SENECA ARMY DEPOT ACTIVITY

SEAD-12 PHASE I ARCHAEOLOGICAL SURVEY SENECA ARMY DEPOT: ROMULUS, NEW YORK

01453



PREPARED FOR:

SENECA ARMY DEPOT ACTIVITY ENVIRONMENTAL COMPLIANCE OFFICE US ARMY CORPS OF ENGINEERS SENECA AREA OFFICE

SUBMITTED BY:

PARSONS ENGINEERING SCIENCE, INC.

10521 ROSEHAVEN STREET FAIRFAX, VIRGINIA

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EXECUTIVE SUMMARY

As part of the on-going remedial response activities at the Seneca Army Depot Activity (SEDA) in Romulus, New York, Parsons ES-Boston conducted an expanded site inspection (ESI) at SEAD-12. After completion of geophysical investigations and prior to conducting extensive remediation activities, the Cultural Resources Department of Parsons ES-Fairfax, performed a Phase I archaeological investigation at SEAD-12. The Phase I archaeological survey of SEAD-12 consisted of background and preliminary documentary research, a pedestrian survey of the entire 360-acre parcel, and the systematic excavation of shovel test pits (STPs) in areas of high-, medium-, and low probability. High probability areas (Archaeological Areas 1-4), which were identified through archival research as the location of former farmsteads, were tested at 10 meter intervals; medium probability areas (Archaeological Areas 7-9), which were designated around historic dumps discovered during the pedestrian survey, were shovel tested at 20 meter intervals with additional judgmental STPs excavated at the discretion of the field director; and finally, low probability areas (Archaeological Areas 5, 6, and 10-21), also tested at 20 meter intervals, were considered to have a low to moderate potential for containing prehistoric materials. A total of 463 STPs was excavated within SEAD-12. The Phase I survey resulted in the identification of 8 archaeological sites (7 historical sites and 1 prehistoric site) and 8 isolated finds, 5 of which were associated with electro-magnetometer (EM) targets.

The eight sites include four sites associated with former farmsteads, three historic dumps, and one prehistoric site, consisting of an isolated projectile point. The general breakdown of the artifact categories recovered from each of the eight sites corroborates that the artifacts fall into three basic categories: (1) artifacts associated with recorded historic structures (Sites A09909.000003-A09909.000006), (2) artifacts associated with historic dumps (Sites A09909.000007-A09909.000009), and (3) a prehistoric site (A09909.000010).

Site A09909.000003, the location of the former Thomas Sample Sr. farmstead, included structural remains (e.g., a stone foundation wall), features (e.g., a cobble stone surface or path and a depression or well), and numerous artifacts. Historic records indicate that Thomas Sample Sr. owned the property (Lot 52, plat 18) as early as 1822. Although historic records are not clear when he first lived on the property, maps indicate a house occupied the same location as Site

A09909.000003 at least by the 1850s. Diagnostic artifacts recovered from the site reflect two distinct periods: the early nineteenth century and the early- to mid-twentieth century. Diagnostic artifacts from the nineteenth century include creamware and pearlware, whereas diagnostic artifacts from the twentieth century include machine-made bottle glass and vessel glass. The majority of the twentieth century artifacts were recovered from the cellar fill in Feature 1, whereas the artifacts dating to the early nineteenth century were distributed more evenly across the site. A large anomaly (EM-5) precluded testing in the eastern portion of the site.

Sites A09909.000004 (the W.G. Sample Farmstead), A09909.000005 (the J. McKnight Farmstead), and A09909.000006 (the John McKnight Farmstead) are located in the same general area that historic maps indicate historic farmsteads. Although records are unclear as to when these residences were erected, they all appear on historic maps between the late 1850s and the early 1870s. With the exception of a possible well or cistern at Site A09909.000006, no structural remains or features were found at the aforementioned three sites. Archaeological materials recovered from the above three sites primarily consisted of architectural and domestic artifacts. Architectural artifacts comprise between 46% (A09909.000004) to 83% (A09909.000005) of the assemblages from these sites; whereas domestic artifacts constitute between 8% (A09909.000005) to 35% (A09909.00004) of the assemblages from these sites. Artifacts recovered from Sites A09909.000004 through A09909.000006 date from the mid- to late-nineteenth century and the early twentieth century. All three residences remained occupied by descendants of the original owners until the property was purchased by the military and the houses razed.

The three remaining historical sites (A09909.000007-A09909.000009) represent dump sites and were located where there was no historical record of any buildings or structures. However, a well was also identified at Site A09909.000009. The artifacts found at these sites were consistent with the sites having been used as small domestic refuse dumps. That is, domestic artifacts comprise between 83% and 96% of these assemblages. The diversity of artifact groups represented at the dump sites is more restricted when compared to the number of artifact groups represented at the house sites. The diagnostic artifacts recovered from Site A09909.000007 date from the late-nineteenth to the early twentieth century (ca. 1880-1910), and the artifacts from Site A09909.000009 date from ca. 1900-1920. Conversely, the artifacts from

Site A09909.000008 primarily date from the mid-twentieth century. No artifacts were collected from below Stratum A at any of these three sites.

Site A09909.000010, the prehistoric site, is represented by a single isolated projectile point fragment. Despite the excavation of eight radial shovel tests at 5-meter intervals, no additional prehistoric materials were recovered. The point resembles an Orient Fishtail type (1200-700 B.C.), and based on the fragmentary nature of the point as well as the breakage patterns on the artifact, it is most likely that the point reflects hunting loss rather than discard or breakage during tool resharpening.

Seven archaeological areas (Areas 10, 11, 14, and 17-20) and one additional EM target (EM-29) produced one or more artifacts. For purposes of this report, these eight artifact locations are classified as isolated finds. Five areas (Areas 17-20 and target EM-29) produced artifacts associated with electro-magnetic signatures. The majority of artifacts from the isolated finds are classified as architectural (e.g., nails, barbed wire and fencing fragments, brick and mortar fragments, and terra cotta pipe) and are considered not significant.

Based on the results of archival research, presence or absence of structural remains and features, artifact density, site integrity, and the historic context, the archaeological sites identified from SEAD-12 were evaluated for National Register eligibility. Two sites (A09909.000003 and A09909.000009) are recommended potentially eligible to the National Register under criterion "d." Site A09909.000003 dates from the early nineteenth century and contains intact structural remains (foundation wall) and several features (e.g., cellar fill, a possible well, and a cobble surface or pathway) as well as numerous artifacts representing a variety of artifact groups. Site A09909.000009 contains a well and a dense surface scatter of domestic artifacts dating from ca. 1900-1920. As required under criterion "d," both sites appear to have the potential to contain information important to regional history and retain a sufficient degree of integrity. It is recommended that these sites should be further investigated if they are impacted by remediation, construction, or other ground-disturbing activities. The remaining seven sites and the eight isolated finds lack both integrity and the potential to contribute significant information to regional history. Because these archaeological resources lack potential to contain significant, they are recommended not eligible for the National Register.

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SECTION 1.0

INTRODUCTION

1.1 PURPOSE AND GOALS

The United States Army Corps of Engineers (USACOE) on behalf of the United States Army is performing on-going remedial response activities at the Seneca Army Depot Activity (SEDA) in Romulus, New York under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. An expanded site inspection (ESI) was performed at various locations at the Seneca Army Depot by Parsons Engineering Science, Inc. (Parsons ES) (Boston office) in 1994. At one location, SEAD-12, these studies identified the presence of contaminants that may pose a threat to human health and the environment. Parsons ES was contracted to conduct a Remedial Investigation/Feasibility Study (RI/FS) at SEAD-12. The remedial work will follow the requirements of the New York State Department of Environmental Conservation (NYSDEC), the US Environmental Protection Agency (EPA) Region II, and the Interagency Agreement. In order to comply with various federal and state regulations and guidelines, including, but not limited to, Army Regulations 420-40, 200-1 and 200-2; the National Environmental Policy Act of 1969, as amended; Sections 106 and 110 of the National Historic Preservation Act of 1966, as amended and its implementing regulations 36 CFR 800; the Archaeological and Historic Preservation Act of 1974; and other applicable federal and state guidelines, the Cultural Resources Department of Parsons ES (Fairfax office) was contacted to perform a Phase I archaeological survey of SEAD-12.

The purpose of the Phase I archaeological survey was to identify archaeological sites within SEAD-12 and to assess, in a preliminary manner, the National Register eligibility of any sites identified as a result of background research and/or field investigations. Tasks associated with the successful completion of the archaeological survey included: background research, sensitivity assessments, preparation of a research design, field investigations, laboratory procedures, management recommendations, and report preparation. Following a description of the project area and a discussion of the recent land-use history, subsequent report sections present the following: Environmental Setting (Section 2.0), Prehistoric and Historic Context (Section

3.0), Background Investigations and Sensitivity Assessment (Section 4.0), Field and Laboratory Methodology (Section 5.0), Survey Results and Site Descriptions (Section 6.0), Summary and Management Recommendations (Section 7.0), and References Cited (Section 8.0). Tables, graphics, and plates sufficient to illustrate the text will be included, and appendices will complete the report.

1.2 DESCRIPTION OF THE PROJECT AREA

The Seneca Army Depot is headquartered in the town of Romulus in Seneca County, New York. Land within the depot includes parts of the towns of Romulus and Varick. Located in the west-central part of the state, the Seneca Army Depot occupies a broad expanse of uplands between Seneca Lake on the west and Cayuga Lake on the east. SEAD-12, the focus of this report, is a 360-acre parcel of land located in the extreme northeast corner of the Seneca Amy Depot (Figure 1-1). Historic maps, photographs, and deed research indicate that the land was used as farmland for the production of agricultural crops, fruit, and pasture throughout the nineteenth century and during first half of the twentieth century. Construction of the Seneca Army Depot began in 1941, at which time all extant farmsteads and outbuildings, including those within SEAD-12, were razed or relocated off the base.

SEAD-12 is located within the former weapons storage area (WSA) facility known as the Q Area. As illustrated in Figure 1-2, SEAD-12 contains a single row of ammunition bunkers or igloos near the southern boundary, numerous buildings are scattered throughout the northern portion of the Q Area (Buildings 802-807, 810, 812, and 825), and various railroad lines, are still extant in the eastern and central portions of SEAD-12. With the exception of Buildings 813-817, 819, and 823, the eastern, southern, and western portions of SEAD-12 consist of open fields or forests. Within the open fields, former stream channels have been channelized and subsequently filled, new drainage ditches have been excavated, and much of the landscape has been stripped or graded. A former railroad cut, relatively deep and broad and clearly visible on all maps and modern photographs, bisects the southern one-third of SEAD-12 in an east-west direction. Immediately south of the railroad cut is a row of 18 ammunition bunkers (igloos) that extends the entire width of SEAD-12. Two additional bunkers are located in the west-central portion of SEAD-12. The bunkers as well as some of the buildings are encased on three sides by large mounds of earth. Based on the level of disturbance observed in some parts of the adjacent fields, it is reasonable to assume that soils removed from these fields were used to encase the bunkers in earthen mounds. The SEAD-12 perimeter is surrounded by a set of three barbed-wire fences, and access to the area is secured.



Source: Envirosphere Co. (1986) Figure 1-2

Seneca Army Depot, SEAD-12



1-4

Seneca Army Depot, SEAD-12

Map of Project Area Roads and Buildings Open fields in the project area support a variety of grasses, with sedges and cattails growing along drainage ditches and channelized streams (Plate 1-1). Forested areas in SEAD-12 are dominated by oak, hickory, beech, and maple with an understory of shrubs and grasses or shrubs and thorny vegetation such as greenbriar, wild rose, and berry bushes (Plate 1-2). In addition to the railroad tracks and ammunition bunkers, some of the open fields in proximity to buildings also contained machine-gun nests and military foxholes. As part of the on-going remedial investigations and prior to the archaeological survey, SEAD-12 had been subjected to several geophysical surveys, including ground penetrating radar (GPR) and electromagnetometer (EM-61). As a result of these surveys, several targets (n = 44) had been identified and staked by the geophysical team. These targets required further investigation by members of both the archaeological and geophysical team. As will be discussed in subsequent sections of the report, most of geophysical targets were located in the vicinity of former buildings (farmsteads).

PARSONS ENGINEERING SCIENCE

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Plate 1-1. General view of SEAD-12, open area



Plate 1-2. General view of SEAD-12, wooded area

Source: Parsons Engineering Science

Seneca Army Depot, SEAD-12



SECTION 2.0

ENVIRONMENTAL SETTING

2.1 GEOLOGY

The Seneca Army Depot Activity (SEDA), located between Seneca Lake on the west and Cayuga Lake on the east, is in west-central New York and occupies the southern margin of the Erie-Ontario-Mohawk Plain physiographic province. Rock formations along the Erie-Ontario-Mohawk Plain range in age from Late Silurian through Devonian. These formations dip gently to the south, and as a result of various erosional factors acting over tens of millions of years, the older rocks outcrop along a series of east-west trending escarpments across the central part of the state. Younger formations outcrop further to the south or are buried beneath many meters of glacial till. The northern margin of the Appalachian Plateau physiographic province lies less than seven miles to the south of SEAD-12.

According to the Geologic Map of New York (Rickard and Fisher 1970), SEAD-12 is underlain by the Ludlowville Formation of the Hamilton Group. The Ludlowville Formation, which is upper Middle Devonian age, consists of various members including the Deep Run shale, Tichenor limestone, and the Wanakah and Ledyard shale members. Formations within the Hamilton Group (Middle Devonian) record a massive influx of mud and sand that eroded from the newly formed Acadian mountain range to the east during the Acadian Orogeny (Isachsen et al. 1991:101). In many locations within the county, the Ludlowville shale is over 140 feet thick. The Marcellus and Skaneateles formations, identified by Hutton (1972: 134) as underlying the Seneca Army Depot, are both shale derived formations, that according to Rickard and Fisher (1970) are located further to the north in Seneca County. These formations are older than the Ludlowville Formation, and lie between the Onondaga Limestone Formation (lower Middle Devonian) and the Ludlowville Formation (upper Middle Devonian).

Several miles north of the project area is the Onondaga Escarpment, which forms a dramatic rise above the lower lying Ontario Plain. The Onondaga Group, lower Middle Devonian in age, consists of various limestone members, including the chert-bearing Morehouse and

Edgecliff members. The Onondaga limestone beds were formed at a time when the eastern part of North America was covered by an extensive shallow sea that supported coral beds and a wide variety of bottom-dwelling animals. Aboriginal populations of central New York (and throughout eastern North America) not only exploited the vast outcrops of Onondaga chert for more than 12,000 years, but they also utilized the numerous caves and rockshelters as habitation sites for a comparable period of time. Today the Onondaga limestone formation is the most important limestone bed in the state, and it is quarried for a variety of industrial and commercial reasons.

2.2 GEOMORPHOLOGY

The Seneca Army Depot occupies a relatively level glacial till plain between Cayuga Lake on the east and Seneca Lake on the west. Elevational differences range from ca. 710 feet (ft) to 600 ft in the northwest portion of the depot. Within SEAD-12, elevational changes range from ca. 670 ft in the southeast corner of the study area to ca. 630 ft in the northwest corner of the area. Surficial deposits in the vicinity of the Seneca Army Depot consist of Wisconsin-aged till overlying bedrock. The till at SEAD-12 is comprised of poorly sorted clay, silty clay, silty clay loam, and cobbles. Bedrock is often near or within several meters of the surface. The till, which is generally poorly drained, was deposited beneath glacial ice during the final advance of the Laurentide (Pleistocene) ice sheet, beginning ca. 27,000 years ago. Glacial stagnation features, such as kames and kettles, drumlins, eskers, moraines, etc., are located both north and south of the army depot, but they do not occur within SEAD-12. Glacial retreat began around 20,000 to 18,000 years ago, and by 14,000 years ago the Laurentide Ice Sheet had retreated north of the St. Lawrence River.

The Finger Lakes, the most prominent glacial feature in the region, represent remnant glacial lakes that formed in U-shaped glacial valleys that were carved out by the Wisconsin ice sheet as it moved southward across the landscape during the late Pleistocene. The former stream valleys filled with meltwater during the initial stages of glacial retreat because possible outwash channels were blocked by the ice sheet on the north and the Valley Heads Moraine to the south (Isachsen et al. 1991:191). The Finger Lake valleys were deeply carved by the glacial advance because they were oriented in the same direction as the ice flow. That is, stream valleys that were oriented perpendicular to the ice flow were not as deeply dissected.

2.3 SOILS

Soils in the Seneca Army Depot belong to the Darien-Angola soil association. These soils are deep and moderately deep, somewhat poorly drained, and have a silty clay to clay loam subsoil (Hutton 1972: General Soil Map). These medium-lime soils, developed in glacial till, are underlain by calcareous shale. Soils within SEAD-12 are dominated by Darien silt loam (0 to 3 percent slope). Darien silt loam soils occupy broad upland expanses and are characterized by somewhat poorly drained to poorly drained soils. Although the soils are suited to crops, pasture, and forest, planting can be delayed in the spring if the soils are not drained. Undrained soils can only support crops with a short-growing season or moisture-tolerant forage crops (Hutton 1972:95). Maintaining soil nutrients is a common management problem, but erosion is of little concern.

