Phase I Archaeological Intensive Survey of Hassanamesitt Woods Property Grafton, Massachusetts



Center for Cultural and Environmental History
University of Massachusetts Boston

Cultural Resources Management Study No. 14

2005

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Submitted To:
The Town of Grafton
The Grafton Land Trust
The Trust for Public Land
The John H. Chafee Blackstone River Valley National Heritage Corridor
Nipmuc Tribal Office
Massachusetts Historical Commission

Submitted By:
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Abstract

The Center for Cultural and Environmental History conducted a Phase I archaeological intensive survey of the Hassanamesitt Woods property in Grafton, Massachusetts from October 2004 through January 2005. Documentary evidence has suggested that the property may contain remains of the church for the Praying Indian village of Hassanamisco, established by John Eliot in 1660. Historical deed research has also placed several Nipmuc families on the property in the early 18th century, suggesting the area was resettled by the original inhabitants of Hassanimisco in the aftermath of King Philip's War. Throughout the course of the 18th and 19th centuries the property was subsequently parceled out for agricultural purposes to white landowners. Nipmuc presence on the property however endured until the end of the 19th century. During the 20th century the property was utilized predominantly for orchards before reverting to its current state of woodland.

The survey of the 203+ acre property on the southern slope of Keith Hill consisted of shovel testing and a GPS survey of above ground features in order to identify historic and prehistoric resources and make recommendations for the future management of the property. A total of 386 test pits were excavated on 10m and 20m intervals covering approximately 74 acres and identifying six historic sites and one prehistoric site. The prehistoric site is composed of a well-defined lithic quarry, while the historic sites consist of the remains of 18th, 19th, and 20th century residential, agricultural, and low level industrial activities. The highest concentration of residential material has been identified as the remains of 18th and 19th century Nipmuc settlement. No 17th century component related to John Eliot's church or meeting house was recovered. Several aboveground features were located, including cellar holes, wells, extensive stone walls, stone retaining walls, and cobbled terraces.

Because the property is not slated for large-scale development it is recommended that no further immediate archaeological testing is needed. However, the archaeological remains related to 18th and 19th century Nipmuc settlement offer an opportunity to investigate Native American resettlement after the abandonment of Hassanamisco. Future archaeology may also help with public interpretation of the property within the context of long term land use from the Prehistoric Archaic period through the Early Modern period. Data gathered during this Phase I survey provides a starting point for the public interpretation of the Hassanamesitt Woods property and allows for the proper management of the property in terms of trail placement and low impact construction.

Table of Contents

Section	Page
Abstract	ii
List of Tables	v
List of Figures	vi
List of Photographs	vii
I. Introduction	1
II. Project Location and Environmental Context	2
Topography	2
Soils	2
Hydrology	4
Vegetation	5
III. Prehistoric Settlement Patterns	6
Paleoindian Period (ca. 12,000 –10,000 B.P.)	6
Early Archaic Period (ca. 10,000-8,000 B.P)	8
Middle Archaic Period (ca. 8,000-6,000 B.P.)	8
Late Archaic Period (ca. 6,000-3,000 B.P.)	9
Transitional Archaic Period (ca. 3,600-2,500 B.P)	10
Early Woodland Period (ca. 3,000-1,600 B.P.)	11
Middle Woodland Period (ca. 1,600-1,000 B.P.)	12
Late Woodland Period (ca. 1,000-450 B.P.)	12
Contact Period	13
IV. Hassanamesitt and Historic Settlement Patterns	15
Plantation Period (1620-1675)	15
Hassanamesitt	16
Colonial Period (1675-1775)	18
Federal Period (1775-1830)	20
Early Industrial Period (1830-1870)	20
Late Industrial Period (1870-1915)	21
Modern Period (1915-Present)	21
V. Methodology	27
Research Questions	27
Field Methods	27
Laboratory Methods	29
VI. Results	30
Quarry Site (Late Archaic – Middle Woodland 8,000 – 1,000 BP)	30
N500 E880	31
N500 E885	31

N505 E880 32
Muckamaug Site (Middle – Late Archaic 8,000 – 3,700 BP, 18th – 19th Century) 32
The John Eliot Parcel 33
The Muckamaug Parcel 38
Area North of the John Eliot Parcel 40
Discussion of Muckamaug Site Results 44
Burrell Cellar Site (19th Century) 45
Salisbury Cellar Site (18th - 19th Century) 47
Enclosure Site (Unknown Temporal Affiliation) 47
Historic Stone Quarry (17th – 20th Century) 48
North Property (19th – 20th Century) 50

VII. Conclusions and Recommendations 53
Recommendations 55

References Cited 56

Appendix A: Material Catalog

Appendix B: Supplementary Maps

List of Tables

Table 1: Prehistoric Cultural Chronology for Southern New England 7

Table 2: Known Prehistoric Sites Within 1.2mi(2km) of the Project Area 14

Table 3: Sites Located Within Hassanamesitt Woods 30

List of Figures

Figure 1: Map of New England Physiographic Zones 2

Figure 2: USGS Quad Map 2

Figure 3: Soils In and Around Keith Hill 4

Figure 4: Original 106 Acres of Peter Muckamaug 19

Figure 5: 1795 Map of Grafton 20

Figure 6: 1831 Brigham Map Showing "Indian House" 21

Figure 7: 19th Century deed map showing possible location of John Eliot's church along with chains of landownership in the project area. 23

Figure 8: Project Area with Wetlands and Aboveground Features 24

Figure 9: Project Area with Wetlands and Stonewall Designations 25

Figure 10: Total Test Pits and Site Designations 26

Figure 11: Quarry Site 30

Figure 12: Muckamaug Site with Parcel Boundaries 33

Figure 13: John Eliot Parcel and Positive Shovel Test Pits 34

Figure 14: STP N970 E1000 35

Figure 15: John Eliot Parcel Core 37

Figure 16: Test Pits with Concentrations of Coarse Earthenwares 37

Figure 17: Muckamaug Parcel 39

Figure 18: Area North of John Eliot Parcel 41

Figure 19: Burrell Cellar Site with Datum 45

Figure 20: Enclosure Site 47

Figure 21: North Property 49

List of Photographs

Photo 1: Beekman Triangular Point 31

Photo 2: Quartzite Scraper 31

Photo 3: Wall E, Looking South 34

Photo 4: Possible "Chestnut" Bottle 36

Photo 5: Blowpipe Pontil on "Chestnut" Bottle 36

Photo 6: Redwares from STP N930 E970 37

Photo 7: Pearlware from STP N960 E1000 37

Photo 8: Creamware from STP N960 E1000 37

Photo 9: Wall C, Looking North 39

Photo 10: Iron Knife Blade from STP N870 E970 40

Photo 11: Cobbled Surface 2, Looking Southeast 42

Photo 12: Cobbled Surface 1, Looking Northwest 42

Photo 13: Cobbled Surface 1, Looking Southeast 43

Photo 14: Cobbled Surface 1, Looking West Showing Eastern Retaining Wall 43

Photos 15 and 16: Stark Projectile Point 44

Photos 17 and 18: Burrell Cellar and Well 46

Photo 19: Enclosure Site Looking East 48

Photo 20: Retaining Wall Looking West 50

I. Introduction

This report serves as a summary of archaeological excavations conducted on the Hassanamesitt Woods property (also referred to as "project area" and "project parcel" in this text) in Grafton, MA. At the request of the Town of Grafton , the Grafton Land Trust, and the Trust for Public Land, the Center for Cultural and Environmental History (CCEH) at the University of Massachusetts Boston conducted a Phase I intensive archaeological survey of the property from October 2004 to January 2005 under state archaeologist permit 2698. The main goal of the archaeological survey was to identify prehistoric and historic resources located on the property and make management recommendations for the future preservation and educational use of the land. The 203+ acre tract has been identified as the location of Hassanimisco (one of John Eliot's fourteen praying Indian villages), 18th and 19th century historic properties related to Native American settlement, and 20th century agricultural fields as well as the potential location of various prehistoric resources and sites. Informed by historic background, personal interviews and deed research conducted by the CCEH in 2002 under state archaeologist permit 2255 the recent survey focused on areas of the property most likely to contain evidence for the village of Hassanimisco and properties occupied after the abandonment of the praying village. In addition to archaeological testing, GPS equipment was utilized to map the large number of stone walls and above ground features present on the property. Information from both the archaeological and GPS surveys was entered into and synthesized with GIS mapping software.

A total of 386 test pits were excavated on 10m and 20m grids covering approximately 74 acres. Six historic sites were identified through both above ground features and below ground deposits including a late18th- early 19th century domestic site, a 19th century domestic scatter, two 19th century cellars, a temporally unidentified historic stone enclosure, and a temporally unidentified area of historic stone cutting. One well-defined prehistoric lithic quarry site was also identified. No archaeological evidence was recovered that supports the documentary claims that the property was the location of one of John Eliot's churches. The large quantity of material located in the area most likely to contain the church however suggests occupation of the site in the aftermath of Hassanimisco's abandonment during King Philip's War (1675-76) and may reflect a return to an area inhabited by members of the praying village. More intense archaeological testing in this area may reveal that an earlier 17th century occupation of the property has been obscured by later 18th-20th century activities.

Stephen Mrozowski Ph.D. and David Landon Ph.D. of the CCEH served as principle investigators, Jack Gary served as project archaeologist, and field crews were supplemented by student employees from UMass Boston, student volunteers from UMass Boston, and volunteers from the Town of Grafton. All artifacts recovered are currently stored at the CCEH along with all field forms, field maps, notes, GPS and GIS data.

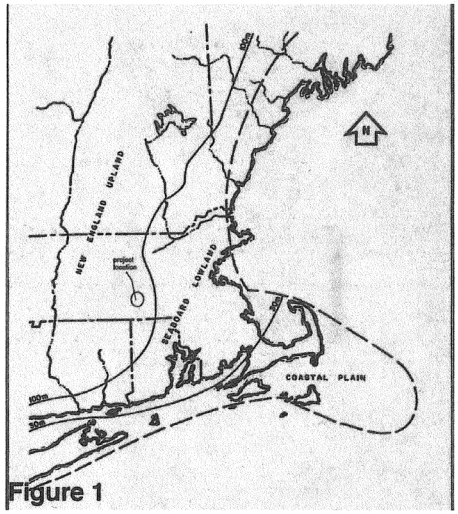

Figure 1

II. Project Location and Environmental Context

The 203 acre property is located in Grafton, Massachusetts, a town within Worcester County in the south-central region of the state. Grafton, approximately 40 miles west-southwest of Boston is located within the New England Upland Physiographic Zone (Figure 1). The Hassanemesitt Woods property is located on the southeastern slope of Keith Hill stretching south and west. The property is bounded on the east by the Grafton and Upton rail line, Salisbury Street and private property to the west, open pasture to the north, and stretches just beyond the New England Power Company powerline right-of -way to the south (Figure 2).

Topography

The property is characterized by rocky terrain generally sloping to the southeast towards the railroad tracks. Elevations range from 365-590ft above sea level, with the highest elevations located in the flatter areas in the western half of the property. Areas of slope in the northern half exhibit terracing most likely associated with 20th century orchards. Several areas in the northwest half of the property have also been terraced through the construction of large stone retaining walls, creating level plateaus that are also assumed to be associated with the orchards.

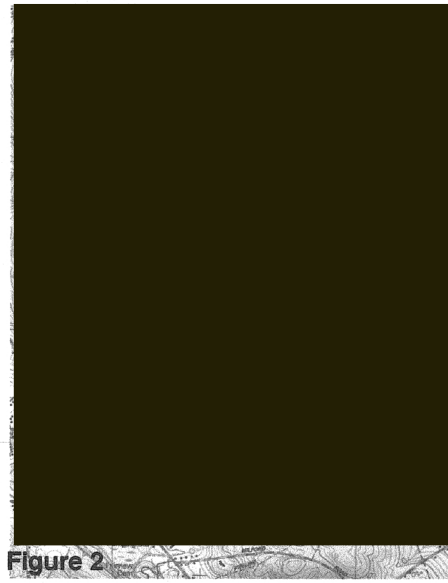
Figure 2

While rock outcrops are common across the property it appears that the northern and western portions of the property have been more extensively cleared for agricultural purposes than the southeastern section where bedrock outcroppings are more numerous.

Soils

Soils are generally shallow and composed of fine sandy loams mixed with stone. Several test pits encountered bedrock in various areas of the property, usually between 30 and 50cm below surface. Areas in the middle and western portion of the project parcel effected by the 1938 hurricane exhibit soils disturbed by mechanical activity, with an earthen berm demarcating areas where bulldozers cleared downed trees in the orchard. Soils in these areas are very shallow with surface

layers nonexistent or measuring as little as 5cm in depth. Several soil series are located on the southeast slope of Keith Hill within the project area (Figure 3). These include: Ridgebury fine sandy loam, Chatfield-Hollis-Rock outcrop complex, Paxton fine sandy loam, and Woodbridge fine sandy loam (USDA 1989). The following is a breakdown of the major characteristics of these soil series with the alphanumeric soil code corresponding with Figure 3 in parenthesis.

Ridgebury fine sandy loam, 0 to 3 percent slopes, extremely stony (71A)

Located in the southern portion of the project area, this very deep, nearly level, poorly drained soil is in low areas within drainageways of glacial till upland. The surface layer is typically very dark gray fine sandy loam to approximately 8 inches (in) (20 centimeters [cm]) below surface. The subsoil is fine sandy loam to approx 22 in (56 cm) below surface. This soil is poorly suited for cultivated crops, hay, and pastures due to the seasonal high water table and surface stones.

Chatfield-Hollis-Rock outcrop complex, 3-15 percent slopes (102C)

Located in the southwest portion of the project area, this moderately deep to shallow, gently to strongly sloping, well drained to excessively drained soil is located on hills and ridges of glacial till uplands. The Chatfield surface layer is typically dark brown fine sandy loam to approximately 2 in (5 cm) below surface. The subsoil is yellowish brown fine sandy loam to approximately 28 in (71 cm) below surface with bedrock right below. The Hollis surface layer is typically dark brown sandy loam to approximately 6 in (15 cm) below surface. The subsoil is dark yellowish brown gravelly fine sandy loam to approximately 19 in (48 cm) below surface with bedrock right below. The permeability of these soils is moderate to moderately rapid throughout. This soil is poorly suited for cultivated crops, hay, and pastures due the areas of exposed rock and the shallow depth of the bedrock.

Paxton fine sandy loam, 3 to 8 percent slopes (305B)

Located in the western portion of the project area, this very deep, gently sloping, well-drained soil is located on drumlins and drumlin-like land features. The surface layer is typically very dark grayish brown fine sandy loam to approximately 8 in (20 cm) below surface. The subsoil is yellowish brown to light yellowish brown fine sandy loam to approximately 24 in (61 cm) below surface. The permeability of this soil is moderate. This soil is well suited for cultivated crops, hay, and pastures. Erosion is a hazard however.

Paxton fine sandy loam, 8 to 15 percent slopes (305C)

Located in the northern portion of the project area, this very deep, strongly sloping, well-drained soil is located on drumlins and drumlin-like land features. The surface layer is typically very dark grayish brown fine sandy loam to approximately 8 in (20 cm) below surface. The subsoil is yellowish brown to light yellowish brown fine sandy loam to approximately 24 in (61 cm) below surface. The permeability of this soil is moderate. This soil is suited for cultivated crops, hay, and pasture. Erosion is a hazard.

Paxton fine sandy loam, 3 to 8 percent slopes, extremely stony (307B)

Located in the southwestern portion of the project area, this very deep, gently sloping, well-drained soil is located on drumlins and drumlin-like land features. The surface layer is typically very dark grayish brown fine sandy loam to approximately 8 in (20 cm) below surface. The subsoil is yellowish brown to light yellowish brown fine sandy loam to approximately 24 in (61 cm) below surface. The permeability of this soil is moderate. This soil is poorly suited for cultivated crops, hay, and pastures due to surface stones and high erosion potential.

Paxton fine sandy loam, 8 to 15 percent slopes, extremely stony (307C)

Located in the southern portion of the project area, this very deep, strongly sloping, well-drained soil is located on drumlins and drumlin-like land features. The surface layer is typically very dark

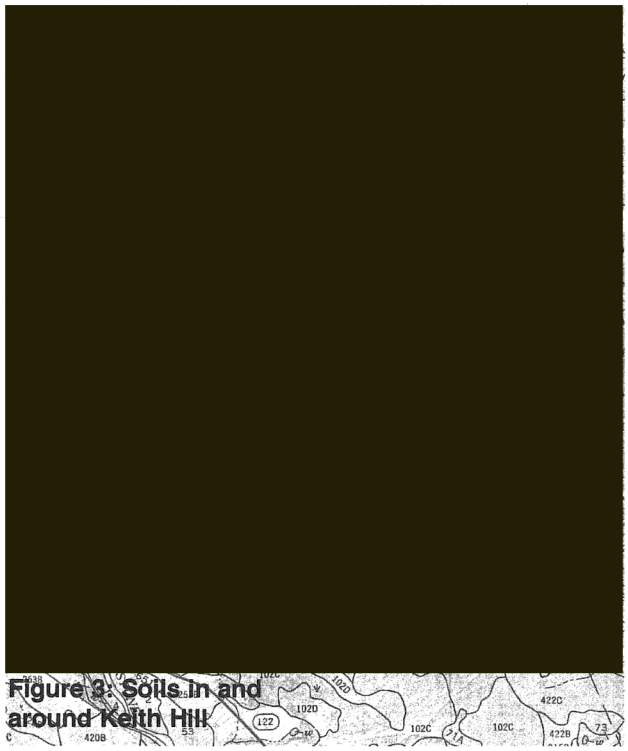

Figure 3: Soils in and around Keith Hill

grayish brown fine sandy loam to approximately 8 in (20 cm) below surface. The subsoil is yellowish brown to light yellowish brown fine sandy loam to approximately 24 in (61 cm) below surface. The permeability is moderate. This soil is poorly suited for cultivated crops, hay, and pastures due the surface stones, slope, and high erosion potential.

Paxton fine sandy loam, 15-35 percent slopes, extremely stony (307D)

Located in the southwestern portion of the project area, this very deep, moderately steep to steep, well drained soil is located on drumlins and drumlin-like land features. The surface layer is typically very dark grayish brown fine sandy loam to approximately 8 in (20 cm) below surface. The subsoil is yellowish brown to light yellowish brown fine sandy loam to approximately 24 in (61 cm) below surface. The permeability is moderate. This soil is poorly suited for cultivated crops, hay, and pastures due to surface stones, slope, and high erosion potential.

Woodbridge fine sandy loam, 3 to 8 percent slopes (310B)

Located in the middle of the project area, this very deep, gently sloping, moderately well drained soil is located on the top and toe slope of drumlins. The surface layer is typically very dark grayish brown fine sandy loam to approximately 11 in (28 cm) below surface. The subsoil is to approximately 22 in (56 cm) below surface. The top 5 in (13 cm) is dark yellowish brown loam, and the lower 6 in (15 cm) is light olive brown loam with mottles. The permeability is moderate. This soil is well suited for cultivated crops, hay and pastures.

Woodbridge fine sandy loam, 3 to 8 percent slopes, extremely stony (312B)

Located in the southern portion of the project area, this very deep, gently sloping, moderately well drained soil is located on the top and sides of drumlins. The surface layer is typically very dark grayish brown fine sandy loam to approximately 11 in (28 cm) below surface. The subsoil is to approximately 22 in (56 cm) below surface. The upper 5 in (13 cm) is dark yellowish brown loam, and the lower 6 in (15 cm) is light olive brown loam with mottles. The permeability is moderate. This soil is poorly suited for cultivated crops, hay, and pastures due to stoniness, and erosion potential.

Hydrology

Hydrographic resources on the property include several small intermittent rain-fed streams that ultimately drain into Miscoe brook to the east and eventually in to the Blackstone River. Several standing wetland areas, fed by streams were also located on the property with the most extensive located in southern portions of the project parcel. The Burrell Cellar Site, located

south of the transmission lines, is bordered to the south and west by an extensive marshland. The Prehistoric Quarry Site, located in the south central portion of the property is bordered to the north and west by marshland. Soils in several areas of the project area, characterized as glay, suggested that some wetland areas have dried up, or are infrequently inundated with water.

Vegetation

Vegetation across the property is second growth forest dominated by deciduous species with stands of pine mixed in. Apple trees associated with the orchard are still present in some quantity in the north and central portions of the property. These same areas are also the densest in terms of lowlying brush, briars, grapevines and other invasionary species. Vegetation is also thickest along the banks of the streams and around areas of greatest human disturbance, such as a cobbled surface in the central portion of the property. Growth in these areas is often so thick as to be virtually impenetrable.

III. Prehistoric Settlement Patterns

The prehistoric cultural chronology for southern New England is divided into three major temporal periods: PaleoIndian, Archaic, and Woodland. The Archaic and Woodland Periods are further divided into Early, Middle, and Late Periods. Each time period is characterized by projectile point typologies, ceramic styles, and subsistence practices (Table 1). The Contact Period divides the Prehistoric and Historic periods, and is characterized by a time when Native American populations underwent rapid social, political, economic, and spiritual change due to European contact and colonization.

Academic anthropologists, avocational collectors, amateur and professional archaeologists, have actively studied the prehistory of central Massachusetts and present day Grafton. Within the past two decades, professional archaeologists, spurred by preservation movements and supporting legislation, as well as increased development of the area, have focused their attention on central Massachusetts. Several Cultural Resource Management surveys have been conducted in Grafton, including: Elia 1980; Rosebrock et al. 1982; Mulholland et al. 1986; Elia et al. 1986; Elia and Strauss 1987; Pagoulatos 1988; Ritchie and King 1988; Glover 1989; Fragola and Ritchie 1996, 1998. Even with all these surveys, the majority of prehistoric site data recorded within the MHC site files is the result of artifact collections amassed by amateur collectors and avocational archaeologists with very little site data available.

The PaleoIndian, Archaic, Woodland, and Contact Periods are discussed in the following paragraphs. Please refer to Table 1 for short summaries describing diagnostic technology, settlement, and subsistence practices for each period. Unless otherwise noted, the majority of the information for this section was taken from the MHC regional survey of Central Massachusetts (1985).

PaleoIndian Period (12,500-10,000 B.P. [before present])

The earliest evidence for human occupation of New England including Central Massachusetts dates from the PaleoIndian Period. Immediately following the retreat of the Wisconsin glacier the environment underwent a transition from tundra to open spruce woodland (Funk 1972). Post-Pleistocene resources such as megafauna, medium and small game, marine resources, and seasonally available flora were exploited by small, mobile bands of hunter-gatherers who moved into the Northeast at this time, roaming large territories (Dragoo 1976).

Table 1: Prehistoric Cultural Chronology for Southern New England

General Period	Identified Temporal Subdivisions	Cultural Aspects
PaleoIndian 12,500-10,000 B.P. (10,500-8000 B.C.)	(1) Eastern Clovis (2) Plano	Hunting of migratory game animals by small groups with a specialized, socphisticated lithic technology was the rule for highly mobile bands of hunter-gatherers.
Early Archaic 10,000-7500 B.P. (8000-5500 B.C.)	(1) Bifurcate-Base Point Assemblages	Few sites are known, possibly because of problems with archaeological recognition. This period represents a transitioin from specialized hunting strategies to the beginnings of a more generalized hunting and gathering adaptation due in part to changingenvironmental circumstances.
Middle Archaic 7500-5000 B.P. (5500-3000 B.C.)	(1) Neville (2) Stark (3) Merrimack (4) Otter Creek	Regular harvesting of anadromous fish and various plant resources is combined with generalized hunting. Major sites are located at falls and rapids along major river drainages. Ground stone technology is utilized. There is a reliance on local lithic materials (5) Vosburg for a variety of bifacial and unifacial tools.
Late Archaic 5000-3000 B.P. (3000-1000 B.C.)	(1) Brewerton (2) Squibnocket (3) Small Stemmed Point Assemblage	Intensive hunting and gathering was the rule in diverse environments. Evidence for regularized shellfish exploitation is first seen during this period. An abundance of sites suggests increasing populations, with specialized adaptations to particular resource zones. Notable differences between coastal and interior assemblages are seen.
Transitional 3600-2500 B.P. (1600-500 B.C.)	(1) Atlantic (2) Watertown (3) Coburn (4) Orient	Same economy as the earlier periods, but there may have been groups migrating into New England, or local groups developing technologies strikingly different from those previously used. Trade in soapstone became important. Evidence for complex mortuary rituals is frequently encountered.
Early Woodland 3000-1600 B.P. (1000 B.C.-A.D. 300)	(1) Meadowood (2) Lagoon	A scarcity of sites suggests population decline. Pottery was first (?) made. Little is known of social organization or economy, although evidence for complex mortuary rituals is present. Influences from the mid-western Adena culture are seen in some area.
Middle Woodland 1650-1000 B.P. (A.D. 300-950)	(1) Fox Creek (2) Jack's Reef	Economy focused on coastal resources. Horticulture may have appeared late in period. Hunting and gathering was still important. Population may have increased from the previous low in the early Woodland. Extensive interaction between groups throughout the northeast is seen in the widespread distribution of exotic lithics and other materials.
Late Woodland 1000-450 B.P. (A.D. 950-1500)	(1) Levanna	Horticulture was established in some areas. Coastal areas seem to be preferred. Large groups some times lived in fortified villages, and may have been organized in complicated political alliances. Some groups may still have relied solely on hunting and gathering.
ProtoHistoric and Contact 450-300 B.P. (A.D. 1500-1650)	(1) Algonquian groups	Groups such as the Wampanoag, Narragansett, and Nipmuck were settled in the area. Political, social, and economic organizations were relatively complex, but underwent rapid change during European Colonization.

Artifacts temporally associated with the PaleoIndian Period include Clovis fluted and Eden-like projectile points, scraping tools, gravers, and drills.

Several important sites from this period have been identified in Massachusetts, including the Bull Brook Site in Ipswich (Grimes et al. 1984) and Locus 6 and Locus 8 of the Wapanucket Site in Middleborough (Robbins 1980). There is also one confirmed PaleoIndian occupation recorded within the Blackstone River drainage. The Mill River Site, a multi-component site located in Hopedale, Massachusetts, near the headwaters of the Mill River. This site yielded a single fluted point (Roop 1963). This may be an isolated find, however, since no other associated PaleoIndian materials or features were discovered in conjunction.

Early Archaic Period (10,000-7500 B.P.)

The Early Archaic Period is characterized by a gradually warmer and drier climate, dominated by a mixed pine-hardwood forest. This paleoenvironment would have made seasonally available food resources more predictable and abundant, allowing prehistoric populations to exploit a wide range of territories. Evidence from eastern Massachusetts river drainage studies, such as Ritchie's review of the Sudbury and Assabet drainages, indicate that a complex multi-site settlement system had been established by this period, with different site locations indicating exploitation of varied resources and environmental settings (Johnson 1993; Ritchie 1984). Populations probably increased during this period, although known sites are poorly represented in the archaeological record. Problems with recognition of components because of the lack of diagnostic materials (bifurcate-base point assemblage) and radiocarbon dates have partially contributed to the perceived low frequency of Early Archaic sites within New England. Many sites dating to this and the PaleoIndian Period may be buried under alluvium or slope wash, or may be situated in isolated and eroded upland locales (O'Steen 1987). At coastal locations, these sites were likely submerged by rising sea levels.

Evidence of Early Archaic activity in the Blackstone River drainage includes the Mill River Site, which produced a single bifurcate base projectile point (Roop 1963). An unprovenienced bifurcate point was also reported in Sutton, MA.

Middle Archaic Period (7500-5000 B.P.)

The distribution and somewhat higher density of Middle Archaic Period (7500 to 5000 B.P.) sites indicates that a multi-site seasonal settlement system was firmly established by this time. Sites from this period appear to cluster around falls and rapids along major river drainages, where the harvesting of anadromous fish and various flora resources was combined with generalized hunting practices. Climatic and biotic changes continued. By this time, the present seasonal migratory patterns of many bird and fish species had become established (Dincauze 1974) and important coastal estuaries were developing (Barber 1979). The Middle Archaic Period in southern New England is marked by Neville-like, Neville-variant, and Stark-like projectile points (Dincauze and Mulholland 1977; MHC 1985a; Ritchie 1979). In the Blackstone River drainage, most of the Neville and Stark-like projectile points recovered to date were manufactured on quartzite similar to known sources found in Westborough and West Boylston (MHC 1985). With the introduction of groundstone technology, a variety of tool types, including net

sinkers, gouges, plummets, and atlatl were introduced into the lithic assemblages (Dincauze 1976). A preference for locally available (within established territories) lithic raw materials for a variety of bifacial and unifacial stone tools is also evidenced at many sites. For example, quartzite, available as riverine and glacial cobbles in many parts of central Massachusetts, were used for chipped-stone tools found at sites in Worcester County (Leveillee and Dalton 1990).

Several Middle Archaic Period sites have been located in the Blackstone River drainage. These include the Mill River Site in Hopedale, an unnamed site near the Blackstone River in Uxbridge, the Cracked Rock Rockshelter in Millbury, and unprovenienced artifacts from Sutton, MA. These all yielded diagnostic Neville and/or Stark projectile points. An archaeological survey located a temporary campsite in Uxbridge with a radiocarbon date of 5420 $\pm$ 180 B.P. (Davin and Gallagher 1984). The town of Uxbridge is also where the Hartford Avenue Rockshelter is located which yielded a Neville projectile point (Ritchie 1985). Site examination investigations at the Purgatory I Site in Sutton and the Cracker Site in Uxbridge, yielded a Brewerton projectile point, and a Vosburg projectile point respectively, both which date to the end of Middle Archaic Period (Solomon et al. 1981; Thorbahn and Cox 1983). The Highfields 1 Site is located within 1.2 mi (2 km) of the project area on the western slope of Keith Hill. Initial testing at this workshop site yielded a Stark Point and quartz debitage (Fragola and Ritchie 1996).

Late Archaic Period (5000-3000 B.P.)

The Late Archaic Period is archaeologically more visible compared to the previous three periods in the Blackstone River drainage. Wetland areas appear to have been used extensively based on site distribution. Locally available lithics including felsites, rhyolites, argillites, and quartz were continually used. The period also marks the rise of steatite mining, with known quarries in Sutton, Worcester, Fitchburg, and Millbury (MHC 1985).

The Late Archaic Period is comprised of three major cultural traditions (Laurentian, Small Stemmed, and Susquehanna). The Laurentian Tradition is the earliest phase of Late Archaic activity in the region. This tradition is marked by the Vosburg (Middle/Late), Otter Creek (Middle/Late), Brewerton (Middle/Late), and Broad Eared projectile point types. These points are manufactured primarily from materials locally available in central Massachusetts. Site distributions from the Laurentian Tradition appear to be oriented to the central uplands region, which has been interpreted as suggesting a primarily interior, riverine adaptation (Dincauze 1974; Ritchie 1971).

Five sites dating to the Laurentian Tradition of the Late Archaic Period have been recorded for the Blackstone River drainage. These include the Purgatory I Site in Sutton, which yielded a Brewerton projectile point, The Cracked Rock Rockshelter in Millbury yielded Laurentian materials, The Bummet Brook Site in Grafton reportedly yielded chipped and ground stone tools from all three Late Archaic Traditions, as did the Mill River Site in Hopedale. The Millbury III Site in Millbury yielded Laurentian Tradition artifacts and a radiocarbon date of 4460 $\pm$ 160 B.P. obtained from a single feature (Leveillee 1998). This site also yielded important Transitional Archaic cremation burials as well as Woodland Period features. These will be discussed in their respective sections.

The Susquehanna Tradition has been most widely associated with mortuary/ceremonial sites in the coastal zone of New England (Dincauze 1968). Artifacts associated with this tradition consist of Atlantic, Wayland Notched, and Susquehanna Broad projectile points and several varieties of bifacial blades. Susquehanna Tradition materials were manufactured from a variety of lithics, including local quartzite, eastern volcanic, and exotic chert. The use of steatite (soapstone) is associated with the Susquehanna Tradition. This tradition is recognized as a transition into the Woodland Period.

Despite recent revisions concerning the diagnostic value of Small Stemmed projectile point types, the Small Stemmed Tradition continues to be an accepted Late Archaic cultural affiliation, although the duration of the tradition has been extended into the Woodland Period in some areas (Mahlstedt 1985; Rainey and Cox 1995; Wamsley 1984). Small Stemmed and Small Triangular (Squibnocket) point types manufactured from quartz and quartzite with almost equal frequency quantitatively dominate both artifact collections and excavated sites. The Small Stemmed Tradition exploited a wide range of ecozones including coastal and riverine settings as well as upland areas. Sites from the Susquehanna and Small Stemmed Traditions overlap into the Woodland Period.

