14 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 2	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 2	2	12 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 3	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 3	2	17 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 4	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
HHH – 4	2	14 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 5	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 5	2	22 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 6	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 6	2	13 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 7	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 7	2	15 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 8	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 8	2	19 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 9	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 9	2	14 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 10	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 10	2	18 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 11	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 11	2	20 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 12	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 12	2	18 – 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 13	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 13	2	19 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 14	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 14	2	17 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 15	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 15	2	14 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 16	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 16	2	11 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 17	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 17	2	15 – 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
HHH – 18	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 18	2	20 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
HHH – 19	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
HHH – 19	2	18 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 1	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 1	2	15 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 2	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 2	2	22 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 3	1	0 – 23	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 3	2	23 – 55	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 4	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 4	2	20 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 5	1	0 - 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 5	2	15 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 6	1	0 - 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 6	2	18 - 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 7	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 7	2	15 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 8	1	0 – 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 8	2	21 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 9	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 9	2	17 – 53	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 10	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 10	2	14 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 11	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 11	2	19 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 12	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 12	2	16 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 13	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 13	2	15 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 14	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
III – 14	2	14 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 15	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 15	2	17 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 16	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 16	2	20 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
III – 17	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
III – 17	2	20 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 1	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 1	2	4 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 2	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 2	2	4 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 3	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 3	2	18 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 4	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 4	2	13 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 5	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 5	2	4 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 6	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 6	2	4 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 7	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 7	2	4 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 8	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 8	2	4 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 9	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 9	2	4 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 10	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 10	2	4 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 11	1	0 – 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 11	2	4 – 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
JJJ – 12	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 12	2	20 – 53	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 13	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 13	2	14 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 14	1	0 -10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 14	2	10 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 15	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 15	2	20 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
JJJ – 16	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
JJJ – 16	2	15 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
KKK – 1	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
KKK – 1	2	15 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
KKK – 2	1	0 – 32	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
KKK – 3	1	0 – 46	5YR 4/4 reddish brown sandy silt	A Horizon	N	Stopped by rocks
KKK – 4	1	0 – 60	5YR 4/4 reddish brown silty loam	A Horizon	N	
KKK – 5	1	0 – 39	5YR 4/4 reddish brown sandy silt	A Horizon	N	Stopped by rocks
KKK – 6	1	0 – 53	5YR 4/4 reddish brown silty loam with gravel	A Horizon	N	Stopped by rocks
KKK – 7	1	0 – 56	5YR 4/4 reddish brown silty loam with gravel	A Horizon	N	Stopped by rocks
KKK – 8	1	0 – 71	5YR 4/4 reddish brown sandy silt	A Horizon	N	
KKK – 9	1	0 – 61	5YR 4/4 reddish brown silty loam	A Horizon	N	
KKK – 10	1	0 – 43	5YR 4/4 reddish brown sandy silt	A Horizon	N	Stopped by rocks
KKK – 11	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
KKK – 11	2	15 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
KKK – 12	1	0 – 51	5YR 4/4 reddish brown sandy silt	A Horizon	N	Stopped by rocks
KKK – 13	1	0 – 47	5YR 4/4 reddish brown sandy silt	A Horizon	N	Stopped by rocks
KKK – 14	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
KKK – 14	2	20 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
KKK – 15	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
KKK – 15	2	15 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
LLL – 1	1	0 – 31	10YR 4/4 dark reddish brown rocks	A Horizon	N	Stopped by rocks
LLL – 2	1	0 – 40	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
LLL – 3	1	0 – 53	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
LLL – 4	1	0 – 46	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
LLL – 5	1	0 – 60	5YR 4/4 reddish brown silty loam	A Horizon	N	
LLL - 6	1	0 – 50	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
LLL - 7	1	0 – 55	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
LLL – 8	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
LLL – 8	2	13 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
LLL – 9	1	0 – 55	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
LLL – 10	1	0 – 61	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
LLL – 11	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
LLL – 11	2	11 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
LLL – 12	1	0 – 54	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
LLL – 13	1	0 – 50	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
LLL – 14	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
LLL - 14	2	15 – 65	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
MMM - 1	1	0 – 24	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by bedrock
MMM - 2	1	0 – 25	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by bedrock
MMM - 3	1	0 – 39	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
MMM - 4	1	0 – 43	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
MMM - 5	1	0 – 54	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
MMM - 6	1	0 – 48	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
MMM - 7	1	0 – 46	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
MMM – 8	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
MMM – 8	2	17 – 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
MMM – 9	1	0 – 55	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
MMM – 10	1	0 – 48	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
MMM – 11	1	0 – 52	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
MMM – 12	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
MMM – 12	2	15 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN - 1	1	0 – 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Moved 1m E due to rock
NNN – 1	2	8 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 2	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 2	2	18 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 3	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 3	2	15 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 4	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 4	2	14 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 5	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 5	2	16 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 6	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 6	2	20 – 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 7	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 7	2	22 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 8	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 8	2	20 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 9	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 9	2	15 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 10	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 10	2	13 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
NNN – 11	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
NNN – 11	2	16 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
OOO – 1	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
OOO – 1	2	18 – 42	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
OOO – 2	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
OOO – 2	2	17 – 60	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
OOO – 3	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
OOO – 3	2	15 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
OOO – 4	1	0 – 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
OOO – 4	2	21 – 56	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
OOO – 5	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
OOO – 5	2	10 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
OOO – 6	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
OOO – 6	2	12 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
OOO – 7	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
OOO – 7	2	13 – 53	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
PPP – 1	1	0 – 31	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by bedrock
PPP – 2	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
PPP – 2	2	15 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
PPP – 3	1	0 – 43	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