A typical soil profile consists of a surface layer root mat, which is very dark gray (10YR3/1 to 2.5Y3/1) silt loam. The underlying plowzone horizon (Ap) is generally 10 to 15 centimeters (cm) in depth and is a dark gray (2.5Y4/1) silt loam. The subsoil (15-50 cm) consists of a dark yellowish brown (2.5Y4/2) to olive yellow (2.5Y6/6) well developed silty clay loam to clay loam. Decomposed shale with lesser amounts of limestone, sandstone, and/or chert was found with increasing frequency with soil depth. The presence of shale and other rock materials is to be expected in soils derived from glacial till. Additionally, because the depth to bedrock is shallow throughout this area, it is common to find decomposed shale within the subsoil. The well developed structure in the B horizon soils indicates both a long period of soil development and stability as well as the presence of large amounts of clay moving through the soil profile. Disturbed soils exhibit a similar profile. However, these soils while extremely compact during excavations, were actually very loose and contained large amounts of angular shale, indicative of the extensive grading activities by the military during the 1940s and 1950s.

The second soil series that occurs in SEAD-12 is the Romulus silty clay loam. This series is characterized by deep, poorly drained soils that occur in depressions, along former watercourses, or adjacent to former wetlands. These soils are more reddish in color and are generally calcareous (Hutton 1972:123). Surface and plowzone horizons are very dark gray (10YR3/1 to 3/2) in color. The plowzone depth is ca. 15 cm, and the underlying subsoil is a moderately well developed, reddish-gray (5YR5/2), silty clay loam to clay loam in texture.

2.4 HYDROLOGY

Although Seneca Army Depot lies between the two largest Finger Lakes, both fresh vater glacial lakes, the depot area is only drained by three low-order streams: namely Reeder ek, Kendaia Creek, and Indian Creek. All three streams flow northwest into Seneca Lake and ence into the Seneca River. Reeder Creek, the principal drainage in the project vicinity, is ated immediately west of SEAD-12, although a small first-order tributary stream formerly bisected the northwest corner of the project area (Figure 2-1). Kendig Creek, which lies immediately north of the depot, also has a tributary stream situated within the northern portion of SEAD-12. Review of historic maps and soil maps indicates that two or three unnamed intermittent streams flowed through the project area during the historic past. Plate 2-1 illustrates an intermittent drainage in the northwest portion of the project area. However, today few, if any, natural drainages occur within SEAD-12. These stream courses have been channelized and filled either by Euro-American farmers during the early twentieth century or by the military during the 1940s. Thus, these former stream courses bear little resemblance to their historic counterparts. That is, they exhibit extensive grading along the shoulders and slopes and infilling along the stream channel.

Low-lying areas or depressions typically contain poorly drained soils that supported wetland vegetation in the past. Today these areas have been drained although they may contain water for short periods of time on a seasonal basis. East-west trending drainage ditches (several meters in depth) have been excavated throughout the depot, although one deep ditch occurs in SEAD-12 north of the ammunition bunkers (Figure 2-1). These ditches were excavated in proximity to the ammunition bunkers (igloos) in order to facilitate drainage of the area. Drainage ditches also have been excavated along all roads in the project area as well. Also, early settlers excavated drainage ditches along the edges of their agricultural fields to improve soil drainage. Euro-American activities over the last 150 years have significantly altered the land use patterns in the area, and resulted in deforestation, erosion, fluctuations in the water table, and pollution. A large wetland, Cranberry Marsh, is located just northeast of SEAD-12, and serves to remind us of the former landscape prior to the introduction of Euro-American agricultural practices.

2.5 CLIMATE

Seneca County is dominated by a humid continental climate that is marked by short warm summers and long cold winters. Regional weather patterns are strongly influenced by the proximity of Lake Ontario as air masses move in a northwesterly direction across the Canadian

2-4



Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12 2-5

Figure 2-1 SEAD-12 Location on USGS Topographic Map



Plate 2-1. 1941 aerial photograph of the northeastern corner of SEAD-12, showing stream channel.



Shield and the Great Lakes area. Temperature extremes range from the upper 80s and low 90s in July and August to -10s and -20s in January and February. Because of the ameliorating effects of Lake Ontario, prolonged periods of extreme temperatures are rare, and the average monthly temperature is ca. 48 to 50. The county averages 160 frost-free days (May to October), and although cloud cover dominates during half of the year (185 days), fogginess is rarely a problem (Hutton 1972).

Annual precipitation in Seneca County is about 33 inches, which is more or less evenly distributed throughout the year. Because of the "lake effect", winter snowfall can be heavy and averages more than 53 inches per year. Despite the heavy snow fall for the area and the relatively short growing season, most mid-latitude agricultural crops can be grown in the county without fear of frost or drought.

2.6 FLORAL AND FAUNAL RESOURCES

Native vegetation in the vicinity of the Seneca Army Depot is the Maple-Beech Deciduous Forest type. This forest type is formally dominated by white pine, hemlock, beech, hard maple, and red oak, with secondary dominants consisting of black cherry, hickory, elm, birch, and hophornbeam. In low-lying areas, basswood, ash, white oak, yellow poplar, black walnut, and willow are dominant species, whereas swamp grasses, cattails, sedges, and rushes dominate in marshy areas. Today the climax forest on the depot supports a dense canopy of oak, hickory, beech, and maple with a understory of poison ivy, greenbriar, wild rose, and other viny plants. Most of the area within SEAD-12 is dominated by grasses and sapling/shrub growth (Hutton 1972).

Prior to the arrival of Euro-American settlers in the late-eighteenth and early-nineteenth centuries, Seneca County, like other parts of central New York, supported a large and diverse animal population. White-tail deer, bear, elk, beaver, otter, lynx, timber wolf, rabbit, squirrel, turkey, porcupine, muskrat, woodchuck, and others were found in abundance in the area. Migratory wildfowl were available seasonally, and a variety of raptors such as hawks and eagles were present as well. Aquatic resources included an abundance of lake and stream fish (e.g., bass, pickerel, pike, trout, drumfish, catfish, bowfin, etc.). Today, many animal species have been extirpated (or are present in small numbers). These species include bear, wolf, lynx, otter, beaver, and porcupine. Conversely, some species such as deer, turkey, woodchuck, rabbit, and squirrel are

thriving. Although waterfowl are relatively rare, many species can be observed during migratory seasons. Raptors are common throughout the area.

2.7 RECENT DISTURBANCES

As discussed in Section 1.2, disturbances to the area contained within SEAD-12 have been extensive since the Army began construction on the depot in 1941. As documented by historic maps, photographs, and deeds, the land within SEAD-12 was used as farmland and pasture land since the Euro-American settlement of the area began in the late eighteenth century. After razing farmsteads and outbuildings in the 1940s, the Army began construction of the base. Land modifications as a result of construction included, but were not limited to, the following activities: (1) stream channelization and/or filling; (2) stripping and grading soils along channelized streams; (3) stripping and grading soils for the construction of roads, railroads, bunkers, and buildings; (4) excavation of soils for construction of bunkers and buildings, (5) excavation of soils for purposes of burying various waste products; (6) removal and transportation of soil to encase the bunkers and buildings; (7) draining and filling wetlands and depressions; (8) excavation of drainage ditches along road beds and bunkers and (9) extensive rodent disturbance. All of the above disturbances were easily visible on the ground surface. Some of these areas were known to contain hazardous materials and were avoided both by pedestrian survey and by subsurface testing. Areas that were disturbed but known to lack any hazardous substances were sampled.

SECTION 3.0

PREHISTORIC AND HISTORIC CONTEXT

3.1 PREHISTORIC CONTEXT

The prehistory of central New York follows the same general chronological periods that were devised for much of eastern North America by Griffin (1967). Griffin (1967) divided the prehistoric period into three major stages of cultural adaptation or development: Paleo-Indian, Archaic, and Woodland. These stages were further divided into seven temporal periods as follows: Paleo-Indian (ca. 10,500-8,000 B.C.), Early Archaic (8,000-6,500 B.C.), Middle Archaic (6,500-3,000 B.C.), Late Archaic (3,000-1,000 B.C.), Early Woodland (1,000 B.C.-A.D. 1), Middle Woodland (A.D. 1-1000), and Late Woodland (A.D. 1000-1600). Date ranges for each period are variable across New York and eastern North America. The dates used in this text are derived from Ritchie (1965, 1971); Ritchie and Funk (1973); Funk (1976, 1988); Funk and Rippeteau (1977), Funk et al. (1993); and Trubowitz (1983). Many of the type sites used by Ritchie and Funk to define the cultural and chronological sequence for the entire state (and in some cases eastern North America) are located in proximity to the Finger Lakes region. Most of these sites were excavated by members of the Rochester Museum and/or the New York State Museum under the direction of Ritchie and Funk during the first-half of the twentieth century. Some of the more famous sites in the vicinity include Lamoka Lake, Geneva, Oberlander, Frontenac Island, Kipp Island, Plum Point, Hunter's Home, Owasco, Jack's Reef, and Levanna.

3.1.1 Paleo-Indian (10,500-8,000 B.C.)

The Paleo-Indian period represents the earliest well-documented human occupation in North America. With the retreat of the Laurentide ice sheet around 11,000 to 10,000 B.C., central New York became habitable for the first time. The Paleo-Indian period minimally dates to the last 12,500 years. The Paleo-Indian period corresponds with the Late Glacial and Pre-Boreal climatic episodes. These climatic episodes were characterized by cool, moist summers and long, cold winters. Based on pollen cores from New York and Pennsylvania, the environment during this time may be best characterized as a spruce, fir, pine forest with extensive open grasslands. The finely crafted, fluted Clovis projectile point is the diagnostic point type from this period.

Paleo-Indian projectile points, without exception, were manufactured from high-quality cryptocrystalline materials, which are often exotic to the region where the points have been discovered. That is, Clovis points are often recovered several hundred miles from the source of the lithic material. In the Middle Atlantic region, Gardner (1977) has demonstrated that Paleo-Indian quarry sites and quarry-related base camps were located in proximity to outcrops of high quality materials. Gardner (1977) and others has argued that the exchange of finely crafted projectile points and high quality lithic material helped to solidify extra-territorial alliances in order to ensure group survival during times of resource depletion and scarcity.

Clovis populations in western North America are associated with extinct Pleistocene megafauna such as mastodons, mammoths, and bison. However, in eastern North America Clovis hunters followed migrating herds of caribou, elk, and moose. Paleo-Indian groups were highly nomadic and lived in small bands which moved seasonally with the migratory game animals. These populations also exploited smaller animals and a variety of plants as they became available.

Clovis points and subsequent Paleo-Indian points (such as Dalton/Hardaway point types) are poorly documented in the central portion of New York state. One of the first Paleo-Indian sites to be discovered in New York is the Potts site, located in Oswego County, northeast of the project area. The site produced two Clovis projectile points, a variety of finished bifaces (i.e., knives and point fragments), end and side scrapers, and gravers. All the material was manufactured from western Onondaga chert (Ritchie 1965). Two Paleo-Indian sites in the Genesee River valley to the west have been reviewed by Trubowitz (1983), and the University of Buffalo has recently excavated a site in the extreme western part of the state. Further to the east, several Paleo-Indian sites have been reported by Funk (1976) and Eisenberg (1978) along the middle Hudson Valley (e.g., West Athens Hill, Kings Road) near outcrops of high quality Normanskill chert.

3.1.2 Early Archaic (8,000-6,500 B.C.)

The Early Archaic period roughly corresponds to the Boreal climatic episode. This period was characterized by a cool moist climate which supported a closed boreal forest environment, dominated by spruce, fir, and birch. Pine decreased slightly and deciduous elements such as oak and hazelnut were present. The closed forested environment resulted in a significant reduction in the mammalian carrying capacity (especially for the large migratory

herds of caribou); additionally Pleistocene megafauna such as mastodon and mammoth became extinct. Although the reduced carrying capacity undoubtedly contributed to the paucity of Early Archaic sites in New York and New England, several thousand years of upland erosion and lowland deposition have combined to eliminate (upland settings) and/or deeply bury (lowland settings) sites from this time period in New York as well as across much of North America.

Throughout much of eastern North America, the Early Archaic period is characterized by Kirk and Palmer corner-notched and stemmed projectile points. The paucity of these point types from the New York-New England region suggests that some type of cultural hiatus may have occurred in this area during the Early Archaic period. Conversely, Trubowitz (1983:65-66) suggests that the paucity of Early Archaic sites in central and western New York may be related to the archaeologists' inability to successfully identify tools from this time period. Regardless of the outcome of this debate, when found, Early Archaic sites are often associated with past (or extant) swamps and wetlands as well as riverine terraces. Subsistence was oriented toward the hunting of deer and elk, while the importance of collecting plant foods evidently increased. Unlike the Paleo-Indian period, Early Archaic populations primarily focused on exploiting locally available lithic materials.

3.1.3 Middle Archaic (6,500-3,000 B.C.)

The Middle Archaic period is associated with a shift to warmer and drier conditions referred to as the Atlantic climatic episode. The environment during this time was characterized by an oak-hickory-hemlock forest with occasional open areas. As the climate became more arid, many human populations began to intensify their exploitation of wetland environments. The exploitation of various resources in these new environments is witnessed by the introduction of a new toolkit. New tool types include axes, celts, and adzes (all associated with woodworking) and a variety of tools associated with the exploitation or processing of plant resources such as grinding stones, nutting stones, mortars and pestles, etc. The hallmark of the early Middle Archaic period is the bifurcate point, (e.g., St. Albans, Kanawha, and LeCroy points). These points, which are very rare in New York (Funk 1976:233-234), are generally thought to have been introduced into the New York/New England area from the Southeast and Middle Atlantic regions. Although occasionally found as surface finds, Middle Archaic points have not been excavated from any sites with intact deposits in the region.

Like sites of the Early Archaic period, Middle Archaic occupations in central New York are rare. Funk (1988, 1976) notes that a Proto-Laurentian tradition has yet to be identified for central and western New York. The paucity of information from this part of the state during the Early and Middle Archaic periods suggests that environmental conditions were not conducive to more extensive and prolonged occupations (as witnessed during the subsequent Brewerton and Lamoka phases). These data suggest that environmental conditions were not favorable for human occupation in this part of the state until after 4,000 B.C. Paleoenvironmental data from New York, Pennsylvania, and Ontario tend to corroborate this interpretation.

Based on data from elsewhere in the state and surrounding region, Middle Archaic settlement/subsistence systems reflect the exploitation of diverse resource zones. That is, for the first time, sites appear to be located in all major environmental zones. Site types include semipermanent riverine base camps; semi-permanent base camps along interior streams or wetlands; special purpose camps in uplands, adjacent to wetlands, and/or in mountain saddles; quarry and quarry related workshops adjacent to lithic outcrops; and rockshelters. Middle Archaic groups still lived in relatively small social units and moved on a seasonal basis in accord with the particular set of resources they were exploiting. Deer, turkey, bear, elk, squirrel, and beaver were the principal game animals; plants and nuts were collected as available on a seasonal basis.

3.1.4 Late Archaic (3,000-1,000 B.C.)

The Late Archaic period is characterized by the proliferation of various cultural groups throughout the area. Unlike the preceding Early and Middle Archaic periods, the Late Archaic period is represented by several cultural traditions, including from oldest to youngest Laurentian (Brewerton), Narrow Point (Lamoka), and Broadspear (Snook Kill, Susquehanna, and Perkiomen). The earliest manifestation of the Late Archaic period in the New York-New England area includes various points of the Laurentian tradition, such as the Brewerton varieties (side-notched, eared, and corner-notched), Vergennes (Otter Creek), and Vosburg point types, and Beekman triangular points. The Laurentian tradition is ubiquitous across Nev York state and New England beginning ca. 3,000 B.C. or slightly earlier. (Ritchie 1965; Funk 198). Snow (1980), Ritchie (1965), and Funk (1988) argue that the Laurentian tradition reflects ...unting adaptation to a boreal forest environment.

In his recent work discussing the temporal relationship between the Brewerton and Lamoka traditions, Funk (1988), reversing Ritchie's (1965) long held opinion, argues convincingly that Brewerton occupations actually precede Lamoka occupations in central and western New York. Although, stratigraphic evidence of the Brewerton-Lamoka sequence has not been identified in central and western New York, Funk (1976, 1988) has documented this sequence in eastern and southeastern New York. Current evidence suggests that both the Laurentian tradition (Brewerton-Vergennes- Vosburg) and the Narrow Point tradition (Lamoka-Sylvan Lake-Normanskill) represent Late Archaic manifestations, with the Brewerton phase beginning around 3,200 B.C. (or possibly a few centuries earlier) and the Lamoka phase beginning around 2,500 B.C. Unlike the Laurentian tradition, which appears to be a regional development from the Boreal Forest zone (Snow 1980), the Narrow Point tradition (also referred to as the Piedmont tradition) is generally thought to be derived from cultural groups in the Southeast and Middle Atlantic regions. Lamoka points (ca. 2,500 B.C.) are defined as small, narrow, thick points with sloping shoulders, a straight stem, and an unfinished base (Ritchie 1971). The core area of the Lamoka complex is the lake region of central and western New York.