Previously discussed sites in Millbury, Hopedale, and Sutton have yielded Small Stemmed and Small Triangular projectile points. Additionally, two Small Stemmed projectile points were recovered from the Deer Path Site in Northbridge along the West River, a tributary of the Blackstone River (Ritchie and King 1988). A Small Stemmed projectile point was also located during a surface walkover along the northwest slope of Keith Hill in close proximity to Bruce's Brook. The Henry Hartness Farm Site, located on the northwest slope of Keith Hill within 1.2 mi (2 km) of the project area produced lithic evidence dating from the Late Archaic Period. A local collector reported the site to the MHC and no further information is available on the types of material recovered (MHC Site Files). A local informant whose property borders the project area to the west collected a quartzite Sylvan Side Notched Small Stemmed point from his property.

Transitional Archaic Period (3600-2500 B.P.)

Some cultural aspects of the Susquehanna Tradition overlap into the Transitional Archaic and Early Woodland Periods. This period is characterized by an increase in social complexity evident in ritualistic mortuary behavior. Carved steatite vessels, prominent in this period, reflect increased sedentism, due to the low transportability of these items. Projectile points and tools of the Susquehanna are found commonly on multi-component sites and are often in association with Small Stemmed Tradition materials, although not in mortuary settings.

Five sites in the Blackstone River drainage have yielded Susquehanna Tradition materials including the previously mentioned Mill River Site in Hopedale and the Millbury III Site in Millbury. The Millbury III Site is approximately 200 m (656 ft) from the Blackstone River and yielded secondary burial cremation features. Several radiocarbon dates ranging from 3985 $\pm$ 145 to 1460 $\pm$ 90 B.P. were obtained from approximately 26 features/deposits. Susquehanna Tradition lithic materials, a copper blade and textile fragment were also recovered. The Millbury III radiocarbon data have been interpreted as representing multiple depositional

episodes spanning numerous generations that reflect a continuity of ideology transferred and reinforced through ceremonialism. "The Millbury III Site was a perceived sacred place for multiple generations and during the Transitional Archaic was used for secondary burial of cremated human remains and related grave goods" (Leveillee 1998). The Horne Hill Steatite Quarry in Millbury also recorded Susquehanna materials. The Purgatory II Site in Sutton yielded three Susquehanna Broad projectile points, and a radiocarbon date of 2805 ± 140 B.P. obtained from charcoal in a feature. This date confirms the Susquehanna occupation of the site (Solomon et al. 1981). The Fisherville Pond Site in Grafton yielded a basal fragment from a Mansion Inn blade. This surface find was not associated with any other prehistoric cultural material. This artifact is culturally affiliated with the Susquehanna Tradition (Elia et al. 1986).

The Orient Phase of the Transitional Archaic Period is represented at quarry sites and rockshelters within the Blackstone River drainage. The quarrying of steatite (soapstone) is an important regional activity associated with this tradition. All three steatite quarries located in Millbury, Horne Hill Site, Torrey Lane Site, and Dolly Bond Site, yielded Orient projectile points during site excavation (Fowler 1966). The Hartford Avenue Rockshelter produced One Wayland Notched and two Orient Fishtail projectile points. A radiocarbon date of 2570 ± 130 B.P. was also obtained from this site reinforcing the Transitional Archaic Period date (Ritchie 1985).

Early Woodland Period (3000-1600 B.P.)

The Early Woodland Period is generally underrepresented in the regional archaeological record, suggesting a population decline and/or poorly documented tool assemblages. Coastal resources are believed to have become an important part of subsistence collecting activities and diets, as evidenced by the high frequency of known Woodland Period coastal sites in New England (Cox 1983; Cox, et al. 1983; Kerber 1984; Thorbahn and Cox 1988). This is also believed to be a time of widespread long distance exchange of raw materials, finished products, and information (MHC 1985). There is some evidence for the appearance of task specific sites (Dincauze 1976). Early Woodland site locations have generally relied on the identification of Meadowood and Rossville point types as well as Vinette I ceramic styles. Because of the problems of relying on diagnostic projectile points to recognize Early Woodland sites, (i.e., overlap of both the Small Stemmed and Susquehanna Traditions) the presence of ceramics is relied on as a diagnostic trait of the Early Woodland Period.

Based solely on these temporal diagnostics, Early Woodland occupation is sparsely represented in the Blackstone River drainage. One site, located within 1.2 mi (2 km) of the project area, yielded a possible black chert Meadowood projectile point collected from the surface. Another site within proximity of the project area is the Highfields 1 Site. Initial testing placed this site in the Middle Archaic Period. A site examination was conducted and a radiocarbon date of 2800 ± 60 B.P. was recovered from a charcoal feature placing it in the Early Woodland Period (Fragola and Ritchie 1998). The Henry Hartness Farm Site, located on the northwest slope of Keith Hill within 1.2 mi (2 km) of the project area produced lithic evidence dating from the Late Archaic and Early Woodland Periods. A charcoal feature at the Millbury III Site yielded a radiocarbon date of 1840 ± 120 B.P. (Leveillee 1998). A local collector reported the site to the MHC and no further information is available on the types of material recovered (MHC Site Files). The previously mentioned steatite quarries, rockshelters, and campsites associated with

the Late Archaic/Transitional Archaic Period may have been utilized during the Early Woodland Period also.

Middle Woodland Period (1650-1000 B.P.)

The Middle Woodland Period apparently saw increasing population and extensive long-distance social and economic interaction. Larger base camps in riverine and coastal settings were established in conjunction with ever increasing sedentism. This is supported by increased instances of storage pit features suggesting production of bulky foods. The Middle Woodland Period is marked by the introduction of horticulture into the traditional hunting and gathering subsistence practices of human populations in the Northeast. Horticulture led to changes in subsistence, population growth, organization of labor, and social stratification (Snow 1980). The degree of dependence on horticulture and its significance as a stimulus of social and economic change in the late prehistory of southern New England is still a topic for further archaeological research (Mrozowski 1993). Recent studies have shown that late Middle Woodland components are marked by a high percentage of exotic lithics. Diagnostic Fox Creek and Jack's Reef projectile points are found in association with Pennsylvania jasper, Ramah chert, Kineo felsite, and Lockatong argillite (Goodby 1988; Luedtke 1988; Mahlstedt 1985). This assemblage of exotic raw materials suggests that Middle Woodland populations inhabiting southern New England took part in an extensive network of social and economic contacts that extended from Pennsylvania northward to Labrador.

This period is not well documented in the Blackstone River drainage. A Woodland Corner Notched projectile point was inventoried from an unknown site in Sutton suggests Middle Woodland occupation. A *probable* Middle Woodland occupation was suggested for the Kettle Hole Site in Northbridge due to the presence of Hornfels chipping debris, frequently associated with Middle Woodland populations in central and southeast Massachusetts. This debris was associated with a hearth/fire pit feature on an upper terrace near the West River (Ritchie and King 1988). An intrusive feature into a Late Archaic cremation at the Millbury III Site yielded a radiocarbon date of 1460 + 60 B.P. placing it in the Middle Woodland Period (Leveillee 1998).

Late Woodland Period (1000-450 B.P.)

The Late Woodland Period is marked by an increase in ceramic production through improvements in technology. Some populations may still have relied solely on hunting and gathering while others turned to horticulture. Coastal areas and semi-permanent settlements seemed to have been preferred although larger groups sometimes lived in fortified villages. This could indicate the presence of complicated political alliances. Late Woodland Period artifacts represented in the archaeological record include triangular Levanna points, cord-wrapped stick-impressed and incised collared ceramic vessels, and increasing amounts of local lithic materials (MHC 1985).

This period is more visible in the Blackstone River drainage compared to the preceding two Woodland Periods. The Bear Hollow Site in Sutton produced several Levanna projectile points and two radiocarbon dates of 425 $\pm$ 150 B.P. and 340 $\pm$ 150 B.P. (Thorbahn and Cox 1983).

The Hartford Avenue Rockshelter in Uxbridge yielded Late Woodland midden deposits (Ritchie 1985). An unnamed site in Grafton yielded one quartz Levanna point and the Bummet Brook Site reported Woodland Period pottery sherds. The Milford Road Quarry in Grafton is believed to have ceremonial significance due to the presence of quartz crystals in the quarry outcrop (MHC Site Files). The Highfields 4 Site is located within 1.2 mi (2 km) of the project area on the northwest slope of Keith Hill in Grafton. This site yielded a Late Woodland quartz Levanna point (Fragola and Ritchie 1996). The Millbury III Site yielded a radiocarbon date of 850 ± 70 B.P. from a charcoal concentration (Leveillee 1998).

Contact Period (450-300 B.P. [1500-1620 A.D.])

Algonquin-speaking groups inhabited southern New England by the Contact Period. A number of Algonquin subgroups occupied the area of Massachusetts when European settlement began in the early 1600s including the Nipnet; a subgroup of the southern New England Nipmuc who inhabited the Blackstone River Valley of central Massachusetts. The Nipnet settlement area included southern Grafton (present day), all of Upton, Northbridge, Hopedale, Mendon, and parts of Milford and Uxbridge (MHC 1985). The Contact Period settlement pattern appears to have consisted of villages and/or base camps located on flood plains along major river drainages with smaller seasonal camps in areas where natural resources could be readily exploited. These groups lived primarily by hunting, fishing and practicing horticulture.

Several documented Contact Period trails passed through present day Grafton. These trails provided access between the river valleys, interior uplands, and coastal lowlands. These routes allowed access to hunting, fishing, planting, gathering, and quarry sites within the area, connecting available resource exploitation sites to the core areas. Major routes appeared to follow northeast to southwest and north to south directions with secondary trails connecting them (MHC 1985). A major trail connecting present day Boston to Hartford passed through Grafton, reportedly through the project area, and crossed the Blackstone River at present day Farnumsville (Ayers 1940). Established Native trails were later utilized by European settlers including the aforementioned trail, which became known as the "Connecticut Path."

Eighteen prehistoric sites are located within 1.2 mi (2km) of the project area and are on file at the MHC. The attached table (Table 2) lists them by state site number and includes location, period, and finds.

Table 2: Known Prehistoric Sites Within 1.2 mi (2 km) of the Project Area

Site	Location	Period	Site Type	Finds
19-WR-115 "Battlefield"	South slope Pigeon Hill	Unknown	No Info Battlefield?	No Info
19-WR-446 Unnamed	Northwest slope Keith Hill	Late Archaic/Early Woodland	Find spot	Small stemmed point
19-WR-448 Unnamed	Wetland associated with West River	Late Woodland Poss. Early Woodland	No Info Poss. Workshop	1 quartz Triangle (Levanna?), 1 Untyped corner-notched, Poss. Meadowood point
19-WR-494 Keith Hill South	Southwest slope of Keith Hill	Unknown	Unknown Poss. Lithic Workshop	quartz flakes and shatter
19-WR-515 Milford Rd. Rockshelter	Upland Terrace East of Blackstone River	Late Woodland	Rockshelter	Quartz debitage, retouched quartz tools, charcoal evidence
19-WR-516 Milford Rd. Quartz Quarry	Upland Terrace East of Blackstone River	Late Woodland?	Quarry	No Info
19-WR-521 Mahoney/Blackstone Terrace	East bank Blackstone River	Unknown	Campsite Workshop	Flakes 2 soil features
19-WR-522 Fowler St Rockshelter/Quarry	Upland Terrace East of West River	Late Archaic E. Woodland M. Woodland L. Woodland	Rockshelter Quarry	Brewerton point, poss. Small stemmed point base, biface, flakes, FCR
19-WR-542 Oakmont Farms	Upland Terrace East of Blackstone River	Unknown	Lithic Workshop/Tool Reduction	Quartz biface fragments, debitage
19-WR-545 Salisbury St. Prehistoric Findspot	Upland Terrace East of Blackstone River, South of Wetland	Unknown	Find spot	Quartz flake
19-WR-546 Warren Brook Prehistoric Findspot	South of Warren Brook	Unknown	Unknown	3 flakes
19-WR-621 Highfields 1 Site	West Slope Keith Hill	Middle Archaic/Early Woodland	Campsite, Workshop	Stark Point, 39 flakes, Charcoal
19-WR-622 Highfields 2 Site	Summit Keith Hill	Unknown	Campsite, Workshop	Quartz biface, quartz core
19-WR-623 Highfields 3 Site	Summit Keith Hill	Unknown	Campsite, Workshop	1 quartz flake, 1 quartz shatter
19-WR-624 Highfields 4 Site	Northwest slope Keith Hill	Late Woodland	Campsite, Workshop	Levanna point, 1 quartz shatter
19-WR-625 Highfields 5 Site	West slope Keith Hill	Unknown	Find spot	1 quartz flake
19-WR-626 Highfields 6 Site	Northwest base Keith Hill	Unknown	Find spot	1 quartz flake
19-WR-665 Henry Hartness Farm	Northwest slope Keith Hill	Late Archaic/Early Woodland	Unknown	Lithic evidence from collector

IV. Hassanamesitt and Historic Settlement Patterns

The historic cultural chronology for southern New England is divided into six time periods. Technological advances and social changes in the region characterize each period. The Contact and Plantation Period were a time of initial European exploration and settlement of the area. In the Colonial Period, European settlement extended further west into unexplored territory leading to conflicts with native groups. The Federal Period saw the break from England during the Revolutionary War and the establishment of an independent country. Growth in technology characterizes the Early Industrial Period as manufacturing grew and replaced agriculture as the basis of New England's economy. Large-scale immigration brought new ethnic groups to the area who quickly found employment in the newly formed mill towns. Major changes in technological development characterized the Late Industrial Period along with growth in transportation routes and the continued influx of immigrants. The Modern Period heralded the decline of industry in New England. The Great Depression and World War II brought the closure of many New England based industries. At this time urban centers began to lose population as people migrated to the suburbs. The improvement of transportation routes enabled workers to move further away from the urban core.

Plantation Period (1620-1675)

European interaction with the Nipmuc living in the project area was sporadic in the early years of European settlement. As coastal areas became more heavily populated, settlements were pushed further west onto land occupied by the Nipmuc. European settlement spread westward using the network of trails previously established by these indigenous populations. Like many tribes in southern New England, the Nipmuc had already been decimated by plagues at this point (Bragdon 1996).

In his work on the history of Grafton, Pierce describes the early European expansion into the area:

> The first mention of this country is by Governor Winthrop, who with a number of others, made an excursion up Charles River in January, 1632....No white man, probably, ever set foot on its soil till the autumn of 1635 when it was traversed by a company of English, consisting of sixty persons, who, thinking themselves straitened for land in Mass Bay, had determined thus early to emigrate to the more fertile banks of the Connecticut (Pierce 1879: 29-30).

The Reverend Hooker of Newton led a group through the unknown wilderness of central Massachusetts along the Great Trail and blazed what came to be known as the Connecticut Path from Boston to Hartford in 1635. Although they did not settle in the project area permanently, their trek opened the country to English settlers. European contact with Native American groups living in central Massachusetts during the Plantation Period was responsible for dramatic shifts in their traditional settlement patterns and subsistence systems (Mandell 1996).

Religious conversion of the native population was a priority of the colonial government from the earliest days of settlement. The first major conversions of Native American populations in

Massachusetts began during the Plantation Period (1640s). John Eliot, a Roxbury minister, began giving regular sermons to the local Native Americans at Newton by 1646. In the same year, the Massachusetts General Court passed laws awarding legal landholding status to Indians who conformed to English lifestyles and converted to Christianity. Eliot began petitioning the General Court for the establishment of English-style Indian praying towns and by 1651 his petition was granted and the first Praying Indian Town was set up at Natick (Carlson 1986; Mandell 1996). Following this, Praying Indian Towns or plantations were set up at present day Canton (Punkapoag), Grafton (Hassanamesitt), Marlborough (Okommakamesit), Lowell (Wamesit), Littleton (Nashoba), and Ashland/Hopkinton (Magunkaquog).

Hassanamesitt

John Eliot began preaching to the native population of the Nipmuc territories in the 1640s. His ability to convert the Indians was facilitated by his understanding of their language. In an effort to make the conversion process more complete, Eliot petitioned the General Court to grant land to Christianized Indians where they could live in English style communities. Eliot "determined that the Indians should be induced to 'sit down orderly' in permanent communities, where they might learn civilized ways of living – English methods of agriculture, the useful trades and decent social conditions" (Nelson 1934: 51). In order to establish these communities Eliot was granted a tract of land in 1651 to establish the first Praying Indian Town in Natick. In 1654 the second town was established at Punkapoag in Canton.

In 1654 Eliot again petitioned the General Court to set aside land for Hassanamesitt (meaning place of small stones), the third Praying Indian Town. The legislature decreed in May of 1654 that "Liberty is granted to the Indians of Hassanamesitt, being about 16 miles west of Sudbury, to make a town there, provided they shall not dispose of it without leave first had and obtained from this court" (Records of General Court, 1651). The town was laid out in 1660 and occupied by the Hassanamisco (meaning people of Hassanamesitt), a sub-group of the Nipmuc. According to Daniel Gookin, Superintendent of the Indians:

> The dimension of the town is four square miles, and so about eight thousand acres of land. This village is not inferior with any of the Indian plantations for rich land and plenty of meadow, being well tempered and watered. It produceth plenty of corn, grain and fruit; and there are several good orchards in this place. It is an apt place for keeping cattle and swine, in which respect this people are the best stored of any Indian town of their size (Gookin 1972: 45).

It was the largest of the praying Indian villages and roughly the size of present day Grafton. The Provincial Government's grant reserved the land for the exclusive use of the tribe for seventy years (Speck 1943).

According to the MHC site file the exact boundaries of the settlement remain unclear. As with many other praying towns there is very little historical documentation of the settlements early years and virtually no detailed maps or plans. Historic documents give varying descriptions of the location of Hassanamesitt. Several sources place it one to two miles east of the Blackstone River (Gookin 1972; Pierce 1879). According to Gookin, Hassanamesitt lies, "thirty-eight

miles from Boston, west southerly; and is about two miles to the eastward of the Nipmuck river; and near unto the old roadway to Connecticut" (Gookin 1972:45). Others believe it was closer to the Old Connecticut Path (Ayers 1940). Most historic accounts, however, do suggest that the nucleus of Hassanamesitt was situated in the southeastern part of Grafton.

Although the exact location of the settlement is unclear, historic records do give some indication of the physical composition of the settlement. In addition to a church, the village contained two or three houses "in the English style" a schoolhouse, orchard, pastures, planting fields and a burying ground. Gookin also states that though there were English style dwellings the natives did not care to live in them, preferring their old style wigwams (Gookin 1972). He does state, however, that they did accept the practice of animal husbandry and, more importantly, the religious instruction of Eliot. This sedentary lifestyle and ready acceptance of the English way of life provided the native community with the means to supplement their indigenous hunting practices. Animal husbandry was practiced to such an extent that Gookin described the settlement as "an apt place for keeping cattle & swine; in which respect this people are the best stored of Indian town of their size" (Gookin 1972).

Hassanamesitt and Natick were the only two praying towns to have churches. Eliot, writing to the Commissioners of the United Colonies in New England on September 4, 1671, describes the beginning of the church at Hassanamesitt: "More over the church of Natick is about to dismiss sundry of their numbers to gather into a church estate at Nipmuck River, 40 miles from the Bay"(Eliot 1671: 248). This church occupied a special place in the conversion efforts of the English. As the western most settlement of Christian Indians, Hassanamesit served as a missionary outpost sending Christianized Indians west to convert additional Native communities and establish new praying towns. This community was special to John Eliot and his mission. In 1670 he wrote "No Indian town gave stronger assurances of success than this at that time." Hassanamesit had become the central point of civilization and Christianity to the whole Nipmuc country (Doughton 1997: 5). As with the location of the plantation itself, the location of the church or meetinghouse is also unclear. Historic records fix its location in different parts of the settlement. Keith family history places it "somewhere on the south-eastern slope of Keith Hill" (Fiske n.d.: 4). Herbert Keith considered it sufficient evidence of the location that "a cellar hole is a short distance from the site of Sarah Boston's Home, long known as the Indian land on the farm formerly that of David L. Fiske" (Fiske n.d.: 4). Ayers agreed with the Keith Hill location stating "for that was the life-center of the praying town reservation" and "Keith Hill (and the plantation as a whole) was handy to the historic Indian fordway across the Blackstone (Nipmuck) River at Farnumsville" (Ayers n.d.: 10-11) (See Figure 7 and Appendix B, Maps 1,2). Other locations include "near the Old Indian Burying Ground in the vicinity of Mr. Frederich Jourdan's place" (Goulding 1889: 936). Archaeological surveys of the town of Grafton over the years have failed to reveal any evidence of the meetinghouse.

By 1674 the village contained sixty residents, representing twelve families (Carlson 1986), with sixteen full church members and about thirty baptized persons (Mandell 1996). On the eve of King Philip's War it was a promising and flourishing community and, as Gookin states, a "hopeful plantation" (1972: 45).

Colonial Period (1675-1775)

The outbreak of King Philip's War (1675-76) led to great social upheaval and disturbed the delicate balance previously achieved between the native populations and the English settlers. The war began in southeastern Massachusetts and quickly spread to other areas of the colony. Bands of hostile Native Americans, led by the sachem Metacomet (King Philip), lay waste to whole villages, decimating food supplies and killing English settlers. The English were just as ruthless in their response to these attacks (Cogley 1999; Mandell 1996).

Non-combatant Hassanamisco Indians were initially allowed refuge from the hostile warriors of King Philip's army and the soldiers of the English. Increasing hostilities over the summer of 1675 forced the government to impose restrictions on the praying Indians. By August of 1675, the Provincial Government passed an order restricting the movement of the Natives to within one mile of the village. Anyone caught outside the boundary risked being shot. This law was not lifted until May of 1677 (Pulsipher 2001). In November 1675, three hundred warriors from King Philip's army entered Hassanamesitt. There they confronted the praying Indians and pressured them into joining the fight. It is speculative whether the praying Indians were willing participants or if they were forced to join King Philip's soldiers. Historical accounts tell of two battles fought on Keith Hill. One battle presumably led to the deaths of 11-16 Indians and several English (Goulding 1889). Soon after, Hassanamesitt was abandoned (MHS Coll. vol. I: 185). Of those who did not join Philip's army, some moved to Natick and traveled back to Hassanamisco to tend their crops while still others were interned on Deer Island in Boston Harbor. Here, many of them died from disease and starvation and of those who participated in the hostilities, many were executed (Cogley 1999). Some were sold as slaves and many children were taken from their parents to be raised in Christian households. This resulted in the further scattering of the Native populations (Connole 2001; Pierce 1879). While they were interned the towns were plundered both by English and hostile natives. Gookin visited with a Hassanamesit resident, Joseph Tuckapawillin, minister and pastor of the church at Hassanamesit, who bemoaned the loss of his property including "my estate, my corn, cattle, my plough, cart, chain, and other goods" (Gookin 1972: 504). The summer of 1676 brought an end to war and with it the last vestiges of Native political autonomy in Southern New England.

At the end of the war, native survivors first settled in nearby Natick and used the land of their old town for growing corn, returning to the safety of the fort at Natick for fear of attack from hostile Mohawks. In 1698 a group of five families returned to Hassanamesitt, although the church and school do not appear to have been rehabilitated (Goulding 1889). These five families were the only occupants of the entire four-mile tract of land (Pierce 1879) and lived there relatively undisturbed until the first half of the 18th century. There is no mention made in the historic record of the fate of the buildings that had been erected at the plantation. It would appear that they were either destroyed during the war or simply succumbed to the elements.

The settlement of Hassanamesitt by the English began in 1718. In that year Elisha Johnson acquired title to a tract of land in exchange for building and maintaining two bridges over the Blackstone River (Mass. General Court 1718; Pierce 1879). Other English families began to arrive and by 1727-1728 there were nine English families and seven individual descendants of

the original native proprietors who held title to the entire 10,000 acre (4,047 ha) grant. Soon though others began to covet the land and the Indians "beneficial isolation would soon be destroyed by the rapid expansion of colonial settlement" (Mandell 1996: 47).

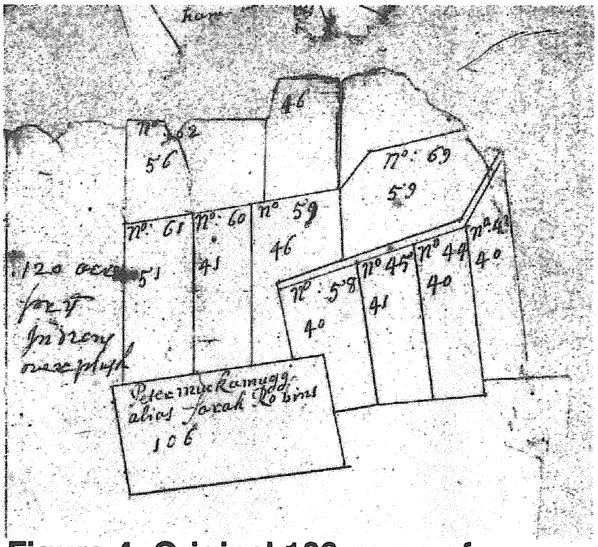

Figure 4: Original 106 acres of Peter Muckamaug

In 1724 the seventy-year exclusive grant given to the original proprietors expired and a group of Englishmen petitioned the General Court to buy land in Hassanamesitt. In 1728 the seven native titleholders granted 7,500 acres (3,035 ha) to 40 English settlers in exchange for 2,500 pounds. Trustees appointed by the General Court were to manage the funds and distribute the interest annually. In the original deed the land was to be divided up equally between the Indians and the English with the Indians also receiving an additional 120 acre (49 ha) tract for their exclusive use. Peter Muckamaug (also spelled Muckamugg) was one of the Indians to be granted a parcel, located on Keith Hill and within the project area, and his name is clearly shown on the Indian Proprietors map (Figure 4). The English were required by the General Court to erect a meetinghouse where there would be seats for the Indians and to build a school for the teaching of Indian children (Suffolk Registry of Deeds; Warren n.d.). A town common was chosen on the west side of Chestnut Hill at the crossroads of two important transportation routes where the meetinghouse and school were erected by 1731, as well as a burying ground and training field. The Willard House was also erected during this period (1718) and is an example of a homestead from the early English settlement of the area (MHC 1985). During this time the main economic base of the town was agriculture and animal husbandry. The land supported a variety of crops and an array of fruit orchards. The settlement officially became the town of Grafton in 1735 (Acts & Resolves, Vol. II, 1715-1741: 743).

The second half of this period saw a continued change in the native population. Records kept by the proprietors of the town detail many occasions when natives petitioned the General Court for permission to sell parcels of their land to pay debts (Proprietors Records 1728: 71). In some instances it was to build a barn, or pay burial expenses or doctor's bills. During this period the Hassanamisco were slowly selling off their lands to a steady stream of English settlers. The native population was also never fully integrated into the new community. Despite the requirements of the original land agreement it appears from the records that they were never admitted into the church (Mass. Archives Resolves of 1740-41 vol. 31: 290A) and Fragola and Ritchie (1996) assert that by 1765 the total Indian population had dwindled to only fourteen. This however is based on Native American visibility at the time, which is often skewed by white assumptions of ethnicity. Intermarriage to African and English colonists in the area may have caused the Nipmuc to "disappear" despite their continued physical presence (Lepore 1998 185)

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Federal Period (1775 – 1830)

The Federal Period was a time of growth for Grafton. The population more than doubled from 861 to 1,889 and the economy rapidly became more diverse (MHC 1985). A 1795 survey plan of Grafton shows the town boundaries at their present day locations as well as the town center with the meetinghouse and early road networks (Figure 5).

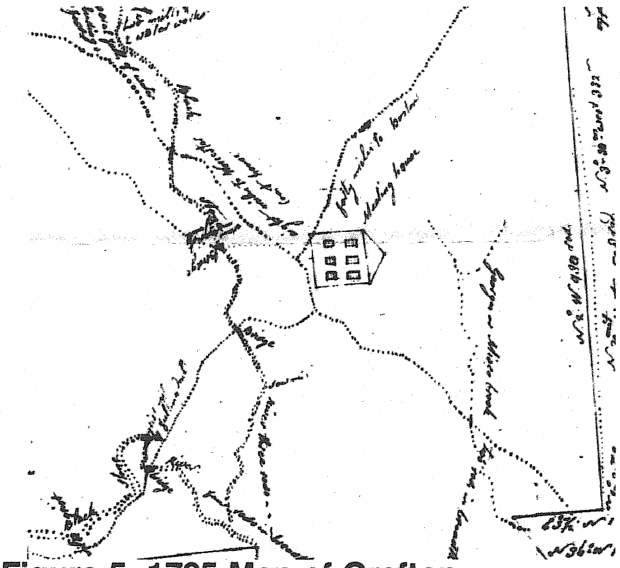


Figure 5: 1795 Map of Grafton

Light industry began to develop, focusing on textiles, leather and quarrying. Shoe making, tanning and currying employed many local men and the town prospered. The opening of the Blackstone Canal led to the development of specific commercial areas of towns such as Saundersville and Centerville where manufacturing took place. Cotton and woolen mills were opened and employed a large percentage of the population.

It was during this period that the Keith family arrived in Grafton. The patriarch of the family, Royal Keith, was an orphan. He was sent to live with his uncle Elijah Stanton in Grafton and taught the shoemakers trade. In 1788 he moved to Boston to work for a shoemaker at his shop near Faneuil Hall. By 1790 he had returned to Grafton and purchased his first house on South Road in 1795. In February of 1797 the family bought the house and farm of James Whipple on what would later become Keith Hill (E.L. Keith n.d.: 6).

Those 53 acres (21 ha) were the start of family holdings, which by 1830 would include 500 acres (202 ha). Family lore also states that: "The Indians were at that time, still inhabitants of the region of Eliot's old church site" (E.L. Keith n.d.: 10).

Early Industrial Period (1830 –1870)

Grafton's economy and population continued to grow during this period and it was a period of rapid industrial development (Marvin 1879). The arrival of the railroad brought immigrants to the town attracted by the promise of employment in the many mills. The railroad supplanted canal service and the Blackstone canal was abandoned in 1848. Leather and textile manufacturing were still prominent industries and whole communities developed around the factories. Amongst all this growth, agricultural activities, predominantly dairying, cattle and fruit orchards continued to form the basis of the towns' economy.

While the population of Grafton more than doubled again from 1,889 to 4,594 during this period, the native population continued to dwindle. Of the seven original families, two had already died or moved out of town and many continually lost control of what little land was left. The 1831 Brigham map (Figure 6) shows an "Indian House" which is located within the project area

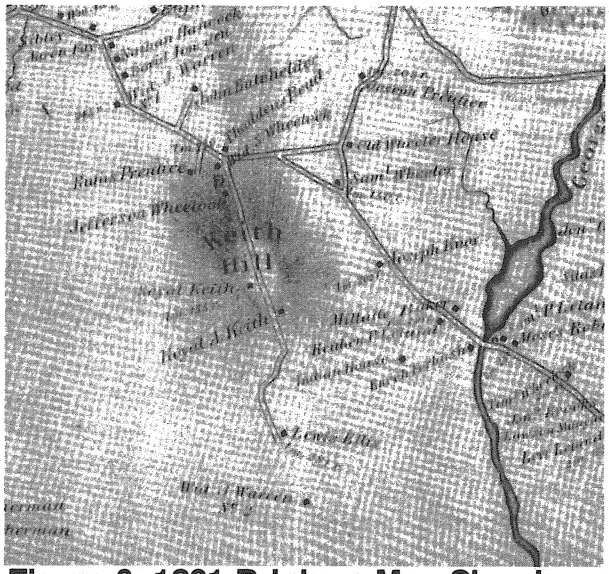


Figure 6: 1831 Brigham Map Showing "Indian House"

but it is not shown on an 1870 map. Of the 120 acres (49 ha) set aside as a reservation for the tribe only one parcel of 4.5 acres (2 ha) has remained. The owners of that parcel, Samuel & Sarah Cisco, were the last members of the tribe to own land on the original Hassanamesitt plantation. It was also during this time that the last remains of the 2,500 pounds paid for the land was lost. Trustees appointed by the court mismanaged these funds to the extent that the Hassanamisco Indians never received any principal payment for their land and only sporadic interest payments (Pierce 1879:61-2).

Late Industrial Period (1870 – 1915)

The textile industry continued to grow and was enhanced by the improvement in transportation with the addition of better roads and new rail lines. One new rail line, the Grafton and Upton or Grafton Center railroad, was built on the edge of the project area. There was also a streetcar system to transport people to other towns. Agriculture, in particular dairying, remained a strong part of the town's economy and agricultural activities expanded to include raising poultry and maintaining fruit orchards.

The population of Grafton did not significantly increase during this period like it had previously. By 1915 the population was 6,250. The peripheral areas of the town continued to hold small and large scale farmsteads that had been previously established. During this time the Keith family and their relatives the Fiske's continued to acquire property in the project area. The property was used for farming, dairying and contained a few orchards.