PPP – 4	1	0 – 47	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
PPP – 5	1	0 – 41	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
QQQ - 1	1	0 – 16	10YR 4/4 dark reddish brown silty loam	A Horizon	N	
QQQ - 1	2	16 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Moved 3m N due to tree
QQQ - 2	1	0 – 20	10YR 4/4 dark reddish brown silty loam	A Horizon	N	
QQQ - 2	2	20 - 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
QQQ - 3	1	0 - 27	10YR 4/4 dark reddish brown silty loam	A Horizon	N	Moved 3m S due to trees; stopped by bedrock
RRR - 1	1	0 - 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
RRR - 1	2	22 - 36	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
RRR - 2	1	0 - 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
RRR - 2	2	16 - 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
SSS – 1	1	0 - 4	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
SSS – 1	2	4 - 30	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
SSS – 2	1	0 - 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
SSS – 2	2	20 - 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
SSS – 3	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
SSS – 3	2	20 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
SSS – 4	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
SSS – 4	2	11 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
TTT - 1	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
TTT - 1	2	16 - 53	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
TTT - 2	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
TTT - 2	2	16 - 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
TTT – 3	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
TTT – 3	2	15 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
TTT – 4	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
TTT - 4	2	20 – 58	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
UUU - 1	1	0 – 46	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
UUU - 2	1	0 – 49	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
VVV - 1	1	0 – 22	5YR 4/4 reddish brown clay silt	A Horizon	N	Stopped by bedrock
VVV – 2	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
VVV – 2	2	20 – 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
WWW - 1	1	0 – 25	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by bedrock
WWW - 2	1	0 – 44	10YR 3/4 dark yellowish brown silty loam	A Horizon	N	Stopped by roots and rocks
WWW - 3	1	0 – 33	5YR 4/4 reddish brown silty loam	A Horizon	N	Stopped by rocks
XXX – 1	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XXX – 1	2	10 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
XXX – 2	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XXX – 2	2	14 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
XXX – 3	1	0 – 55	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
XXX – 4	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
XXX – 4	2	11 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YYY - 1	1	0 – 31	No soil-shale	A Horizon	N	Stopped by rocks
YYY - 2	1	0 – 7	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
YYY - 2	2	7 – 41	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
YYY - 3	1	0 – 27	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
YYY - 4			Not dug			Exposed bedrock
YYY - 5	1	0 – 52	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
ZZZ - 1	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
ZZZ - 1	2	12 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
ZZZ - 2	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
ZZZ - 2	2	16 - 40	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
ZZZ - 3	1	0 - 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
ZZZ - 3	2	11 - 35	5YR 4/4 reddish brown silty loam	Bw Horizon	N	Stopped by rocks
ZZZ – 4	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
ZZZ – 4	2	11 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
ZZZ – 5	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
ZZZ – 5	2	20 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
ZZZ – 6	1	0 - 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
ZZZ – 6	2	12 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
ZZZ – 7	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
ZZZ – 7	2	18 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAAA-1	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAAA-1	2	20 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAAA-2	1	0 – 17	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAAA-2	2	17 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAAA-3	1	0 -19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAAA-3	2	19 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAAA-4	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAAA-4	2	18 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAAA-5	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAAA-5	2	20 – 44	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAAA-6	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
AAAA-6	2	11 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAAA-7	1	0 – 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAAA-7	2	8 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAAA-8	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAAA-8	2	10 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
AAAA-9	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
AAAA-9	2	16 – 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-1	1	0 – 5	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-1	2	5 – 43	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-2	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-2	2	14 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-3	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-3	2	11 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-4	1	0 – 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-4	2	21 – 57	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-5	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-5	2	10 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-6	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-6	2	15 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-7	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-7	2	20 – 53	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-8	1	0 – 55	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-9	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-9	2	12 – 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-10	1	0 – 6	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-10	2	6 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
BBBB-11	1	0 – 11	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
BBBB-11	2	11 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-1	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
CCCC-1	2	16 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-2	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-2	2	20 – 53	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-3	1	0 – 6	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-3	2	6 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-4	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-4	2	13 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-5	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-5	2	22 – 56	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-6	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-6	2	10 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-7	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-7	2	13 – 55	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-8	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-8	2	19 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-9	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-9	2	20 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-10	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-10	2	18 – 57	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-11	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-11	2	22 – 55	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-12	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-12	2	14 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
CCCC-13	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
CCCC-13	2	16 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-1	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-1	2	15 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-2	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-2	2	18 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
DDDD-3	1	0 – 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-3	2	21 – 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-4	1	0 – 25	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-4	2	25 – 60	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-5	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-5	2	16 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-6	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-6	2	16 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-7	1	0 – 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-7	2	8 – 45	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-8	1	0 – 12	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-8	2	12 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-9	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-9	2	19 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-10	1	0 – 48	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	Stopped by rocks
DDDD-11	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-11	2	20 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-12	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-12	2	22 – 56	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-13	1	0 – 18	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-13	2	18 – 55	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-14	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-14	2	14 – 56	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-15	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-15	2	19 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
DDDD-16	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
DDDD-16	2	20 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEEE-1	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-1	2	13 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
EEEE-2	1	0 – 8	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-2	2	8 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEEE-3	1	0 – 14	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-3	2	14 – 55	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEEE-4	1	0 – 61	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-5	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-5	2	20 – 48	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEEE-6	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-6	2	15 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEEE-7	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-7	2	20 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEEE-8	1	0 – 22	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-8	2	22 – 54	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEEE-9	1	0 – 30	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-9	2	30 – 65	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
EEEE-10	1	0 – 21	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
EEEE-10	2	21 – 56	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFFF-1	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFFF-1	2	20 – 49	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFFF-2	1	0 – 7	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFFF-2	2	7 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFFF-3	1	0 – 16	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFFF-3	2	16 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFFF-4	1	0 – 13	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFFF-4	2	13 – 55	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFFF-5	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFFF-5	2	20 – 46	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFFF-6	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFFF-6	2	19 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