The Lamoka tradition, which apparently follows the Brewerton phase in central New York, has been defined by Ritchie (1965), Ritchie and Funk (1973), and others as large, semipermanent camps (or possibly villages) located along lakeshores and major streams with specialized processing and foraging camps located along minor streams. Occasionally, Lamoka sites are found in interior uplands and rockshelters. Large camp or village sites are characterized by various features including hearths, storage pits, and extensive post mold patterns suggestive of rectanguloid houses with rounded corners. Deep midden deposits indicate a subsistence system based on the exploitation of various fish resources and mast products, while hunting and collecting played a more supportive role.

Both Brewerton and Lamoka sites are well documented in the area, and points related to these traditions are common. The largest and best known sites from the Brewerton period are the Robinson and Oberlander sites on the outlet channel of Oneida Lake, northeast of the project area. Two of the best known sites of the Lamoka phase are the Lamoka Lake site, located southwest of the project area, and the Geneva site, located near the town of Geneva, northwest of the project area. These sites as well as many smaller campsites are located on lakeshores.

The second half of the Late Archaic period is characterized by the Broadspear or Susquehanna tradition. This tradition is defined on the basis of various broad spears (e.g., Snook Kill, Susquehanna, Batten Kill, and Perkiomen) and other point types as well as the appearance of steatite vessels near the end of the period. Compared to the cultural sequence of eastern New York, central New York experiences somewhat of a cultural hiatus between the Lamoka phase and the Broadspear tradition. That is, the Lamoka phase extends several centuries longer in central New York than in eastern New York, where it (Lamoka) is replaced by the River phase (Normanskill) by ca. 2000 B.C. In central New York, the settlement data and artifact assemblages indicate that subsistence practices of the Susquehanna tradition were more focused on the exploitation of riverine resources. The presence of steatite vessels may suggest participation in a far reaching (i.e., pan eastern North America) exchange network.

3.1.5 Early Woodland (1,000 B.C.-A.D. 1)

The Woodland stage, like the Archaic stage, is divided into three subperiods (Early, Middle, and Late). The Woodland period is defined on the basis of the introduction of ceramic vessels, more sedentary lifestyles, and the introduction of agriculture. Early Woodland ceramics (ca. 1000 B.C.-A.D. 1), called Vinette I, are similar to other ceramic types from the Chesapeake and Tidewater regions of Virginia northward into New York. These early ceramics are characterized by relatively thick, cord-marked sherds with crushed quartz and/or grit for temper. In central New York, the initial Early Woodland period is referred to as the Frost Island phase (1250-870 B.C.). The type site is the O'Neil site on the Seneca River. Surface manifestations of this phase are relatively abundant in central New York. Sites from this time period reflect a cultural continuity with the preceding Susquehanna sites, and toward the end of the Frost Island phase, ceramic vessels replace the steatite containers of the preceding period.

The Meadowood phase (ca. 900-700 B.C.) represents the first widespread and well documented Woodland phase in central New York. Significant sites from this period in the project vicinity include Vinette and Oberlander, northeast of the depot, and the Wray site along the Genesee River to the west. Meadowood points and Vinette pottery are the major diagnostics of this phase. Site types consist of campsites (both large and small) and cemeterie, and settlement and subsistence data reflect a riverine and lacustrine orientation, which Ritchie and Funk speculate was triggered by increased sedentism and the intensive collection of plant resources such as *Chenopodium* and *Polygonum*. Likewise, the abundance and the exotic nature of burial goods suggests the emergence of a "big-man" society.
The subsequent Middlesex phase is undated and is only represented by burials and burial mounds. That is, undisturbed habitation sites have not been excavated to date. Grave goods from Middlesex burials include Adena points, Vinette ceramics, red ochre, mica, copper, or other exotics. Trubowitz (1983) asserts that the Middlesex phase most likely represents the adaptation of mortuary practices and the acquisition of trade goods (e.g., Adena points from Ohio cherts) by Meadowood people, rather than an actual migration of Adena people from the upper Ohio valley.

3.1.6 Middle Woodland (A.D. 1-1000)

The early Middle Woodland period in western and central New York (ca. A.D. 1 - 1000) is represented by the Point Peninsula tradition. The Point Peninsula tradition is comprised of four phases, from earliest to youngest, these are: Canoe Point, Squawkie Hill, Kipp Island, and Hunter's Home. Vinette 2 ceramics typify the early part of the period. Unlike the cord-marked Vinette 1 ceramics, Vinette 2 ceramics exhibit plain surfaces, but decorative motifs, such as dentate-stamping and rocker-stamping, are common. Vessel size increases dramatically by the end of the period, and is likely associated with the increase in sedentism and the introduction of agriculture after A.D. 800. The exploitation of plant resources intensified during this period and undoubtedly contributed to the increase in sedentism at this time, which in turn, contributed to a population increase by the end of the period.

Burial practices during the first half of the period reflect affinities to the Hopewell tradition in Ohio. Ritchie and Funk (1973) suggest that the absence of an agriculturally based economy did not permit the peoples of the Canoe Point and Squawkie Hill phases to generate the food surplus necessary to sustain the elaborate social structure involving burial mounds, elaborate rituals, and social stratification. However, during the Kipp Island (A.D. 300-900) and Hunter's Home (A.D. 800-1000) phases, an agricultural economy may have been introduced into the area (although maize has not yet been recovered or identified from and undisturbed context), as more complex cultural systems began to develop in the second half of the period. The type sites for the aforementioned phases, as well as the type site for the Jack's Reef ceramic wares and projectile points and the Levanna ceramics and point type are located in the vicinity of the Seneca Army Depot, near Cayuga Lake. The Middle Woodland period is represented by a variety of site types including villages, seasonal hamlets, short-term campsites, cemeteries, burial mounds, and various workshops and extractive/processing stations.

3.1.7 Late Woodland (A.D. 1000-1600)

The Late Woodland period is characterized by the introduction and widespread acceptance of an agricultural lifestyle based on the production of maize, squash, and beans. As settlements became more sedentary and population grew, small hamlets gave way to palisaded villages. Traditionally, Ritchie and Funk (1973) have argued that the Hunter's Home phase of the Point Peninsula tradition evolved into the Owasco tradition, which in turn evolved into the proto-historic and historic Iroquois. Recently, Snow (1995:59-79) has challenged this linear cultural continuity. Snow (1995) argues that the roots of the Owasco tradition are not to be found in the indigenous Hunter's Home phase, but rather they are to be found in the Clemson Island tradition of central Pennsylvania. Snow (1995) maintains that Clemson Island people, migrating northward from Pennsylvania, represent the introduction of the Iroquois speakers into central New York. This hypothesis, while very intriguing, has not yet achieved widespread acceptance.

The earliest phase of the Owasco tradition is the Carpenter Brook phase (A.D. 1000-1125), followed by the Canandaigua phase (A.D. 1125-1200). The Carpenter Brook phase sees the introduction of maize, beans, and squash, and settlement data indicate small, unfortified hamlets. During the Canandaigua phase palisaded villages first appear. The Castle Creek phase (A.D. 1200-1400) is similar to the preceding Canandaigua phase, but human effigies begin to appear on pots and pipes for the first time.

The earliest documented Iroquois tradition begins with the Oak Hill phase, which dates from A.D. 1300-1400. The Oak Hill phase is characterized by the introduction of the longhouse architectural style, suggesting the development of a matrilineal kinship system which persists today among the Iroquois. The subsequent phase, the Chance phase (A.D. 1400-1500), is largely similar to the Oak Hill phase except that there is a shift from cord-impressed wares to incised wares (Ritchie and Funk 1973). Iroquoian villages in the Seneca-Cayuga area, during the Oak Hill and Chance phases, were less heavily fortified than counterparts to the east along the Mohawk drainage. Ritchie and Funk (1973:167) conclude that in all material aspects (e.g., ceramic styles, house and village patterns, burial practices, skeletal remains, subsistence data, etc.) the Owasco tradition shows a tremendous degree of continuity both throughout the Late Woodland period but also with the subsequent Iroquoian culture of the early historic period. The emergence of the historic Iroquois from the various phases of the Owasco tradition is relatively straightforward; the only question is when the different Iroquois groups united to form the Five Nations of the Iroquois.

3.18 Proto-historic (A.D. 1600-1750s)

The Iroquois Confederacy (or the Five Nations of the Iroquois) is believed to have formed sometime between 1450 and 1630. Objectives of the confederacy included mediating disputes between member groups and presenting a unified front and policy to outsiders. The confederacy may have been formed as a defensive response to Algonquian incursions into Iroquoian territory following European contact with the Algonquian groups along the St. Lawrence River in the mid-1500s. The Iroquois Confederacy was formed by the Oneida, Onondaga, Mohawk, Cayuga, and Seneca. The later two groups were active in the project vicinity from the late prehistoric period and into the second half of the eighteenth century. In fact the Seneca were known as the "Keepers of the Western Door", referring to the geographic location of the Seneca compared to the other groups within the confederacy. The cultural/historical sequence for the Seneca, as described above, was delineated by a number of archaeologists working with the Rochester Museum of Arts and Sciences and the New York State Museum during the 1920s through the 1970s. Contributors to the body of knowledge concerning Iroquoian prehistory and history include Parker (1918, 1922, 1926); Wray (1973); Ritchie (1944, 1961, 1965); Funk (1967), Tooker (1967) and Tuck (1978).

At the time of European contact, Iroquois groups lived in hamlets or villages, often stockaded, and practiced a mixed economy based on the cultivation of maize, squash, and beans and supplemented by hunting, fishing, and plant collecting. With the intensification of European contact and the ever-increasing demands of the fur trade, rival Algonquian groups and Hurons (Iroquoian speakers from the Great Lakes area of Ontario) began to clash with the Iroquois over control of the fur trade. The French began the fur trade with earnest in the early 1600s, and the Dutch established a trading post at Fort Orange near Albany in 1623. With access to European weapons and trade goods, the Iroquois were able to halt the southward expansion of the French and their Indian allies (e.g., the Huron). Between King William's War (1689-1697) and the end of the French and Indian War in 1760, the Iroquois skillfully played off the British against the French on numerous occasions. Unfortunately, the Iroquois were squeezed between the French on the west at Fort Niagara and the British on the east at Fort Oswego, both of whom sought their political alliance and trade. In the end, the Iroquois allied themselves with the British against the French in the French and Indian War (1754-1760).

As the immediate area around the Iroquois became trapped out, the Iroquois preceded to exert their political and economic control westward in areas such as Pennsylvania and Ohio and southward as far as Virginia and the Carolinas. Control of the European fur trade did not come without a price. True, the Iroquois gained access to a large number of trade goods, prestige items, and weapons, but the increased contact with Europeans also led to the introduction of epidemic diseases (to which the Native Americans had no immunities) and increased warfare both with the various Europeans and also with other Indian groups. Fortified settlements became the norm, and the taking of Indian hostages became commonplace as the Iroquois population was continuously depleted via disease and warfare.

Iroquoian settlement patterns and subsistence practices, to the extent possible given the upheaval of traditional lifeways caused by the influx of Europeans, remained similar to those during the Late Woodland period. Longhouses tended to increase in size during the later half of the protohistoric period as nucleation intensified in the face of disease, warfare, and spatial compaction. However, the matrilineal-based clan system continued to form the basis of the socio-political system throughout this period. Villages generally shifted when the agricultural soils became depleted, but with population pressures mounting from all directions during the Iroquois. Fortunately, the Iroquois Confederacy allowed flexibility in the movement and location of villages depending on political circumstances.

3.2 HISTORIC CONTEXT

3.2.1 General History of the Area

Following the French and Indian War, control of the Finger Lakes region remained with the Iroquois, although there was mounting pressure from Europeans to open the area for settlement. Despite passage of the Proclamation of 1763, which forbade future taking of Iroquois lands by European settlers and ejected those migrants who had already put down roots, and the Treaty of Fort Stanwix in 1768 which confirmed Native American ownership of the area but revoked their title to Ohio Valley lands, European squatter settlements increased throughout the area. Without French support, the Iroquois were unable to halt the spread of new European settlement (Billington and Ridge 1982). When the Revolutionary War broke out, the Six Nations of the Iroquois (which now included the Tuscaroras, who joined the League in the 1720s) claimed neutrality, but by 1777 all groups but the Oneida and Tuscaroras had allied themselves with the British, effectively breaking up the League. During the early years of the war, most of the hostilities occurred within the Mohawk River Valley, east of the Finger Lakes region. The Iroquois began as lesser participants in the war, forming small raiding parties that seized or destroyed colonial property along the Mohawk and captured or killed only armed resisters, but by 1778 they, along with the British, were destroying larger areas and settlements with little or no regard for innocent, unarmed occupants of the region. As a punitive measure, General Washington executed several counterattacks during the summer of 1779 in which raiding Continental forces drove deep into Iroquois territory, destroying Native American villages and taking indiscriminate numbers of prisoners, including women, children, and the elderly.

General John Sullivan commanded the raiding force invading the area that would later become Seneca County. After defeating a surprised group of Tories and Native Americans at the village of Newtown (now Elmira), Sullivan's troops marched north, destroying all the extant Indian settlements along the Susquehanna River and its tributaries, plus all the major Cayuga and most of the Seneca villages. They reached the Seneca village of Kendaia, commonly believed to have been located near the boundaries of the Seneca Army Depot and Sampson State Park, in September 1779. Finding the village abandoned by the Native Americans, the rebels proceeded to burn the settlement and destroy the orchards. Accounts written by Sullivan's men indicate that the village contained 20-30 houses, both framed and bark-covered, as well as numerous apple, peach and plum trees, a burying ground, and cattle, horses and pigs. From Kendaia, Sullivan's forces moved north to Kenadesaga (modern Geneva), and outward to other Native American settlements along Cayuga Lake and near Waterloo, decimating nearly everything in their path. By the end of Sullivan's campaign, 40 towns in the region had been destroyed. Following the destruction of their native homes and villages, a number of defeated Iroquois tribes, including members of the Upper Mohawk, Cayugas, Onondagas, and Senecas, relocated to the Niagara Peninsula vicinity, where they rekindled the League of Nations. Although the Iroquois continued to fight along side the British for the remainder of the war, they never returned to their original homelands. Moreover, through a series of treaties, most notably the Second Fort Stanwix Treaty in 1784, which ceded all Iroquois lands east of the Genesee River to the United States, the Iroquois lost legal claim to this region. The last of the treaties (with the Cayugas) was signed in 1789, opening the door for European settlement of the former Iroquois lands (Wallace 1970, McVarish and Cook 1996).

During the 1780s, the land comprising what would become Onondaga, Seneca, Cayuga and Cortland counties, as well as parts of Oswego, Wayne, Schuyler and Tompkins counties, was reserved by the New York state land commissioners for distribution to Revolutionary War veterans. In 1784, Surveyor-General Simon DeWitt authorized surveys of this area to begin. Based upon his love of classical history, he named each of the 28 individual townships after famous Greeks or Romans; three of these townships, Romulus, Ovid, and Junius, were assigned to the area that would later become Seneca County. This vast stretch of land was referred to as the "Military Tract." Within each township, 100 smaller lots were surveyed, consisting of 600 acres each and usually about 1 mile square, and referred to as "Military Lots". Each of the lots was assigned to a war veteran by lottery. Of the 600 acres in each lot, 100 acres in the southeast corner were reserved as state property, and were known as the "State's Hundred." Grantees were required to pay a one-time survey fee to the state within two years of taking possession of the property for use of this land. If the amount of 48 shillings was not paid, half of the 100 acres would be revoked and sold at public auction (Schein 1993, McVarish and Cook 1996).

Most of the Military Lots were not settled by the veterans assigned to them. Due to the long lag-time between the end of the war and 1791, when the lots were first distributed, many veterans had already settled elsewhere and were not willing to move. Although some did relocate to the area, many of the new owners immediately sold their property to land speculators or local settlers who were beginning to migrate into the region. Deed records illustrate the often rapid turnover of property during these early years of regional development, but this belies actual settlement; much of the land remained vacant until the early nineteenth century.