Modern Period (1915 – Present)

The early modern period saw very few changes in Grafton's economic and social composition. Employment was still provided by the various industries located in the different villages around the town. Local roads and highways were rapidly replacing the railroad as the means for transporting goods and people of the area. Agriculture was still strong until the 1940's but the hurricane of 1938 severely damaged the fruit orchards that had been planted on Keith Hill and the orchards were never brought back to full production. An aerial photograph from 1957 however shows that the orchards were still predominant in the northern and central portions of the project area (See Appendix B, Map 3).

After World War II the mills began to close down as operations moved south to take advantage of cheaper labor costs. Farming also became less and less prominent and many large farms were sold to developers who built housing and commercial developments.

Today, Grafton is a residential community that attracts families looking to take advantage of Grafton's central location and easy accessibility to major transportation routes. The start of

commuter rail service to Boston made Grafton attractive to those looking to buy homes in rural Central Massachusetts.

The project area has changed hands repeatedly in recent years. Throughout the 18th and early 19th centuries the Keith and Fiske families, who were related by marriage, owned the land. During the twentieth century it was broken up and sold to various owners, with a portion of the property retained by the Fiske family and used as an orchard. In the last 40 years the Robinson's have slowly accumulated the various parcels to create the 203 acre (82 ha) project area under examination. Fortunately, the property has primarily been used for farming and animal husbandry. There has been little in the way of development that would disturb any potential sub-surface archaeological remains, although several orchard trees uprooted during the hurricane of 1938 were reportedly cleared away and the land leveled by machinery (Mr. Carl Hjertberg, personal communication).

The Nipmuc native presence of Grafton is still present in the form of the 4 + acre (1.6 + ha) reservation located on Brigham Hill that contains what is referred to as the "Cisco Family Longhouse." The reservation is still the focus of the Tribe's spiritual and political activities and is the only remaining parcel of tribal land from the original plantation established in 1654 (Rae Gould, personal communication).

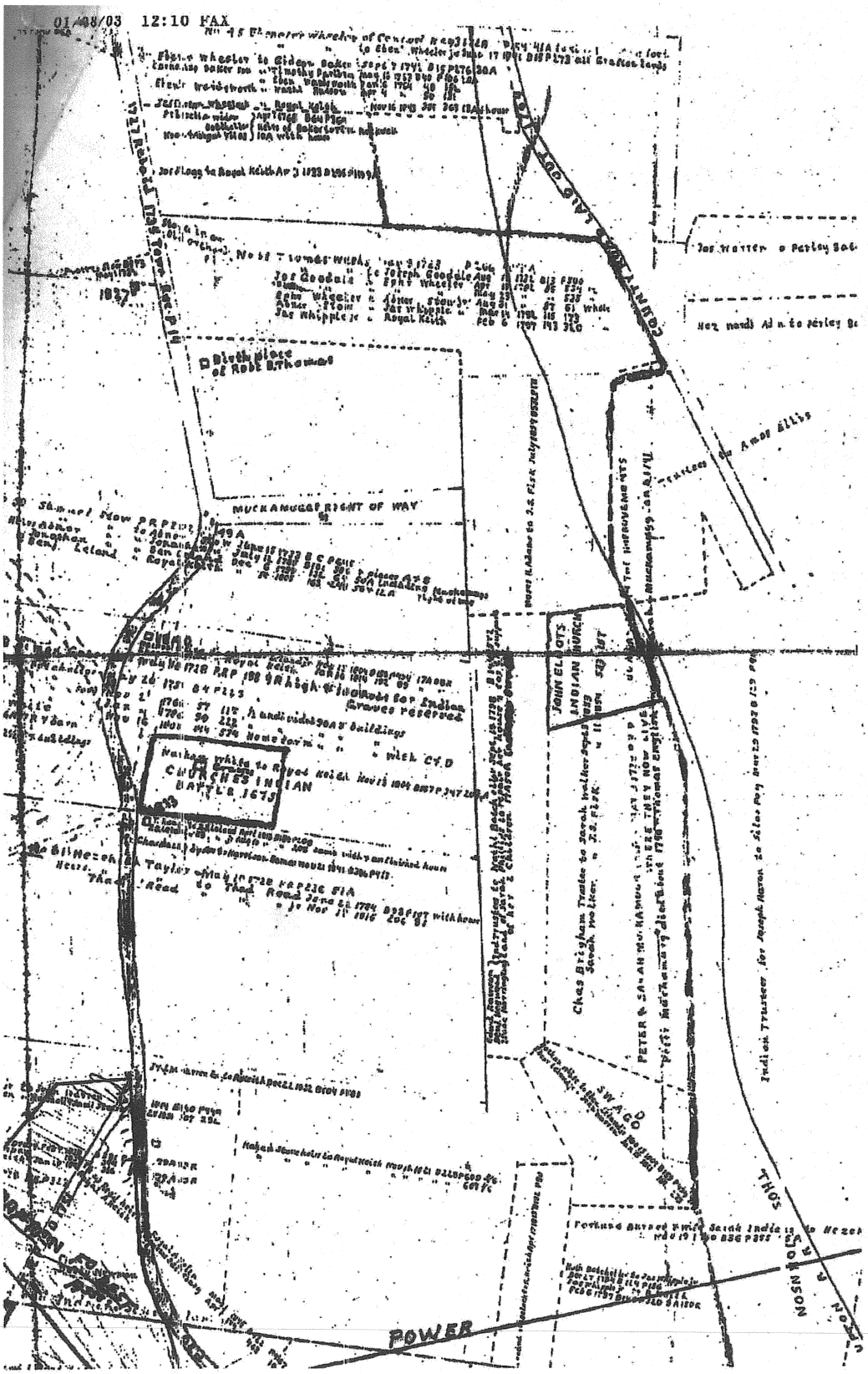


Figure 7: 19th Century deed map showing possible location of John Eliot's church along with chains of landownership in the project area.

Project Area With Wetlands and Aboveground Features

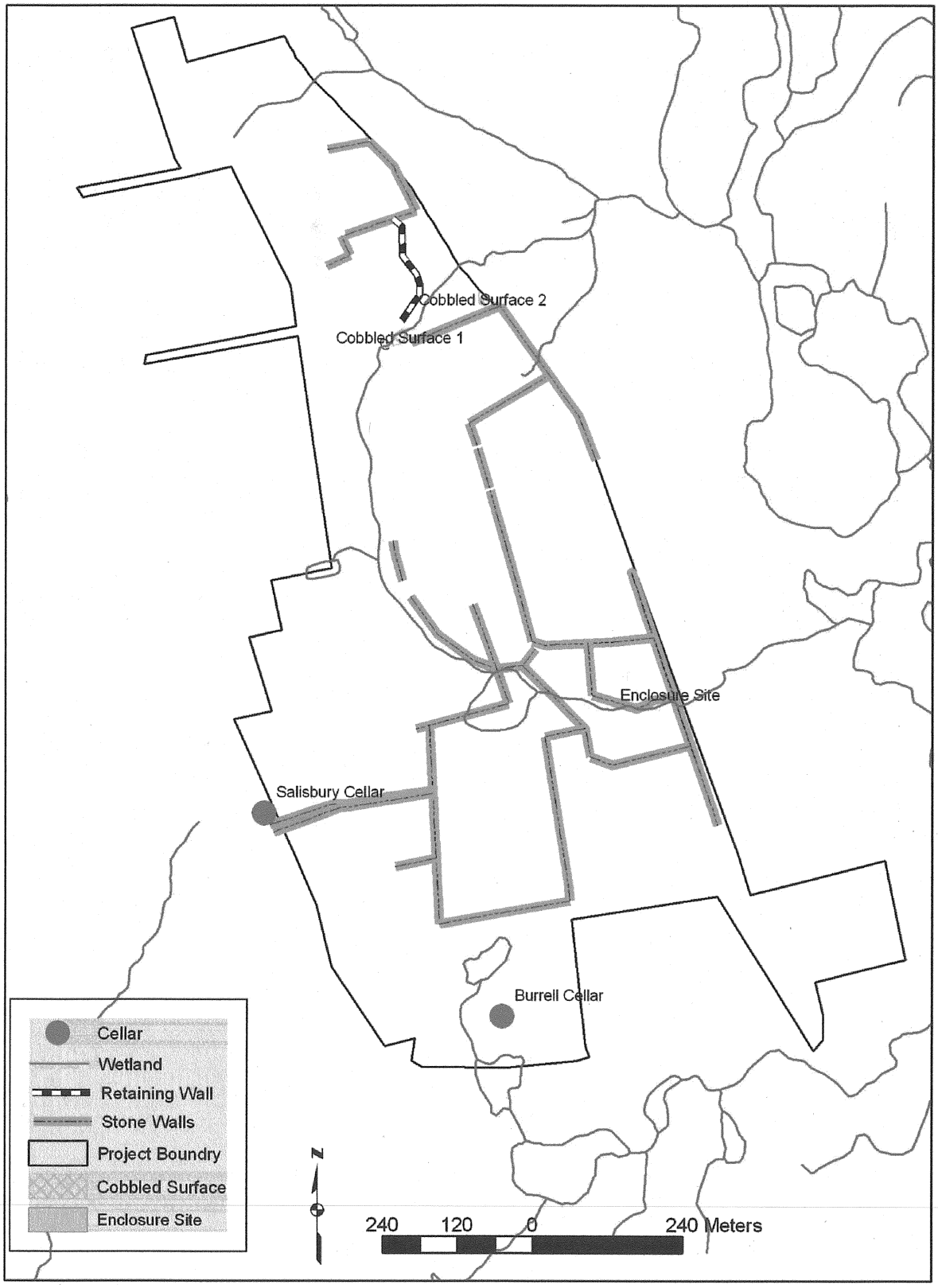


Figure 8

Project Area With Wetlands and Stonewall Designations

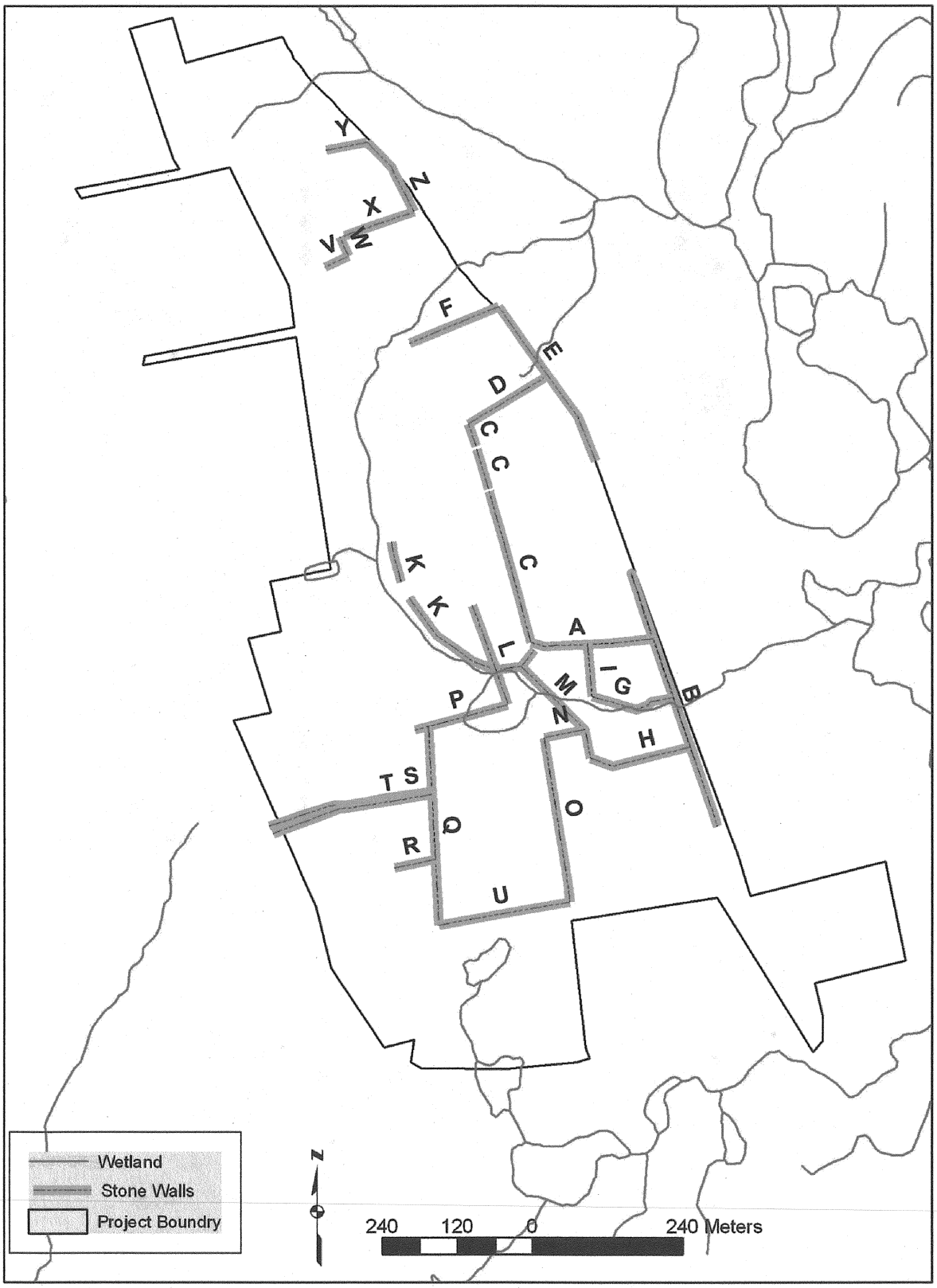


Figure 9

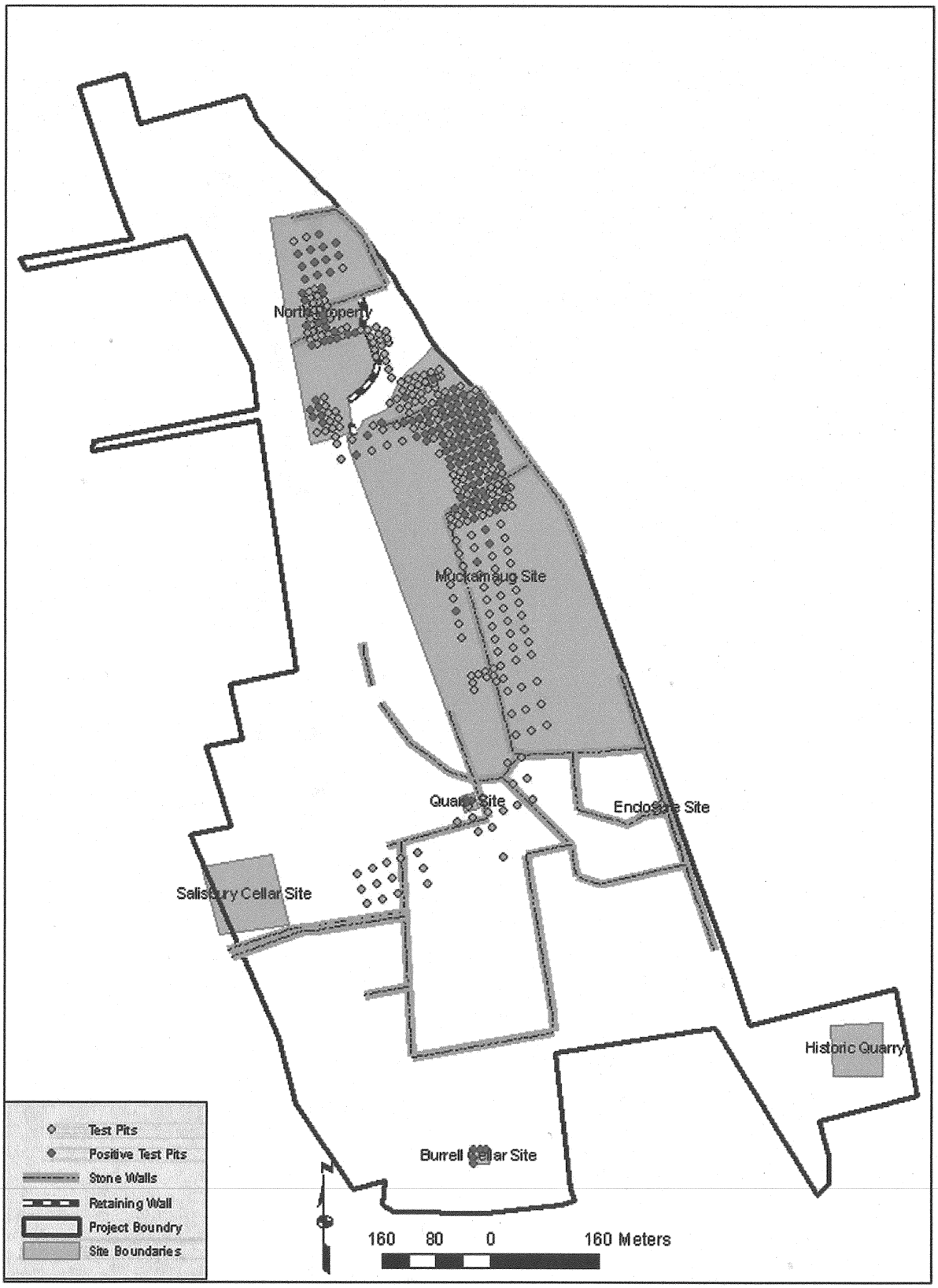

Total Test Pits and Site Designations
Muckamaug Site
Salisbury Cellar Site
Historic Quarry
Burrell Cellar Site
Test Pits
Positive Test Pits
Stone Walls
Retaining Wall
Project Boundry
Site Boundaries
160 80 0 160 Meters

Figure 10

V. Methodology

Research Questions

Historic deed research and documentary evidence suggest that the project area of the Hassanamesitt Woods property is a likely area for the location of intact archaeological resources pertaining to John Eliot's activities and the Praying Indian village of Hassanamesitt. The project area is also likely to contain evidence for Native American habitation in the aftermath of King Philips War as Native inhabitants returned to the area that once was Hassanamesitt. (See Figure 7) In addition to these central themes the property also has the potential to inform our understanding of agricultural practices and historic land use from the 18th through the 20th centuries. On a larger scale, the potential for prehistoric deposits may also inform our understanding of Native American activities prior to colonization and provide a picture of the property's land use over a long period of time. With this in mind several specific questions have been posed.

1) In what way, if any, does the archaeological evidence aid in reconstructing the history of land use for the parcel from the Archaic period through the Early Modern period?

2) Is there archaeological evidence to support the documentary claims of continuous occupation and connection to the original settlement of Hassanamesitt and John Eliot's meeting house?

3) In what ways are the Native families identified in the deed research visible in the archaeological deposits located on the property?

4) Can the numerous stone walls and above ground features located on the property be connected to John Eliot, Hassanamesitt, and the Native and European inhabitants identified in historic and deed research? (See Figure 8)

5) How can the archaeological resources on the property aid in the preservation and use of the land for educational purposes in the future?

Field Methods

Due to the large size of the Hassanamesitt Woods property, the field strategy was tailored to maximize time and effort by focusing on a specific set of goals. One of our first priorities was to cover as much area as possible in order to make recommendations for the future management of the property as a whole. The excavation of shovel test pits on a grid system is the most effective archaeological method for testing large areas and identifying deposits below the surface. This method consists of digging 50cm x 50cm test pits down to subsoil or 50cm below the surface if subsoil is encountered at a shallower depth. Each test pit is excavated stratigraphically with any features or disturbances noted and excavated separately. All soil is screened through 1/4 inch wire mesh and all cultural material is retained.

The sampling procedure employed during the project was guided by numerous factors, the first being the desire to test areas that have been historically denoted as John Eliot's church and Peter Muckamaug's 18th century property. (See Figure 7 and Appendix B, Map 1) In order to establish a grid that would cover the property effectively a datum (N1000 E1000) was established in the east-central area of the project area that had been identified as having the most potential for intact resources pertaining to Hassanamesitt and John Eliot's church. A grid was then established on a heading of magnetic north. A baseline of three sub-datums, 10m apart, were placed off the datum using a laser theodolite. Test pits were denoted in relationship to the datum and named according to their position relative to that point. Due to the dense vegetation on the property it would have been inefficient to lay out subsequent test pits using the laser transit or with tape measures, therefore pacing and compass were used.

While it was our goal to test as much of the property as possible, we also wanted to be able to gather enough information from the areas that we felt offered the greatest potential for answering our research questions on a property that we assumed would be characterized by low archaeological visibility (Mrozowski 2000). In the central portion of the property where the 19th century deed map placed John Eliot's church and where we established our datum it was decided to excavate on a 10m interval. Outside of this area we relied on artifact concentrations, topography, and above ground features to guide the choice of interval. Sloped areas were excavated on a 20m interval, as were areas that contained little in the way of material culture. Flat terraces and areas around well-delineated stone walls and property boundaries were excavated on a 10m interval. 5m arrays in the four cardinal directions were placed around test pits containing diagnostic prehistoric material when surrounding test pits on a 10m interval were negative for material. Our testing strategy was limited by restrictions that did not permit excavation in wetland areas. The southeastern portion of the property was also not tested due to the steep slope and amount of surface rock.

Two sections of the property, which can be considered site outliers, were treated separately from the contiguous excavations that comprised the bulk of our investigation. The first is referred to as the Burrell Cellar Site and is located in the southern most portion of the property, south of the powerline right-of-way and along the southern property boundary. This is one of the more conspicuous aboveground features and falls outside the boundaries of Peter Muckamaug's property. A datum was established near the northern edge of the cellar and designated N500 E500. Several test pits were placed off this point on a grid oriented to magnetic north. The material recovered from these test pits help to define the temporal affiliation of this site. A second site, located in the southeastern portion of the property, was delineated by a stone pen or enclosure built into a stone wall that defines the property's eastern boundary. The site is referred to as the Enclosure Site. Three test pits were excavated on a 10m interval oriented to magnetic north, but not connected to the main site grid. The test pits were simply numbered by the order in which they were excavated.

The remains of numerous stone walls and above ground features noted across the property were mapped during a two day walk-over using two Garmin 12 GPS receivers. The heavy vegetation across the project area made conventional mapping with a laser theodolite too time consuming and at times impossible. Points taken with the GPS receivers were used to outline

series of stonewalls, cellar holes, wells, and other above ground features that could not be identified with the 2001 orthophotos. These points were entered into the site-wide GIS database in order to inform the relationships between below ground deposits, surface features, and information gathered during the deed research. Each stone wall was given an alphabetic designation for ease of reference (See Figure 9) while cobbled surfaces were assigned a number. These designations will be referred to below when discussing site and area boundaries.

Laboratory Methods

All artifacts were returned to CCEH's main lab at UMass Boston where they underwent processing. This included washing and sorting artifacts by type before being identified and entered into an access database (Appendix A). Metal artifacts were dry brushed as per the CCEH's protocol for treating unstable materials.

VI. Results

During the months of October and November a total of 386 test pits were excavated. The survey covered 74 acres or approximately 1/3 of the total property. Taking areas of slope, wetland, and disturbed conditions into account it is estimated that approximately half of the testable property was covered. Of the 386 excavated test pits, 153 (40%) contained cultural material. Based on artifact concentrations and above ground features a total of seven sites were delineated (See Figure 10). Table 3 lists the site name, project area location, and temporal affiliation.

Table 3: Sites located within Hassanamesitt Woods

Site Name	Project Area Location	Temporal Affiliation
Quarry Site	South Central	Late Archaic-Middle Woodland 8,000 - 1000 BP
Muckamaug Site	East Central	Middle - Late Archaic 8,000 - 3,700 BP 18th-19th Century
Burrell Cellar Site	South Central Boundary	19th Century
Salisbury Cellar Site	Southwest Boundary with Salisbury Street	19th Century
Enclosure Site	Southeast	Unknown
Historic Stone Quarry	Southeast Boundary	17th-20th Century
North Property	North Central	19th-20th Century

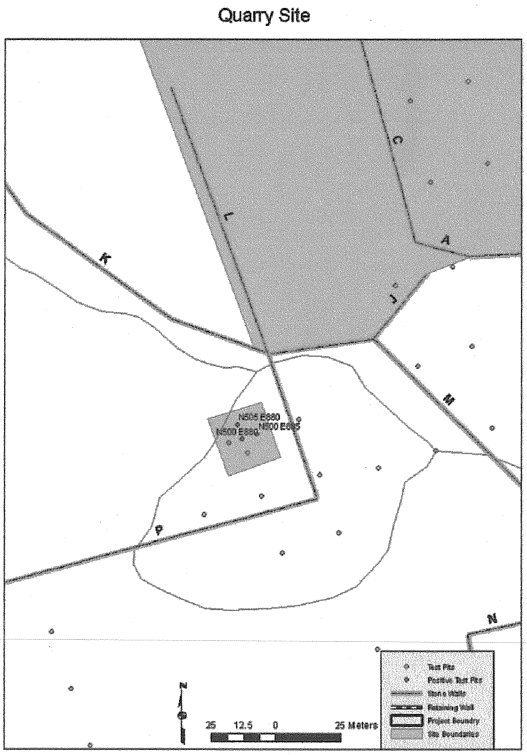


Figure 11

Quarry Site (Late Archaic – Middle Woodland 8,000 – 1,000 BP)

Located in the south central portion of the project area, the site is a discreet concentration of prehistoric lithic material related to quarrying a localized vein of quartz and quartzite for tool manufacture. The site is located near the corner intersection of stone walls L and P, within the boundaries of a parcel of land that historically may have been used for pasture or a wood lot. The parcel, bounded by walls K, L, and P, is predominantly standing wetland with a stream running through it in the northern section (Figure 11). At the base of the wetland area near stone wall L are several large quartz cobbles lying on the surface, some mixed into piles of field stone. Historically this 56 acre parcel was outside of the original land grant given to Peter Muckamaug and had been acquired by Richard Taylor in 1728 (See Appendix B, Map 1). After

changing hands several times throughout the 18th century the property was sold to Hassanamesitt Lodge in 1847, at which time it appears that it was being used as pasture and woodlot. Walls L and P appear to have marked the southeast corner of the original parcel, but all other boundaries have been removed or possibly bulldozed.

Due to the lack of material found in the area around the parcel, testing was conducted on a 20m interval. STP N500 E880 yielded a single quartz Beekman triangular point. STP N480 E880, 20m to the south, and STP N500 E900, 20m to the east, however did not yield any cultural material. In order to determine if the point was an isolated incident, an array of four test pits were excavated on a five meter interval around STP N500 E880. The extensive size of the wetlands surrounding the area would not allow us to test any further than 5 meters to the north and west. A high spot, surrounded by the wetlands located 50 meters to the north and 70 meters to the west of the positive test pit was also tested but yielded no material. The results of STP N500 E880, and the surrounding test pits are discussed below.

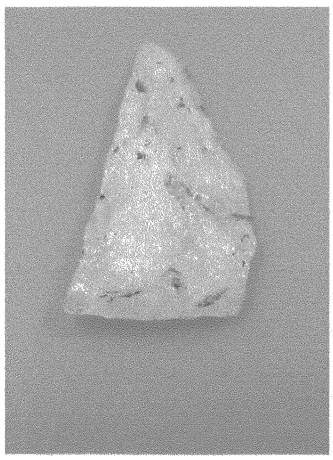


Photo 1: Beekman Triangular Point

N500 E880

A horizon soils were characterized as a 25-30cm deep 10YR3/3 dark brown silty loam. Root disturbance from a nearby dead tree intruded into the A horizon, causing light mottling with the 10YR5/6 yellowish brown soils of the underlying B horizon. The quartz projectile point, identified as a Beekman triangle, was the only material recovered from the A horizon (Photo 1). Two possible pieces of quartz shatter were recovered from the B horizon. Beekman triangular points are often constructed of quartz and are characterized by straight lateral sides. The exact dating of these points is difficult as they are found in Late and Transitional Archaic sites (6000-2700 BP) as well as late Middle Woodland sites (2000-1000 BP) (Hoffman 1991: 17).

N500 E885

This test pit produced the largest amount of prehistoric lithic material in the project area and evidence for prehistoric quarrying of quartz and quartzite. Stratigraphy was similar to N500 E880 with a more distinct layer of mottleing separating the 20cm deep A horizon from the B horizon soil. A large quartzite rock, sloping to the north, was found at the top of the B horizon. The rock exhibited signs of wear conducive with quarrying activites and appeared to have been struck in order to obtain large chunks of quartzite. A possible end scraper made of the same material was recovered from the B horizon. The majority of material was recovered from the A horizon and the mottled soil above B. Seven quartz cores were found in these layers, further evidence for the procurement of raw material. Along with several quartz primary flakes and shatter, one blade-like quartz flake may have been utilized. A second utilized quartzite flake with notched sides and broad worked edge may have been used as an abrading scraper (Photo 2). The midsec-

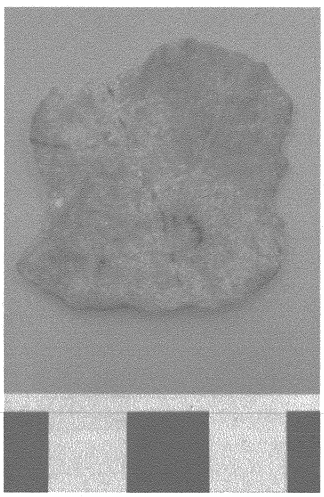


Photo 2: Quartzite Scraper

tion of a broken rhyolite point was also recovered from the A horizon, but it's temporal affiliation is uncertain.

N505 E880

The soil profile was conducive to other test pits in the area but contained a layer of bog iron underneath the B horizon, 50cm below the surface. The presence of bog iron indicates that the area is frequently inundated with water. Material recovered from the A horizon included two quartz cores, quartz shatter, a possible flake drill made of an unknown material, and a preform for a quartzite projectile point. The preform material has a large amount of inclusions and may not have been suited for final production or may be an indicator of the need to utilize the available but less desirable lithic material. One quartz core and a quartz flake were recovered from the B horizon.

Shovel test pits N495 E880 and N500 E875 did not yield any material, suggesting that the site is fairly localized. The one Beekman triangular point provides us with a rough date for the site but the presence of material throughout the A and B horizons suggests that Native Americans had procured material from the area over a long period of time. The presence of quartz shatter in a nearby treefall in the wetland area to the northwest of the concentration also suggests that other nearby sources were utilized. More than likely Native Americans would not have inhabited the site for any period of time and would have used the resource as they needed it, carrying raw materials from the quarry to more permanent encampments. There is evidence in the shatter, primary flakes, scrapers, and points that some complete tool manufacture also occurred in the area. This may also be explained by the proximity of the wetlands and the possibility that the area was frequently hunted, with processing tools and broken points left behind. There is little evidence for historic disturbance in the area of the Quarry site and it does not appear to have been part of the orchards in the 20th century. Soils, the presence of rock, and topography make the area unsuited for crop cultivation and like much of the property in the southern section of the project area was probably utilized for livestock grazing or woodlots. This information, in conjunction with the results of the shovel test pits, suggests a high probability of intact subsurface deposits. Further excavation has the potential to reveal information pertaining to lithic procurement activities spanning several prehistoric periods.