STP	Lvl	Depth (cm)	Soil Description	Soil Interpretation	Artifacts (Y/N)	Comments
FFFF-7	1	0 – 25	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFFF-7	2	25 – 60	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFFF-8	1	0 – 24	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFFF-8	2	24 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
FFFF-9	1	0 – 23	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
FFFF-9	2	23 – 52	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGGG-1	1	0 – 20	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGGG-1	2	20 – 50	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGGG-2	1	0 – 15	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGGG-2	2	15 – 47	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGGG-3	1	0 – 19	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGGG-3	2	19 – 57	5YR 4/4 reddish brown silty loam	Bw Horizon	N	
GGGG-4	1	0 – 10	10YR 4/4 dark yellowish brown silty loam	A Horizon	N	
GGGG-4	2	10 – 51	5YR 4/4 reddish brown silty loam	Bw Horizon	N	

Note: Excavation of all STPs was stopped after the removal of at least 20 of culturally sterile subsoil unless otherwise stated.

Appendix D.

Artifact Catalog

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Artifact Catalog

Cat. #	Provenience	Level	Depth	Qty.	Material	Object	Comments
1	C – 5	1	0 – 44	1	Ceramic	Tile fragment, ceramic	Reburied
2	C – 5	1	0 – 44	4	Ceramic	Brick fragments	Reburied
3	D – 1	1	0 – 30	5	Iron	Metal cans, sanitary seam	Reburied
4	D – 1	1	0 – 30	1	Glass	Glass, clear, bottle fragment	Reburied
5	D – 5	1	0 – 20	8	Glass	Glass, clear and brown	Reburied
6	D – 5	1	0 – 20	1	Iron	Can	1970s, Reburied
7	K – 3	1	0 - 5	1	Glass	Glass, clear	Reburied
8	K – 3	1	0 - 5	1	Ceramic	Porcelain, white, undecorated	
9	K – 5	1	0 - 5	1	Glass	Glass, clear	Reburied
10	KK – 3	1	0 - 5	1	Glass	Glass, clear	Reburied
11	VV – 2	1	0 - 4	1	Ceramic	Porcelain, white, undecorated	Reburied
12	VV – 3	1	0 - 4	15	Ceramic	Porcelain, white, undecorated	Reburied
13	VV – 3	1	0 - 4	2	Glass	Glass, clear	Reburied
14	YY – 1	1	0 – 37	4	Ceramic	Whiteware, undecorated	Reburied
15	CCC – 1	1	0 – 14	8	Ceramic	Porcelain white, undecorated	Fragment of bowl. Marked “Imperial” -Reburied