Although Seneca County was not formed until 1804, the towns of Romulus and Ovid were both organized in 1794. In 1794, the area containing Romulus and Ovid was part of the new Onondaga County, which had been carved out of Herkimer County (Herkimer County itself had been formed from a part of Montgomery County in 1791). The first settlers in the vicinity of Romulus came in the late 1780s and early 1790s. Migration continued during the early nineteenth century. Most of the people settling in the region came from New England states, Pennsylvania, New Jersey, and other parts of New York. Many were farmer-mechanics of German and Scots-Irish descent, who grew crops for subsistence and often for sale on the local market, and simultaneously practiced a trade. Regional markets slowly expanded as transportation improved in the region. Pioneer occupations included blacksmiths, carpenters, wheelwrights, and shoemakers, as well as the requisite millers, who established early grist, saw, potash, and distilling mills in the region. In general, people settled in dispersed clusters and on

isolated farmsteads. Small communities developed at cross-roads, near mill sites, and along the Seneca and Cayuga lake shores. Some of these early settlements were located at Romulus village, Kendaia village (named after the Indian village of the same name once located two miles to the south), and Ovid village. An early law allowing every landowner a road leading to his property resulted in the grid-like system of country roads marking the edges of the square-shaped military lot divisions. Many of the first settlers bought large pieces of property, sometimes a whole 600-acre lot at a time. However, as they sold parcels off, or divided the land between their children, farms in the area became smaller, generally totaling about 100 acres, which was a more manageable size to administer (McGrane 1975).

However, as Settlement in the Seneca County area remained sparse at first. transportation routes through the area improved, population increased. The Mohawk turnpike was the first major road to link the Finger Lakes region together. In 1794, it was extended from Utica to the Genesee River, and by 1803 it had reached Buffalo, promoting east-west travel along the northern edge of Cayuga and Seneca Lakes, both for settlers coming into the area and as a means to move agricultural and trade goods to market. While many migrants used the thoroughfare chiefly as a way to traverse the area on their route westward, some did stop and purchase lands on which to settle. By the early nineteenth century, the area had become modestly populated, due in part to additional public and private roads that had been completed, such as the Ithaca and Geneva Turnpike (following roughly the same path as State Route 96) in 1810. According to the 1810 census, the town of Romulus (which still included the future towns of Fayette and Varick) had 2,766 inhabitants, making up 431 families. In addition, there were 3 grist mills, 7 saw mills, 3 tanneries, 6 distilleries, and 5 potash manufactories. Of the settlers, 102 called themselves mechanics, and were employed in 11 different kinds of trades (Spafford 1813).

Water transportation along the Finger Lakes had always been used as a means to move goods and people from one place to another. During the 1820s, a series of canals was completed that linked central New York with the rest of the state, and the Finger Lakes with each other. The 363-mile long Erie Canal was completed in 1825 between Buffalo and Albany, prompting local communities to develop connecting waterways as quickly as possible. The Seneca-Cayuga Canal was finished in 1828, linking the northern ends of the two lakes together and to the Erie Canal. The Crooked Lake Canal connected Seneca and Keuka Lakes in 1822. At the southern end of the Seneca Lake, the Chemung Canal allowed access to the Chemung River at Elmira by 1833. With the network of canals in place, agricultural products and other manufactured

commodities could now be shipped almost anywhere in the state. As a result, the Seneca County region experienced a brief boom in population, although it was soon followed by the exodus of many residents moving west, particularly to Michigan, along the new canal system (McVarish and Cook 1996).

Development of farmland within Seneca County continued as new settlers migrated into the region. In response to heightened settlement of the area, in 1830 the town of Varick was formed from the northern part of Romulus, creating a more centralized social and administrative center for those people living in that part of the county. During the first half of the nineteenth century, grains and cereals were the primary crops grown in central New York. These included wheat, buckwheat, rye, and hay. However, by about 1840 agricultural competition with other midwestern states caused a decline in cereal production for the region. With improved transportation, such as the Erie Canal, states like Ohio and Illinois were able to flood eastern markets with their voluminous grain products, leaving central New York unable to keep pace economically. By mid-century, many local farmers were relocating to the midwest; those that stayed were forced to switch production from cereals to market gardening, cattle raising, or dairying. This economic pattern essentially endured for the remainder of the nineteenth century and into the mid-twentieth century.

In 1841, the first railroad line between Rochester and Syracuse was completed in central New York. By 1853, this line had been connected with the New York Central Railroad. With the advent of railroads, farmers in Seneca County began to ship their products to distant markets without suffering undue competition from midwestern states. As railroads became the shipping mode of choice, barge traffic in the region declined. In 1873, the Geneva and Ithaca Railroad was finished, with the linking spike hammered into place at Romulus. For Seneca County farmers and residents, railroad culture during the late nineteenth and early twentieth centuries was a significant factor in their lives and lifestyles (McVarish and Cook 1996).

The area that would become the Seneca Army Depot continued to be used primarily as farmland and pastureland through the mid-twentieth century. Most of the farms were own 1 and occupied by locally-based families who had lived on the land for several generations. They practiced diversified agricultural activities, including growing grains and vegetables, tending orchards, and raising livestock, mostly dairy cows. Much of their products were for local consumption. To facilitate better crop yields, local farmers in the early twentieth century often installed subterranean ditches in their fields to counteract poor soil drainage (McGrane 1975).

Light industry, while not specifically located in the future depot vicinity, accounted for employment of county residents who traveled to Geneva and Seneca Falls to find additional work.

The region changed irrevocably in the 1940s, when the U.S. government selected 11,500 acres of Seneca County farmland in the towns of Romulus and Varick for construction of an army ordnance depot, which began in July 1941. Over 100 families were displaced as a result of the new facility. The owners of the properties were compensated by the government for their land, and given up to one month to vacate their farms. Many chose to have their houses and other structures moved off-base to new locations; those that remained were either razed or partially recycled for their construction materials. Since the 1940s, the Seneca Army Depot has provided employment for many of the local residents. Although most of the surrounding area is still devoted to agricultural pursuits, the depot has afforded continued economic stability during the remainder of the twentieth century (Watrous 1982, Klein 1986).

3.2.2 History of SEAD-12

The history of parcel SEAD-12 is the story of a few agriculturally-based, extended families, who lived and farmed the land for most of the nineteenth century and the first half of the twentieth century. Their longevity at this location created a close-knit, stable community that endured for up to five generations, until it was displaced by acquisition of the area for the Seneca Army Depot in the early 1940s.

SEAD-12 falls within two original 1791 military lots, Lot 52 on the north and Lot 57 on the south. Of the ca. 360 acres that comprise SEAD-12, roughly three-quarters are contained in Lot 52, and the remainder are within Lot 57. The following text discusses each of the lots and their inhabitants within the SEAD-12 project area, moving generally from north to south. Figure 3-1 shows the property boundaries within Lots 52 and 57 in 1941, when the U.S. Government purchased the property. For ease of identification, the plat numbers shown on this map will be used to discern the different property divisions and owners discussed below. Table 3.1 is a summary of those property owners who occupied the larger tracts within SEAD-12, beginning with the owner who first settled on each parcel.





Figure 3-1 Detail of 1941 Real Estate Map Showing Property Lines and Owners

Location	Owners	Years Owned or Occupied
Lot 52, plat 18	Edward Spaulding	1801-< 1810
	Isaac Spaulding, Sr.	>1810-<1840
	Isaac Spaulding, Jr.	>1840-1890
	Mary A. Mattern	1890-1918
	Peter Murphy	1918-1941
Lot 52, plat 23	Thomas Sample, Sr.	1822-1868
	Thomas Sample, Jr.	1868-1907
	William E. Hogan	1907-1941
Lot 52, plat 27	Thomas Sample, Sr.	1822-1868
	Wilson G. Sample	1868-1882
	Theodore Russell	1882-1890
	Ruth Russell	1890-1898
	James McGrane and heirs	1898-1941
Lot 57, plat 32	John McKnight, Sr.	1825-1857
	John McKnight, Jr.	1857-1902
	John McKnight, Jr. heirs	1902-1941

Table 3.1.	Previous Land	Owners by	Plat and	Lot within	SEAD-12
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Neither of the two military lots, which measured roughly one-mile square, appears to have been inhabited by the veterans who were assigned the land in the 1790s: Lot 52 was assigned to John Jacobus and Lot 57 was assigned to John Stake (Anonymous 1876:157). Rather, each owner sold his property in parcels to local residents, who then settled the land. Some of the earliest homesteads in this part of Romulus (which later became Varick) were located within the northern part of Lot 52, just outside the SEAD-12 boundary along modern-day Yale Farm Road. These included the home and tavern of Benjamin Lemmon, at the northwest corner of the lot on plat 15, and the home and blacksmith shop of William Gambee, at the northeast corner of the lot north and east of plats 19 and 24. Both of these men purchased their property by the 1810s. Benjamin Lemmon was an early civic leader of Romulus, and the first town meeting of newly formed Varick was held in his tavern on Lot 52, in 1830 (McGrane 1975:47). Part of William Gambee's former property is contained within the northeast corner of SEAD-12 on plats 19 and 24 (Liber H, p. 82), although it is likely that any improvements, such as houses or outbuildings, were situated outside the project boundary, nearer to Yale Farm Road. The portion within SEAD-12 was probably used strictly as farmland.

To the south of Benjamin Lemmon's property, within Lot 52, plat 18 on the SEAD-12 tract, were lands purchased by Edward Spaulding in 1801 (Liber W2, p. 499). This land, eventually totaling 100 acres, stayed within the Spaulding family for most of the nineteenth century. Edward Spaulding was listed in the 1800 census for Romulus (pension records indicate that he was about 50 years old at the time) and the household of an Isaac Spaulding (presumably a son or brother) was listed in the 1810 census. It appears that Edward Spaulding passed ownership of the property to Isaac Spaulding, although no official deeds were filed marking the transaction. Isaac Spaulding apparently died between 1810 and 1840, when his wife Martha was listed as the head of the Spaulding household. By the 1850 census for Varick, Isaac Spaulding's son of the same name was listed as a 32 year old farmer living with his 62 year old mother Martha, a sister or wife also named Martha, 28, and a brother John, 36. In 1860, the census taker listed John, a blacksmith, as the head of a household that included brother Isaac and mother Martha. Isaac was again listed as the head of his household in Child's 1867-68 Gazetteer and Business Directory of Seneca County, where he was described as a farmer of 100 acres. In 1870 Isaac Spaulding was living with neighbor John Gambee, and in 1883 he married Catharine Gambee, the widow of former neighbor William Gambee. It was apparently the second marriage for both of them. In 1890 Isaac Spaulding deeded his 100 acre property to his niece Mary Mattern living in Ohio (Liber 110, p. 232). It is likely that by this time he had stopped actively farming his own property. Child's 1894-95 Reference Business Directory of Seneca County listed Isaac Spaulding as a retired farmer owning an 100-acre farm that was rented out "on shares" to David Beary. In 1918 Peter Murphy, a farmer living to the west of SEAD-12 on Lot 51, purchased the former Spaulding farm from Mary Mattern (Liber 143, p. 210). Peter and his wife Mae were the owners of plat 18 until they sold it to the U.S. Government in 1941 (Liber 184, p. 101). It is unclear whether the farm house was occupied during this period, but it is probable that the acreage was still used to grow crops by the Murphys or their tenants.

Historic maps (e.g. Gibson 1852, Gray 1859, Nichols 1874; Figures 3-2, 3-3 and 3-4, respectively) indicate that the Isaac Spaulding home was located near former McGrane Road (now North-South Base Line Road), outside the project area to the north and west of the SEAD-12 boundaries. It is likely that the structure stood into the twentieth century, as it also appeared, albeit unlabeled, on maps made in the early 1900s (USGS 1902, Pratt 1909). The eastern portion of the Spaulding property falls within the SEAD-12 tract, however, in the area surrounding Building 804. It is probable that no improvements, such as houses or outbuildings, were located within this portion of the property, but that the acreage was used mainly as farmland. Although the 1859 Gray map indicates placement of a blacksmith shop at the far eastern end of the



Seneca Army Depot, SEAD-12

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3-19

Seneca Army Depot, SEAD-12



Seneca Army Depot, SEAD-12

Spaulding property, comparison with other nineteenth-century maps suggests that this shop was actually located north of the SEAD-12 property, associated instead with blacksmith William Gambee's tract.

To the south of the Spaulding property, on plat 23, were lands owned by the '...mple family. Although this tract was at one time part of a larger parcel occupied by an ear settler named Tunis Van Brandt, which encompassed the southwest portion of Lot 52 and the southwest part of Lot 57, it is probable that plat 23, being on the northernmost end of this several hundred acre property, was not improved or otherwise utilized until it was purchased by Thomas Sample, Sr. in 1822 (Anonymous 1876:157; Child 1894-95:431). Thomas Sample's property eventually included nearly all of the southern half of Lot 52, including all of plats 23, 26 and 27. Sample, born in about 1794 in Pennsylvania, served in the War of 1812 before relocating to New York. By 1830, he was listed in the census for Varick and in 1850 his household included himself, his wife Anna (the daughter of John McKnight, a neighbor directly to the south), 52, sons James M., 30, Wilson, 19, and Thomas, 15, and daughter Amanda, 25. By 1860 only son Thomas remained at home, the other children having moved into their own houses nearby. In 1868 Thomas Sample, Sr. split part of his property up between his younger sons. Plat 23, totaling 131.54 acres, went to Thomas Sample, Jr., although in the 1870 census the senior Sample was still listed as the head of the household containing Thomas Sample, Jr., 35, his wife Adeline, 33, and their daughter Nellie, 7 (Liber 78, p. 126). Thomas Sample, Sr. died in 1877, but his son Thomas and his family continued to occupy the property until about 1907, when the farm passed to Thomas' orphaned nephew William Hogan, who had been living with the Samples (Liber 125, p. 502; McGrane 1975:98). An 1890s gazetteer described Thomas Sample, Jr. as owning 127 acres of farmland, 8 horses, 2 cows, 50 sheep, 10 colonies of bees, and 2 acres devoted to orchards (Child 1894-95:431). William Hogan and his wife Emma continued to own plat 23 until the U.S. government purchased the land in 1941 (Liber 184, p. 106).

The Thomas Sample house, first occupied by the father and later by the son, is seen clearly on a number of historic maps (Browne 185-; Gibson 1850, 1852; Gray 1859; Nichols 1874; USGS 1902; Pratt 1909) (Figures 3-2, 3-3, 3-4 and 3-5). It was located immediately east of McGrane Road (now North-South Base Line Road), at the extreme northwestern boundary of the SEAD-12 tract. In her book describing the history of Varick, Agnes McGrane described the Samples and their house in some detail. She recalled Thomas Sample, Jr. as "kind of a 'Gentleman Farmer' who always had a hired man, and he took great pride in his knowledge and authority." Later, she wrote, "The Samples had built a large two story house with double parlors



Source: USGS 1902

Seneca Army Depot, SEAD-12

and a two-story bay window. Ingrain carpet covered the floor. Their only daughter died in New York soon after her marriage. A full length picture of Nellie always rested on an easel in the parlor with a garland of paper flowers on it...When the Samples built their large house, they forgot to provide for a stairway in front, so the builders made a circular corner in one of the parlors. With their upright piano against this wall, like one President Hayes had, the mistake was not really noticeable. But they also forgot a downstairs bedroom, so one was added to the north side which made the house look rather cluttered" (McGrane 1975:97-98).

South of the Thomas Sample property was plat 27 of Lot 52, composed of 100 acres. This land, originally part of the Thomas Sample, Sr. tract, was later divided between his children. Plat 27 was given to son Wilson G. Sample in 1868, the older brother of Thomas Sample, Jr. (Liber 77, p. 489). By issuance of the 1860 census, Wilson Sample, then 28, had already established his own household including himself, his wife Emma, 26, and their three young children. It is probable that he was living on plat 27 by the mid-to-late 1850s, although at that time the land was still owned by his father. Wilson Sample and his wife and children continued to occupy the property through the early 1880s. In 1882, he sold the land to Theodore Russell, who in turn transferred the parcel to Ruth Russell in 1890 (Liber 96, p. 564; Liber 106, p. 541). By 1898, Ruth Russell had died, and plat 27 was sold by her mortgager to James and Margaret McGrane (Liber 117, p. 92). According to Agnes McGrane, whose parents were James and Margaret McGrane, their family moved from a farm across the street on Lot 51 to the former Wilson Sample farm in 1903 (McGrane 1975:100). After their parents died, the heirs of James and Margaret McGrane owned and occupied the property until it was purchased by the U.S. government in 1941 (Liber 184, p. 113). The family moved part of the McGrane house to Romulus when the military took over, although a 90-foot long barn on the their property was razed (McGrane 1975:100).