Muckamaug Site (Middle – Late Archaic 8,000 – 3,700 BP, 18th – 19th Century)

The area designated the Muckamaug Site received the most intense investigation due to the likelihood of deposits relating to John Eliot's activities and the later post-Hassanamesitt Native occupation. Documentary and deed research places the central portion of the project area as the location of John Eliot's "church". This same area was also the property of Peter Muckamaug and his descendents, a Native American who returned to Hassanamesitt in the early 18th century. Peter was one of the original Native American recipients of land after Hassanamesitt was parceled off. Several sources also place the Muckamaug Site as the location for the 19th century home of Sarah Boston, Peter's granddaughter. Sarah is something of a local legend and her "Indianess" and dwelling on the side of Keith Hill are referred to in several town recollections and historic documents. One recollection of Sarah states that she could carry a keg of rum over her shoulder and do a man's work during the day (Taft, Norman n.d.: 4) while another recounts

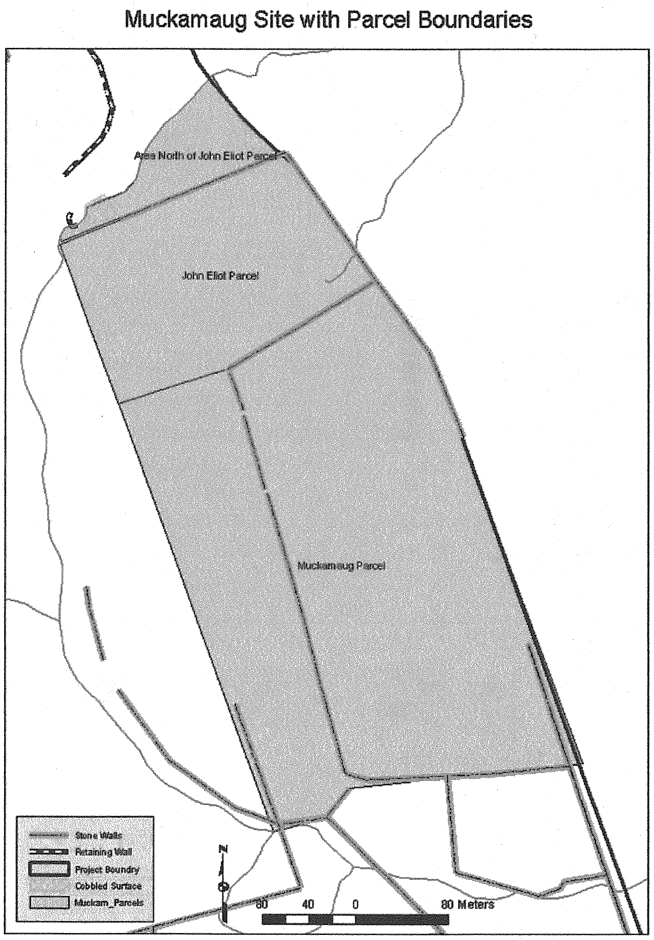


Figure 12

how her medicinal knowledge of local plants saved her brother's life (Taft n.d.: 4). Accounts of Sarah's dwelling describe it as a dark and sparsely furnished cabin surrounded by lilac bushes, often hosting drifters and other Native Americans (Fiske n.d.*b*: 6). A popular story involving Sarah chopping down a cherry tree that local boy's often bothered may have become so widespread due to her explanation that the act was not out of spite but that the tree blocked out the light of the window making it difficult to read her bible (Fiske n.d.*a*: 5).

Two connected parcels, bounded by stonewalls, have been identified as the areas depicted in a 19th century deed map showing Eliot's church and Muckamaug's property (Figure 7). The site has been broken down into three areas for ease of discussion: the "John Eliot Parcel", the "Muckamaug Parcel", and the "Area North of the John Eliot Parcel" (Figure 12). Due to the high concentration of material located in the John Eliot parcel (See Appendix B, Map 4), and the probability for this area to have been the core of historic activity within the project area, it has received the most analysis and discussion concerning the archaeological data.

The John Eliot Parcel

The northern parcel, noted as John Eliot's church, the center of Peter Muckamaug's 18th century property, and the home of Sarah Boston, is located immediately to the west of the railroad tracks and is bounded on the north, south and east by stone walls F, D, and E respectively (See Figure 13). A western boundary wall is absent and may have been dismantled when the area was terraced for use as an orchard. Historical accounts also claim that the cellar hole for Sarah Boston's dwelling could be seen from what is today the Grafton and Upton rail line but was filled in during the early years of the 20th century when the Fiske family began the orchards (Taft 1975: 4). The total area is estimated at 19,500 square meters or approximately 5 acres. Stone wall E to the east is particularly robust and appears to have been constructed by building two parallel walls and then filling the space in between with rock. The width of the wall is approximately 2 meters, substantially larger than most walls on the property (Photo 3). The northern boundary, wall F, is less substantial with a second wall, mostly in ruins, running parallel at the eastern end of the parcel. Near the western terminus, wall F has been partially dismantled and an earthen ramp built over it, most likely to provide cart access. Shallow drainage

John Eliot Parcel and Positive Shovel Test Pits

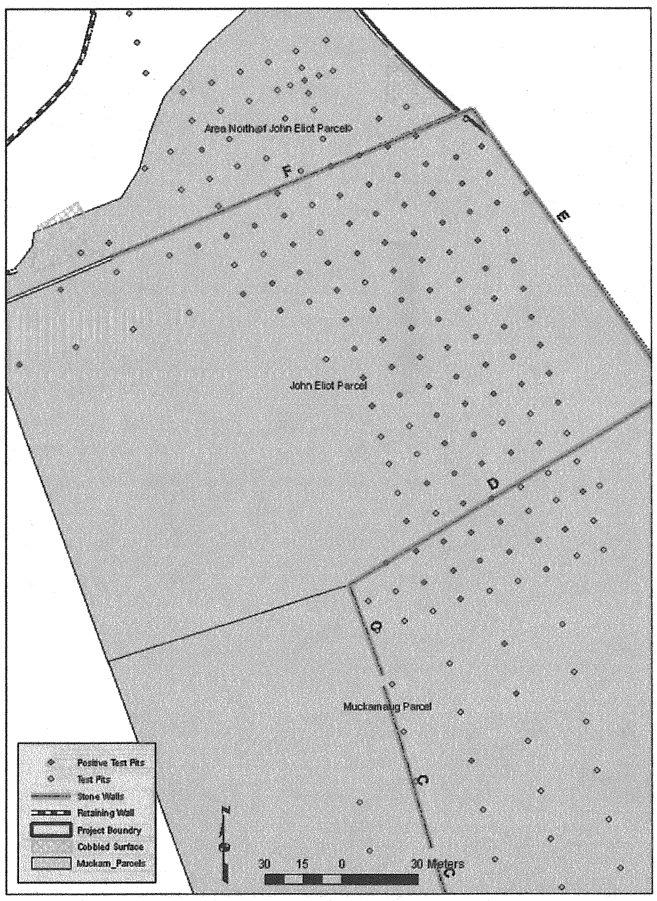


Figure 13



Photo 3: Wall E, Looking South

ditches have been dug around the interior perimeter of the wall. Portions of these ditches appear to have been lined with gravel or cobbles and may have been dug to facilitate drainage along the slope when the area was utilized as an orchard in the 20th century. The majority of the parcel slopes to the east with the middle area extensively terraced, most likely for the purpose of the orchard. Apple trees and the mesh screen wrapped around their bases are still evident across the entire parcel. The southeast corner of the parcel exhibited attributes consistent with wetland areas with at least two test pits encountering glay soils underlying the A horizon. Vegetation across the parcel consists of apple trees, mixed deciduous second growth, and dense underbrush characteristic of disturbed soils. Vegetation thins out along the western extent of the parcel at the top of the slope.

The John Eliot parcel was tested on a 10m interval in order to determine if the area was the location of the church or meeting house identified in historic documents and maps. The low archaeological visibility of other praying Indian sites such as Magunco suggest that a close interval testing strategy is necessary to identify deposits related to these settlements (Mrozowski 2000). A total of 107 test pits were placed in the parcel, covering the majority of the 5 acres. 81 test pits, comprising 75% of the total excavated units in the parcel contained material culture (Figure 13, See Appendix B Map 5) . Soils in these areas were relatively consistent with a 22-25cm deep A horizon composed of a 10YR3/3 dark brown silty loam. Artifacts were concentrated in the A horizon, with the densest deposits occurring at the A/B interface. B horizon

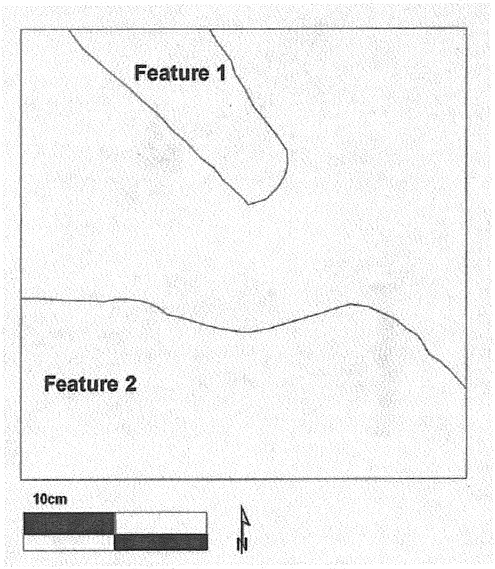


Figure 14: STP N970 E1000

soils were predominantly sterile, with the exception of high density test pits, where some material was recovered below the A/B interface. B soils were a consistent 10YR6/6 brownish yellow sandy loam with high rock content. A possible buried A horizon, delineated Stratum A-2, was found in STP N970 E990. The soil was characterized by an 8cm lens of 10YR5/4 yellowish brown sandy loam underlying a 28cm thick A horizon. One piece of transfer printed pearlware and two pieces of redware were recovered from the A-2 layer. 10 meters to the east in STP N970 E1000, two possible features were located at the A/B interface, approximately 15cm below the surface (Figure 14). Most likely the result of bioturbation these two dark amorphous stains were the only designated features across the entire project area. Feature 1, a rectangular stain composed of 10YR3/3 dark brown loosely packed soil was located along the northern edge of the unit. The feature contained one cut iron nail and a single fragment of redware. Feature 2, a similar dark stain encompassing the southern 1/3 of the unit contained two fragments of creamware and one fragment of redware. While these features may be tree root stains that have carried material down from the A horizon, their location in the area of highest artifact concentration gave reason for their separate excavation. STP N970 E1000 also contained the highest number of artifacts recovered from the B horizon, perhaps as a result of bioturbation or human activity related to landscaping the parcel for the introduction of the orchards. These various soil anomalies in close proximity to each other may be the signature of the cellar holes that were filled in at the beginning of the 20th century. While the positive identification of subsurface features in the area requires more intense excavation, the recovery of prehistoric and historic material has proven to be informative.

Only a small scatter of prehistoric material was recovered from the John Eliot Parcel and is represented by 5 fragments of quartz shatter, two possible expediently produced quartz projectile points and a possible quartzite drill. One projectile point, recovered from the A horizon in STP N1000 E1020, appears to be a crudely worked small-stemmed point. These were generally expediently produced tools that span the Late Archaic to the Late Woodland period (Hoffman 1991: 17). The second point, recovered from the A horizon in STP N980 E950 may be a broken preform to a small-stemmed point or possibly to a more formal Lagoon style point, which would place it in the early Woodland period (Hoffman 1991: 21). The third possible diagnostic artifact was found in STP N990 E1000 and may be a Brewerton Eared drill dating to the late Archaic period. Taking a median date for these objects, in conjunction with a Stark projectile point found north of the John Eliot parcel (discussed below), it is possible to assume that the bulk of Native occupation in the area occurred around the late and transitional Archaic 6,000 – 2,700 years B.P.

Historic material was much better represented with the densest concentrations of material

recovered from the central portion of the parcel at a point where the slope of the terraces begins to level off. STP N960 E1000 contained the highest amount of artifacts with 134 objects recovered. The next five highest counts were recovered from test pits in the immediate proximity of STP N960 E1000, suggesting a possible area of occupation and representing the core area of the John Eliot parcel (Figure 15, See Appendix B, Map 6). Artifact densities drop off significantly to the south and upslope to the west. Material type is consistent and temporally represents a late 18th to early 19th century occupation. The ceramic assemblage is composed primarily of creamwares (302 fragments), pearlwares (209 fragments) and redwares (486 fragments) (See Photos 6-8). Mean ceramic dates yielded from test pits in the core area consistently gave dates within a 15 year time span of 1790 – 1805. Moving away from the core to the north, east and south, mean ceramic dates remained consistent with this timeframe. Three test pits to the southwest of the core (STP N950 E960, N940 E970, and N930 E970) may represent a slightly earlier component (Figure 16). Unlike most test pits in the John Eliot parcel, which contained quantities of refined earthenwares, the majority of the ceramic assemblage in these three test pits is composed of coarse earthenwares with only one piece of creamware recovered. The earliest datable ceramic for the entire project area, a single fragment of combed or dotted staffordshire slipware (1660 – 1745) was also found in STP N950 E960. A second depositional trend is the occurrence of slip-decorated redwares within and to the south of the core area. While the production of slip-decorated redwares spanned a long period of time, from the 17th to the 19th century, the spatial concentration of these objects may point to temporal patterns in trash deposition.

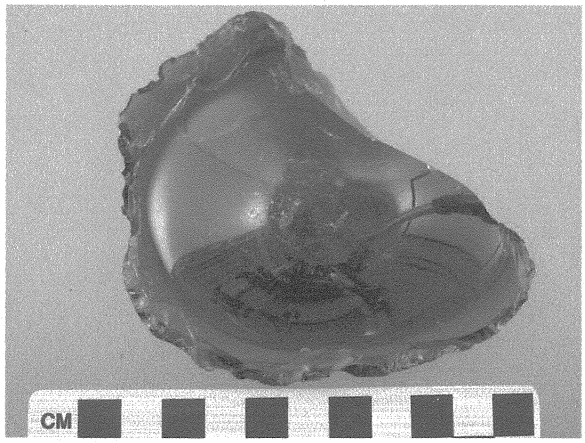


Photo 4: Possible "Chestnut" Bottle



Photo 5: Blowpipe Pontil on "Chestnut" Bottle

The glass assemblage from the John Eliot parcel is fairly robust with a variety of vessel types represented. A total of 42 fragments of bottle glass, 35 fragments of window glass and 12 fragments of tableware glass were recovered. Within the bottle glass assemblage several vessel types were recovered including wine bottles, liquor bottles and portions of a paneled flask. One small segment of the flask recovered from STP N980 E1000, is decorated with a raised five-point star, possibly one of thirteen to decorate a panel that included a spread eagle. The opposite panel would have been a depiction of a horse and cart with the words "Railroad" and "Lowell". These olive-amber colored flasks were produced by the Coventry Glass Works in Coventry, Connecticut from 1829 – 1832 (McKearin and Wilson 1978: 109-111). Two near intact bottle bases were recovered directly east of the core area. One bottle base, found in STP N960

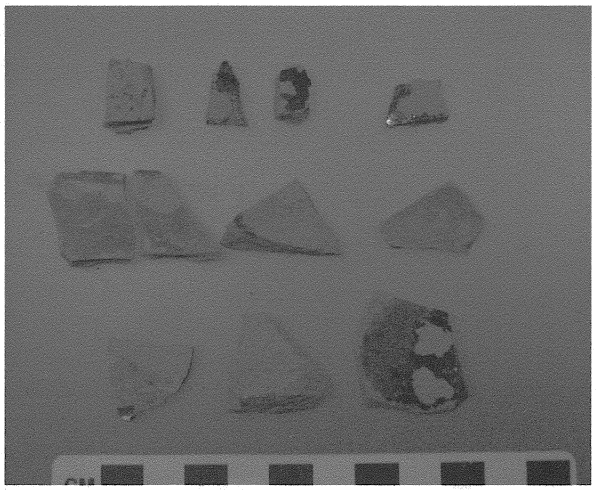


Photo 6: Redwares from STP N930 E970

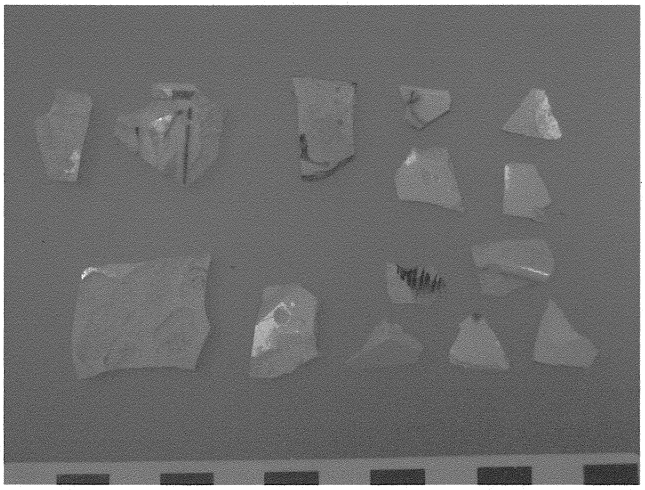


Photo 7: Pearlware from STP N960 E1000

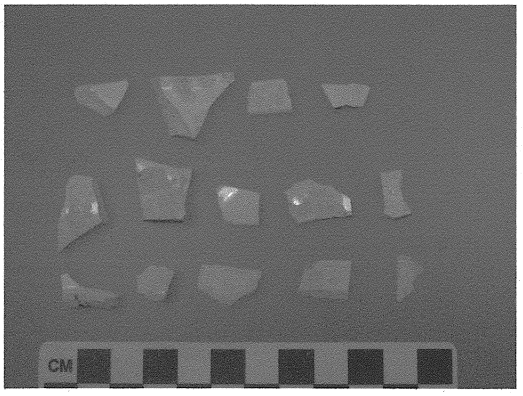


Photo 8: Creamware from STP N960 E1000

John Eliot Parcel Core

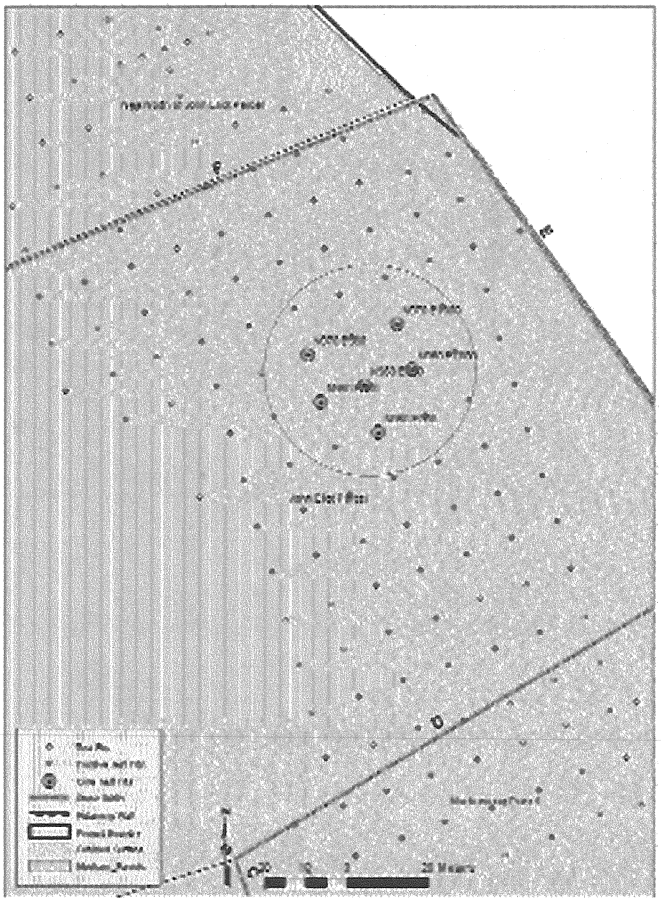


Figure 15

Test Pits with Concentrations of Coarse Earthenwares

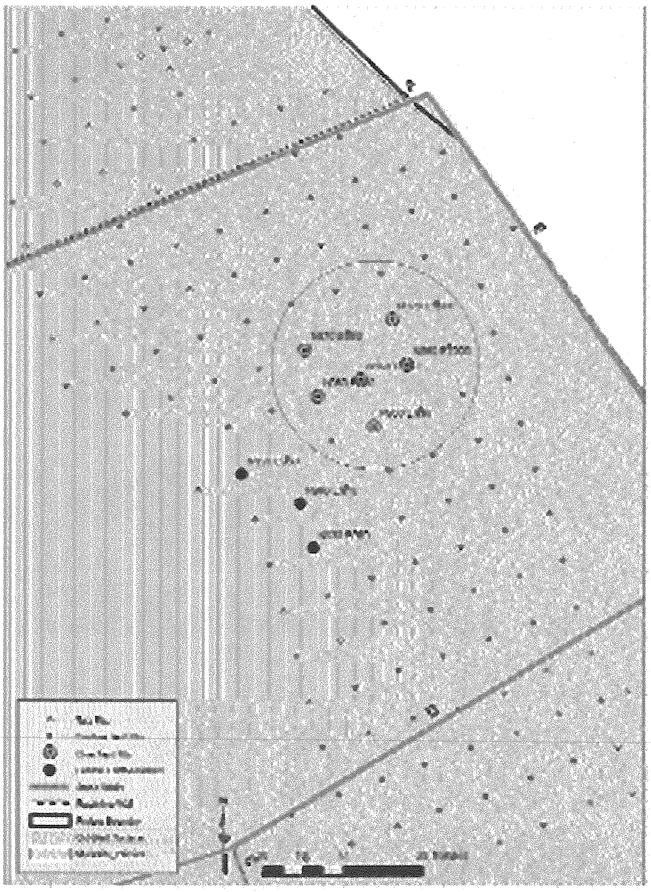


Figure 16

E1010, has been identified as a dark green wine bottle with a sand tipped pontil, of the type manufactured during the 18th century (Jones 2000: 156-157). The second base, (Photos 4-5) found in STP N970 E1020, can be classified as a dark green ovoid utilitarian, or perhaps "chestnut", bottle with a blowpipe pontil. These bottles, common in New England, were not liquid specific and were meant to hold any manner of fluid, usually alcoholic in type. Like the majority of material culture recovered from the John Eliot parcel these bottles can be dated to the 18th and early 19th centuries (McKearin and Wilson 1978: 246-248, Plate III).

Architectural debris recovered from the John Eliot parcel is represented by a low density scatter of 14 cut iron nails or nail fragments, 35 fragments of window glass, and 30 fragments of brick, including one brick bat found on the surface near STP N960 E1010. Window glass tends to be scattered across the parcel with the highest densities occurring at the core of the site. Nails and brick however are spatially limited to the core. No surface features pertaining to structures were evident and is probably the result of any cellars on the property being filled in when the Fiske family began the orchards. More intense testing in the core area would be needed to identify any remaining cellars which were most likely cleared of any stone lining or foundation when the orchard was planted.

Other material of note found on the John Eliot Parcel included a small amount of faunal remains. The 37 fragments of predominantly calcined bone were found exclusively in the core area of the site. Three brass buttons were also recovered; two of them from STP N910 E990 while the other was found in the core area in STP N950 E990. All three were of one-piece stamped brass construction with no frontal decoration. The one button from STP N950 E990 did have a leaf and branch design encircling the back. All three of these buttons can be dated to the first half of the 19th century (Noel Hume 1969: 90). A total of five clay tobacco pipe fragments were recovered. Of the two bowl fragments, one found in STP N950 E1000 exhibited an unidentifiable molded design. Of the three stems recovered one was unmeasurable while one yielded a bore diameter of 5/64 and one yielded a bore diameter of 4/64.

The Muckamaug Parcel

The second area that is included in the Muckamaug Site adjoins the John Eliot parcel to the south (Figure 17). The 19th century deed map records this parcel as belonging to the children of Peter and Sarah Muckamaug, presumably Sarah Phillips, before coming under the guardianship of one of the Indian Trustees sometime before 1853. This southern area is much larger than the northern parcel and covers an estimated 81,600 square meters or 20 acres. It is bounded by stone walls A, C, D, and portions of E and B. Wall C along the western boundary is similar in construction to the portion of wall E in the John Eliot parcel and expands in width as it moves south (Photo 9). Two openings, or cart-ways, are located midway down wall C, occuring at its thickest point. The western edge of the parcel where the majority of testing occurred is relatively flat before sloping steeply to the eastern edge of the project area and the railroad tracks. Several small, intermittent stonewalls and rock piles are located within the parcel. Mixed deciduous and pine stands compose the vegetation along with thick underbrush. There is no evidence for the parcel being used for orchard, but a 1957 aerial photo shows the property adjoining the parcel on the western edge as orchard (See Appendix B, Map 3). Evidence for bulldozing after the 1938 hurricane is apparent outside the southwestern edge of the parcel

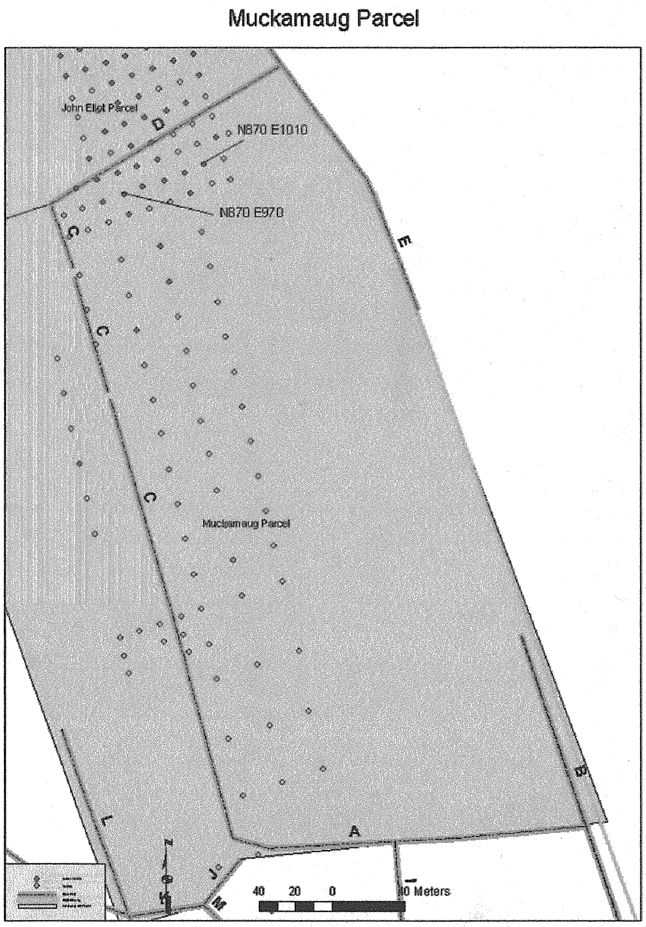


Figure 17



Photo 9: Wall C, Looking North

where the abrupt termination of wall L and a line of earthen berms mixed with large rock marks the extent of the clearing activity. This western orchard area was not tested extensively primarily due to evidence for disturbance caused by the 20th century bulldozing. In addition this area is very flat and unlike the rest of the Hassanamesitt Woods property devoid of any stonewalls. This is most likely the result of clearing for the orchards and bulldozing. The remnants of walls L, K, and J outline the southern end of a 20 acre parcel that adjoined the Muckamaug parcel. The boundaries of this thin parcel, now destroyed by the recent activities of the orchard, belonged to Peter Muckamaug's descendent, Sarah Phillips and was part of the original 1728 100 acre holding of Peter's (See Appendix B, Map 1). It appears to have been sold off by the Indian Trustees in 1798 to Nathaniel Batcheller when Sarah was unable to provide for her children. Several test pits were placed in this parcel along wall C as well as around and within one of the larger piles of rock associated with the earthen berms in order to determine if they were a foundation. Revealing shallow soils and only one fragment of blue transfer printed pearlware it must be assumed that the large amount of rock mixed into the berms is the remains of the stone wall boundaries that at one time marked the western boundary of Sarah Philip's parcel. These walls were subsequently cleared away during the 1938 bulldozing. The lack of material and almost non-existent A horizon may suggest that any cultural layers in this parcel have been stripped.

The Muckamaug parcel within the stone wall boundaries was tested on both a 10m and a 20m interval depending on soils and artifact concentrations. A total of 92

STP's were placed in the area, with the 10m interval of the northern section a continuation of the testing in the John Eliot Parcel. Soils in the southern 2/3 of the parcel are generally shallow with very little A horizon development. Several test pits exhibited no A horizon at all with only a thin layer of organic humus overlying a B horizon composed of 10YR5/6 yellowish brown sandy loam. The southern area also has much higher concentrations of rock and boulders and was consequently predominantly sterile for cultural material. The northern 1/3 of the parcel where testing was conducted on a 10m interval contained more developed soils. A horizon, generally 25cm deep, was composed of 10YR 3/2 very dark grayish brown silty loam, while B horizon soils were generally 10YR4/6 dark yellowish brown sandy clay loam.

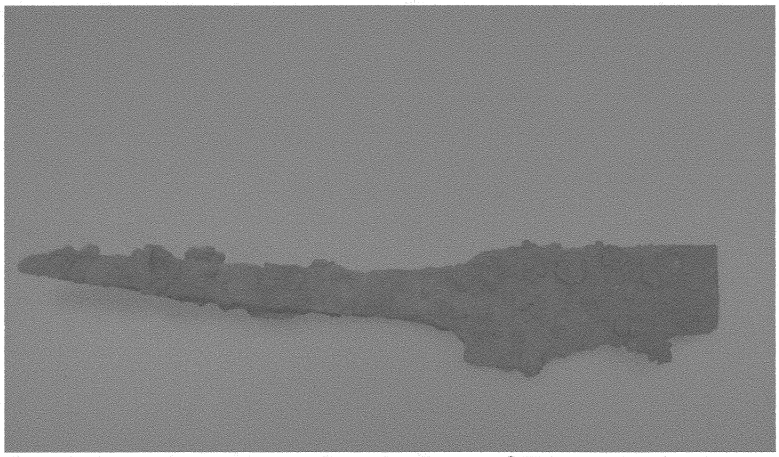


Photo 10: Iron Knife Blade from STP N870 E970

The material recovered from the Muckamaug parcel was concentrated in the area of well developed soils along the northern edge of the parcel and is most likely associated with the occupation of the John Eliot parcel. Ceramics, including redware and both creamware and pearlware, point to a late 18th – early 19th century date for the area, similar to the John Eliot parcel. Size and quantity of material however is significantly smaller with several pieces of ceramic exhibiting burning. The recovery of calcined bone in the area may suggest that the area was used for dumping hearth or privy contents. Two iron objects of note recovered from the area included a broken knife blade (Photo 10) and a wooden handled ice chopper. The table knife was recovered from the A horizon in STP N870 E970. No other material was found with it. While the majority of the blade has been broken, the "rat-tail tang", which would have fit into a wood or bone handle, has remained intact. While assigning a specific date to the object is difficult, the presence of a heel at the base of the blade at least indicates that it is post-1760 (Dunning 2000: 37) and most likely falls into the late 18th century date range. Heavy wear on the blade also indicates a long period of use. The ice chopper was recovered from STP N870 E1010 at the very top of the A horizon, just under the organic layer. The heavy iron blade would have fit onto a wooden handle and judging from its presence near the surface was most likely deposited within the last fifty years.

Area North of the John Eliot Parcel

A third section of the Muckamaug site lies outside the boundaries of the stonewalls, located in between wall F and one of the few well established streams running west to east through the

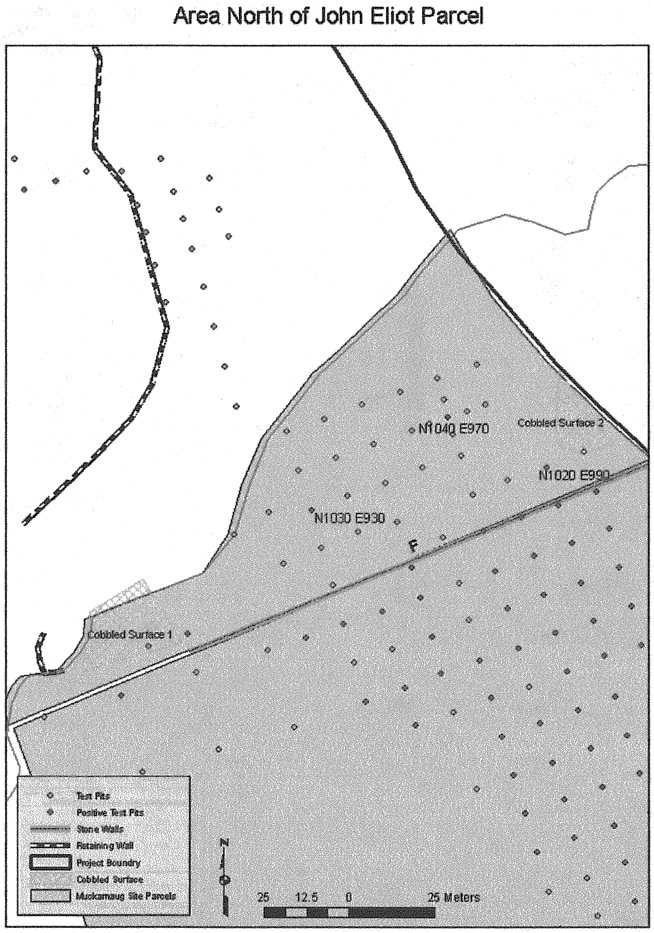


Figure 18

property (Figure 18). One 19th century deed map places this area in the southern part of the 14 acre "Indian Pasture" owned by Sarah Phillips. After Sarah requested the Indian Trustees to sell this parcel in 1815, it appears to have changed hands several times before being acquired by Jonathan Fiske in 1854. A cobbled surface (Cobbled Surface 1) and rock outcrops bound the area to the west while the railroad tracks mark the eastern extent of the area. Like the Eliot parcel this area slopes to the east towards the railroad tracks and the eastern project boundary. Directly to the west of the railroad tracks lies an extensive pile of field stones (Cobbled Surface 2), which may have been placed there when any cellar or foundations were dismantled at the time the orchard was planted (Photo 11). Cobbled Surface 1, measuring approximately 42m east-west and 17m north-south, is located at the western terminus of wall F (Photos 12-14). A retaining wall of large boulders runs along the eastern and northern edges of this surface, with the stream running along the north side. While it is obvious that the surface is relatively flat and intentionally placed, the amount of vegetation covering it makes it difficult to determine exact boundaries or its function. Several holes, almost well-like in apperance dot the surface. In the southeastern corner of the cobbled surface, an accumulation of 20th century trash was found including a toothpaste tube, liquor bottles, a mason jar, and a glass condiment jar. One possible interpretation of this feature is that it was the base or foundation for a cider mill or press during the property's 20th century use as an orchard.

The presence of the stream in this area has contributed to the abundance of undergrowth that obscures the surface. Soils in the area are extremely rocky and shallow, with bedrock encountered around 30-50cm below surface in several units. A horizon soil was generally 10YR3/3 dark brown sandy loam while the B horizon soil was a lighter 10YR5/6 yellowish brown sandy clay loam. Clay content was higher in the B horizon in test pits further to the west. Rock outcrops, large boulders and piles of field stones predominate further west towards the stream and Cobbled Surface 1. These aboveground concentrations of rock made excavation in the western section difficult and at times impossible.

Test pits in this area were predominantly negative. Of the 32 test pits excavated in this area only three contained material culture (approximately 10%). STP N1020 E990 is located in



Photo 11: Cobbled Surface 2, Looking Southeast



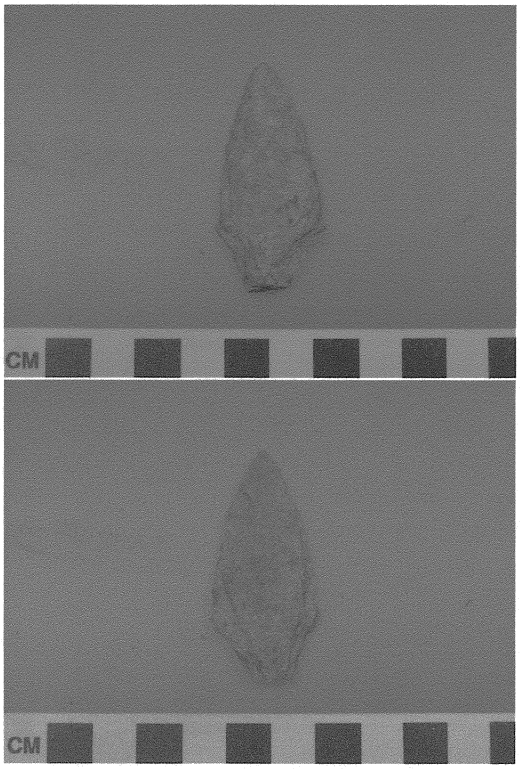
Photo 12: Cobbled Surface 1, Looking Northwest



Photo 13: Cobbled Surface 1, Looking Southeast



Photo 14: Cobbled Surface 1, Looking West Showing Eastern Retaining Wall



Photos 15 and 16: Stark Projectile Point

between the northern wall of the John Eliot parcel and the ruins of a parallel wall that may have marked a cart path. Five sherds of clear glazed redware were found in the A horizon and are likely spill-over from the concentration of material in the John Eliot parcel. The other two positive test pits contained prehistoric lithic material in small quantities. A whole quartzite Stark projectile point was recovered from the A horizon in N1040 E970 (Photos 15-16). An array of four test pits on a five meter interval was placed around the positive STP but no other material was found. Given the slope and the proximity of the stream directly to the north, the point may be an isolated object dropped or left behind while hunting. STP N1030 E930, located further to the east near the edge of the piles of field stone, revealed one piece of quartz shatter and a quartz flake scraper around 24cm below surface at the A/B interface. All test pits on a 10m interval surrounding this small concentration were negative.

Discussion of Muckamaug Site Results

Historic documentation suggests that the Muckamaug Site is the location of the most intense and enduring post-Hassanamesitt Nipmuc settlement. Archaeological data supports this claim and suggests that the area designated the John Eliot parcel is the location for the residential center of Peter Muckamaug and his descendents, most notably Sarah Boston, a very visible character in local lore. The original 106 acres were parceled out by the Indian Trustees after the death of Peter and the inheritance of the property by Sarah Phillips, indicating that the family's landholdings dwindled in the face of economic plight and English desire for land. By 1853 the five acres of the John Eliot parcel remained as the only piece of the original 106 acres. Material remains suggest that the most intense period of occupation on the property occurred during the end of the 18th century and beginning of the 19th century. The presence of certain ceramic types, in the form of one fragment of Staffordshire slipware and several fragments of whiteware however stretch the occupation potentially as far back as the early 18th century and up to the second half of the 19th century. These dates accord well with the settlement of Peter Muckamaug and his descendents. There is however no archaeological evidence from this survey for a 17th century component related to John Eliot. The placement of John Eliot's "Church" within the boundaries of the Muckamaug Site is most likely a result of inference drawn from the long-term presence of Nipmuc inhabitants on the property (See Yentsch 1988 for a discussion concerning the formation of myths and legends surrounding 17th and 18th century houses). The "Indian House" referred to on the 1831 Brigham map is most likely the residence of Sarah Philips and her daughter Sarah Boston, both visible members of the Nipmuc. It is however possible that a 17th century component is obscured by the intense 18th and 19th century activities as well as disturbances related to the orchard. The terracing of the slope and the filling in of cellar holes

in the early 20th century may have removed any trace of colonial 17th century Native American habitation. Structural evidence for the "village" of Hassanamesitt most likely would not include European architectural elements but rather those related to traditional Native American impermanent structures. The archaeological signature of these structures is ephemeral at best and requires more intense subsurface investigation to be properly identified. The cluster of 18th and 19th century artifacts around a core area (in all probability a filled cellar hole) as well as depositional spatial patterning however suggests that there is still some integrity to the archaeological deposits within the John Eliot Parcel. The excavation of several larger units (1m x 1m, 1m x 2m) in this area would provide information regarding the events that shaped the landscape and determine the likelihood for intact Native American and European structural elements.

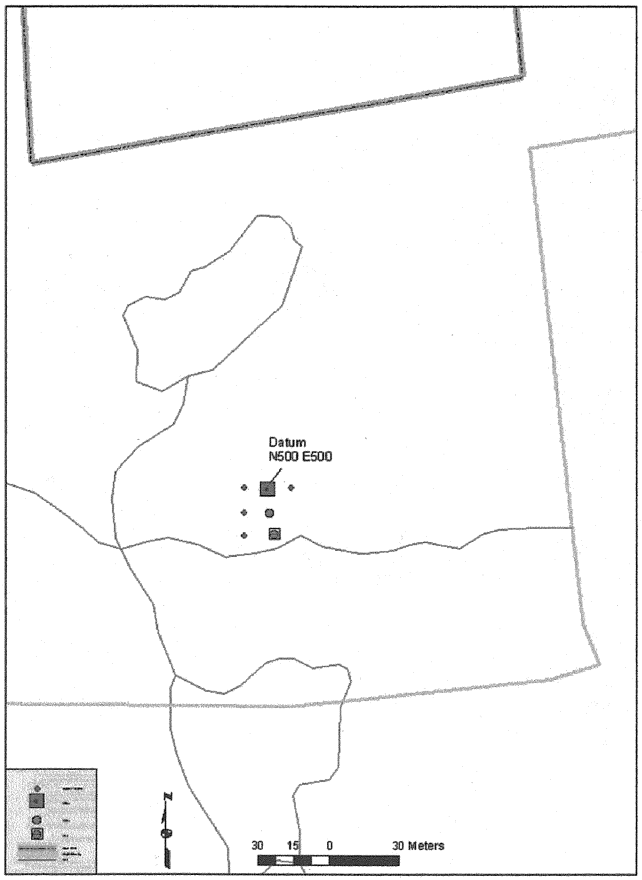


Figure 19

Burrell Cellar Site (19th Century)

The Burrell Cellar Site, located near the southern boundary of the property is composed of two above ground features that were identified by the CCEH during the initial walkover survey in 2002. The cellar hole and well that define the site are familiar to local residents and appear on a 1983 property map outlining the Robinson's property, but the site's temporal affiliation was unknown until recent excavations. Because the site is removed from the bulk of excavations based around the N1000 E1000 datum, it was delineated as a separate site with a new datum. The Burrell Cellar Site datum was placed approximately 10m north of the cellar hole and delineated N500 E500. All test pits placed around the site were based on this datum and run on a magnetic north – south grid (Figure 19).

Site vegetation was predominantly pine stand with a mixture of deciduous underbrush. The cellar hole itself is partially filled in with vegetation, rock from the foundation walls, and dead trees (Photo 17). The stone lined well, still open, is located approximately 10m to the southwest of the cellar. The well opening measures approximately 1m in diameter (Photo 18). A heavily utilized trail runs to the south of the well and cellar and is most likely the remains of the 1675 Old Mendon Road noted on the 19th century deed map. Soils in the area are consistent with locations in the project area containing evidence of occupation. Developed A horizon soils consist of a 20-25cm deep



Photos 17 and 18: Burrell Cellar and Well

10YR3/2 very dark grayish brown silty loam overlying a 10YR6/6 brownish yellow sandy loam B horizon. Charcoal flecking was evident in the B horizon in STP N480 E490 and a high concentration of charcoal was found in the A horizon of STP N500 E510.

A total of five shovel test pits were placed to the north and west of the cellar in order to determine the temporal affiliation of the above ground features. While artifact concentrations were relatively low, all five test pits contained cultural material. The only truly diagnostic artifact recovered was a small fragment of whiteware, found in the A horizon of STP N500 E500. This test pit contained the largest amount of material with several pieces of window glass, redware, and calcined bone present. Lithics, in the form of two small pieces of quartz shatter were also recovered from both the A and B horizons of STP N500 E500. Ten meters to the east in STP N500 E510, a large quantity of brick was recovered in conjunction with a deposit of charcoal in the A horizon. No other material was found in this unit and the brick may be representative of a chimney fall. The one test pit placed near the well, STP N480 E490, recovered only a small fragment of brick, an unmeasurable white clay pipestem, and a possible piece of quartz shatter. Two cut iron nails were recovered from STP N490 E490 along with one fragment of dark green wine bottle glass.

Artifact density surrounding the cellar was relatively low for a residential occupation. This small scatter of material and the presence of a well however is representative of a residential structure and based on the occurrence of whiteware and cut nails we can place the occupation into the 19th century, post-1820. Vegetation in the area is very young and the occurrence of charcoal in high quantities in STP N500 E510 may suggest that the area burned recently. It is also possible that this is the remains of a hearth or chimney as mentioned above.

Salisbury Cellar Site (18th - 19th Century)

The Salisbury Cellar Site is located along the southwest boundary of the project area directly off of the unpaved portion of Salisbury Street. The site, composed of a stone lined cellar, was not investigated through subsurface testing due to its removal from the Muckamaug Site, lack of connection to Hassanamesitt, and known 19th century association. The cellar is most likely connected to a house noted on one of the 19th century deed maps and may have been originally inhabited by Ebenezer Leland Sr.. The house was located on a 3 acre parcel that was part of a larger 64 acre plot of land eventually sold by Ebenezer Leland Jr. to John Warren in 1814. The house is noted as being inhabited by John Warren's widow on the 1831 Brigham map (See Figure 6). The heirs of John Warren sold the property in 1835, after which the property changed hands several times before being acquired by the Salisbury family from Royal Keith around 1845. The fate of the structure after this time is uncertain but it may have continued to be inhabited as late as 1886 when Herbert Keith makes a passing reference to it in his "Early History of Hassanimisco" (9). While the 3 acre house plot is along the edge of the project area, the majority of the 64 acres is outside the bounds of the Hassanamesitt Woods property. Subsurface testing around the cellar may help to identify a date of construction and may inform the 18th century component of English settlement after Hassanamesitt was parceled off in 1728.

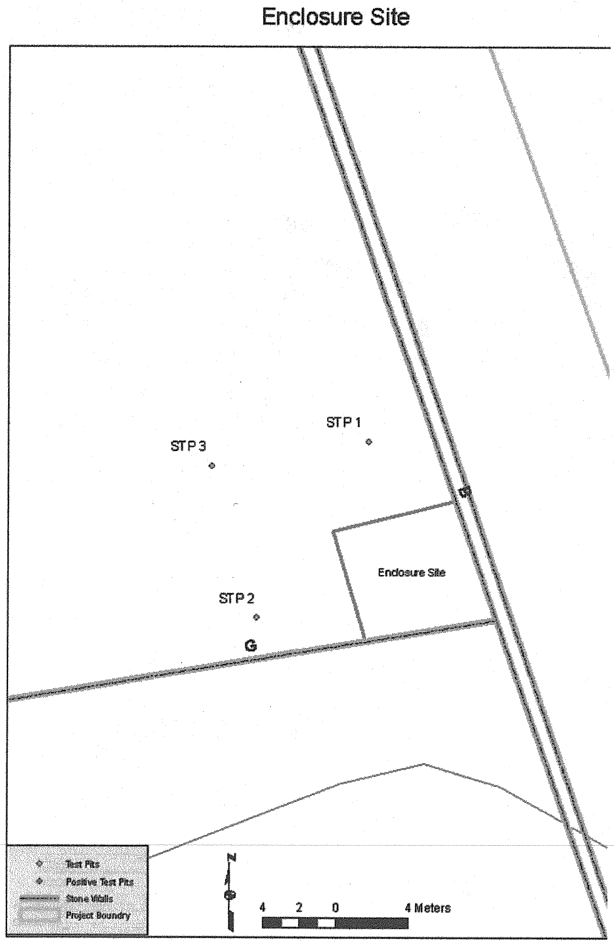


Figure 20

Enclosure Site (Unknown Temporal Affiliation)

The Enclosure Site is located along the southeastern boundary of the site and is defined by the stone wall enclosure built at the intersection of walls B and G (Figure 20, Photo 19). Like the Burrell Cellar site, test pits excavated in the area were not tied into the main datum located at N1000 E1000. A total of three test pits were excavated in order to determine the temporal affiliation of the feature. Test pits were labeled STP1, 2, and 3.

Vegetation was predominantly open deciduous growth, characteristic for the southern portion of the property. A stream runs along the southern edge of the feature along the edge of wall G. The enclosure sits at the base of a considerable slope in an area predominated by rock outcroppings. All three test pits were negative for material culture and were dominated by very rocky soils. A horizon soil was characterized by a shallow 10YR4/3 brown silty loam while B horizon soils were composed of a 10YR5/6 yellowish brown sandy loam.



Photo 19: Enclosure Site Looking East

Bedrock was encountered at 30cm in STP 2 and at 22cm in STP3.

The location of the enclosure and the absence of material culture suggest that the feature may have been used as an animal pen. The sloped rocky topography in the southern portion of the project area is unsuitable for cultivation and the various parcels located in the area may have been utilized mainly for grazing or woodlots. The enclosure would have fallen along the edge of the original 1728 property boundary of Peter Muckamaug. The lack of material culture and the number of property changes that took place in this area however make it difficult to solidly attribute this feature to Peter Muckamaug or his descendents.

Historic Stone Quarry (17th – 20th Century)

During a site walkover at the beginning of the current project an area delineated as an historic stone quarry was located in the far southeastern section of the property. Designated as Parcel C on a 1959 deed map, the property was owned by Daniel Fiske as late as 1967 before being sold to the Robinson family. A road referred to on a 19th century deed map as the Old Mendon Road of 1675, also referred to as the original Indian Trail to Mendon, ran directly past the area where stone cutting would have taken place. This road was probably the main point of access to the stone resource. Quarrying activity on Keith Hill has been documented and two 20th century sites, GRF-HA-22 and GRF-HA-24, are on file at the MHC. Because it fell outside of the boundaries most relevant to John Eliot and Hassanamesitt no subsurface testing was conducted. Several rock outcrops exhibited evidence for historic stone cutting with drill and iron chisel marks. The area represents local, low-level industrial activity.

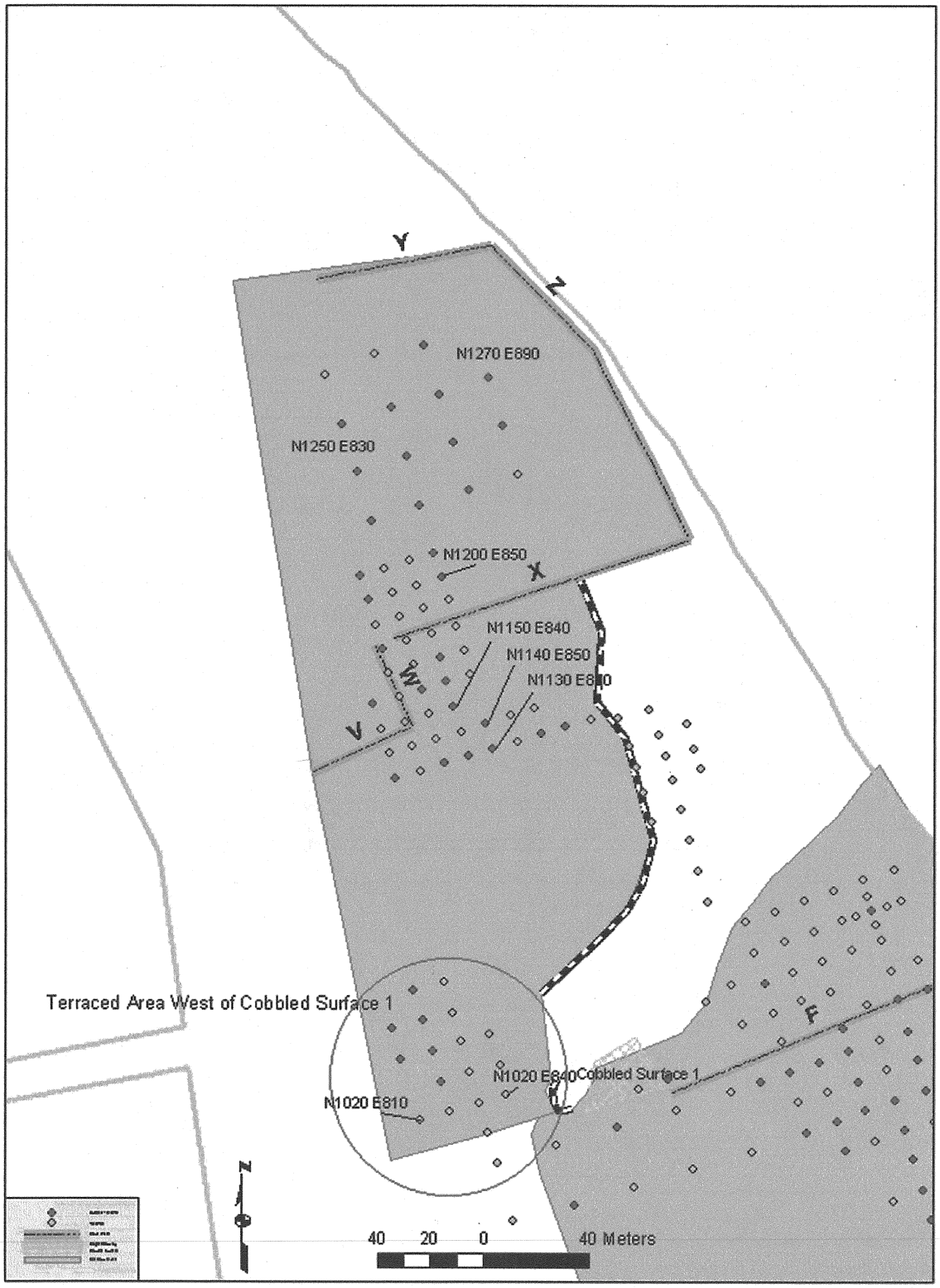

North Property
Y
Z
N1270 E690
N1250 E830
N1200 E850
X
N1150 E840
N1140 E850
N1130 E8
W
V
Terraced Area West of Cobbled Surface 1
N1020 E840
Cobbled Surface 1
N1020 E810
F
N
40 20 0 40 Meters

Figure 21

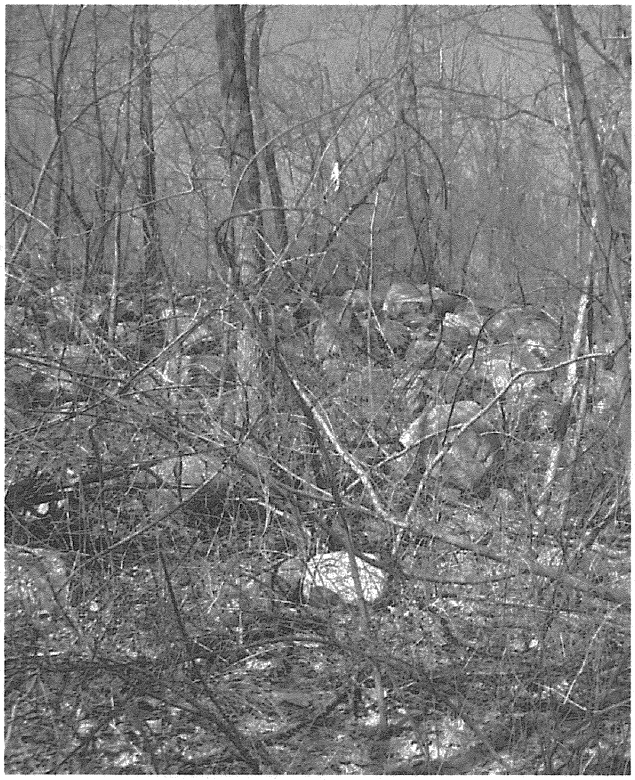


Photo 20: Retaining Wall, Looking West

North Property (19th – 20th Century)

The northern section of the project area is defined by several low-density scatters of prehistoric and historic material. The area is dominated by a large terrace and related stone retaining wall running north south in between walls X and F (Figure 21, Photo 20). The 1957 aerial photo shows this retaining wall to be the eastern limit of the orchards (See Appendix B, Map 3). Test pits placed at the base of the wall were consistently negative while all positive test pits were located in the flat high area created by the terrace, or along the slope north of wall X. Several iron car and stove parts were found mixed into the large boulders of the retaining wall, which is most likely the product of shaping the landscape for the orchards. Several areas are still dominated by apple trees, many of them still producing fruit. The central portion of the North Property site around the retaining wall is dominated by deciduous growth in conjunction with apple trees, briar patches, and extremely thick underbrush. The area is at times impassable due to the thickness of vegetation. Further to the west, near the cobbled surface and running north toward the junction of walls V and W the vegetation thins considerably. Pine stand predominates in the southeastern section of the parcel defined by walls X, Y, and Z. This parcel is predominantly sloped, descending from the flatter western area eastward towards the railroad tracks. Standing intermittent wetlands are located along the far western edge of the area and one small stream running parallel to wall X on the north side was encountered. The stream channel may have been man made because several sections are lined with 55 gallon metal drums as if to create a culvert or gully. The water table in the proximity of the stream, along the N1190, N1200, and N1210 lines, was encountered in several test pits at approximately 40cm below depth.

Excavation strategy for this area was predicated mainly on topography and the proximity to above ground features such as stone walls and the cobbled surface. Flat areas near walls were tested on a 10m interval while areas with slope were tested on a 20m interval. Soils were relatively consistent across the area with most STP's encountering a 20-30cm deep A horizon characterized by a 10YR3/2 very dark grayish brown silty loam. B horizon soils were predominantly 10YR6/6 brownish yellow sandy loams with high rock content. STP N1020 E810, excavated near the wetlands along the western edge also encountered glay soils underlying the A horizon suggesting the area has been the location of standing wetlands for a long period of time. Some intentional landscaping was also evident directly east of the standing wetland along the terrace bordering the cobbled surface. STP N1020 E840, while negative for material culture revealed a 70cm deep A horizon, most likely the result of filling against a small retaining wall directly

west of the creek and cobbled surface.

A total of 103 test pits were excavated in the North Property area with 39 (approximately 38%) of these having contained material culture. Both prehistoric and historic material density was relatively low across the area with the highest densities occurring near wall Y and in the flat terraced area west of the cobbled surface and east of the intermittent wetlands. Prehistoric material is represented by a small scatter of lithic material that is confined to test pits north of the N1130 line. Material is predominantly small fragments of quartz shatter (5), with one possible small quartz core recovered from STP N1150 E840. The rest of the assemblage is composed of two possible quartzite projectile point bases, both recovered from STP N1270 E890. Historic material density was only slightly higher with coal, found in 15 test pits, bottle glass (11 test pits) and whiteware (10 test pits) as the most consistent artifacts recovered. The bottle glass assemblage was composed predominantly of fragments from clear machine made liquor bottles. Interestingly the only glass recovered from the area west of the cobbled surface is related to pharmaceutical bottles, while the more northern portion of the site contains a mixture of clear, green, and aqua glass from a range of vessels, including wine bottles. The numbers in the glass assemblage however are so small that it is hard to make any interpretations from this observation. All the bottle glass can be dated to the 19th and 20th centuries.

Plain undecorated whiteware, dating to post-1820, predominates the ceramic assemblage (23 fragments). One annular painted whiteware fragment and one brown transfer printed whiteware saucer fragment represent the only decorated earthenwares from the North Property assemblage. Other whiteware vessel types include fragments of several chamber pots and at least one serving platter. One small piece of creamware was recovered as the only object from STP N1200 E820, with all surrounding STP's negative for material culture. Several fragments of American produced stoneware were also recovered from the North Property site reinforcing the post-1820 date garnered from the whiteware. Four fragments from STP N1200 E850, one fragment from N1140 E850, and one fragment from N1130 E850 are representative of low quality buff smooth glazed jugs or jars with a date range of 1840 – 1920. Another fragment of American gray stoneware with Albany slip, dating to 1805 – 1920, was found in STP N1250 E830.

Architectural debris is represented by four pieces of window glass and three cut iron nails. With the exception of one nail found in STP N1160 E840 and a fragment of clear window glass recovered from STP N1130 E830, the small amount of architectural debris is concentrated in test units near wall Y.

The nature of the historic material at the North Property site suggests a mid-19th century occupation. The low-density scatter over a large area, with no spatially discreet residential deposits like those found at the Muckamaug site may also point to the area's use as agricultural fields. The deposition of artifacts may be the result of scattered and plowed "field trash". As early as 1797 the North Property was in the hands of Royal Keith where he lived with his family for thirty years before selling the property to his daughter's husband, Jonathan Stow Fiske. The Fiske family resided on the property until 1879 when the house burned. No architectural features relating to this house were encountered as it would have been located closer to what is now Keith Hill Road and outside of the project boundary. Temporally, the deposits of material

are probably related to the Fiske occupation of the property and their use of the land for agricultural purposes. Closer interval shovel testing within the boundary of walls X, Y, and Z, where a larger amount of material was recovered, may help pinpoint more specific activities related to the 19th century occupation of the property.

VII. Conclusions and Recommendations

While archaeological deposits on the Hassanamesitt Woods property do not strongly point towards activities related to the Praying Indian Village of Hassanamesitt they do point to a continuation of traditional settlement and land use in the area. Archaeological data recovered from this survey also aids in the reconstruction of historic Native American re-settlement and European occupation of the property after the abandonment of Hassanamesitt. Each research question posed at the beginning of this report will be reexamined in light of the archaeological findings.

1) In what way, if any, does the archaeological evidence aid in reconstructing the history of land use for the parcel from the Archaic period through the Early Modern period?

Archaeological deposits and above ground features consistently suggest a landscape used for resource procurement and habitation. A tradition of quarrying activities, begun by Native Americans utilizing local quartz outcrops for tool production and ending with recent stone cutting for foundations, has been an integral part of the property's history. Archaeological evidence also suggests that Native American prehistoric habitation may have been sporadic and migratory with the area used mainly for hunting and litihc procurement well into the Woodland period. Judging from the archaeological deposits the landscape does not appear to have been intensely utilized until the 18th century. With the resettlement of Hassanamesitt in the early 1700's the property moves into a period of more visible occupation. The discreet and localized nature of the largest historic deposits, located primarily within the five acre John Eliot Parcel of the Muckamaug site, also suggest that the landscape continued to be utilized primarily for resource procurement instead of widespread settlement. The property appears to have been parceled out primarily for the use of pasturage and land to support surrounding English colonists. Although the 106 acres allotted to Peter Muckamaug represented the core of the Hassanamesitt Woods property, it too was parceled out to increasingly land hungry white settlers. Archaeological deposits suggest that the land continued much as it had when resettlement began and by the end of the 19th century the Nipmuc presence continued to be the only habitation at the core of the property. As settlement increased on the perimeter of the property along Salisbury Street, the road to Mendon, and what became Keith Hill Road, Peter Muckamaug's descendents remained living among the pasturage, fallow, and orchards. The death of Sarah Boston in the late 1800's marks the end of the property's occupation and the several thousand year use of the property by the Nipmuc. By the early 20th century it appears that the Hassanamesitt Woods property was either being reclaimed by forest or used as an orchard.

2) Is there archaeological evidence to support the documentary claims of continuous occupation and connection to the original settlement of Hassanamesitt and John Eliot's meeting house?

There is no strong archaeological evidence to suggest that the area designated in historical documents as the location of John Eliot's meeting house is located on the property. There are also no substantial deposits of 17th century material that connect the Hassanamesitt Woods property to the original Praying Indian settlement. It is however possible that any archaeological signa-

ture for this settlement has been obscured by 20th century disturbances related to the Fiske family orchards. More intense archaeological investigation in the Muckamaug Site would be needed to test the validity of this statement.

3) In what ways are the Native families identified in the deed research visible in the archaeological deposits located on the property?

The residence of Peter Muckamaug and his descendents is well represented in the archaeological record. This occupation is visible by the density of 18th and 19th century material at the core of the John Eliot Parcel within the Muckamaug Site. The recovery of refined earthenware ceramics, bottle and window glass, and architectural debris suggests an intense residential occupation on the property. The occupation most likely spans from 1728 when Peter Muckamaug was allotted the original 106 acres up to Sarah Boston's death in the late 19th century when five acres was all that remained of the property. While we do not have evidence for Hassanamesitt, this site represents three generations of Nipmuc settlement on the property and possibly a return to an area once inhabited by the Hassanamisco.

4) How are the large amount of stone walls and above ground features located on the property related to John Eliot, Hassanamesitt, and the Native and European inhabitants identified in historic and deed research? (Refer to Figure 9)

While there is no evidence for the network of stonewalls being related to Hassanamesitt, many of the walls are associated with 18th and 19th century Nipmuc habitation. Their configuration has changed little from the division of the property in 1728. The most dramatic change appears to have taken place in the 20th century when walls were removed during landscaping for the orchards (See Appendix B, Map 3). Property boundaries in the southern portion of the property however are remarkably consistent with 19th century deed maps outlining 18th and 19th century property transactions. (See Appendix B, Maps 2 and 7) These properties, owned solely by white landowners by 1853 were most likely plots of acreage dedicated to pasture and woodlots. Peter Muckamaug's property boundaries are still evident, although portions of the original 1728 parcel have been removed from the central portion of the Hassanamesitt Woods property. Archaeological evidence suggests that the area bounded by walls A, B, C, D, and E was most likely pasturage for the use of Peter Muckamaug and his family, while walls D, E, and F demarcated the family's main residential component.

Structures related to the orchard are also predominant in the area; particulary the two stone retaining walls between walls F and X (Photo 20). Cobbled Surface 2 is also most likely a result of the introduction of the orchards. This loose pile of stone is most likely the result of dismantling the stone foundation and cellar of the Muckamaug structure that once stood on the John Eliot Parcel. Cobbled Surface 1 may also be the result of similar activity and may be the remains of the western boundary walls of the Muckamaug property. This surface however was intentionally placed, possibly as a platform for a cider press or mill. STP N1010 E890 was the only test pit in proximity to Cobbled Surface 1 to yield any material. One fragment of clear window glass was the only object recovered from this test pit and does not provide us with a

solid temporal assignment for the feature. Removing the vegetation covering this surface would contribute to our understanding of its function as it is currently inaccessible for detailed mapping.

5) How can the archaeological resources on the property aid in the preservation and use of the land for educational purposes in the future?

The Hassanamesitt Woods property offers an excellent opportunity to present to the public a landscape that has been utilized by two cultural groups for largely the same purposes. Traditions of quarrying, hunting, farming, animal husbandry, and residence can be traced from 6,000 years ago all the way up to the present day. Both quarry sites offer an excellent example of how both Prehistoric Native Americans and Europeans utilized the property's abundant lithic resources. Standing stonewalls and intact cellar features also give a largely intact glimpse into what the landscape looked like in the 18th and 19th centuries. The Muckamaug Site offers the opportunity to discuss the presence and impact of the Nipmuc on the cultural landscape of the project area as well as within the town of Grafton.

Recommendations

The Town of Grafton is in the unique position to preserve several important cultural resources without further archaeological excavation. Without the threat of development we must recommend that in keeping with the archaeological conservation ethic no further immediate archaeological excavation is needed. Further survey work would be needed only in the event that specific areas of the property not tested were slated for development. The cultural resources identified by this survey can be used in conjunction with environmental and recreational planning for educational and public outreach. Development of the property for increased public use would greatly benefit from the inclusion of these resources within a trail system or other program that could disseminate the prehistoric and historic activities associated with the property. It is recommended that any high impact development, such as the installation of buildings, parking lots, roads, etc, be confined to areas with limited or disturbed cultural resources. One potential area for more permanent development would be on the western side of wall C where bulldozing and orchard activity have already taken place.