The former Wilson Sample house appeared on two historic nineteenth-century maps (Gray 1859, Nichols 1874) (Figures 3-3 and 3-4). Its placement straddles the east-west access road leading to bunkers A0101 and A0102, just east of former McGrane Road (now North-South Base Line Road). It is unclear whether the house that the McGranes lived in after 1903 was the same structure occupied by the Wilson Sample household in the mid-nineteenth century. The 1909 Pratt map shows a structure several hundred feet north of the projected location of the Sample house suggesting that an episode of razing and rebuilding may have occurred on the former Sample property. The last portion of SEAD-12 included in Lot 52 is a ca. 400 foot wide strip of land from the western edge of plat 26. This land was part of the Sample property given to oldest son James in 1850 (Liber X2, p. 85). Previous to the Sample ownership of the plat, it had belonged to Benjamin Lemmon and his son Charles Lemmon. Benjamin Lemmon had acquired the land in 1819, and had deeded it to his son Charles in 1820 (Liber N, pp. 394, 224). In 1837 Thomas Sample bought the property from Charles Lemmon (Liber H2, p. 125). James Sample and his family lived on plat 26 from about 1850 until his death in 1905, at which point the property was purchased by Myron Secor (Liber 122, p. 418). The parcel changed hands again in 1931, when Paul and Sadie Olsowske bought plat 26 from Secor and his wife Catherine (Liber 161, p. 353). The Olsowskes owned the land until the U.S. government bought it in 1941 (Liber 184, p. 145).

No structures appeared on the portion of plat 26 within SEAD-12 on any of the nineteenth-century maps reviewed for this project. Since this was the interior part of the plat, with the main access road to the property located on the east side of the plat (outside SEAD-12), it is not surprising that there were no structures here. It is probable that this land was used either for farmland or was wooded, as most of it is today.

Immediately south of the Wilson Sample property (plat 27 in Lot 52) was Lot 57. Plat 32, which occupied the northwest corner of Lot 57, contained 100 acres, although not all of the plat is contained within SEAD-12. This land was originally part of the Tunis Van Brandt property, which as described above, covered the southwest part of Lot 52 and the northwest part of Lot 57. It is not clear whether Van Brandt actually improved any of this plat. According to one source, "Van Brandt engaged in the laborious work of the pioneer, cleared up a portion of his farm, and then, years later, sold one hundred acres to John McKnight, a present occupant" (Anonymous 1876:157). However, this information conflicts with records at the Seneca County deeds office, which indicate at least four owners between Van Brandt (who is not listed for this lot in Seneca County, perhaps because he owned and disposed of the land prior to the county's incorporation in 1804, when the records begin) and the John McKnight referred to in 1876. The earliest recorded owners of this part of Lot 57 at the Seneca County deeds office were George M. and Abby Woolsey, of Liverpool, England. They sold all of Lot 57 in 1816 to James Sackett of Marcellus, in Onondaga County, New York (Liber K, p. 135). In 1822 Sackett sold 448 acres of Lot 57, which included all but 200 acres on the south side of the lot, to Thomas Winslow of Romulus (Liber P. p. 298). According to the deed, Winslow was already living on Lot 57 at the time he purchased it from Sackett, although it is not known where on Lot 57 he resided. In 1825, Winslow sold 278 acres in the northwest part of Lot 57, which included plat 32, to John

McKnight (Liber S, p. 17). Thus, McKnight and his family were probably the first owners actually to settle on and improve plat 32.

By the time the 1850 census was made, which itemized households by individuals, the McKnight family consisted of father John, 51, a farmer born in Pennsylvania, his wife Elizabeth, 55, born in Connecticut, and their children Eliza Ann, 16, and John, Jr., 15, both born in New York. Property transactions indicate that Anna Sample, the wife of Thomas Sample, Sr. and neighbor to the north, was a sister of John McKnight, Sr. This relationship probably accounted for the adjoining property ownership of the two families. John McKnight, Sr. died in 1851. His will divided his original 183-acre tract into two discrete parcels. The northern tract contained 100 acres, and became plat 32. The remaining 83 acres were located south of plat 32, outside the boundaries of SEAD-12. According to the will, John McKnight, Jr. was to have the 100-acre parcel (plat 32) when he turned 21 (Liber 88, p. 445). Until then, Stephen Ludlum of Varick was appointed John, Jr.'s guardian. In 1857, the deed for what would become plat 32 was officially granted to John McKnight, Jr., and by the 1860 census John McKnight, Jr. was listed as the head of his household, and was living with his widowed mother (Liber 66, p. 71).

During the mid-1860s, John McKnight, Jr. married and started his own family. In addition to himself, the 1870 census listed five other occupants of the John McKnight household: his wife Martha, 28; their children Corrina, 4; Ann E., 2; and Clara, 1; and John's mother Elizabeth, then 75. In 1880, the household had grown to include two more children in addition to those listed above: Charles, 9; and Emma B., 7. An 1890s gazetteer listed John McKnight as an ex-supervisor and farmer owning 98 acres of farmland, 5 horses, 4 cows, and 2 acres of orchard. His daughters Anne E. and Emma B. were listed as housekeepers in their father's house, and his son Charles was listed as a farmer for his father (Child 1894-95:426). John McKnight continued to occupy plat 32 until his death in 1901. His obituary indicated that he had been a supervisor of Varick for two terms, and that he was survived by all five of his children. In 1902, plat 32 passed to daughters Anna E. McKnight and Clara E. Cook (Liber 119, p. 349). The two sisters and Clara's husband Edward lived on the McKnight property until the U.S. government bought the parcel in 1941 (Liber 184, p. 110).

Neighbor Agnes McGrane talked about the McKnight farm, called "Cedar Front" due to cedar trees lining the road in front of the house, in her book about Varick. She described the house as being white with green shutters, with a bell on the east wing. Outbuildings included red barns and a yellow wagon house. As a family, she said the McKnights were thrifty, punctual, and industrious (McGrane 1975:104-105).

Historic maps illustrate the location of three structures on plat 32. Three 1850s maps show a structure attributed to John McKnight ca. 800-1000 feet east of McGrane Road (now North-South Base Line Road) (Browne 185-, Gibson 1850, Gray 1859) (Figure 3-2). A second structure, also occupied by John McKnight on plat 32 but south of the SEAD-12 property line ca. 200-300 feet east of McGrane Road, appeared on several 1850s maps as well (Browne 185-, Gibson 1850, 1852) (Figure 3-2). Unfortunately, it is unclear whether one structure belonged to John McKnight, Sr. and another belonged to John McKnight, Jr. It is probable, however, that John McKnight, Jr. could have lived in both of the houses during his lifetime, one when he still resided with his parents and the other when he set up his own household. The third structure location, ca. 100 feet east of McGrane Road at the extreme southwestern end of the SEAD-12 property, does not appear on historic maps until 1874, and may represent a later house occupied by John McKnight, Jr. and/or his descendants (Nichols 1874, USGS 1902, Pratt 1909) (Figures 3-4 and 3-5).

The final portion of Lot 57 within the SEAD-12 project area was the northwest section of plat 33, measuring ca. 500 feet wide, and constituting the interior portion of the plat's original 52 acres. Because this land was situated far away from the access roads to the property, which ran along the eastern side of the tract, no houses probably were located here. Not surprisingly, no structures appeared on any of the historic maps reviewed for this project. It is likely that this land was used primarily as farmland for the various owners who held the property during the nineteenth and twentieth centuries.

In summary, the primary landowners of SEAD-12 during the nineteenth century consisted of the Spaulding family (Lot 52, plat 18), the Sample family (Lot 52, plats 23 and 27), and the McKnight family (Lot 57, plat 32). Each of these families lived at their locations for several generations, most of them on farms of about 100-150 acres. They built modest to large houses that had associated outbuildings such as barns and wagon sheds. As a rule, the houses were built near roadways running north-south and east-west. The main road, along which most of the houses in the SEAD-12 parcel were situated, was known as McGrane Road by the late nineteenth century, and now constitutes the western boundary road of SEAD-12 (called North-South Base Line Road). The farms themselves were located mostly on the interior of the parcels, and were worked by family members and hired help. In several cases, neighbors intermarried, thus forming family bonds between farms. This combination of factors allowed a stable, long-lasting community to develop within the SEAD-12 property vicinity.

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SECTION 4.0

BACKGROUND INVESTIGATIONS AND SENSITIVITY ASSESSMENT

4.1 ARCHIVAL METHODOLOGY

Several goals guided the background research for this project. The first goal was to identify previously recorded archaeological sites within the project area, within the SEDA, and finally, within the project vicinity. Four repositories were visited to obtain this information. In the Albany area, the New York State Office of Parks, Recreation and Historic Preservation houses all current archaeological site materials, while the New York State Museum maintains older site files. Visits to both facilities resulted in a preliminary assessment of previous archaeological work in the area. Regional offices in central New York supplemented the data obtained from the two Albany-based repositories. Additional archaeological reports and comparative artifact collections were researched at the Rochester Museum and Science Center in Rochester. Finally, the office of the Army Corps of Engineers, located on the Seneca Army Depot, maintains up-to-date files on all cultural resources work performed within the confines of the base, and is the most complete source for reports written about SEDA within the last several years. All four of the above repositories provided materials about previous archaeological work in the project vicinity.

The second goal of the background research was to define high-, medium- and lowprobability areas for the identifications of previously undocumented archaeological sites on the SEAD-12 property. Development of a predictive model for locating cultural resources would then guide subsequent field efforts and methodologies. Two types of data were used to develop a predictive model for historical archaeological sites: (1) nineteenth- and early twentieth-century maps of the area, found at the New York State Archives in Albany and the Library of Congress in Washington, D.C.; and (2) deed records on file at the Seneca County Recorder of Deeds Office for the individual parcels within the SEAD-12 tract. All historic maps were overlaid against a current map of the property to determine where former buildings and structures had stood. Because there was considerable mapping error, especially with the older maps, the deed records served to corroborate which property owners occupied which parcels. Thus, the deed records served to identify where the mapping errors occurred. For example, if a map indicated that a

property owner, known from deed records to have lived on one parcel, appeared to have a structure on a different parcel, it was possible to shift the overlay so that the structures aligned with the correct properties. On all of the historic maps, the relationship of structures relative to one another appeared similar, but in many cases the scales on the older maps were s ved. Figure 4-1 shows the overlay of historic structures and parcel divisions within SEAD-1. The historic maps also helped identify areas on the SEAD-12 property where former wetlands and drainages had been located. This information, combined with comparative data from other archaeological site locations in the vicinity, permitted the formulation of a model for identifying sensitive areas for prehistoric resources.

The last goal of the background research was to obtain contextual data about the prehistoric and historic development of the region and the land-use history of the project area, especially concerning the individual property owners that lived on the SEAD-12 parcel. To supplement primary and secondary source materials from the aforementioned repositories, abstracted data from census, birth, marriage, death, pension, and other legal records also were reviewed at the Seneca County Historian's Office. The Seneca Army Depot also provided current and historic photographs and maps, some of which are reproduced in this report.

4.2 PREVIOUS ARCHAEOLOGICAL STUDIES

No archaeological sites or standing historic structures had been previously documented within the SEAD-12 boundaries prior to this project. This fact was due most certainly to the lack of a cultural resources survey on the actual property, although the tract had been included in several larger archaeological studies. The most important previous investigation was a basewide archaeological overview and management plan prepared by Envirosphere Company in 1986 that identified a number of possible historical archaeological site locations within SEAD-12 (Klein 1986). These potential sites corresponded to the historic structures found on some of the same nineteenth- and early twentieth-century maps that were reviewed for this project (i.e. Browne 185-, Gibson 1850, Gray 1859, and Nichols 1874). However, none of the projected sites was field checked by Envirosphere Company, nor was any subsurface testing undertaken at these locations in 1986. The sites identified by Envirosphere Company that fall within the SE. D-12 boundaries are SAD-6, the T. Sample farmstead; SAD-10, the W.G. Sample farmstead; SAD-201, the J. McKnight farmstead; and SAD-31, the John McKnight farmstead. Recently, a more intensive survey of the Seneca Army Depot property was conducted by Geo-Marine, Inc. Results of this study are still forthcoming.



Property Lines and Structures

4-3

The SEAD-12 parcel was also included in a cultural resources survey of the Seneca County Sewer District No. 1, a large area containing parts of Varick, Romulus, and Ovid (Pratt and Pratt 1977). All subsurface investigations were limited to areas of the sewer district near the town of Ovid and west of Route 96A along East Lake Road, near the Seneca Lake shore. No subsurface investigations occurred on the Seneca Army Depot, nor was any specific research undertaken regarding the SEAD-12 property. A follow up study adjacent to the original project area was performed several years later, but it did not impact any land on the Seneca Army Depot (Pratt 1981).

A number of prehistoric archaeological sites have been recorded within and adjacent to the Seneca Army Depot, although all the sites are over one mile and most are two or three miles from the SEAD-12 project area. Table 4.1 is a summary of the prehistoric sites on or near the depot on file at the New York State Museum, the New York State Office of Parks, Recreation and Historic Preservation, and the New York State Archaeological Survey at SUNY Buffalo.

Nearly all of the prehistoric archaeological sites first were recorded during the early twentieth century by William Beauchamp (1900) and Arthur Parker (1920). Many of the sites recorded by Parker in 1920 were located based on recollections of local informants and as such could not be field checked. A study by John Milner Associates attempted to relocate five previously recorded prehistoric sites within the Seneca Army Depot boundaries (Fiedel 1996). The results were uniformly negative: i.e., they could not relocate any of the sites and recommended no further work. To date, the only known prehistoric site in the project vicinity that has been positively located is the Iroquois village site of Kendaia (NYSM-4824, RMSC Ovd 3). Beginning in the 1940s, four separate excavation episodes occurred at the site's Native American cemetery. Harry L. Schoff excavated 21 burials in 1941 and 22 burials in 1942. He concluded that the first set dated to the late 1700s, and may have been associated with the John Two Sullivan raid on the village in 1779, whereas the second set dated to 1700-1730. subsequent excavations by members of the avocational Archaeological Society of Central New York in 1949 and 1951 resulted in the removal of 39 additional graves (Bodner et. al. 1993). During a Stage 1A study of Sampson State Park in 1993, the site was relocated but not subjected to any further excavation. In consultation with personnel from the New York State Office of Parks, Recreation and Historic Preservation, it was decided that the site should not be excavated further unless it was threatened by impending development (Bodner et. al. 1993).

Site Number	Location of site	References	Remarks
NYSM-4820	Romulus Quad, "On branch of Kendig Creek, lot 26, Fayette	Parker 1922	Parker Site 17, village site
NYSM-4822	Romulus Quad, "On small brooklot 74, town of Varrick (sic)"	Parker 1922	Parker Site 19, camp site
NYSM-4825	Romulus Quad, "Lot 67near a small stream running from one of the sources of Reeder Creek"	Parker 1922, Klein 1986, Fiedel 1996	Parker Site 22, village site
NYSM-4823	Geneva South and Dresden Quads, "Lot 64, Romulus, on Seneca Lake"	Parker 1922, Fiedel 1996	Parker Site 20, camp site
NYSM-4840	Geneva South and Dresden Quads, west of railroad tracks	Parker 1922, Fiedel 1996	Parker site, no number, "traces of occupation"
NYSM-8685	Ovid Quad, second projected location of Parker Site 21	Parker 1922	Parker Site 21B, village site
UB-1260	Ovid Quad, Lot 67	Beauchamp 1900, Klein 1986, Fiedel 1996	"Hunt Site," Late Woodland village site
NYSM-4824	Dresden Quad, Lot 79 within Sampson State Park	Beauchamp 1900, Parker 1922, Klein 1986, Bodner et. al., 1993	Parker Site 21A, Iroquois village site and cemetery
NYSM-4826	Dresden Quad, "Lot 65 and on either side of a small stream at the mouth of a ravine"	Beauchamp 1900, Parker 1922, Klein 1986, Fiedel 1996	Parker Site 23, village site "of early occupation"
A09906.000016	Dresden Quad, west of West	Oberon 1995, Fiedel	Middle Archaic and

Table 4.1. Previously Recorded Archaeological Sites within the Project Vicinity

Recently, two archaeological studies were completed in the southwest portion of the Seneca Army Depot property near Sampson State Park. The first, by HeritageAmerica, Ltd., was a Phase I investigation of the Ash Landfill site, a former refuse incineration and disposal site. The survey resulted in the identification of a small campsite, dating to the Middle Archaic and Early Woodland (site A09906.000016 from Table 4.1). In addition, the remains of three or possibly four twentieth-century structures were identified that do not appear to meet National Register criteria individually, but might contribute to a larger district encompassing the former farm property on which they sit (Oberon 1995).

1996

Smith Farm Road, Lot 72

PARSONS ENGINEERING SCIENCE

Early Woodland small

camp site

The second recent project on the SEDA was a Phase I cultural resources survey conducted by PanAmerican Consultants, Inc. in 1996 at the Seneca Army Airfield, located in the southwest corner of the Seneca Army Depot. The survey identified three historical archaeological sites. One (site PCI/SADA 1), located within the yard of a nineteenth-century Greek Revival house, contains stratigraphic integrity and is considered potentially eligible for the National Register. The other two sites (PCI/SADA 2 and PCI/SADA 3) represent artifact scatters associated with nineteenth-century farmsteads that were located on historic maps. The integrity of these two sites has been disturbed by modern disturbances, and as such they do not meet National Register criteria for eligibility (Cinquino et al. 1996).