While further archaeological testing is not immediately necessary, several areas would benefit from further limited testing. The excavation of larger controlled units in the John Eliot Parcel of the Muckamaug Site would help clarify claims that the property was the location of John Eliot's church. Several 1m x 2m units in the area of highest artifact density may define filled in cellar holes, wells, and privies that would yield better temporal information or have evidence for a 17th century component. More intense excavation may also identify structural features related to Native American habitation that is not visible during shovel testing. Further excavation in the Burrell Cellar Site and testing at the Salisbury Cellar Site would also provide a comparative sample of material against which the Muckamaug assemblage could be tested. Excavations on these sites would also illuminate the trajectory of European expansion into the area as well as provide information regarding the 18th and 19th century "neighborhood" that grew up on Keith Hill that continues to this day.

REFERENCES CITED

Ayers, Harral

n.d. "Hassanamesit: Royal Capital of the Nipmucks." On File, Grafton Public Library, Grafton, MA.

1940 *The Great Trail of New England.* Meadon Publishing Co., Boston, MA.

Barber, Russell, J.

1979 *Human Ecology and the Estuarine Ecosystem: Prehistoric Exploitation in the Merrimack Valley.* Unpublished Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, MA.

Bragdon, Kathleen, J.

1996 *Native People of Southern New England, 1500-1650.* University of Oklahoma Press, Norman.

Brigham, Charles Jr.

1831 *Map of Grafton, Worcester County, Mass.* Massachusetts State Archives, Boston.

Brigham, John

1702 *Plan of Grafton (Hassanamisco).* Third Series vol. 37, No. 213, p. 18. Massachusetts State Archives, Boston.

Carlson, Catherine C.

1986 *Archival and Archaeological Research Report on the Configuration of the Seven Original Seventeenth Century Praying Indian Towns of the Massachusetts Bay Colony.* Report on file, Massachusetts Historical Commission, Office of the Secretary of State, Boston, MA.

Cogley, Richard

1999 *John Eliot's Mission to the Indians before King Philip's War.* Harvard University Press, Cambridge, MA.

Cox, Deborah C.

1983 *Prehistoric Settlement Patterns Along the Pettaquamscutt River.* Unpublished Master's the sis, Department of Anthropology, Brown University, Providence, RI.

Cox, Deborah C., Peter F. Thorbahn, and Alan Leveillee

1983 *An Archaeological Assessment Survey of the Pettaquamscutt River Basin.* PAL Report No. 12-1. Submitted to the Rhode Island Historical Preservation Commission, Providence, RI.

Dincauze, Dena F.

1968 Cremation Cemeteries in Eastern Massachusetts. *Papers of the Peabody Museum of Archaeology and Ethnology* 59(1). Peabody Museum, Harvard University, Cambridge, MA.

1974 An Introduction to the Archaeology of the Greater Boston Area, *Archaeology of Eastern North America*, Vol. 2, No. 1.

1976 *The Neville Site: 8,000 Years at Amoskeag, Manchester, NH*, Peabody Museum Monographs, No. 4. Harvard University, Cambridge, MA.

Dincauze, Dena, and Mitchell Mulholland
1977 Early and Middle Archaic Site Distributions and Habitats in Southern New England. In *Amerinds and their Paleoenvironments in Northeastern North America.* Annals of the New York Academy of Sciences 288:439–456.

Doughton, Thomas Lewis
1997 *Hassanamesitt or Place of Small Stones*. geocities.com/quinnips/history/hassan1.html

Dragoo, Don W.
1976 Some Aspects of Eastern North American Prehistory: A Review 1975. *American Antiquity* 41:3–27.

Dunning, Phil
2000 Composite Table Cutlery from 1700 to 1930. In *Studies in Material Culture*, Karl Karklins editor, pp.32-46. Society for Historical Archaeology, Uniontown, PA.

Elia, Ricardo
1980 *Archaeological Investigation of the Proposed Stage II Sewers (Contract Nos. 7, 8, 9, 10) in Grafton, Mass*. Report on file, Massachusetts Historical Commission, Boston, MA.

Elia, Ricardo et al.
1986 *New England/Hydro Quebec Phase II Transmission Facilities, Cultural Resources Survey, Volume Two: Massachusetts.* Office of Public Archaeology, Boston University. Submitted to New England Power Company, Westborough, MA.

Elia, Ricardo and Alan E. Strauss
1987 *Intensive Archaeological Survey of the Proposed Digital Equipment Corporation Facilities in Lancaster, Massachusetts.* Office of Public Archaeology, Boston University. Submitted to Beals & Thomas, Inc., Westborough, MA.

Eliot, John
1671 "Letter to the Commissioners of the United Colonies in New England, Roxbury" 4 September 1671. Massachusetts Historical Society, Vol. XVII (1879-1880): 248.

Emerson, Benjamin K.
1917 Geology of Massachusetts and Rhode Island. *United States Geological Survey Bulletin* 597.

Esber, George S.
1987 Designing Apache Homes with Apaches. In *Anthropological Praxis: Translating Knowledge into Action*, edited by Robert M. Wulff and Shirley J. Fiske, pp. 187-196.

Fiske, Ella M. Williams
n.d. *a* "Keith Hill and Our Neighbors." On File, Grafton Public Library, Grafton, MA.

n.d. *b* "Keith Hill Homes and Neighbors." On File, Grafton Public Library, Grafton, MA.

Fowler, William S.
1966 The Horne Hill Soapstone Quarry. *Bulletin of the Massachusetts Archaeological Society* 27(2): 17-27.

Fragola, Patricia S. and Duncan Ritchie
1996 *Intensive (Locational) Archaeological Survey, Highfields of Grafton, Grafton, Massachusetts*. The Public Archaeology Laboratory, Inc. Report no. 739. Submitted to Magill Associates, Inc., Grafton, MA and J.R. Andrews Survey & Engineers, Inc., Uxbridge MA.

1998 *Site Examination Archaeological Investigation, Highfields 1 and Pratt-Keith Sites, Highfields of Grafton Project, Grafton, Massachusetts*. The Public Archaeology Laboratory, Inc. Report no. 739. Submitted to Magill Associates, Inc., Grafton, MA and J.R. Andrews Survey & Engineers, Inc., Uxbridge MA.

Funk, Robert E.
1972 Early Man in the Northeast and the Late Glacial Environment. *Man in the Northeast* 4: 7-39.

Glover, Suzanne
1989 *An Intensive Archaeological Survey: Crescent Green Condominium Development, Grafton, Massachusetts.* The Public Archaeology Laboratory, Inc. Report no. 288. Submitted to Clipper Grafton Trust, Boston, MA.

Goodby, Robert
1988 *The Seabrook Phase and Post-Hopewellian Interaction in the Northeast.* Unpublished Masters thesis, University of New Hampshire, Durham, NH.

Gookin, Daniel
1830 *An Historical Account of the doings and sufferings of the Christian Indians of New England.* Manuscript copied by Jared Sparks, October 29, 1830. On file at the American Antiquarian Society, Worcester, MA.

1972 *Historical Collections of the Indians in New England.* Arno Press, New York. Original Edition, 1792.

Goulding, Frank P.
1889 An Historical Address. In *History of Worcester County, Massachusetts, Vol. II*, edited by D. Hamilton Hurd, pp. 935-945. J.W. Lewis & Company, Philadelphia, PA.

Grafton Town Clerk's Office
Proprietor's Records, Town of Grafton, MA, 1728-1738.

Grimes, John et al.
1984 Bull Brook II. New Experiments upon the Record of Eastern PaleoIndian Cultures. *Archae - ology of Eastern North America* 12:159–183.

Hoffman, Curtiss R
1991 *A Handbook of Indian Artifacts from Southern New England.* Revised from the original text of William S. Fowler. Massachusetts Archaeological Society Special Publication #4.

Johnson, Eric S.
1993 Bifurcate Base Projectile Points in Eastern and Central Massachusetts: Distribution and Raw Materials. *Bulletin of the Massachusetts Archaeological Society* 54(2): 46-55.

Keith, E. L.
n.d. "Sketch of the Keith Family." On File, Grafton Public Library, Grafton, MA.

Keith, Herbert
1886 "Early History of Hassanamisco." On File, Grafton Public Library, Grafton, MA.

Kerber, Jordan
1984 *Prehistoric Human Occupation and Changing Environment of Potowomut Neck, Warwick, Rhode Island: An Interdisciplinary Approach.* Unpublished Ph.D. dissertation, Department of Anthropology, Brown University, Providence RI.

Leveillee, Alan
1998 *"Old Place, Safe and Quiet": Program of Archaeological data Recovery Millbury III Cremation Complex, Millbury, Massachusetts Volumes I and II.*

Leveillee, Alan, and Ronald Dalton
1990 *An Intensive Archaeological Survey, Rogers Property Recreational Facilities/Senior Center, Westborough, Massachusetts.* PAL Report No. 322. Submitted to the Town of Westborough, MA.

Lepore, Jill
1998 *The Name of War : King Philip's War and the Origins of American Identity.* Knopf, New York.

Luedtke, Barbara E.
1988 The Pennsylvania Connection: Jasper in Massachusetts Archaeological Sites. *Bulletin of the Massachusetts Archaeological Society* 48(1).

Mahlstedt, Thomas F.
1985 *Report on the Data Recovery Program of the Reedy Meadow Brook Site, Pepperell, Massachusetts.* Report on file, Massachusetts Historical Commission, Office of the Secretary of State, Boston, MA.

Mandell, Daniel R.
1996 *Behind the Frontier: Indians in 18th c. Eastern Massachusetts.* University of Nebraska Press, Lincoln, NE.

Marvin, Abijah
1879 *History of Worcester County, Mass.* Vols. I, II., C.F. Jewett, Boston, MA.

Meriam, Joseph Jr., Thomas Sherman and Thaddeus Read
1795 *Plan of Grafton.* Town Plans 1794, vol. 6, No. 1259, p. 14. Massachusetts State Archives, Boston.

Massachusetts Historical Commission
1984 *Historic and Archaeological Resources of the Connecticut Valley.* Massachusetts Historical Commission, Boston, MA.

1985 *Historic and Archaeological Resources of Central Massachusetts: A Framework for Preservation Decisions*. Massachusetts Historical Commission, Boston, MA.

Massachusetts State Archives
1740-41Resolves of the, Vol. 31: 290A-291
1651 Records of the General Court

Mrozowski, Stephen A.
1993 Native American Farming. Unpublished manuscript in possession of the author.

2000 *The Subtleties of Interpretation in an Archaeology of Native American Communities.* Paper presented at the annual meetings of the Society for Historical Archaeology, Quebec City, Quebec.

Mulholland, Mitchell T. et al.
1986 *Archaeological Remote Sensing and Historical Research Survey for the Yeadon Parcel at the Hassanamisco Indian Burying Ground, Grafton, Massachusetts*. University of Massachusetts Archaeological Services, Amherst, Massachusetts. Submitted to Mr. Foster Yeadon, Grafton, MA.

Nelson, John
1934 "Apostle Eliot and His Praying Indians." In *Worcester County: A Narrative Vol. I.* The American Historical Society, Inc., New York.

O'Steen, Lisa D.
1987 *Cultural Resource Literature and Research Review for the Proposed Champlain Gas Pipeline Corridor: Vermont, New Hampshire and Massachusetts.*

Pagoulatos, Peter
1988 *Intensive Archaeological Survey, Oakmont Farms, Grafton, Massachusetts*. The Public Archaeology Laboratory, Inc. Report no. 207. Submitted to Milford Road Associates, Boston, MA.

Pierce, Frederick.
1879 *History or Grafton.* Charles Hamilton Press, Worcester, MA.

Pulsipher, Jenny Hale
2001 *"Our Sages are Sageles": A Letter on Massachusetts Indian Policy after King Philip's War"* William and Mary Quarterly, 3rd Ser., 58: 431-448.

Rainey, Mary Lynne, and Deborah Cox
1995 *Archaeological Investigations at Two Prehistoric Sites in the Seekonk Archaeological District, Seekonk, Massachusetts*. The Public Archaeology Laboratory, Inc. Report No. 399. Submitted to Algonquin Gas Transmission Company, Boston, MA.

Ritchie, Duncan

1979 *Middle Archaic Lithic Technology from Eastern and Southeastern Massachusetts*. Paper presented at the Conference for Northeast Archaeology, Amherst, MA.

1984 A Review of Past and Current Research in the Sudbury and Assabet Drainages. In *Man in the Northeast* Vol. 25:85–93.

1985 *Archaeological Investigations at the Hartford Avenue Rockshelter, Uxbridge, Massachusetts: The Data Recovery Program.* The Public Archaeology Laboratory, Inc. Report no. 40-2. Submitted to the Massachusetts Department of Public Works, Boston, MA.

Ritchie, Duncan and Marsha King

1988 *Archaeological Reconnaissance Survey of West Hill Dam and Reservoir in Uxbridge, Northbridge, Upton, and Mendon, Massachusetts.* The Public Archaeology Laboratory, Inc., Report no. 158-1. Submitted to IEP, Inc. Northborough, MA and the U.S. Army Corps of Engineers, New England Division, Waltham, MA.

Ritchie, William A.

1971 *A Typology and Nomenclature for New York Projectile Points.* Revised edition. New York State Museum and Science Service Bulletin 384, Albany, NY.

Robbins, M.

1980 *Wapanucket*. Massachusetts Archaeological Society, Attleboro, MA.

Roop, Stanley

1963 Mill River: An Archaic Upland Site. *Bulletin of the Massachusetts Archaeological Society* 24(2): 1-21.

Rosebrock, Ellen E. et al.

1982 *Phase I Archaeological Reconnaissance/Intensive Survey for the Heritage Park, Blackstone Canal, Massachusetts*. Institute for Conservation Archaeology, Peabody Museum, Harvard University. Submitted to Commonwealth of Massachusetts, Department of Environmental Management, Boston, MA.

Snow, Dean

1980 *The Archaeology of New England.* Academic Press, New York, NY.

Solomon, Janet et al.

1981 *Phase II Archaeological Site Examination, Study of State Highway Route 146 (Contract No. 1), Sutton, Massachusetts*. Public Archaeology Laboratory, Department of Anthropology, Brown University Report. Submitted to Vollmer Associates, Inc., Boston, MA.

Speck, Frank

1943 A Note on the Hassanamisco Band of Nipmuc. *Bulletin of the Massachusetts Archaeological Society* 4(4): 49-56.

Suffolk County Registry of Deeds, Boston, MA.

Taft, Mrs. Arthur

n.d. "The Last of the Aborigines in Grafton." On File, Grafton Public Library, Grafton, MA.

Taft, Norman Mortimer
n.d. "Tales of Taft: An Oral History of a New England Village." On File, Grafton Public Library, Grafton, MA.

Thaxter, Samuel
1719 *Plan of Grafton.* Third Series, vol. 5, No. 304, p. 22. Massachusetts State Archives, Boston.

Thorbahn, Peter, and Deborah Cox
1983 *Extended Phase II Testing and Analysis of Six Prehistoric Sites in the Northern Section of the Route 146 Project.* Public Archaeology Laboratory, Brown University Report, Providence, RI. Submitted to Massachusetts Department of Public Works, Boston, MA.

1988 The Effect of Estuary Formation on Prehistoric Settlement in Southern Rhode Island. In *Holocene Human Ecology in Northeastern North America*, edited by G.P. Nicholas, pp. 167–182, Plenum Press, NY.

United States Department of Agriculture
1989 *Interim Soil Survey Report: Worcester County, Massachusetts Southern Part.* Soil Conservation Service, Worcester County Conservation Districts, Spencer, MA.

United States Geological Service
1982 7.5 Minute Milford, Massachusetts Quadrangle.

Wamsley, J.C.
1984 *Final Report on the Intensive Survey and Limited Site Examinations of Huguenot Sites in Oxford, Massachusetts.* Department of Archaeology, Boston University, Boston, MA.

Warren, C.M.
n.d. "The Early History of Grafton." On File, Grafton Public Library, Grafton, MA.

Worcester County Registry of Deeds, Worcester, MA.

Yentsch, Anne E.
1988 Legends, Houses, Families, and Myths: Relationships Between Material Culture and American Ideology. In *Documentary Archaeology in the New World*, Mary Beaudry edi tor, pp.5-20. Cambridge University Press.

Appendix A
Material Catalog

Grafton II: Material Catalog

Burrell Cellar Site

Context # 164 **Location: N500 E510** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
721	36	Fragment	Brick					191.3g

Context # 165 **Location: N500 E500** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
722	1	Body	Whiteware					
723	4	Body	Redware		Missing Glaze			
724	1	Fragment	Window Glass			Clear		
725	1	Fragment	Window Glass		Burned	Aqua Tint		Partially melted
726	6	Fragment	Bone		Calcined			
727	1		Lithic	Quartz Flake				Thick, may be shatter

Context # 166 **Location: N500 E500** **Stratum: B**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
728	1		Lithic	Quartz Shatter				

Context # 167 **Location: N500 E490** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
729	1	Body	Redware			Brown		

Context # 168 Location: N490 E490 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
730	1	Body	Bottle Glass			Dark Green	Wine Bottle	
731	1	Whole	Iron Nail	Cut				
732	1	Fragment	Iron Nail	Cut				

Context # 169 Location: N480 E490 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
733	1	Fragment	Brick					.6g
734	1	Stem	Clay Pipe					Unmeasurable
735	1		Lithic	Quartz Shatter				

Muckamaug

Context # 1 Location: N980 E1030 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
1	1	Lid	Jackfield Type		Burned			Teapot
2	1	Body	Creamware					
3	1	Rim	Creamware		Burned			

Context # 2 Location: N1000 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
4	1	Body	Creamware					
5	4	Body	Redware		Missing Glaze			

6	1	Fragment	Window Glass			Light Green		
7	1		Lithic	Quartz Projectile Point			Small Stemmed	Expediently produced, Late Archaic-Late Woodland
8	1		Lithic	Indeterminate Granite				Appears to have been cut, has very flat faces

Context # 3 Location: N990 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
9	2	Body	Creamware					
10	1	Body	Pearlware					
11	1	Body	Redware		Missing Glaze			

Context # 4 Location: N980 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
12	2	Body	Redware		Missing Glaze			
13	1	Body	Creamware					
14	1	Body	Creamware		Burned			
15	1	Base	Pearlware					
16	1	Body	Stoneware	American Gray with Albany Slip				
17	1		Lithic	Quartz Shatter				

Context # 5 Location: N970 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
18	2	Rim	Creamware					
19	5	Body	Creamware					

20	1	Body	Creamware		Burned			
21	1	Body	Pearlware		Burned			
22	1	Body	Pearlware	Hand Painted Polychrome Underglaze				Blue, Orange, Green
23	1	Body	Pearlware	Annular Painted Bands				Blue, Brown
24	3	Body	Redware		Missing Glaze			
25	1	Body	Redware			Brown		
26	1	Body	Redware	Black Lustrous				
27	1	Fragment	Window Glass			Aqua Tint		
28	1	Base	Bottle Glass			Dark Green	Wine Bottle	Blowpipe Pontil
29	2	Body	Bottle Glass			Dark Green	Wine Bottle	

Context # 6 Location: N960 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
30	4	Body	Redware		Missing Glaze			
31	1	Rim	Creamware					
32	1	Body	Pearlware					
33	1	Body	Pearlware	Annular Painted Bands				Brown
34	1	Body	Indeterminate Refined White Earthenware		Burned			

Context # 7 Location: N950 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
35	1	Body	Redware			Dark Brown		

Context # 8 Location: N940 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
36	1	Body	Pearlware					
37	1	Body	Creamware					
38	1	Body	Porcelain	Overglaze Enamel				Red Leaf Decoration
39	2	Body	Bottle Glass			Amber	Beer Bottle	Machine Made
40	2	Fragment	Brick					3.4g

Context # 9 Location: N930 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
41	1	Body	Creamware					

Context # 10 Location: N920 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
42	1	Rim	Creamware					

Context # 11 Location: N910 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
43	6	Body	Redware	Black Lustrous				

Context # 12 Location: N880 E1020 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
44	1	Body	Redware			Brown		
45	1		Lithic	Quartz Shatter				

Context # 13 Location: N1000 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
46	1	Body	Redware	Black Lustrous				

Context # 14 Location: N990 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
47	1	Body	Creamware					
48	1	Body	Pearlware					
49	1	Body	Pearlware	Hand Painted Blue Underglaze				Blue Line

Context # 15 Location: N980 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
50	1	Body	Creamware					
51	1	Base	Creamware				Teacup	
52	2	Body	Pearlware					
53	1	Body	Pearlware		Burned			
54	1	Rim	Pearlware	Blue Shell Edged	Burned		Plate	
55	1	Body	Indeterminate Refined White Earthenware		Missing Glaze			
56	9	Body	Redware		Missing Glaze			
57	1	Body	Redware			Brown		
58	1	Rim	Redware			Clear	Pan	
59	1	Body	Redware			Dark Brown		

60	2	Body	Redware	Black Lustrous				
61	2	Body	Bottle Glass			Clear		Machine Made

Context # 16 Location: N980 E1010 Stratum: B

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
62	1	Body	Redware		Missing Glaze			
63	1	Body	Redware			Clear		

Context # 17 Location: N970 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
64	1	Rim	Creamware					
65	1	Base	Creamware					
66	7	Body	Creamware					
67	1	Body	Pearlware	Annular Painted Bands				Green and brown bands with rouletting
68	1	Body	Pearlware	Handpainted Blue Underglaze				Blue leaf
69	1	Body	Pearlware	Handpainted Polychrome Underglaze				Brown line
70	1	Rim	Pearlware					Blue line along rim
71	1	Rim	Pearlware				Soup Plate	
72	8	Body	Pearlware					
73	2	Spout	Pearlware				Teapot	Strainer portion of teapot
74	2	Body	Indeterminate Refined White Earthenware		Burned			
75	1	Body	Indeterminate Refined White Earthenware		Missing Glaze			

76	7	Body	Redware		Missing Glaze			
77	3	Body	Redware			Dark Brown		
78	1	Body	Redware			Brown		
79	1	Base	Redware	Black Lustrous			Mug	
80	1	Body	Redware	Black Lustrous				
81	1	Fragment	Window Glass			Aqua Tint		

Context # 18 Location: N960 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
82	2	Rim	Creamware					
83	8	Body	Creamware					
84	2	Body	Pearlware					
85	1	Body	Pearlware	Handpainted Blue Underglaze				
86	1	Body	Pearlware	Handpainted Polychrome Underglaze				Brown and orange design
87	2	Body	Indeterminate Refined White Earthenware		Burned			
88	6	Body	Redware		Missing Glaze			
89	4	Body	Redware			Clear		
90	1	Body	Redware	Black Lustrous				
91	1	Body	Redware	Slip Decorated		Clear		White slip trailing
92	3	Fragment	Brick					.1g
93	1	Base	Bottle Glass			Dark Green	Wine Bottle	Sand tipped pontil

94	1	Whole	Iron Nail	Cut				

Context # 19 Location: Surface Find North of N960 E1010 Stratum:

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
95	1	Fragment	Brick					133.4g

Context # 20 Location: N950 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
96	1	Rim	Creamware					
97	2	Body	Creamware					
98	1	Rim	Pearlware	Handpainted Blue Underglaze				
99	1	Body	Pearlware					
100	1	Body	Porcelain					
101	4	Body	Redware		Missing Glaze			
102	1	Base	Redware		Missing Glaze			
103	1	Body	Redware			Clear		

Context # 21 Location: N940 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
104	1	Body	Pearlware					
105	1	Body	Redware		Missing Glaze			
106	1	Body	Redware			Dark Brown		
107	1	Base	Tableware Glass			Clear	Tumbler	

Context # 22 Location: N930 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
108	1	Rim	Creamware					
109	1	Body	Creamware					
110	1	Fragment	Window Glass			Aqua Tint		Heavily Scratched
111	1	Body	Bottle Glass			Light Olive		

Context # 23 Location: N920 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
112	1	Body	Creamware					
113	1	Body	Pearlware					
114	1	Rim	Pearlware	Green Shell Edged			Saucer	
115	1	Body	Indeterminate Refined White Earthenware		Missing Glaze			

Context # 24 Location: N900 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
116	1	Body	Redware		Missing Glaze			Exterior wash

Context # 25 Location: N870 E1010 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
117	1	Whole	Iron Ice Chopper					Would have attached to wooden handle

Context # 26 **Location: N1010 E1000** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
118	4	Body	Creamware					
119	1	Body	Pearlware					
120	1		Lithic	Quartz Shatter				

Context # 27 **Location: N1000 E1000** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
121	1	Rim	Creamware					
122	1	Body	Creamware					
123	4	Body	Pearlware					
124	2	Rim	Pearlware	Green Shell Edged	Burned			
125	1	Rim	Indeterminate Refined White Earthenware		Burned			
126	1	Body	Indeterminate Refined White Earthenware		Burned			
127	4	Body	Redware		Missing Glaze			
128	1	Base	Redware		Missing Glaze			
129	2	Fragment	Melted Glass			Aqua Opaque		Possibly a Milk Bottle

Context # 28 **Location: N990 E1000** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
130	2	Body	Creamware					
131	4	Body	Pearlware					

132	1	Body	Redware		Missing Glaze			
133	2	Body	Redware	Black Lustrous				
134	1	Body	Tableware Glass			Clear		
135	1		Lithic	Quartzite Drill				Possibly a Brewerton Eared drill

Context # 29 Location: N980 E1000 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
136	1	Base	Creamware					
137	7	Body	Creamware					
138	1	Rim	Pearlware	Handpainted Blue Underglaze				
139	1	Base	Pearlware	Annular Painted Bands				Blue Band
140	1	Base	Pearlware					
141	6	Body	Pearlware					
142	2	Body	Whiteware					
143	2	Body	Indeterminate Refined White Earthenware		Missing Glaze			
144	1	Rim	Redware		Missing Glaze			Exterior wash
145	1	Base	Redware		Missing Glaze			
146	6	Body	Redware		Missing Glaze			
147	2	Body	Redware			Clear		
148	1	Body	Redware			Dark Brown		Interior and exterior glaze
149	2	Body	Redware	Black Lustrous				

150	1	Fragment	Brick					.1g
151	1	Body	Tableware Glass			Clear		
152	1	Body	Bottle Glass			Light Olive		
153	1	Body	Bottle Glass			Olive Green	Flask	Molded panel, 5 pointed star
154	1	Fragment	Bone		Calcined			

Context # 30 Location: N970 E1000 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
155	2	Rim	Creamware					
156	2	Base	Creamware					
157	10	Body	Creamware					
158	1	Rim	Pearlware	Handpainted Blue Underglaze			Teacup/bowl	
159	1	Body	Pearlware	Blue Transfer Print				
160	12	Body	Pearlware					
161	1	Body	Whiteware					
162	4	Body	Indeterminate Refined White Earthenware		Missing Glaze			
163	9	Body	Redware		Missing Glaze			
164	1	Body	Redware		Missing Glaze			Exterior wash
165	1	Body	Redware			Clear		
166	1	Rim	Redware			Clear		
167	2	Body	Redware			Dark Brown		
168	1	Body	Redware	Black Lustrous				

169	1	Fragment	Window Glass			Aqua Tint		
170	1	Body	Tableware Glass			Clear		
171	1	Body	Bottle Glass			Aqua Tint		Thin, possibly flask
172	2	Body	Bottle Glass			Olive Green	Flask	
173	1	Fragment	Bone		Calcined			

Context # 31 Location: N970 E1000 Stratum: B

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
174	3	Body	Creamware					
175	1	Body	Pearlware	Handpainted Blue Underglaze				
176	1	Body	Pearlware	Blue Transfer Print				
177	1	Body	Pearlware					
178	1	Base	Indeterminate Refined White Earthenware		Burned			
179	2	Body	Redware		Missing Glaze			
180	1	Body	Redware			Clear		Possibly burned
181	1	Body	Bottle Glass			Olive Green	Flask	
182	1	Body	Tableware Glass			Clear		
183	1	Body	Bottle Glass			Aqua Tint		Thin, possibly flask
184	1	Body	Bottle Glass			Aqua Tint		Non-glass inclusion present

Context # 32 **Location: N970 E1000** **Stratum: Feature 1**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
185	1	Body	Redware			Dark Brown		
186	1	Whole	Iron Nail					Possibly a drawer pull

Context # 33 **Location: N970 E1000** **Stratum: Feature 2**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
187	2	Body	Creamware					
188	1	Body	Redware		Missing Glaze			

Context # 34 **Location: N960 E1000** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
189	1	Body	Porcelain	Underglaze Blue				
190	1	Base	Creamware				Bowl	
191	2	Rim	Creamware				Plate	
192	2	Rim	Creamware					
193	38	Body	Creamware					
194	1	Rim	Pearlware	Blue Shell Edged			Saucer	
195	1	Rim	Pearlware	Handpainted Polychrome Underglaze			Bowl	Brown, blue, orange, green, leaf and vine motif
196	1	Body	Pearlware	Handpainted Polychrome Underglaze			Bowl	Orange
197	1	Rim	Pearlware	Handpainted Blue Underglaze				

198	2	Body	Pearlware	Handpainted Blue Underglaze				
199	2	Base	Pearlware					
200	10	Body	Pearlware					
201	3	Body	Whiteware					
202	4	Body	Indeterminate Refined White Earthenware		Burned			
203	5	Body	Indeterminate Refined White Earthenware		Missing Glaze			
204	17	Body	Redware		Missing Glaze			
205	6	Body	Redware	Black Lustrous				
206	1	Rim	Redware			Dark Brown		
207	1	Rim	Redware		Missing Glaze			
208	6	Body	Redware			Dark Brown		
209	1	Body	Redware			Clear		
210	1	Body	Redware			Brown		
211	1	Body	Redware			Ginger		
212	1	Body	Redware			Yellow		Possibly a Fragment of Slip Decoration
213	2	Body	Redware	Slip Decorated		Clear		White slip trailing
214	2	Fragment	Brick					17.9g
215	2	Body	Bottle Glass			Clear		
216	4	Fragment	Window Glass			Aqua Tint		
217	1	Body	Bottle Glass			Olive Green	Flask	
218	1	Body	Bottle Glass			Dark Green	Wine Bottle	

219	1	Whole	Iron Nail	Cut				
220	4	Fragment	Bone					
221	8	Fragment	Bone		Calcined			

Context # 35 Location: N950 E1000 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
222	1	Rim	Creamware					
223	9	Body	Creamware					
224	1	Body	Pearlware	Handpainted Blue Underglaze				Blue Leaf
225	3	Body	Pearlware					
226	1	Rim	Pearlware	Green Shell Edged	Burned		Saucer	
227	1	Body	Indeterminate Refined White Earthenware		Missing Glaze			
228	6	Body	Redware		Missing Glaze			
229	1	Body	Redware	Slip Decorated	Missing Glaze			White slip trailing
230	1	Body	Redware			Clear		
231	1	Body	Redware			Brown		
232	1	Rim	Redware			Dark Brown		
233	1	Body	Redware	Black Lustrous	Burned			Paste is black/gray but glaze appears unburnt
234	1	Body	Clay Pipe	Bowl				Molded design
235	1	Fragment	Bone	Tooth				

Context # 36 Location: N940 E1000 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
236	1	Rim	Creamware					
237	3	Body	Creamware					
238	2	Body	Creamware					Incised line, mend
239	1	Base	Creamware		Burned			
240	1	Body	Pearlware	Handpainted Polychrome Underglaze				Brown star
241	1	Body	Redware			Clear		
242	1	Body	Redware			Yellow w/Brown		
243	1	Body	Redware		Missing Glaze			Exterior wash
244	2	Fragment	Window Glass			Aqua Tint		
245	1	Body	Bottle Glass			Olive Green	Flask	
246	1	Body	Bottle Glass			Green		

Context # 37 Location: N930 E1000 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
247	5	Body	Creamware					
248	1	Body	Indeterminate Refined White Earthenware		Missing Glaze			
249	2	Body	Redware		Missing Glaze			
250	1	Body	Redware			Dark Brown		

Context # 38 **Location: N920 E1000** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
251	1	Rim	Creamware					

Context # 39 **Location: N900 E1000** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
252	1	Body	Redware			Dark Brown		Interior and exterior glaze

Context # 40 **Location: N870 E1000** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
253	1		Lithic	Quartz Core				
254	1		Lithic	Quartz Shatter				

Context # 41 **Location: N860 E1000** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
255	1	Fragment	Bone		Calcined			