All of the remaining compliance-related archaeological studies that are located within a one to two mile radius of the Seneca Army Depot have been preliminary surveys for the installation or modification of gas lines, wells, or in one case. a county road. With two exceptions, these projects identified no archaeological sites (Bartochowski and Nelson 1985; High and Nagel 1986a, 1986b, 1986c, 1986d; Kula 1987; Manchester and Nagel 1985, 1986a, 1986b, 1986c, 1986d; Nagel 1985). The first exception is a prehistoric lithic scatter (RMSC Gen 16, Hoser Site), consisting of 1 chert biface and 11 chert flakes, recorded several miles northwest of SEAD-12 in the town of Fayette north of Lerch Road and west of Highway 96A (Nagel and Manchester 1986). The second exception consists of two light concentrations of historic artifacts 'located on the south side of Yale Farm Road just north of SEAD-12. This site was determined not significant due to previous disturbance of the area from dumping and grading activities. No further information was given about the temporal association of the artifact assemblage or the previous occupants of the property along Yale Farm Road (Manchester and Nagel 1986e).

4.3 ARCHAEOLOGICALLY SENSITIVE AREAS

As discussed in Section 4.1, areas within SEAD-12 considered sensitive for the recovery of archaeological resources were identified based upon historic map research and deed information for historical sites, and a combination of landform and distance to water and wetlands for prehistoric sites. The identification of archaeologically sensitive areas served to guide the field investigations, which are presented in Section 5.0.

Figure 4-1 presents the results of the historic map overlays. Based upon these data, five projected locations for the recovery of historical archaeological sites were identified and assigned archaeological area numbers (Areas 1-5). All five of these sites had been previously identified

by Klein in 1986. These are the Thomas Sample homestead (SAD-6) on Lot 52, plat 23 (Area 1); the Wilson Sample homestead (SAD-10) on Lot 52, plat 27 (Area 2); and two loci each attributed to the John McKnight homestead (SAD-201 and SAD-31) on Lot 57, plat 32 (Areas 3 and 4). A location in Lot 52, plat 18, shown on the 1859 Gray map as the site of a blacksmith shop (SAD-7), was designated Area 5 and tested as such. Based upon mapping error (i.e., other historic maps showed the same blacksmith shop to be off the SEAD-12 project area), this area was considered to have a low to moderate probability for containing cultural materials.

Significant archaeological sites (such as campsites and villages) in central and western New York are consistently found in proximity to major streams and lakeshores and on moderately well drained to well drained soils. Additionally, quarry sites, lithic workshops, and rockshelters are located in proximity to chert outcrops and along the Onondaga Escarpment, north of the project area, respectively. SEAD-12 is not located in proximity to a major stream or lakeshore, nor are there outcrops of Onondaga chert or rockshelters in the vicinity. Consequently, SEAD-12 is unlikely to contain these types of sites. Background research indicates that short-term campsites and special use sites are often located adjacent to perennial streams. A small intermittent stream does cross the parcel (running east-west in the northern section of the area; see Plate 2-1), and review of historic maps suggests that other intermittent streams may have traversed the project area prior to Euro-American settlement (Figure 4-1). Thus, there is a low to moderate potential for the identification of special activity sites or possibly a short-term campsite in the project area. Areas considered to have a low to moderate potential for containing prehistoric archeological sites are illustrated in Figure 4-1. For mapping and surveying purposes, areas within 600 feet of streams or former wetlands were determined to be archaeologically sensitive.

These former stream channels (as well as small wetlands) were channelized, either by local farmers during the nineteenth and early twentieth century, or by the military after they acquired the property in the middle of the twentieth century. Based on the absence of major streams in the area; the extensive distance to intermittent streams within the area; the presence of poorly drained soils throughout most of the project area; and the extensive disturbance of the area from stream channelization, construction of bunkers, buildings, roads, and railroad tracks, etc., SEAD-12 is considered to have a low to moderate potential (at best) for containing prehistoric artifacts or sites. All of the archaeological areas tested for prehistoric cultural resources were therefore designated as having low to moderate probability. These loci included Area 6, and Areas 10-21. Descriptions of each of these areas are contained in Chapter 5.

SECTION 5.0

FIELD AND LABORATORY METHODOLOGY

5.1 FIELD METHODOLOGY

SEAD-12, a high security area, located in the north-central portion of the Seneca Army Depot, consists of ca. 360 acres. The field methodology combined background research (i.e., previously recorded sites in the vicinity) and archival research (i.e., historic map and deed research), in order to ascertain the location of former historic buildings or previously recorded archaeological sites. Additional research of topographic, geomorphic and soil maps was conducted in order to determine if any former streams or wetlands were within the project area in the past. The purpose of this research was to develop a predictive model for locating prehistoric and historic archaeological sites. Following completion of the research, a pedestrian survey provided a more detailed examination of the survey area. The pedestrian survey guided the placement of shovel test pits (STPs) during subsequent phases of the field work. A total of 463 STPs was excavated in SEAD-12. Table 5.1 summarizes the results of the survey results and site descriptions are presented in Section 6.0.

Finally, the Parsons ES Boston office conducted geophysical investigations of SEAD-12. The electro-magnetometer survey employed the Geonics EM-61. The EM-61 survey resulted in the identification of 44 anomalies (targets). These targets either represent buried metal objects or significant changes in soil conductivity (e.g., fill). The majority of these targets appeared to be associated with historic building locations. Selected targets were excavated by the archaeological team; others that may have contained military refuse, hardware, or other potentially contaminated debris were either not excavated or were excavated by the geophysical team.

Archaeological Area	No. STPs	Positive STPs	Archaeological Site
Archeological Area # 1	41	25	A09909.000003
Archeological Area # 2	40	21	A09909.000004
Archeological Area # 3A	21	13	A09909.000005
Archeological Area # 3B	27	17	A09909.000005
Archeological Area # 4	40	10	A09909.000006
Archeological Area # 5	16	0	
Archeological Area # 6	17	0	
Archeological Area # 7	19	1	A09909.000007
Archeological Area # 8	6	0	A09909.000008
Archeological Area # 9	45	3	A09909.000009
Archeological Area # 10	12	1	
Archeological Area # 11	12	2	
Archeological Area # 12	8	0	
Archeological Area # 13	12	0	
Archeological Area # 14	11	1	
Archeological Area # 15	12	0	
Archeological Area # 16	20	1	A09909.000010
Archeological Area # 17	37	3	
Archeological Area # 18	6	1	
Archeological Area # 19	32	3	
Archeological Area # 20	19	1	
Archeological Area # 21	9.	0	
Target EM-29	1	1	
Totals	463	104	

Table 5.1. Summary of Shovel Test Results by Area

5.1.1 Pedestrian Survey

A pedestrian survey was conducted over the entire project area prior to any subsurface testing. The goal of the pedestrian survey was to determine the location of former structural remains, features, or artifacts and to identify areas that were too disturbed or too wet for the placement of shovel test pits (STPs). The pedestrian survey, which consisted of a systematic walkover of the entire project area, was conducted by a four person team of archaeologists in August, 1997. Transects were spaced at 20 meter (m) intervals and were oriented north-south. East-west survey baselines were established along easily recognized cultural features such as roads, fence lines, etc.

The pedestrian survey identified several disturbed areas that were visible on the surface (Figure 5-1, Plates 5-1, 5-2). The majority of these areas had been graded (Plate 5-1) in order to smooth the landscape and improve lines of sight for the military. Other areas appeared to have been graded or stripped for the purpose of providing soil to encase the ammunition bunkers, or to fill wetlands. Several areas were used for dumping various types of waste. These areas were noted during the survey by the presence of excavation pits and mounds of dirt and rubble (Plate 5-2). Additionally, existing streams and drainages were filled and/or channelized. Channelized streams also exhibited disturbed or graded soils along the shoulders of the drainages. Several disturbed areas were tested by STPs in order to ascertain the extent of disturbance and the amount of fill, and finally, to determine if any buried, intact archaeological horizons or features existed beneath the fill.

All shovel test locations and archaeological sites were recorded onto sketch maps and then transcribed onto a master site map. Field notes and photographs were also used to document survey areas, wetlands, disturbed areas, and existing archaeological sites (i.e., former historic building locations). An English grid (i.e., in feet) had been established over the entire SEAD-12 area. The archaeological survey used a metric grid that was based on the established English grid. Grid coordinates were then converted to metric for archaeological provenience.

Based on the results of background research, archival research, and the pedestrian survey, the project area was divided into areas of high-, medium-, and low probability. High probability areas, shovel tested on a 10 meter (m) grid, were confined to areas that were likely to contain evidence of former historic farmsteads. Medium probability areas were defined as a result of the pedestrian survey and consisted of historic trash dumps or EM targets. These areas were tested






Plate 5-1. Graded area near EM-1 (Archaeological Area 12), view south



Plate 5-2. Disturbed pit area near EM-21, 22, 23, and 24 (northeast of Archaeological Area 5), view north

Source: Parsons Engineering Science

on a 10 m grid or a 20 m grid, with additional judgmental STPs excavated to define site boundaries, depending on conditions. Low probability areas, considered to have a low to moderate potential for containing prehistoric artifacts, were tested on a 20 m grid, with additional judgmental STPs excavated to define site boundaries. There were no areas within SEAD-12 that were considered to have a high potential for containing prehistoric sites.

5.1.2 Shovel Testing

5.1.2.1 High Probability Areas

Based upon the results of the archival research, four locations were found that had high potential for historic archaeological sites. These high probability areas, designated Archaeological Areas 1-4, were sampled by the excavation of STPs on a 10 meter grid. In addition, remote sensing targets, identified as a result of geophysical testing [(i.e., electromagnetometer (EM-61) and ground penetrating radar (GPR)], were also tested on a 10 meter grid. Several of the anomalies located by geophysical testing were found to contain hazardous materials. Due to health and safety concerns, these areas were avoided by both pedestrian survey and by sub-surface testing, as stipulated in the Health and Safety Plan and the Scope of Work.

Archaeological Area 1. Archaeological Area 1, the location of the former Thomas Sample farmstead (SAD-6¹), is situated in the extreme northwestern portion of SEAD-12 (Figure 5-1). Although settled as early as the 1820s, the Thomas Sample farmstead does not appear on historic maps until the 1850s. The archaeological datum, STP 670N/100E (metric grid) and 2198.2N/328.1E (English grid), was placed in the central portion of the area. Archaeological Area 1 is covered with various grasses, and a cluster of trees is located in the center of the site. Archaeological Area 1, ca. 1.1 acres in size, measures 90 m (N-S) by 70 m (E-W). A total of 41 STPs was excavated at this location. These included 28 shovel tests on a 10 meter grid: three transects (east-west) by eight STPs (north-south). Six additional shovel tests were excavated around a known disposal pit; five radial STPs were excavated to better define the western boundary of the site, and two additional radial shovel tests were excavated in the interior of the site, to define intact stratigraphy.

¹ 1.SAD-x refers to the potential historical archaeological sites identified by the Envirosphere Company (Table 4-3: 1986).

Archaeological Area 2. Archaeological Area 2 was deeded to Wilson G. Sample (SAD-10) in 1868 although a residence first appears on historic maps in the 1850s. This area is located south of Archaeological Area 1, in the west-central portion of SEAD-12. The area is currently cleared and covered in grass and poison ivy. The archaeological datum is situated at STP 365N/60E (metric grid), which correlates to 1048.9 N/196.9E on the existing English grid (Figure 5-1). Area 2, ca. .84 acres in size, measured 50 m (N-S) by 60 m (E-W). A total of 40 STPs, excavated on a 10 meter grid, was placed in Archaeological Area 2 (Figure 5-1).

The former house site continued north of the east-west road. However, this area had been impacted by military dumping and contained hazardous materials; consequently, no testing occurred north of the road. Several areas of disturbances were encountered in Area 2. These included a graded strip of land near the road, on the west side Area 2; a cut-and-fill area, running north-south through the center of Area 2; and target EM-40 at the north end of Area 2. Although these areas were clearly visible on the surface, several STPs were excavated in these areas to document the extent of disturbance.

Archaeological Area 3. Archaeological Area 3 occupies a grassy field, north of the ammunition bunkers in the extreme southwest corner of SEAD-12 (Figure 5-1). Archaeological Area 3 is bounded by a road to the west and severe disturbances, caused by grading, to the south and east. The northern boundary was defined as a result of historic map research. A railroad ditch bisects the site from northeast to southwest, with Area 3A east of the cut and Area 3B west of the cut. Area 3 corresponds to the house site that was originally deeded to John McKnight, Jr. (SAD 201) in the 1850s, and appears on historic maps by the 1870s. The metric datum point was located at 90N/40E (295.3N/131.2E on the English grid) (Figure 5-1). Area 3 is ca. 0.86 acres in size and measures 70 m (N-S) by 100 m (E-W). A total of 46 shovel tests was excavated in Area 3, all on a ten meter grid. Two additional shovel tests for a total of 48STPs, were excavated in proximity to targets EM-33 and EM-34 (Figure 5-1).

Archaeological Area 4. Archaeological Area 4 was predicted to contain the house site deeded to John McKnight, Sr. (SAD-31) in the 1820s, the house first appears on historic maps in the 1850s. The area has been extensively graded, and it is covered in grass and poison ivy although portions of the area contain scattered pine trees. Archaeological Area 4 is located in the southwestern portion of SEAD-12, some 115 m east of Archaeological Area 3. The metric datum, located at STP 50N/240E (164N/787.4E in feet) was placed in the middle of the site

SEAD-12. The metric site datum was located at 60N/1100E (196.8N/3608.9E in feet on the English grid). The area measures 40m (N-S) by 120 m (E-W), or 0.74 acres. Area 9 consisted of a total of 45 shovel tests. Forty of these STPs were placed on a 10 meter grid, with five additional STPs added in and around the well feature and the surface artifact scatter.

5.1.2.3 Low Probability Areas

Several areas were deemed to have a low to moderate potential for prehistoric archaeological sites. These areas were defined by existing or former stream channels or wetlands, several of which had been altered (i.e., channelized, graded, or filled) by the military. Areas adjacent to streams, wetlands, or knolls overlooking such areas were identified for testing. These areas were generally tested on a 20 meter grid. Some disturbed areas, identified through geophysical research, were tested in order to ascertain if intact archaeological strata of features existed beneath the fill sequences. These areas were also tested on a 20 meter grid. Figure 5-1 illustrates the location of the areas discussed in the following text.

Archaeological Area 5. Archaeological Area 5 was located in the northeastern section of SEAD-12, immediately south of a bend in the road that accessed Building 804 (Figure 5-1). Despite the possibility that a Blacksmith Shop may have been located in the vicinity, Area 5 was tested as a low probability area because the majority of historic maps suggested that the Blacksmith Shop was actually located north of the project area, outside of SEAD-12. The eastern one-third of the area was bisected by the north-south road, and a former stream (now channelized) traversed the area from southeast to northwest. Areas to the south of the stream were partially wooded and exhibited poorly drained soils, whereas areas to the north consisted of an open field. The metric datum point was located at 1060N/1015E (374.7N/3330E on the existing English grid). The area is 0.79 acres in size and measures 60 m (N-S) by 80 m (E-W). A total of 16 STPs were excavated on a 20 meter grid, consisting of four transects north-south and five transects east to west. One of the north-south transects was not excavated because it lay in the middle of the paved road.

Archaeological Area 6. Archaeological Area 6, located in the southwestern port of SEAD-12, occupies a small knoll that rises above a marshy area to the northeast. Based upon landform characteristics, Archaeological Area 6 was considered to have a low to moderate potential for prehistoric occupation. The archaeological metric datum was at STP 211N/219E (or 692.2N/685.7E in feet) (Figure 5-1). The area measures 60 m (N-S) by 60 m (E-W), or ca. 0.89

(Figure 5-1). The area measures 70 m (N-S) by 100 m (E-W), or ca. 1.2 acres in size. A total of 40 shovel tests was excavated at Archaeological Area 4 on a ten meter grid.

5.1.2.2 Medium Probability Areas

During pedestrian survey, three additional historic sites were discovered. These sites consisted of small, localized dump areas, one of which also contained a well. The dump areas were not associated with any historic buildings as identified through the historic map research. Areas 8 and 9 were tested on a 10 meter grid, and Area 7 was tested on a 20-meter grid. Additional judgmental STPs were excavated in all three areas.

Archaeological Area 7. Archaeological Area 7 is located in an open forested area in the northeastern section of SEAD-12 (Figure 5-1). The metric datum is located at STP 850N/ 1100E (or 2788.7N/3608.9E on the English grid). Archaeological Area 7 is bounded by a low lying wetland to the north and disturbed forested areas to the south. The area measures 60 m (N-S) by 120 m (E-W), or ca. 1.9 acres. A total of 19 STPs was excavated in Archaeological Area 7. Seventeen STPs were arranged on a 20 meter grid, with 2 additional STPs excavated in order to better define the stratigraphy and extend of the surface scatter of artifacts located around 822N/1107E. Only one STP (817N/1107E), located on the periphery of the surface scatter, contained artifacts. The surface scatter was roughly ovoid and covered an area 10 meters in diameter.

Archaeological Area 8. Archaeological Area 8 is located ca. 95 m to the west of Archaeological Area 7. Archaeological Area 8 represents a small localized dump area, that was most likely related to military activity (Figure 5-1). It is bounded to the west by a north-south road. The metric datum is located at 850N/1005E (2788.7N/3297.2E on the English Grid) (Figure 5-1) and measures 10 m (N-S) by 20 m (E-W) or 0.05 acres. This location was discovered and reported to the archaeologists by the geophysical team. Six STPs, excavated at 10 meter intervals, were excavated around this area, none of which were positive. A controlled surface collection was conducted in the area between the transects.

Archaeological Area 9. Archaeological Area 9 is located in a wooded area in the extreme southeastern section of the project area (Figure 5-1). During the pedestrian survey of the project area, a small dump and a well feature were found in a wooded area in the southeastern portion of

acres. A total of 17 STPs was excavated in Archaeological Area 6; 16 of these were on a 20 meter grid, consisting of four transects, each with four shovel tests,. None of these were positive. One additional shovel test was excavated into a rectangular-shaped depression (oriented eastwest) that was discovered during the pedestrian survey. The depression appears to be the width of a wide-bucket backhoe, and may be related to waste disposal by the military.

Archaeological Area 10. Archaeological Area 10, projected to have low to moderate potential for prehistoric activity, was located in the south-central portion of SEAD-12. The area is situated on a slight rise, overlooking a wetland. The area consisted of an open, grassy field, and a former stream or drainage, now channelized, was located to the northeast. The area between Archaeological Area 10 and the former stream had been channelized and graded in the past and the top soil removed. The metric datum was located at STP 305N/365E or (1000.6N/1197.9E on the English grid). The area measures 40 m (N-S) by 60 m (E-W) or ca. 0.59 acres. A total of 12 shovel tests was excavated on a 20 meter grid. These STPs were placed on four transects east-west, each with three STPs north-south.

Archaeological Area 11. Archaeological Area 11, situated in the central portion of SEAD-12, was located on a small, (west-facing) interfluvial rise between two former drainages (Figure 5-1). Given the proximity of this knoll to former drainages, this area was thought to have a low to moderate potential for prehistoric occupation. This area is an open grassy field that overlooks a small wetland located at the bottom of the knoll between the drainages. The metric datum is located at 390N/590E (1279.5N/1935.7E in the English grid). The area is ca. 0.59 acres and measures 60 m (N-S) by 40 m (E-W). A total of 12 STPs, excavated on a 20 meter grid, was placed in Archaeological Area 11. The STPs were dug along four transects east-west, with 3 STPs per transect.

Archaeological Area 12. Archaeological Area 12 was located on a small rise overlooking a wetland area to the east. Area 12 is situated in the west-central portion of SEAD-12, and is bounded a hazardous waste area (disposal pit EM-4) on the west and an east-west road to the north. The metric datum is located at 500N/115E (1640.4N/377.3E in feet) (Figure 5-1), and the area measures 20 m (N-S) by 60 m (E-W), or ca. 0.29 acres. A total of eight shovel tests was dug in Archaeological Area 12. The STPs were excavated on a 20 meter grid. There were two transects north-south, each with four STPs east-west.

Archaeological Area 13. Archaeological Area 13 was located in an open field and wetland area in the east central portion of SEAD-12. The area is bounded by railroad tracks on the north and east, and forested wetlands on the south and west. The metric datum is located at 365N/1220E (1197.5N/4002.6E in feet) (Figure 5-1), and the area measures 60 m (N-S) by 40 m (E-W), or ca. 0.59 acres. Twelve shovel tests, excavated on a 20 meter grid, were dug in Archaeological Area 13. There were four transects north-south, each with three STPs.

Archaeological Area 14. Archaeological Area 14 was located in a wooded area in the northeastern portion of SEAD-12. The area is bounded on the west by a paved road, a clear-cut fire line on the south, and a wetland area on the north. The wetland slopes gradually to the north and merges into a former stream channel that has been channelized. The area was tested with two east-west transects that were located on a small rise (possibly man-made) above the wetland. The area is bisected by a former road cut, (old ruts were evident on the surface) and is dominated by vegetation indicative of disturbance (e.g., greenbriar, berry bushes, poison ivy, etc.). The metric datum is located at 915N/1035E (3002.9N/3395.6E in feet) (Figure 5-1), and the area measures 20 m (N-S) by 80 m (E-W), or ca. 0.39 acres. A total of 11 shovel tests, excavated on a 20 meter grid along two transects, was dug in Archaeological Area 14. The northern transect contained 6 STPs and the southern transect contained five STPs.

Archaeological Area 15. Archaeological Area 15 was located on a rise above a wetland area in the north central portion of SEAD-12. The area, which measures 60 m (N-S) by 40 m (E-W), or ca. 0.59 acres, is bounded by paved roads on the west and south and a wetland area on the north. The metric datum is located at 855N/750E (2805.1N/2460.6E in feet) (Figure 5-1). Twelve shovel tests, excavated on a 20 meter grid, were dug in Archaeological Area 15. The area contained four transects north-south, each with three STPs.

Archaeological Area 16. Archaeological Area 16 was located on a rise in an open, grassy field overlooking a wetland area to the northwest and a channelized stream to the north. Area 16 is located in the north-central portion of SEAD-12 and measures 60 m (N-S) by 40 m (E-W), or ca. 0.59 acres.. The metric datum is located at 915N/855E (3001.9N/2805.1E in feet) (Figure 5-1). Twenty shovel tests, excavated on a 20 meter grid, were dug in Archaeological Area 16. These included 12 STPs within the original grid, with an additional eight radial STPs excavated around a single positive STP.

Archaeological Area 17. Archaeological Area 17, located in the southeastern portion of the project area, combines both a low probability area with testing of several EM targets, including EM-12, EM-13, and EM-30. The area occupies a large knoll and is bounded by a former railroad cut on the north, a paved road on the west, a large drainage ditch parallel to the ammunition bunkers on the south, and wetlands to the east. The metric datum was established at STP 20N/905E (65.6N/2069.1E in feet) (Figure 5-1). The area measures 60 m (N-S) by 160 m (E-W), or ca. 2.4 acres. A total of 37 shovel tests was dug at Archaeological Area 17. These consisted of 4 transects north-south, each with nine STPs. One additional STP was excavated over target EM-12.

Archaeological Area 18. Archaeological Area 18, which is located in the south-central portion of SEAD-12, was selected because of the location of target EM-8. The area is in the middle of a large open grassy field with wetlands to the north and the old railroad cut to the south. The metric datum was located at STP 240N/440E (787.4N/1443.5E in feet) (Figure 5-1). The area measures 20 m (N-S) by 40 m (E-W), or ca. 0.19 acres. Six STPs were excavated in Archaeological Area 18 along three transects north-south, each with two STPs. One additional STP was excavated over target EM-8.

Archaeological Area 19. Archaeological Area 19 is located central portion of SEAD-12. The area occupies a large rise and the land slopes gently to the west. The area was selected for testing as both a low probability area for prehistoric resources as well as for EM targets (EM-9, EM-10, and EM-31). The area measures 80 m (N-S) by 140 m (E-W), or ca. 1.5 acres. The metric datum is located at 365N/860E (1197.5N/2821.5E in feet) (Figure 5-1). A total of 32 shovel tests was excavated in Archaeological Area 19; these included 28 STPs on a 20 meter grid, and four additional STPs excavated in proximity to EM targets.

Archaeological Area 20. Archaeological Area 20 was located in the east-central portion of the project area in a broad, flat, grassy area that sloped gently to the west. The area is bounded by paved roads to the north, east, and south. The area was tested for its potential to contain prehistoric materials, but it also contained target EM-28. The metric datum is located at 640N/975E (2099.7N/3198.8E in feet) (Figure 5-1). The area measures 60 m (N-S) by 60 m (E-W), or ca. 0.59 Acres. A total of 19 shovel tests, excavated on a 20 meter grid, was placed in the area. Several additional STPs were excavated at 10-meter intervals in areas surrounding EM-28.

Archaeological Area 21. Archaeological Area 21 is located in the southwestern portion of the project area, between Area 6 on the west and Area 10 on the east. This area, which occupies a low grassy field, was primarily tested because of target EM-7. The metric grid is located at STP 240N/255E (787.4N/836.6E in feet) (Figure 5-1). The area measures 40 m (N-S) by 40 m (E-W), or ca. 0.39 acres. Nine shovel tests were dug in Archaeological Area 21 on 2 20 meter grid, with three transects north-south and three transects east-west.

5.2 LABORATORY METHODS

The artifacts were cleaned in plain water and bagged in 4-mil polyethylene zip-lock bags according to provenience and material type. Consecutive bag numbers were assigned in the field for each provenience where artifacts were recovered, and artifact numbers were assigned to the specimens as they were cataloged. The artifacts were processed following the Syracuse University Archaeological Research Center (SUARC) *Guidelines for the Preparation of Archaeological Collections for Curation* (Revised July 11, 1997). The SUARC accession number (1998-001 as signed by Douglas Armstrong, Ph.D., Curator at SUARC) along with site numbers, provenience information, and artifact numbers were written in indelible ink on the exterior of the artifact bags, and acid-free tags with the same information were placed within the bags. In addition, diagnostic artifacts were hand-labeled with the SUARC accession number and artifact number using acryloid B-72 sealant and black or white pigment ink. Acryloid B-72 glue was used to mend selected artifacts. The collections are stored in acid-free boxes, labeled with the project name, SUARC accession number, site numbers, and the date of the survey. At the conclusion of the project all artifacts and field records will be returned to the SEDA, and will be subsequently curated at SUARC.

The artifacts were cataloged by count, raw material, typology, function, and segment. Additional artifact attributes were recorded where they contributed to the determination of the artifact function or temporal range. Specific maker marks were researched using sources including Fike (1987), Toulouse (1971), and Wilson and Wilson (1971) for embossed glass marks; and Godden (1991), Gates and Ormerod (1982), and Kovel and Kovel (1986) for ceramic back marks.

The cataloging also included grouping the artifacts in categories in order to provide a framework for intersite comparison. The categories used (*group* and *class*) were based on those

used in a system developed by Stanley South (1977), but were tailored to incorporate nineteenth and twentieth century artifact types. The groups used to categorize the current assemblages included Activity (tools, non-architectural hardware, flowerpots, etc.), Architectural (brick, nails, drain pipes, etc.), Clothing (buttons, shoe parts, etc.), Domestic (ceramic and glass vessels, furniture and lamp parts, etc.), Personal (tobacco pipes, toys, writing-related material, etc.), Fuel (coal and clinker), and Faunal (bone and shell). Each group was further subdivided into a *class* category. Archaeological site forms are presented in Appendix A and the complete artifact inventory is found in Appendix B.

SECTION 6.0

SURVEY RESULTS AND SITE DESCRIPTIONS

6.1 HIGH PROBABILITY AREAS

Archaeological Area 1 (Site AO9909.000003, T. Sample Farmstead)

Site Discussion. Archaeological Area 1, the location of the Thomas Sample Sr. Farmstead is located in the extreme northwestern corner of the project area (Figure 5-1, Plates 6-1 and 6-2). Twenty-five of the 41 STPs contained cultural material (Figure 6-1). An area east of the low hilltop that contained the highest concentration of artifacts and features was also slated for the excavation of STPs. However, because a known disposal pit (EM-5) was found by geophysical testing, this area was avoided (except for excavation of two STPs) by the archaeological survey team, as per the Health and Safety Plan. STP profiles demonstrated that parts of the site had been graded and/or filled, probably in association with razing of the former house in the 1940s. Other areas showed evidence of rodent disturbance. However, the majority of the site exhibited intact strata that produced nineteenth-century artifacts. In addition, three features were identified and described below.

During the pedestrian survey, an ovoid depression (Feature 2) was located adjacent to a cluster of trees on top of a small knoll. Two additional features were discovered during the excavation of shovel tests. A scatter of historic ceramics was also discovered along with several large rectangular cut flagstones in a disturbed area within a grove trees southeast of Feature 2. Following a description of the soils at the site, the report will discuss the features and artifacts recovered from the excavation of STPs.

Soil Description. A typical positive STP soil profile in Archaeological Area 1 consisted of a root mat and plow zone (or nearer to the house undisturbed soils) that was a 10YR 4/2 dark grayish brown silt loam that averaged some 15 to 25 cm in thickness (Figure-6-2A). Stratum B ranged from 20 to 33 cm in thickness, in the areas that were undisturbed, and was a 10YR 5/2



Plate 6-1. Area 1, Site A09909.000003, view south



Plate 6-2. Closer view of Site A09909.000003, Features 1-3 in middle of photo, view south

Source: Parsons Engineering Science





6-3



A. SEAD-12, Area 1 Site A09909.000003, STP 640N/70E

Stratum A (0-15cm): 10YR 4/2 dark grayish brown; silt loam with occasional rounded gravel; historic artifacts
Stratum B (5-48cm): 10YR 5/2 grayish brown; silty clay loam with occasional rounded gravel; historic artifacts
Stratum C (48-50cm): 2.5Y 7/1 light gray mottled with 10YR 6/4 light yellowish brown; compact clayey silt with decomposed shale bedrock; sterile

A

B

B. SEAD-12, Area 1 Site A09909.000003, STP 670N/90E (Feature 1)

Stratum A (0-15cm): 2.5Y 7/3 pale yellow; mottled, silty clay loam; sterile (redeposited subsoil)

Stratum B (15-114cm): 10YR 5/2 grayish brown; loose silt with numerous large cobbles; mixed historic and recent artifacts (cellar fill)



Source: Parsons Engineering Science

Figure 6-2 Representative Soil Profiles

grayish brown, compact silty clay loam with occasional pebbles. Artifacts in undisturbed areas were primarily from the nineteenth century. Stratum B in the disturbed area consisted of 10YR 4/1 dark gray to 5/2 grayish brown compact silt loam. Disturbed areas contained historic and modern (mid-twentieth century) artifacts. Culturally sterile subsoil (Stratum C) ranged from 2.5Y 7/1 light gray, mottled with 10YR 6/4 light yellowish brown dense, compact clayey silt, to 2.5Y 7/2 light gray, mottled with 2.5Y 5/6 light olive brown clayey silt. This subsoil stratum also contained varying amounts of angular shale (decomposed shale bedrock) and rounded chert, sandstone and limestone pebbles. The angular shale represents decomposed bedrock, whereas the chert and sandstone pebbles and cobbles are derived from glacial till.

Features. Three historic features were encountered during the testing of the site. The first feature (Feature 1, Figure 6-1, Plate 6-3), located ca. 30 cm below the ground surface in STP 670N/90E, was determined to be part of an east-west oriented wall, presumably part of a foundation for the T. Sample farmstead. A one-meter square area of Feature 1 was then exposed, in order to determine the north-south dimensions (i.e., width) of the wall line. The cut-stone wall averaged 60 cm in width, with its greatest width around 70 cm. On the south side of the wall in STP 670N/90E a deep artifact-bearing stratum, most likely basement fill, was encountered. Excavation continued to a depth of 1.14 m below surface, however, the base of the stratum was not reached. Figure 6-2B illustrates the soil profile of Feature 1. The feature fill, over 1 meter I depth, consisted of a 10YR 5/2 grayish brown, loose silt with numerous cobbles. Artifacts contained within the feature fill were primarily early twentieth century, though both late nineteenth century and recent artifacts were also present.

Two additional features (Features 2 and 3) were found in proximity to each other near a grove of trees, east of Feature 1 (Plate 6-4). Feature 2, (Figure 6-1, Plate 6-5), an ovoid depression, was located immediately west of STP 670N/100E, the site datum. Based on size, shape, and location, this feature may be a well or possibly a trash pit. Feature 1 measured 1.7 m (N-S) by ca. 2 m (E-W). Although the top of the feature was cleared and mapped, it was not excavated because it was felt that the feature would require more controlled excavation than could be accomplished during an identification survey.

A third feature, Feature 3, located just beneath the rootmat (Figure 6-3, Plate 6-6), was encountered during close interval testing around Feature 2. Feature 3, a cobblestone surface, was identified in STP 670N/95E. As with Feature 1, a one-meter square area was cleaned off around the feature to expose a larger portion of the cobblestone surface. The southeastern corner was



Source: Parsons Engineering Science



Plate 6-5. Site A09909.000003, Feature 2 - depression, view south



Plate 6-6. Site A09909.000003, Feature 3 - cobble surface, view south

Source: Parsons Engineering Science

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my Depot, SEAD-12

Showing Features

located, just west of Feature 2 (Figure 6-3). The cobblestone surface may represent a pathway between the former house and the possible well.