Context # 42 **Location: N1020 E990** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
256	5	Body	Redware			Clear		

Context # 43 **Location: N1010 E990** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
257	1	Body	Pearlware					
258	1	Body	Redware		Missing Glaze			

Context # 44 **Location: N1000 E990** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
259	1	Rim	Creamware					
260	5	Body	Creamware					
261	1	Rim	Pearlware	Handpainted Blue Underglaze				
262	1	Body	Pearlware	Blue Transfer Print				
263	1	Base	Pearlware				Bowl	
264	4	Body	Pearlware					
265	5	Body	Redware		Missing Glaze			
266	1	Body	Redware			Clear		
267	1	Body	Redware			Dark Brown		
268	1		Lithic	Quartz Flake				

Context # 45 **Location: N990 E990** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
269	4	Body	Creamware					
270	1	Rim	Pearlware	Handpainted Blue Underglaze			Bowl	
271	1	Base	Pearlware	Handpainted Blue Underglaze			Bowl	
272	1	Body	Pearlware					
273	1	Body	Indeterminate Refined White Earthenware		Burned			
274	1	Body	Redware		Missing Glaze			

275	1	Body	Redware			Dark Brown		
276	2	Body	Redware	Black Lustrous				
277	1	Body	Bottle Glass			Olive Green	Flask	
278	1	Whole	Bone	tooth				Starting to fragment

Context # 46 Location: N980 E990 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
279	11	Body	Creamware				Flatware	
280	1	Body	Pearlware	Handpainted Polychrome Underglaze	Burned			Brown Lines
281	1	Spout	Pearlware				Teapot	Strainer portion of teapot
282	3	Body	Pearlware					
283	8	Body	Redware		Missing Glaze			
284	2	Body	Redware			Clear		
285	2	Body	Redware			Dark Brown		
286	2	Body	Redware	Black Lustrous				
287	1	Base	Redware		Burned		Jug or Bowl	

Context # 47 Location: N970 E990 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
288	2	Base	Creamware					
289	9	Body	Creamware					
290	2	Body	Pearlware					

291	1	Rim	Indeterminate Refined White Earthenware		Burned			
292	2	Body	Indeterminate Refined White Earthenware		Missing Glaze			
293	1	Body	Stoneware	American Gary Albany Slip			Jug or Bottle	Heavily ribbed interior
294	12	Body	Redware		Missing Glaze			
295	2	Base	Redware		Missing Glaze		Bowl or Milkpan	mend
296	1	Body	Redware			Dark Brown		
297	1	Body	Redware			Clear		
298	4	Fragment	Window Glass			Aqua Tint		
299	1	Body	Bottle Glass			Aqua Tint		
300	1	Body	Tableware Glass			Clear		
301	1	Fragment	Bone		Calcined			

Context # 48 Location: N970 E990 Stratum: A-2

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
302	1	Body	Pearlware	Blue Transfer Print				
303	1	Body	Redware		Missing Glaze			
304	1	Body	Redware			Brown		

Context # 49 Location: N970 E990 Stratum: B

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
305	1	Body	Creamware					
306	3	Body	Redware		Missing Glaze			

307	1	Body	Redware			Dark Brown		

Context # 50 Location: N960 E990 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
308	1	Rim	Creamware					
309	13	Body	Creamware					
310	3	Body	Pearlware	Handpainted Blue Underglaze			Bowl	Blue leaves and lines
311	1	Rim	Pearlware					
312	8	Body	Pearlware					
313	4	Body	Whiteware					May be Pearl or Creamware
314	4	Body	Indeterminate Refined White Earthenware		Missing Glaze			
315	13	Body	Redware		Missing Glaze			
316	1	Rim	Redware		Missing Glaze			
317	2	Body	Redware			Dark Brown		
318	1	Body	Redware			Brown	Pan	
319	3	Body	Redware			Clear		Speckled glaze
320	1	Body	Redware		Burned	Clear		
321	1	Body	Redware		Burned	Dark Brown		
322	1	Body	Redware	Slip Decorated		Clear		White slip trailing
323	1	Base	Redware	Slip Decorated		Clear	Milk Pan	White slip trailing, same as bases in #47
324	1	Fragment	Window Glass			Aqua Tint		

325	1	Body	Bottle Glass			Green		Very flat
326	1	Whole	Iron Nail	Cut				
327	9	Fragment	Bone		Calcined			

Context # 51 Location: N950 E990 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
328	1	Rim	Creamware					
329	13	Body	Creamware					
330	2	Body	Buff Glazed Earthenware					1800-1820
331	1	Rim	Pearlware	Blue Shell Edged			Saucer	
332	1	Body	Pearlware	Blue Transfer Print				
333	1	Rim	Pearlware	Handpainted Polychrome Underglaze			Bowl	Brown line around rim
334	1	Base	Pearlware					
335	6	Body	Pearlware					
336	7	Body	Indeterminate Refined White Earthenware		Burned			
337	2	Body	Indeterminate Refined White Earthenware		Missing Glaze			
338	23	Body	Redware		Missing Glaze			
339	1	Body	Redware		Missing Glaze			Exterior wash
340	1	Base	Redware		Missing Glaze		Milk Pan/Pan	Exterior wash, lighter in color
341	1	Rim	Redware			Clear	Milk Pan/Pan	Same Vessel as base above
342	1	Body	Redware			Clear		

343	2	Body	Redware			Brown		
344	4	Body	Redware			Dark Brown		
345	1	Body	Redware			Dark Brown		Interior and exterior glaze
346	5	Body	Redware	Black Lustrous				
347	1	Body	Redware	Slip Decorated	Missing Glaze			White slip trailing
348	1	Body	Redware		Burned			May be part of large base in Context #46
349	1	Body	Stoneware	American Gary Albany Slip				Brown exterior speckled with yellow
350	2	Fragment	Brick					7.5g
351	1	Stem	Clay Pipe					5/64
352	3	Fragment	Window Glass			Aqua Tint		
353	2	Body	Bottle Glass			Clear		Very cloudy
354	1	Body	Bottle Glass			Olive Green	Flask	
355	1	Body	Bottle Glass			Dark Green	Wine Bottle	
356	2	Body	Bottle Glass			Green		
357	1	Base	Tableware Glass			Clear	Tumbler	Glass tipped pontil
358	1	Whole	Iron Nail	Cut				Rose head
359	3	Fragment	Iron Nail	Cut				
360	1	Whole	Copper Button	One Piece				Leaf design encircling back, stamped brass,1800-30
361	1	Fragment	Bone					
362	2	Fragment	Bone		Calcined			

Context # 52 Location: N950 E990 Stratum: B

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
364	1	Body	Creamware					

Context # 53 Location: N940 E990 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
365	1	Base	Creamware					
366	2	Body	Creamware					
367	1	Body	Pearlware					
368	1	Body	Indeterminate Refined White Earthenware		Burned			
369	1	Body	Indeterminate Refined White Earthenware		Missing Glaze			
370	5	Body	Redware		Missing Glaze			
371	2	Base	Redware	Slip Decorated	Missing Glaze			Mend
372	1	Fragment	Window Glass			Aqua Tint		
373	1	Body	Bottle Glass			Dark Green	Wine Bottle	
374	1	Body	Tableware Glass			Clear		Molded Glass
375	1	Whole	Iron Nail	Cut				
376	2	Fragment	Iron Nail	Cut				
377	2	Fragment	Bone		Calcined			

Context # 54 **Location: N930 E990** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
378	2	Body	Redware		Missing Glaze			
379	3	Body	Redware			Clear		Missing glazes outlines something formerl attached
380	1	Base	Redware	Slip Decorated		Clear		White slip trailing same as base in #50
381	1	Stoneware	Buff Smooth Glazed American					1840-1920
382	1	Fragment	Melted Glass			Blue		

Context # 55 **Location: N920 E990** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
383	1	Body	Pearlware	Handpainted Blue Underglaze			Bowl	
384	4	Body	Redware		Missing Glaze			
385	3	Fragment	Unidentified Iron					

Context # 56 **Location: N910 E990** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
386	1	Body	Creamware					
387	1	Body	Redware		Missing Glaze			Burned
388	1	Whole	Copper Button	One Piece				Stamped, 15mm diameter
389	1	Whole	Copper Button	One Piece				Stamped, 17mm diameter

Context # 57 Location: N900 E990 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
390	1	Body	Redware			Brown		
391	1	Body	Redware		Missing Glaze			Exterior wash, lighter color
392	1	Body	Redware		Missing Glaze			

Context # 58 Location: N890 E990 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
393	1	Body	Pearlware					
394	1	Body	Redware			Dark Brown		

Context # 59 Location: N880 E990 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
395	1	Body	Clay Pipe	Bowl				

Context # 60 Location: N870 E990 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
396	1	Rim	Pearlware	Green Shell Edged			Plate	
397	1	Body	Redware		Missing Glaze			
398	2	Body	Redware	Black Lustrous				

Context # 61 Location: N1010 E980 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
399	3	Body	Creamware					

Context # 62 Location: N1000 E980 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
400	3	Body	Creamware					
401	1	Body	Indeterminate Refined White Earthenware		Burned			
402	1	Fragment	Window Glass			Aqua Tint		

Context # 63 Location: N990 E980 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
403	3	Body	Creamware					
404	1	Body	Indeterminate Refined White Earthenware		Burned			
405	1	Body	Redware		Missing Glaze			
406	1		Coal					.1g

Context # 64 Location: N980 E980 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
407	2	Rim	Creamware					
408	6	Body	Creamware					
409	1	Rim	Pearlware					Possibly Green Shell Edged
410	1	Body	Redware			Apple Green		
411	1	Body	Redware			Dark Brown		
412	2	Body	Redware			Yellow w/Brown		Mend

Context # 65 Location: N970 E980 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
413	1	Rim	Porcelain	Plain				
414	1	Rim	Creamware					
415	15	Body	Creamware					
416	1	Rim	Pearlware	Handpainted Polychrome Underglaze			Bowl	Brown and yellow lines around rim
417	1	Body	Pearlware	Handpainted Polychrome Underglaze				Blue, black and red
418	2	Body	Pearlware	Handpainted Blue Underglaze				Blue Lines
419	2	Rim	Pearlware					
420	15	Body	Pearlware					
421	6	Body	Indeterminate Refined White Earthenware		Missing Glaze			
422	3	Body	Indeterminate Refined White Earthenware		Burned			
423	1	Body	Redware		Missing Glaze			Burned
424	16	Body	Redware		Missing Glaze			
425	6	Body	Redware			Clear		
426	1	Body	Redware			Clear		Speckled glaze
427	3	Body	Redware			Dark Brown		Speckled glaze
428	2	Body	Redware			Brown		
429	2	Body	Redware	Black Lustrous				
430	1	Rim	Redware			Brown		

431	1	Body	Redware			Clear		
432	1	Fragment	Window Glass			Aqua Tint		
433	1	Body	Bottle Glass			Olive Green	Flask	
434	1	Base	Bottle Glass			Olive Green	Flask	Thin and flat, circular lines
435	1	Body	Bottle Glass			Green		Flat, similar to glass in Context #50
436	1	Fragment	Bone					Cut mark evident

Context # 66 Location: N960 E980 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
437	2	Rim	Creamware					
438	22	Body	Creamware					
439	2	Body	Pearlware	Handpainted Blue Underglaze				Blue line
440	1	Base	Pearlware	Blue Transfer Print			Plate	
441	2	Body	Pearlware	Blue Transfer Print			Bowl	
442	2	Base	Pearlware				Plate	Small portion of makers mark visible on large piec
443	1	Rim	Pearlware					
444	10	Body	Pearlware					
445	4	Body	Whiteware					
446	1	Rim	Indeterminate Refined White Earthenware		Burned		Bowl	
447	1	Body	Indeterminate Refined White Earthenware		Burned			
448	2	Body	Indeterminate Refined White Earthenware		Missing Glaze			

449	15	Body	Redware		Missing Glaze			
450	1	Body	Redware		Missing Glaze			Exterior wash
451	1	Body	Redware			Brown		Interior and exterior glaze, exterior=dark brown
452	2	Body	Redware			Dark Brown		
453	2	Body	Redware			Brown		
454	1	Base	Redware			Brown	Pan	
455	1	Rim	Redware			Brown	Pan	
456	2	Body	Redware			Clear		Speckled glaze
457	1	Body	Redware			Clear		
458	1	Body	Redware			Apple Green		Very small bit of glaze
459	1	Body	Redware	Black Lustrous				
460	1	Body	Redware	Black Lustrous	Burned			Paste is gray/black, similar to Context #35
461	2	Fragments	Brick					.8g
462	1	Stem	Clay Pipe					4/64
463	1	Body	Clay Pipe	Bowl				
464	1	Fragment	Window Glass			Aqua Tint		
465	2	Body	Bottle Glass			Olive Green		
466	1	Body	Bottle Glass			Olive Amber		
467	4	Fragment	Bone		Calcined			

Context # 67 **Location: N950 E980** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
468	3	Body	Creamware					
469	1	Body	Pearlware	Handpainted Blue Underglaze				
470	1	Base	Pearlware				Teapot	Possibly interior of teapot base, ribbed
471	5	Body	Pearlware					
472	8	Body	Redware		Missing Glaze			
473	3	Rim	Redware			Brown	Pan	
474	3	Body	Redware			Brown		
475	1	Body	Redware	Black Lustrous				
476	1	Body	Redware	Slip Decorated	Missing Glaze			White slip trailing
477	7	Fragment	Brick					7.4g

Context # 68 **Location: N940 E980** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
478	1	Body	Creamware					
479	1	Body	Indeterminate Refined White Earthenware		Burned			
480	1	Redware			Missing Glaze			
481	1	Base	Bottle Glass			Dark Green	Wine Bottle	

Context # 69 **Location: N930 E980** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
482	2	Body	Creamware					
483	5	Body	Redware		Missing Glaze			
484	1	Base	Redware			Brown	Pan	
485	1	Body	Redware	Slip Decorated		Clear		White slip trailing
486	1	Fragment	Window Glass			Aqua Tint		

Context # 70 **Location: N920 E980** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
487	1	Body	Creamware					
488	2	Body	Redware		Missing Glaze			

Context # 71 **Location: N910 E980** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
489	4	Body	Creamware					
490	4	Body	Pearlware					
491	6	Body	Redware		Missing Glaze			
492	1	Body	Redware			Yellow w/Brown	Mug?	Interior and exterior glaze
493	1	Body	Redware			Dark Brown		
494	1	Body	Redware			Dark Brown	Pan	Dark brown exterior, ginger interior
495	1	Rim	Redware	Black Lustrous				

Context # 72 Location: N900 E980 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
496	1	Rim	Creamware					
497	1	Body	Creamware					
498	1	Base	Pearlware				Bowl	
499	1	Body	Pearlware					
500	2	Body	Redware		Missing Glaze			
501	2	Body	Redware			Yellow		

Context # 73 Location: N890 E980 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
502	1	Body	Indeterminate Refined White Earthenware		Burned			
503	2	Body	Redware		Missing Glaze			

Context # 74 Location: N880 E980 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
504	1	Body	Creamware					
505	1	Body	Pearlware	Handpainted Polychrome Underglaze				Brown leaf
506	1	Base	Redware		Burned	Yellow	Mug?	Possibly slip trailed
507	1	Body	Tableware Glass			Clear		Molded, similar to context #53

Context # 75 **Location: N870 E980** **Stratum: B**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
508	1	Body	Pearlware	Handpainted Blue Underglaze	Burned			Blue Line
509	1	Body	Indeterminate Refined White Earthenware		Burned			Most likely pearlware
510	1		Lithic	Indeterminate Quartz				

Context # 76 **Location: N840 E980** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
511	1	Whole	Iron Nail	Cut				

Context # 77 **Location: N820 E980** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
512	1	Body	Pearlware					

Context # 78 **Location: N1040 E970** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
513	1	Whole	Lithic	Quartzite Projectile Point			Stark	Middle-Late Archaic

Context # 79 **Location: N1010 E970** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
514	1	Lid	Pearlware	Handpainted Polychrome Underglaze			Teapot	Molded, possibly a teapot
515	1	Body	Pearlware					
516	1	Rim	Redware			Brown	Pan	

Context # 80 **Location: N1000 E970** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
517	1	Base	Creamware					
518	1	Body	Creamware					
519	1	Body	Redware		Missing Glaze			
520	1	Body	Redware			Brown		Interior and exterior glaze
521	1	Body	Redware	Black Lustrous				
522	2	Fragment	Window Glass			Aqua Tint		
523	1	Body	Tableware Glass			Clear		
524	1	Body	Tableware Glass			Clear		Molded, same as Contexts #53,74

Context # 81 **Location: N990 E970** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
525	2	Body	Creamware					
526	1	Body	Pearlware	Handpainted Blue Underglaze				
527	1	Body	Indeterminate Refined White Earthenware		Burned			
528	1	Body	Redware		Missing Glaze			

Context # 82 **Location: N980 E970** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
529	1	Body	Creamware					
530	1	Rim	Indeterminate Refined White Earthenware					

531	1	Body	Redware		Missing Glaze			
532	1	Fragment	Window Glass			Aqua Tint		

Context # 83 Location: N960 E970 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
533	1	Body	Creamware					Incised lines
534	3	Body	Creamware					
535	1	Body	Pearlware	Handpainted Polychrome Underglaze				Blue and Orange
536	1	Body	Redware	Black Lustrous				

Context # 84 Location: N950 E970 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
537	1	Body	Creamware				Plate	
538	1	Fragment	Brick					15.5g
539	2	Fragment	Iron Nail	Cut				

Context # 85 Location: N940 E970 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
540	6	Body	Redware		Missing Glaze			
541	1	Base	Redware		Missing Glaze			
542	1	Rim	Redware			Yellow w/Brown	Milk Pan/Pan	
543	2	Body	Redware			Brown		

544	1	Body	Redware			Olive Brown		
545	1	Body	Redware		Burned	Dark Brown		Paste partially gray, interior and exterior glaze
546	8	Fragment	Brick					3.7g
547	1	Fragment	Window Glass			Aqua Tint		
548	1	Body	Bottle Glass			Green		

Context # 86 Location: N930 E970 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
549	1	Body	Creamware					
550	16	Body	Redware		Missing Glaze			
551	1	Body	Redware		Missing Glaze			Exterior wash
552	2	Rim	Redware					Exterior wash, mend
553	1	Base	Redware			Brown		
554	3	Body	Redware			Brown		
555	2	Body	Redware			Dark Brown		
556	1	Body	Redware			Clear		Interior and exterior glaze
557	2	Body	Redware			Dark Brown		Interior and exterior glaze
558	2	Body	Redware		Burned	Dark Brown		Interior=dark brown, exterior=black
559	1	Body	Redware	Black Lustrous				
560	3	Body	Redware	Slip Decorated	Missing Glaze			White slip trailing
561	1	Fragment	Brick					4.0g

562	1	Stem	Clay Pipe					Unmeasurable
563	5	Fragment	Window Glass			Aqua Tint		
564	1	Whole	Iron Nail	Cut				Short, bent
565	1	Fragment	Bone		Calcined			

Context # 87 Location: N900 E970 Stratum: B

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
567	1	Body	Redware			Brown		

Context # 88 Location: N880 E970 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
568	1	Rim	Indeterminate Refined White Earthenware	Shell Edged	Burned			

Context # 89 Location: N870 E970 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
569	1		Iron Cutlery	Knife				Blade broken, tang intact

Context # 90 Location: N860 E970 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
570	5	Body	Creamware					
571	2	Body	Indeterminate Refined White Earthenware		Missing Glaze			Most likely creamware

Context # 91 Location: N980 E960 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
572	1	Body	Redware		Missing Glaze			

Context # 92 **Location: N970 E960** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
573	1	Body	Redware		Missing Glaze			

Context # 93 **Location: N960 E960** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
574	1	Body	Pearlware					
575	1	Body	Redware			Brown		

Context # 94 **Location: N950 E960** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
576	1	Body	Staffordshire Slipware	Slip Trailed				
577	1	Base	Redware		Missing Glaze			
578	1	Body	Redware			Brown		
579	2	Body	Redware			Clear		
580	1	Body	Redware	Slip Decorated	Missing Glaze			White slip trailing
581	1	Fragment	Window Glass			Aqua Tint		

Context # 95 **Location: N940 E960** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
582	1	Body	Indeterminate Refined White Earthenware		Burned			

Context # 96 **Location: N930 E960** **Stratum: B**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
583	1	Body	Pearlware	Handpainted Polychrome Underglaze				Brown line

Context # 97 **Location: N890 E960** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
584	1	Body	Pearlware					
585	1	Body	Redware		Missing Glaze			

Context # 98 **Location: N880 E960** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
586	1	Body	Creamware					
587	1	Body	Pearlware		Burned			
588	5	Fragment	Bone		Calcined			

Context # 99 **Location: N870 E960** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
589	1	Rim	Porcelain	Overglaze Enamel			Teacup	Red lines and vine design
590	1	Body	Bottle Glass			Green		

Context # 100 **Location: N1010 E950** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
591	1	Body	Redware			Olive Brown		

592	2		Lithic	Quartz Shatter				

Context #: 101 **Location: N1000 E950** **Stratum: B**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
593	1	Rim	Creamware					
594	1	Body	Creamware					

Context #: 102 **Location: N990 E950** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
595	1	Body	Tableware Glass			Aqua Tint		Molded, similar to other molded glass

Context #: 103 **Location: N980 E950** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
596	4	Body	Creamware				Plate	Knife marks present
597	1	Body	Pearlware	Blue Transfer Print				
598	1	Body	Pearlware	Annular Painted Bands				Yellow band
599	2	Body	Pearlware					Heavy knife marks
600	1	Body	Redware		Missing Glaze			
601	1	Body	Redware			Clear		Speckled glaze
602	2	Body	Redware	Black Lustrous				
603	2	Base	Redware	Black Lustrous				
604	1		Lithic	Quartz Preform				Possibly a small stemmed or Lagoon preform

Context # 104 **Location: N880 E950** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
605	1	Body	Pearlware					

Context # 105 **Location: N1000 E940** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
606	1	Rim	Pearlware				Plate	

Context # 106 **Location: N980 E940** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
607	1	Rim	Pearlware	Blue Shell Edged	Burned		Plate	

Context # 107 **Location: N970 E940** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
608	1	Body	Creamware					
609	1	Body	Redware			Brown		

Context # 108 **Location: N1030 E930** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
610	1		Lithic	Quartz Shatter				
611	1		Lithic	Quartz Flake Scraper				

Context # 109 **Location: N1000 E930** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
612	1	Body	Pearlware					

Context # 110 **Location: N980 E930** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
613	1	Body	Redware			Clear		

Context # 111 **Location: N1000 E920** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
614	1	Body	Redware		Missing Glaze			

Context # 112 **Location: N1010 E890** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
615	1	Fragment	Window Glass			Clear		

Context # 120 **Location: N740 E920** **Stratum: B**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
637	1	Body	Pearlware	Blue Transfer Print				

Context # 121 **Location: N800 E960** **Stratum: B**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
638	1		Lithic	Quartz Shatter				Cortex on one side

Context # 122 **Location: N980 E850** **Stratum: B**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
639	1		Lithic	Indeterminate Lithic				Wedge shaped, planar sides, possibly quartzite

North Property

Context # 123 **Location: N1280 E890** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
640	1	Fragment	Window Glass			Clear		

Context # 124 **Location: N1270 E890** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
641	1		Lithic	Quartzite Biface				Flake like, may be a biface or broken point
642	1		Lithic	Quartz				Similar in shape and size as above

Context # 125 **Location: N1270 E890** **Stratum: B**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
643	1		Lithic	Indeterminate Lithic				Smooth, striations, curved shape, natural

Context # 126 **Location: N1250 E890** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
644	2		Coal					1.0g

Context # 127 **Location: N1130 E880** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
645	2		Lithic	Quartz shatter				
646	1		Lithic	Quartz Primary Flake				

Context # 128 **Location: N1290 E870** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
647	1	Body	Whiteware	Annular Painted Bands				Blue bands
648	5		Coal					11.5g
649	1		Coal	Slag/Clinker				20.5g

Context # 129 **Location: N1270 E870** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
650	1	Rim	Whiteware					
651	1	Body	Whiteware				Pot/Chamber Pot	
652	1	Rim	Whiteware	Brown Transfer Print			Saucer	
653	10		Coal					14.5g
654	1		Coal	Slag/Clinker				.3g
655	1	Fragment	Bone		Calcined			
656	1		Lithic	Quartz Shatter				

Context # 130 **Location: N1250 E870** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
657	1	Body	Bottle Glass			Clear		
658	1		Coal	Slag/Clinker				7.0g
659	1	Whole	Iron Nail	Cut				

Context # 131 **Location: N1230 E870** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
660	1	Whole	Iron Nail	Cut				

Context # 132 **Location: N1130 E870** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
661	1	Body	Whiteware					

Context # 133 **Location: N1000 E870** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
662	1		Lithic	Indeterminate Lithic				Odd Shape, looks like a stone sheep's tooth

Context # 134 **Location: N1270 E850** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
663	2	Body	Whiteware					
664	1	Body	Bottle Glass			Clear		Machine made
665	1	Body	Lamp Chimney Glass			Clear		Very thin
666	1		Coal	Slag/Clinker				.6g
667	1	Fragment	Indeterminate Iron Object					

Context # 136 **Location: N1250 E850** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
670	1	Body	Bottle Glass			Clear		

Context #: 137 **Location: N1230 E850** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
671	1	Body	Whiteware					

Context #: 138 **Location: N1210 E850** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
672	1	Body	Bottle Glass			Dark Green	Wine Bottle	

Context #: 139 **Location: N1200 E850** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
673	4	Body	Stoneware	Buff Smooth Glazed				Coarse with brown streaks, resembling paint
674	1	Body	Bottle Glass			Clear		Machine made, seam visible

Context #: 140 **Location: N1140 E850** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
675	1	Rim	Stoneware	Buff Smooth Glazed			Jar/Jug	Dark brown interior glaze
676	1		Coal					.7g

Context #: 141 **Location: N1130 E850** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
677	1	Body	Stoneware	Buff Smooth Glazed			Jar/Jug	Dark brown interior glaze
678	1	Fragment	Melted Glass			Aqua Tint		
679	2		Coal					1.7g

Context # 142 **Location: N1170 E840** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
680	1		Coal					3.2g

Context # 143 **Location: N1160 E840** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
681	1	Fragment	Iron Nail	Cut				

Context # 144 **Location: N1150 E840** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
682	1		Coal	Slag/Clinker				3.0g
683	1		Lithic	Quartz Core				Small core

Context # 146 **Location: N1130 E840** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
685	4	Rim	Whiteware				Chamber Pot	Mend
686	4	Body	Whiteware				Chamber Pot	Mend
687	1		Coal					0.1g
688	1		Lithic	Quartz Shatter				

Context # 147 **Location: N1270 E830** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
689	1	Body	Bottle Glass			Dark Green	Wine Bottle	
690	1	Fragment	Window Glass			Clear		

Context # 148 **Location: N1250 E830** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
691	1	Body	Stoneware	American Gray Albany Slip				Two toned paste with gray and buff
692	1	Fragment	Window Glass			Clear		
693	4		Coal					7.8g

Context # 149 **Location: N1230 E830** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
694	1	Rim	Redware			Brown		

Context # 150 **Location: N1160 E830** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
695	5	Body	Bottle Glass			Clear	Liquor Bottle	Machine made, seam visible

Context # 151 **Location: N1130 E830** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
696	1	Fragment	Window Glass			Clear		
697	1		Coal					1.0g
698	1		Coal	Slag/Clinker				0.1g

Context # 152 **Location: N1210 E820** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
699	1	Base	Bottle Glass			Clear	Pharmaceutical Bottle	Circular base

Context # 153 **Location: N1200 E820** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
700	1	Body	Creamware					

Context # 154 **Location: Surface Find Near N1190 E820** **Stratum:**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
701	1	Whole	Iron Plow Point					

Context # 155 **Location: N1180 E820** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
702	1	Base	Whiteware				Chamber Pot	Stained yellow
703	2	Body	Whiteware					

Context # 156 **Location: N1060 E820** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
704	2	Base	Whiteware				Platter	
705	2	Body	Whiteware				Platter	
706	1		Coal					.7g

Context # 157 **Location: N1050 E820** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
707	1	Body	Whiteware					
708	1	Body	Bottle Glass			Aqua Tint		
709	1	Body	Bottle Glass			Aqua Tint	Pharmaceutical Bottle	Molded Letters

710	1	Body	Lamp Chimney Glass			Clear		
711	3		Coal					1.7g

Context # 158 Location: N1040 E820 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
712	1	Stem	Clay Pipe					5/64
713	1	Base	Bottle Glass			Aqua Tint		Probably associated with glass in Context #157
714	3		Coal					4.7g
715	1		Coal	Slag/Cinder				.1g

Context # 159 Location: N1030 E820 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
716	2	Fragment	Indeterminate Plastic			White		

Context # 160 Location: N1160 E810 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
717	1	Body	Whiteware					

Context # 161 Location: N1130 E810 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
718	1	Body	Bottle Glass			Green		Machine made, seam visible

Context # 162 Location: N1050 E810 Stratum: A

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
719	1	Body	Indeterminate Refined White Earthenware		Missing Glaze			

Context # 163 **Location: N1040 E810** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
720	1	Body	Redware		Unglazed			

Quarry Site

Context # 113 **Location: N500 E880** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
616	1		Lithic	Quartz Projectile Point			Beekman Triangle	Late Archaic - Middle Woodland

Context # 114 **Location: N500 E880** **Stratum: B**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
617	2		Lithic	Quartz Shatter				

Context # 115 **Location: N500 E885** **Stratum: A**

Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
618	1		Lithic	Quartzite Scraper			Utilized Flake Scraper	Notched sides, possibly an abrading scraper
619	1		Lithic	Rhyolite Projectile Point				Unidentified type
620	1		Lithic	Quartz Flake				Blade like, possibly utilized
621	1		Lithic	Quartz Primary Flake				
622	2		Lithic	Quartz Secondary Flake				
623	3		Lithic	Quartz Shatter				
624	7		Lithic	Quartz Core				

Context # 116	Location: N500 E885	Stratum: B					
Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
625	4		Lithic	Quartz Shatter				
626	1		Lithic	Quartzite Flake				Strange material
627	1		Lithic	Quartzite End Scraper				Same material as above

Context # 117	Location: N505 E880	Stratum: A					
Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
628	1		Lithic	Flake Drill				Uncertain material
629	1		Lithic	Quartzite Preform				Unknown projectile type
630	2		Lithic	Quartz Core				A lot of inclusions present
631	2		Lithic	Quartz Shatter				

Context # 118	Location: N505 E880	Stratum: B					
Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
632	1		Lithic	Quartz Flake				
633	1		Lithic	Quartz Core				

Context # 119	Location: Tree Fall NW of Quarry Site	Stratum:					
Cat. No.	Count	Portion	Object	Descriptor	Condition	Color	Vessel Type	Comments
634	1		Lithic	Quartz Utilized Flake				Possibly a flake scraper
635	3		Lithic	Quartz Shatter				
636	1		Lithic	Quartz Core				

Appendix B
Supplementary Maps

Map 1: Current Stone Walls and Historic Parcels
Index to Parcel Codes

Map 2: Current Stone Walls and 19th Century Deed Map

Map 3: Above Ground Features and 1957 Aerial Photo Showing Orchards

Map 4: Grafton II: Muckamaug Parcels and Historic Material Density

Map 5: Total Test Pits (With Orthophoto)

Map 6: Hassanamesitt Woods Total Artifact Concentrations (Surfer Density Map)

Map 7: 19th Century Deed Map with Total Test Pits

Map 8: Site Boundaries and Historic Parcels

Map 9: Aboveground Features and Wetlands with 2001 Aerial Photo

Map 10: Grafton II: Test Pits with Prehistoric Material

Current Stone Walls and Historic Parcels



Appendix B: Map 1

Index to Parcel Codes

Information on parcel chains gathered from 19th century deed maps and the 2002 CCEH Reconnaissance Survey.

Parcel 1, 2, 3, 4, 6: Parcels Within the Original 1728 Muckamaug Parcel

On the deed map, "John Eliot's Indian Church" was located on **Parcel 1**. There is no reference to where the information placing the church at this location originated.

Peter & Sarah Muckamaug (original proprietors) 1728 106 acres "taking in the improvements where they now live" **(Parcel 1, 2, 3, 4, 6)**

The children of Sarah and Peter, Joseph Aaron and Sarah Phillips, divided the land between them.

Joseph Aaron sold **Parcel 4** to Abner Stow in 1788 and another lot to the east of the project area to Silas Fay in 1797.

In 1798 the trustees of Sarah Philips, daughter of Peter and Sarah Muckamaug sold the western section of the Muckamaug grant **(Parcel 6)** to Nathaniel Batchellor. The land was sold at public auction by a resolve of General Court. On November 23, 1797 Nathaniel Batchellor bought 20 acres with all buildings and appurtenances for $216.40. The farm was sold to raise money to "pay debt and then support the children of Sarah Philips Indian" (Proprietor's Records).

In 1853 the eastern section of the land **(Parcel 2)** was under the guardianship of Charles Brigham, Trustee. With the permission of the General Court he sold it to Sarah Walker, a descendant of Peter and Sarah Muckamaug, in September of 1853 for $1.00. It contained 20 acres of 'wood and pastureland."

The following year Sarah sold it to Jonathan Fiske for $665.62.

Parcel 3, which is referred to as "Swago" on one map, is mentioned as a place where Sarah Boston collected medicinal herbs from around the wetland areas (Taft 1975: 4). It is difficult to figure out the chain of landowners however, but it appears that it was sold off from the Muckamaug parcel before 1804 when Nathaniel White sold it to Ebenezer Leland Jr.. Leland sold it to John Warren in 1811.

Parcel 5:

Presumably owned by Esther Freebush "Indian" in 1728
Indian Trustees to Daniel Grosvenor (date unknown)
Grosvenor presumably sold the parcel to Leonard Wheelock
Leonard Wheelock to Royal Keith in 1813

Parcel 7:

The Indian Trustees to Thomas Nichols in 1778
Thomas Nichols to Nathaniel Batchellor 1779 20 acres (Thomas Nichols also acquired 31 acres of the lot to the west which is outside the project area.)
Nathaniel Batchellor to James Wheeler 1785 22.5
James Wheeler to Ephraim Wheeler 1788 22.5 acres
Ephraim Wheeler to James Wheeler 1790 29.5 acres

James Wheeler to Jonathan Wheeler 1793 22.5 acres
Jonathan Wheeler to Nahum Stone 1793 22.5 acres
The heirs of Nahum Stone to Royal Keith in 1821 for $3,484.60

Parcel 8: *Southern Portion of Lot 45*

Ebenezer Wheeler of Concord (original proprietor) 1728 41 acres
Ebenezer Wheeler to his son Ebenezer 1741 "all Grafton lands"
Ebenezer Wheeler Jr. to Gideon Baker 1742 30 acres for £250
Cornelius Baker to Timothy Parlina (?) 1763 20 acres
Cornelius Baker to Ebenezer Wadsworth 1764 partial acreage
Ebenezer Wadsworth to Nathaniel Hudson 1764
A 10 acre portion of this lot was parceled off to form a separate lot in the southern section. It is difficult to determine from the map if the property is part of the project area.
Priscilla Batchellor (widow) and Noah and Abigail Vilas as "heirs of Baker" sold this 10 acre Parcel with house to Timothy Rockwell in 1768.
Jefferson Wheelock sold the northern portion of 13 acres to Royal Keith in 1844
Joseph Flagg sold 9 acres of the southern portion to Royal Keith in 1833

Parcel 9: *Lot 58*

Thomas Weeks (original proprietor) 1728 40 acres
Thomas Weeks to Joseph Goodale 1732 40 acres for £500
Joseph & Elizabeth Goodale to Ephraim Wheeler 1782 _ of land & buildings
Joseph Goodale solely to Ephraim Wheeler 1782 _ parcel & _ buildings
Ephraim Wheeler to Abner Stow Jr. 1782 40 acres with buildings
Abner Stow to James Whipple 1792 40 acres with buildings
James Whipple to Royal Keith 1797 40 acres with buildings. This parcel is the first one purchased by Royal Keith. The transaction included an additional 9 acre meadow lot and 4 acres of woodland that are not in the project area.
Royal Keith to his son-in-law Jonathan Fiske in 1827
Jonathan Fiske to David L. Fiske
David Fiske sold it in 1879

Parcel 10:

In the northwest corner – "Indian Pasture"
Sarah Phillips requested that the Indian Proprietors sell this 14 acre piece of land
Asa Goodell (Trustee) sold the land to Joseph Prentice in 1815
Joseph Prentice to Royal Keith in 1830
Moses Adams to J.S. Fiske "Joseph Prentice Farm" 1854

Parcel 11:

Appears to have been parceled off in several sections after John Warren acquired the property in 1814 from Ebenezer Leland Jr.
North Section
Heirs to John Warren to Marshall and Samuel Stearns (?) 1835
South Section

Heirs to John Warren to Thomas Drury in 1838
Thomas Drury to Ruth Drury in 1839
Ruth Drury to Royal A. Keith in 1841
Heirs to Royal A. Keith to A(?) Salisbury 1845

Parcel 12:

3 acre home site of Ebenezer Leland Sr., part of the larger Parcel 11.
Ebenezer Leland Sr. to Ebenezer Leland Jr. (Date unknown)
Ebenezer Leland Jr. sold to John Warren in 1814
Follows the progression of **Parcel 11**, but appears to have been a rental property until the Salisbury family acquired it around 1845.

Parcel 13: *Lot 61*

Richard Taylor (original proprietor) 1728 51 acres
Richard Taylor to Hezekiah Taylor (son) 1741
Heirs of Hezehiah Taylor to Thaddeus Read in 1784 land with buildings
Thaddeus Read to Thaddeus Read Jr. 45 acres with land and buildings in 1815 for $200
Heirs of Thaddeus Read to Royal Keith in 1845
Royal Keith to Harrison Eames "a certain lot of wood and pasture land" 1847
Harrison Eames to Hassanamesitt Lodge 1847

Parcel 14: *Lot 60*

Noted as the location of "Churches Indian Battle 1675", outside of the project area.
Indian Burial Ground also in parcel, near Keith Hill Road and outside of the project area.
Small section that is in the project area was purchased by Royal Keith from Nathan White in 1804

Parcel 15: *Lot 59*

Samuel Stow to Abner Stow in 1733
Heirs to Abner Stow to Jonathan Stow in 1785
Jonathan Stow to Benjamin Leland in 1799
Benjamin Leland to Royal Keith in 1805

Parcel 16:

Only information pertaining to this property is that it was owned by Daniel Fiske and eventually acquired by the Robinson family in 1967. It is the location of the Historic Stone Quarry.

Parcel 17:

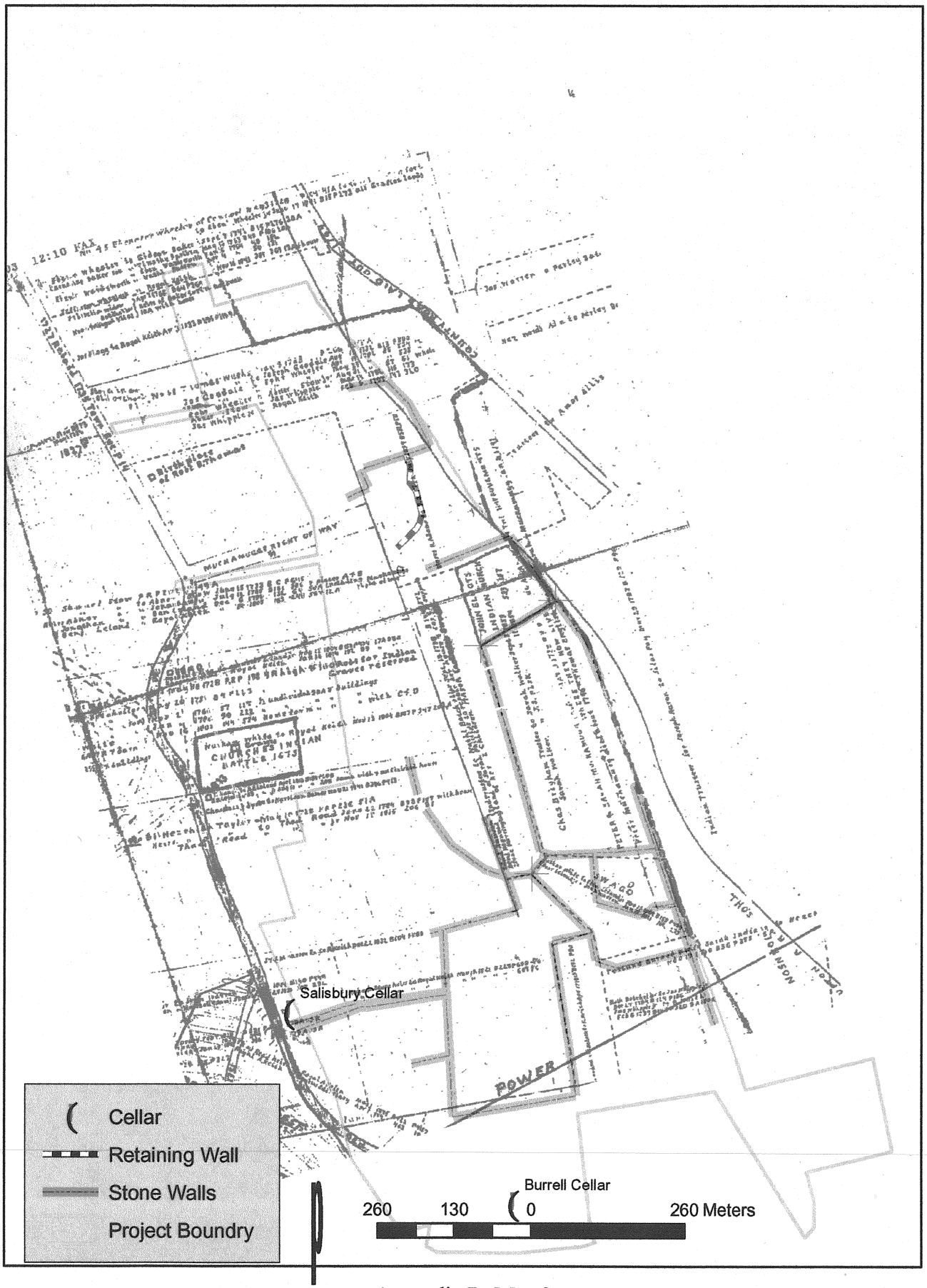
Owned by Benjamin Leland in 1797
May have been purchased by Royal Keith in 1817

Property may also have been rented out to the Burrell family as this parcel is the location of the Old Burrell Cellar.

Parcel 18:

Muckamaug right of way.

Current Stone Walls and 19th Century Deed Map

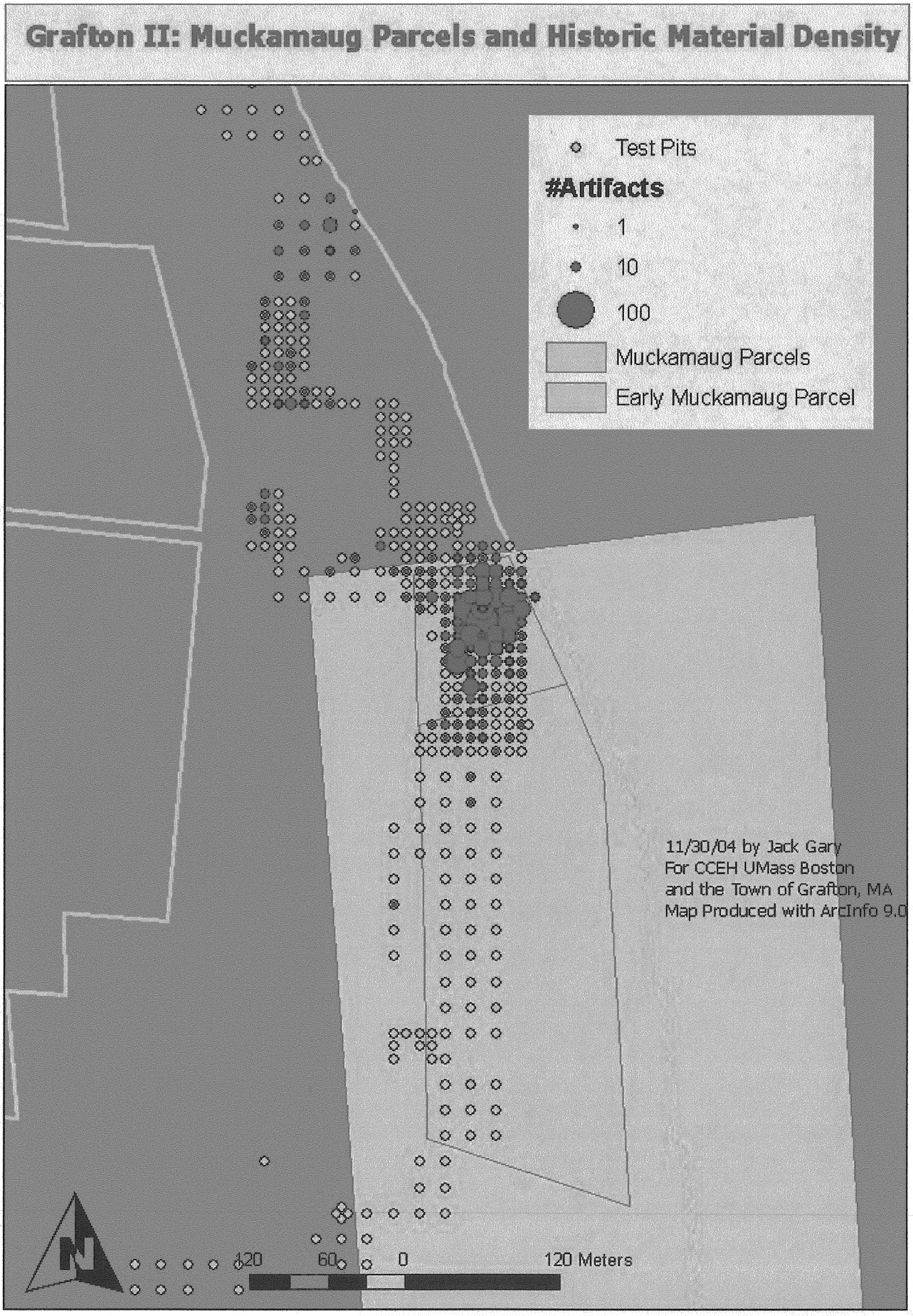


Appendix B: Map 2

Above Ground Features and 1957 Aerial Photo Showing Orchards



Appendix B: Map 3

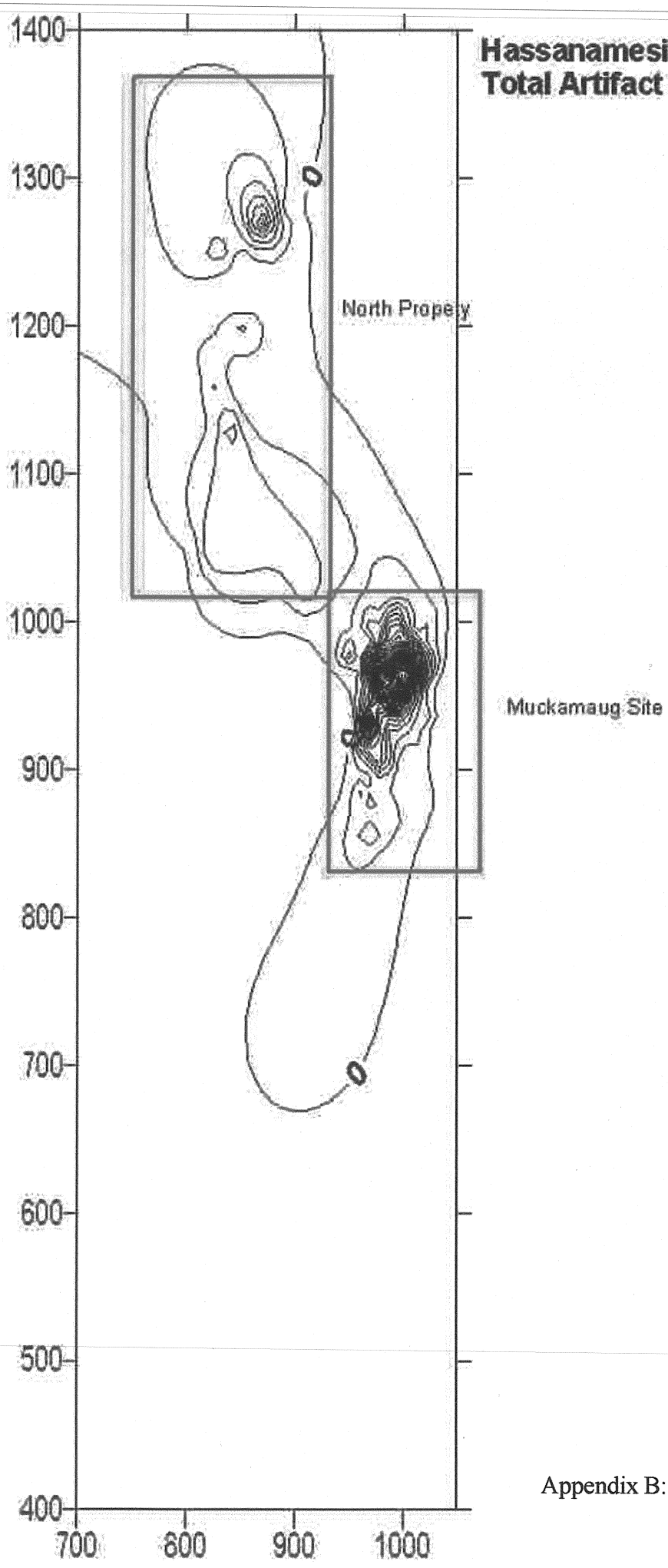


Appendix B: Map 4

Total Test Pits

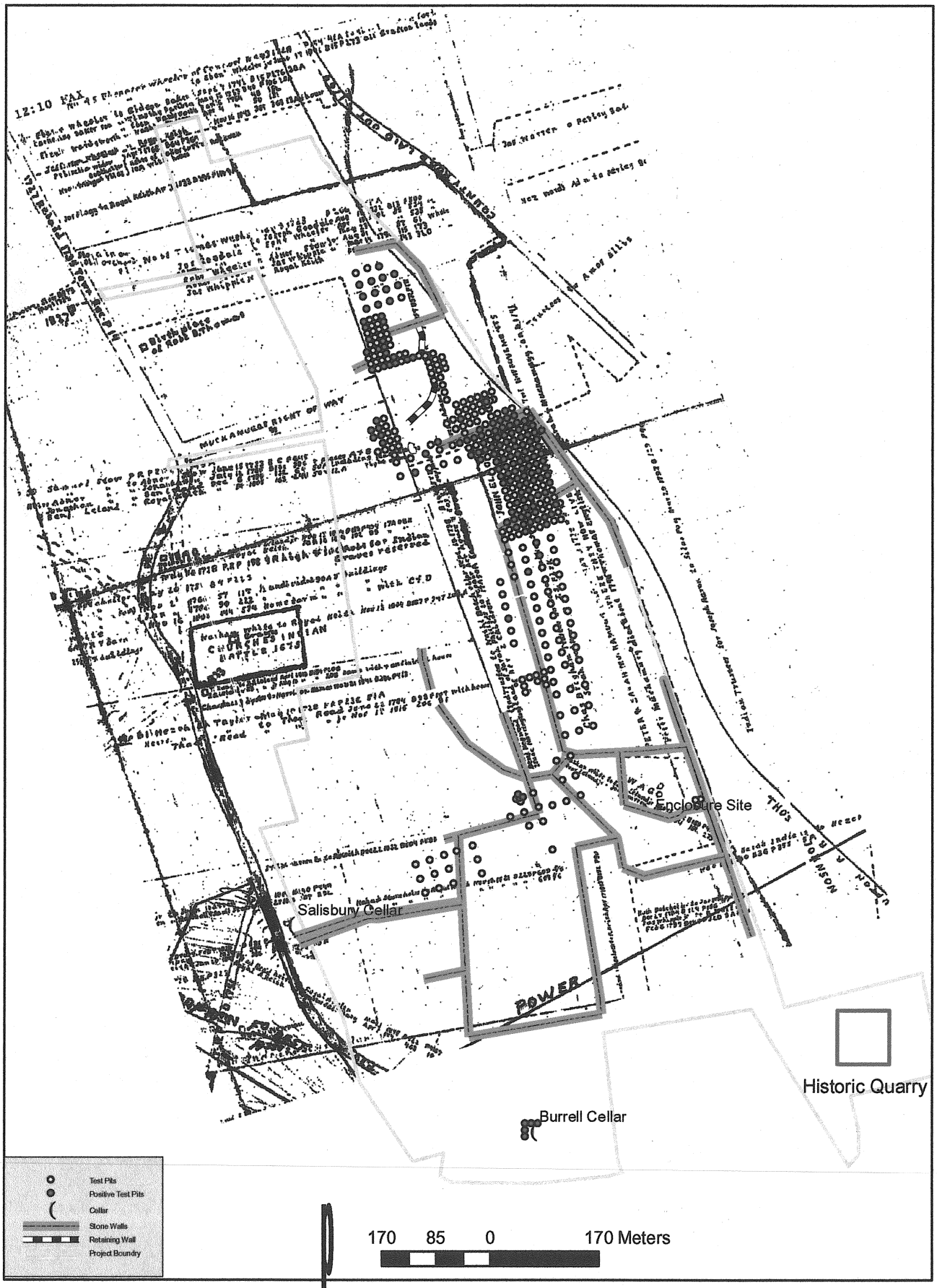


Appendix B: Map 5



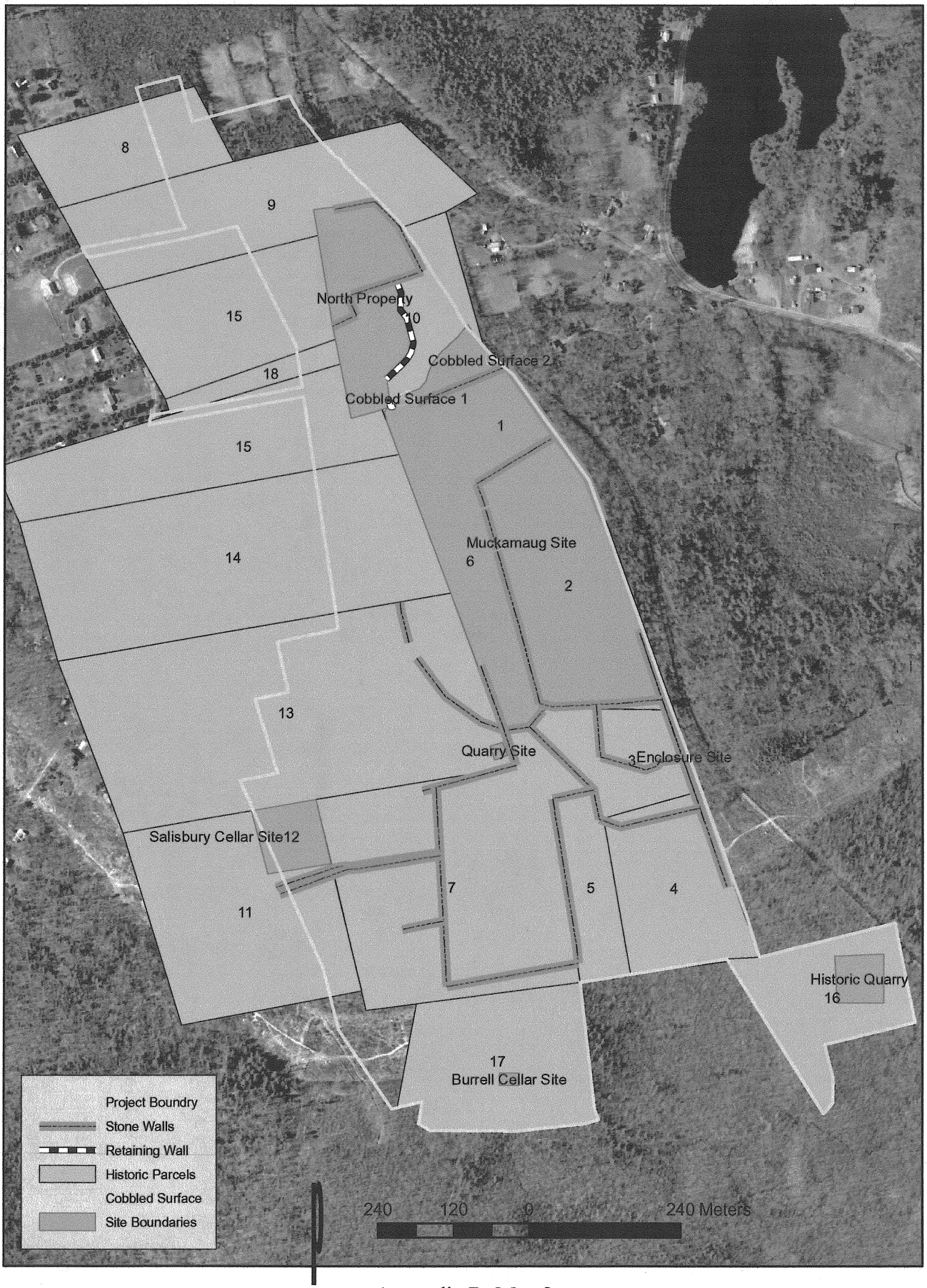
Appendix B: Map 6

19th Century Deed Map with Total Test Pits



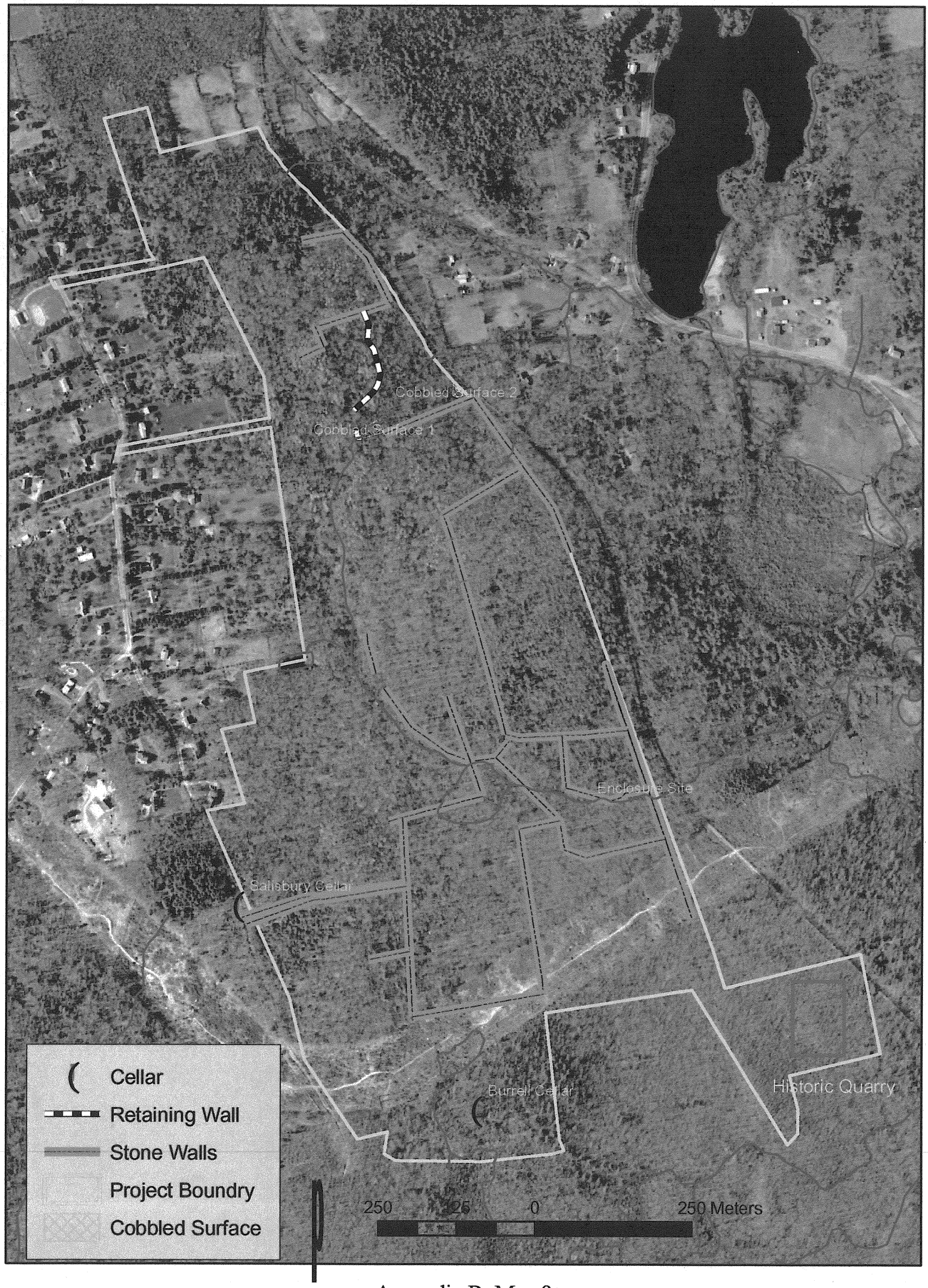
Appendix B: Map 7

Site Boundaries and Historic Parcels

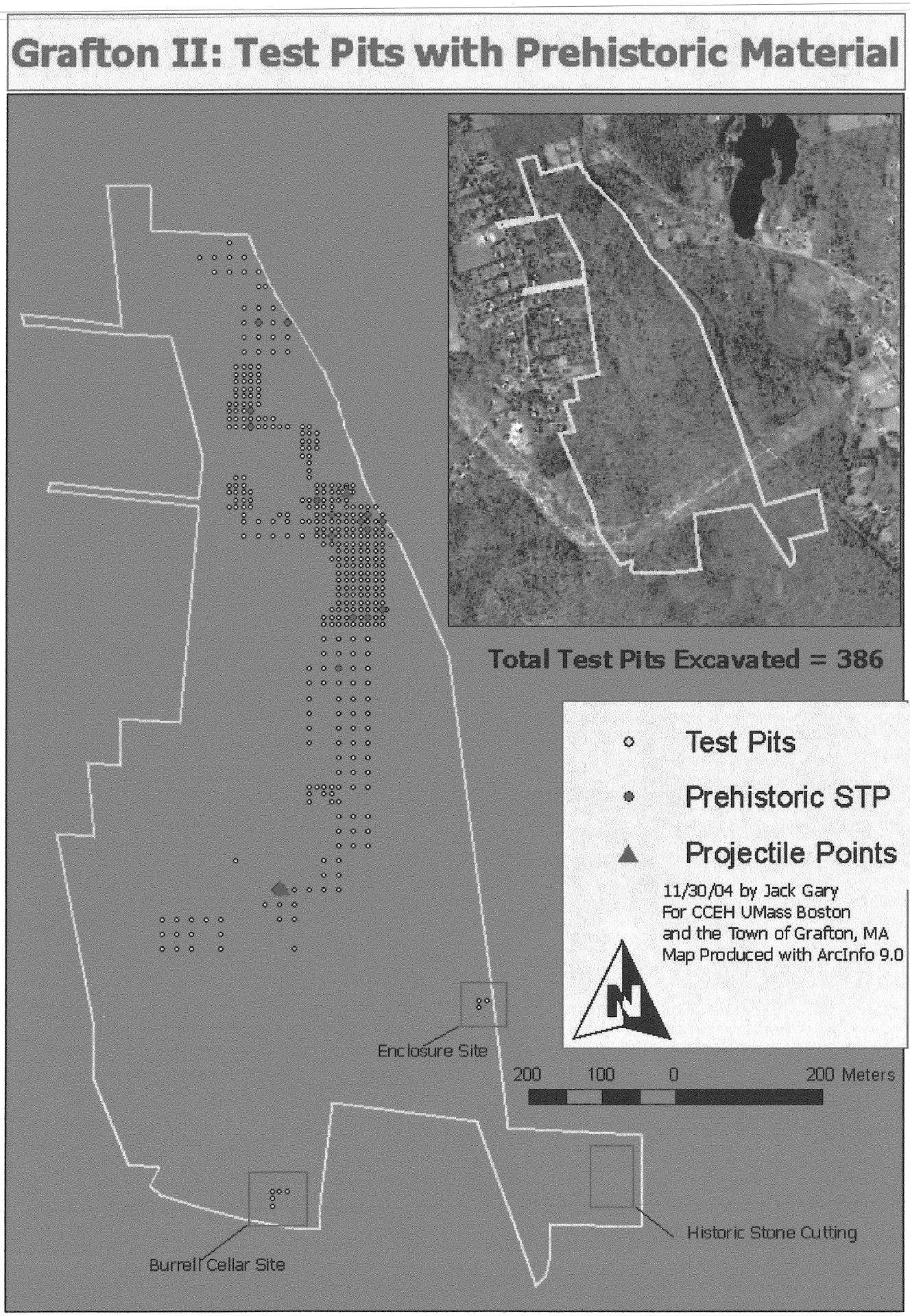


Appendix B: Map 8

Aboveground Features and Wetlands with 2001 Aerial Photo



Appendix B: Map 9



Appendix B: Map 10