Artifacts. A total of 342 artifacts was collected from 25 shovel tests in Archaeological Area 1. The majority of the artifacts (93%) were found in STPs within the transects 650 North through 700 North, and 80 East through 100 East. STPs excavated to the west of the 80 East line only contained a sparse scatter of architectural artifacts, and only one artifact (a chain link) was found in the STPs excavated within or to the east of the disposal pit area identified through geophysical testing. Similarly, STPs excavated north of the 700 North line as well as those south of 650 North line contained few artifacts, all architectural. A list of the artifacts by group, material, and count is presented in Table 6.1 Architectural material (e.g., brick, mortar, plaster, window glass, and nails) made up the largest group of artifacts (57%), and domestic glass vessels and ceramics made up the second largest group (24%) (Table 6.1).

Group	Material	Count `
Activity	Flowerpot sherd	3
	Hardware (screw, nut, bolt, chain)	8
Architectural	Brick fragment	81
	Window glass fragment	37
	Mortar/plaster fragment	33
	Cut nail	23
	Wire nail	21
Clothing	Safety pin	1
Domestic	Glass bottle/ fruit jar/ vessel sherd	26
	Ferrous bottle cap	1
	Ceramic vessel sherd*	55
Fauna	Pig mandible fragment	2
	Cow tooth	1
	Mammal bone fragment	37
Fuel	Coal/clinker (sampled)	2
Personal	Phonograph disk fragment	1
	Ballclay tobacco pipe stem	1
Unidentified	Metal fragment	9
	Total	342

* the ceramic types are listed in Table 6.2.

The artifacts date to two distinct periods: the early nineteenth century, and the earlymiddle twentieth century. Diagnostic artifacts include early nineteenth century creamware and pearlware ceramics, and early-middle twentieth century machine-made bottle and vessel glass. A breakdown of the ceramic types is shown in Table 6.2. The whiteware/ironstone and the stoneware represent ceramic sherds that span very long periods of time, and therefore these wares are not considered diagnostic artifacts.

Class	Туре	Count
Food Consumption/Serving	Creamware	6
	Pearlware	12
	Whiteware/ironstone	9
	Refined redware	6
	Unidentified	1
Food Preparation/Storage	Stoneware	2 -
,	Coarse redware	19
	Total	55

Table 6.2 Archaeological Area 1, Site A09909.000003 Ceramics

STP 670N/90E, which contained Feature 1, produced the greatest concentration of twentieth century artifacts (n=71). The stratum containing the artifacts was composed of a grayish brown loose silt and extended from 15 to over 114 cm below the surface; the base of the stratum was not reached. The artifacts found in the STP appear to date to a short time span, close to the time that the house was demolished in 1941. A liquor bottle within this deposit had a mark used by the Owens-Illinois Glass Co. from 1929 to 1954, and all other identifiable glass vessels were machine made. The ceramic tableware sherds recovered from this STP were undecorated ironstone, and other artifacts included flowerpot and fruit jar sherds, a phonograph record fragment, a safety pin, cut and wire nails, and butchered bone. STP 700N/80E contained fewer artifacts (n=8) (ironstone and wire nails) that might also date to this period; wire nails were found over the site in a number of proveniences that otherwise contained artifacts from the early nineteenth century.

In contrast to the concentration of twentieth century artifacts found in one deep stratum adjacent to the stone wall feature, the early nineteenth century types were more evenly

distributed over the site. These artifacts were generally less than 40 cm below the surface. Nineteenth century artifacts were also found within and below the matrix of Feature 3, the cobblestone surface. Generally speaking, the strata containing the early artifacts was a gray brown silt loam. Some STPs exhibited varying amounts of disturbance, ranging from rodent activity to mechanical grading. The creamware ceramics were all undecorated, and the pearlware sherds were shell-edged or broad-line floral painted in a style that was used on that ware from ca. 1810-1830 (Majewski and O'Brien 1987). Lead-glazed refined and coarse redwares were found with the creamwares and pearlwares, likely dating to the same period. Other artifacts found within the early deposits included a ballclay pipe stem and animal bone.

Archaeological Area 2 (Site A09909.000004, W.G. Sample Farmstead)

Site Discussion. Archaeological Area 2, deeded to Wilson G. Sample in 1868 by his father Thomas Sample Sr., was located ca. 300 meters south of Site A09909.000003 (Plate 6-7). Twenty-one of the 40 STPs excavated in Area 2 were positive (Figure 6-4). Some degree of disturbance in the western portion of Area 2 was evident as a result of the geophysical survey. Target EM-40 occupies the western edge of Area 2 next to the road.

Soil Description. Soils at this site consist of Stratum A (root mat and plow zone), that is comprised of 10YR 4/2 to 2.5Y 3/2 very dark grayish brown silt loam that averaged some 10 to 15 cm in thickness. Beneath Stratum A was Stratum B, consisting of a 10YR 5/4 yellowish brown compact silty clay loam with shale fragments and cobbles in the areas that were undisturbed. Stratum B ranged from 20 to 33 cm in thickness in the undisturbed portions of the site (Figure 6-5A). In disturbed areas, Stratum B (16-39 cm) consisted of a 2.5Y 7/3 pale yellow silty clay loam mottled with 2.5Y 6/2 light brownish gray silty clay loam (Figure 6-5B). Culturally sterile subsoil (Stratum C) was a 10YR 5/2 grayish brown, mottled with 10YR 6/6 brownish yellow, compact clayey silt (Figure 6-5A), or a 2.5Y 7/3 pale yellow compact silty clay mottled with 2.5Y 6/2 light brownish gray silty clay Compact silty clay with 2.5Y 6/2 light brownish gray silty clay brown, mottled with 10YR 6/6 brownish yellow, sompact clayey silt (Figure 6-5A), or a 2.5Y 7/3 pale yellow compact silty clay mottled with 2.5Y 6/2 light brownish gray silty clay for a 2.5Y 7/3 pale yellow compact silty clay mottled with 2.5Y 6/2 light brownish gray silty clay (Figure 6-5B). Stratum C also contained varying amounts of angular shale and rounded chert, sandstone and limestone pebbles and cobbles. The frequency and size of the angular shale materials increased with soil depth.

Features. No cultural features were encountered during the pedestrian survey or the shovel testing portions of the field work.



Source: Parsons Engineering Science





A. SEAD-12, Area 2 Site A09909.000004, STP 335N/40E

- Stratum A (0-12cm): 10YR 4/2 dark grayish brown; silt loam with numerous roots; historic artifacts
- Stratum B (12-42cm): 10YR 5/4 yellowish brown; very compact silty clay loam with shale fragments and cobbles; historic artifacts
- Stratum C (42-53cm): 10YR 5/2 grayish brown mottled with 10YR 6/6 brownish yellow; moist, clayey silt with rootlets and shale fragments; sterile

B. SEAD-12, Area 2 Site A09909.000004, STP 355N/40E

- Stratum A (0-16cm): 10YR 4/2 dark grayish brown; silt loam with numerous roots and occasional gravel; sterile
- Stratum B (16-39cm): 2.5Y 7/3 pale yellow mottled with 2.5Y 6/2 light brownish gray; dense, compact silty clay loam with occasional gravel; sterile
- Stratum C (39-45cm): 2.5Y 7/3 pale yellow mottled with 2.5Y 6/2 light brownish gray; dense, compact silty clay with occasional gravel; sterile





Source: Parsons Engineering Science

Figure 6-5 Representative Soil Profiles

Artifacts. A total of 153 artifacts was collected from 21 STPs in Area 2. The artifacts consisted primarily of architectural material (46%) and domestic ceramic and glass sherds (35%) (see Table 6.3). The artifacts were concentrated in two principal areas. The first area was from STPs on the northern-most east-west transects (360 and 365 North), where the majority of the artifacts were found (78%). The artifacts from the eastern STPs in that area were recovered from Stratum A. These artifacts included ironstone and whiteware ceramics, a scatter of architectural material including wire nails, a crowbar, and large metal pieces that may have been parts of farm machinery. The artifacts from the STPs on the western portion of that line came from both Stratum A and from Stratum B. Few of the artifacts from this part of the site could be precisely dated. Several may date to the late nineteenth or early twentieth century, such as a beaded lamp chimney glass sherd. The presence of machine-made glass and wire nails in Stratum B indicates twentieth century deposition or disturbance. This may have been the result of grading or road construction to the west and north.

The second area of artifact concentration extended from STPs 315-345N/40 East, along a slope which rises to the east. This slope appears to be man-made, and the artifacts redeposited. The artifacts were found primarily in Stratum B, a mottled soil that extended roughly 10 to 70 cm below the surface. The artifacts included a single sherd of pearlware as well as later nineteenth or early twentieth century material such as a blown-in-mold fruit jar fragment and gilded ironstone. To the west of that line there was evidence of serious grading and compaction of the soil related to construction of the road just to the west. East of the 40E line was the flat grassy plateau, where few artifacts were found.

Group	Material	Count
Activity	Flowerpot sherd	1
	Crowbar	1
	Hardware (nut, screw)	4
Architectural	Brick/tile fragment	8
	Window glass fragment	16
	Mortar/plaster fragment	20
	Cut nail	20
	Wire nail	5
	Barbed wire fragment	1
Clothing	Leather shoe fragment	1
	Cupreous clasp	1
Domestic	Glass bottle/ fruit jar/ vessel sherd	31
	Pearlware ceramic sherd	I
	Whiteware/ ironstone ceramic sherd	18
	Coarse redware ceramic sherd	1
	Lamp chimney glass fragment	2
Fauna	Mammal bone fragment	6
Fuel	Coal (sampled)	2
Unidentified	Metal (poss. plow parts, wire, etc.)	11
	Leather fragment	2
	Rubber fragment	1
	Total	153

Table 6.3 Archaeological Area 2, Site A09909.000004, Artifact Totals

Archaeological Area 3 (Site A09909.000005, J. McKnight Farmstead)

Site Discussion. Archaeological Area 3, the location of Site A09909.000005, was deeded to John McKnight Jr. by his father John McKnight Sr. in 1851. The site is located in the extreme southwestern corner of the project area (Plate 6-8). Thirty of 48 shovel tests contain artifacts (Figure 6-6). However, STP profiles, discussed below, indicate that portions of Area 3 had also been graded and filled. In addition, a railroad cut bisects the site from southwest to northeast.


Source: Parsons Engineering Science





6-18

Soil Description. Soils in Area 3A and 3B were variable and often depicted disturbance. As illustrated in Figure 6-1, the western and southern portions of the area were graded and disturbed. In addition, an abandoned railroad cut runs from southwest to northeast across the middle of the site. It is likely that much of this area has been graded and disturbed by construction of the railroad, the roads, and the nearby drainage ditch and ammunition bunkers. Figure 6-7A through 6-7C depicts various soil profiles within Areas 3A and 3B. Soils in Archaeological Area 3A (Figures 6-7A and 6-7B) consist of a thin root mat and plow zone (Stratum A), that is comprised of 10YR 4/2 dark gravish brown, sandy loam that averaged less than 10 cm in thickness. Stratum B, which underlies the rootmat, was a 10YR 5/2 grayish brown to 10YR 5/3 brown compact sandy loam that generally ranged from 20 to 33 cm in thickness in the undisturbed portions of the site (Figure 6-7A). Although Stratum A and Stratum B often contained a light scatter of modern and historic artifacts, in some STPs Stratum A was sterile, suggesting that this soil layer may be redeposited fill. The exceptionally thin soil layer identified in some parts of the site suggest that the original soil horizon was stripped and then redeposited after military grading of the area. Stratum C may represent a relic plow zone or an E horizon soil. Stratum C was a 10YR 5/1 gray compact sandy loam, that occasionally contained historic artifacts. Stratum' C, which was ca. 10-20 cm in thickness, contained an increasingly high percentage of decomposed shale fragments with depth. The sterile subsoil (Stratum D) was ca. 40+ cm in thickness in this part of the site and ranged from a 10YR 5/3 brown to 10YR 5/4 or 5/6 yellowish brown compact fine sandy clay. Stratum D exhibited an increase in decomposed shale fragments with depth.

A typical soil profile in Area 3B is presented in Figure 6-7C. This profile is similar to some of the STPs excavated in Area 3A. In general, the plow zone (Stratum A) was 10-20 cm in thickness and ranged from a 10YR 3/3 dark brown to 10YR 4/2 dark grayish brown silt loam with historic and modern artifacts. Stratum B, sterile subsoil, was 10-15 cm in thickness and consisted of a 10YR 5/4 to 10YR 5/6 yellowish brown silty clay loam. Stratum C was a 10YR 5/4 yellowish brown silty clay with moderately well developed subangular blocky structure. Strata B and C contained decomposed shale fragments, which increased in frequency with depth.

Features. No cultural features were encountered during either the pedestrian survey or in the shovel testing portion.



B. SEAD-12, Area 3A Site A09909.000005, STP 50N/90E

Stratum A (0-3cm): 10YR 4/2 dark grayish brown; slightly sandy loam with numerous roots; sterile

Stratum B (3-100cm): 10YR 5/2 grayish brown; loose, sandy loam with numerous large cobbles and tabular sandstone; historic artifacts

Stratum C (100-102cm): 10YR 5/1 gray; dense, compact silty clay with solid tabular shale; sterile



with numerous roots and angular shale fragments; sterile Stratum B (7-32cm): 10YR 5/3 brown; friable, compact, slightly sandy loam with angular shale fragments; historic artifacts

A. SEAD-12, Area 3A Site A09909.000005, STP 60N/70E Stratum A (0-7cm): 10YR 4/2 dark gravish brown; sandy loam

Stratum C (32-46): 10YR 5/1 gray; decayed shale in fine sandy loam; historic artifacts

Stratum D (46-85): 10YR 5/3 brown; compact fine, sandy clay, increasing compactness and shale with depth; sterile



C. SEAD-12, Area 3B Site A09909.000005, STP 42N/20E

Stratum A (0-14cm): 10YR 3/3 dark brown; silt loam with numerous roots; historic artifacts

Stratum B(14-25cm): 10YR 5/4 yellowish brown; silty clay loam with small subangular blocky structure; sterile

Stratum C (25-40cm): 10YR 5/4 yellowish brown; silty clay loam with medium subangular blocky structure; sterile



Source: Parsons Engineering Science

Figure 6-7 Representative Soil Profiles

Artifacts. A total of 170 artifacts was recovered from 30 STPs in Area 3. Architectural artifacts (83%) predominate the assemblage, with domestic ceramics and glass sherds a distant second (8%). Table 6.4 presents a list of artifacts by group, material, and count. Area 3A (east) and Area 3B (west) produced similar assemblages, but the artifact distributions differed.

A total of 101 of the artifacts was found in Area 3A, with the majority of artifacts concentrated along the 50 North transect. Forty-two came from STP 50N/90E, which was placed at target EM-35. The artifact bearing stratum extended to 100 cm below the surface, and contained a variety of architectural material including 30 cut and wire nails, a possible stove part, and a flow-blue printed ironstone sherd. Other artifacts found on the same transect (i.e., the 50 North line) to the east included a single sherd of early nineteenth century floral printed pearlware, late nineteenth or early twentieth century solarized glass, and wire nails that probably date to the twentieth century. Disturbances were noted in these STPs, including significant rodent burrowing, grading, and impacts from a large drainage ditch cut located just to the south. The STPs at the far western edge of Area 3A appeared to have been disturbed by the railroad ditch to the west. Very few artifacts were found in the central and northern portion of Area 3A, which was heavily graded. A light scatter of artifacts (n=7), including a blown-in-mold fruit jar sherd and terra cotta drainpipe fragments, were found in the northeastern portion of the area, in the uppermost 20 cm of three STPs.

Group	Material	Count
Architectural	Brick/tile fragment	43
	Window glass fragment	12
	Mortar/plaster fragment	4
	Ceramic drainpipe fragment	29
	Cut nail	23
	Wire nail	29
	Unidentified nail	1
Domestic	Glass bottle/ fruit jar/ vessel sherd	7
	Pearlware ceramic sherd	1
	Whiteware/ ironstone ceramic sherd	4
	Coarse redware ceramic sherd	1
Fauna	Mammal bone fragment	6
	Clam shell fragment	6
Fuel	Clinker (sampled)	3
Unidentified	Metal plate (poss. stove part)	1
	Total	170

 Table 6.4 Archaeological Area 3, Site A09909.000005, Artifact Totals

Fewer artifacts were found in Area 3B (n=69). As in Area 3A, architectural material, including fragments of brick, mortar/plaster, ceramic drainpipe, window glass, and nails predominate. In Area 3B, however, the artifacts were more lightly and evenly distributed, and generally were recovered from the uppermost 30 cm of the STPs. Very few domestic artifacts were found, including no ceramics and only 4 bottle glass sherds. The easternmost STPs were disturbed by the railroad cut to the east, and significant rodent disturbances were noted in the west-central portion of the area. A compacted and corroded iron tub was found in Stratum A of STP 107N/30E (EM-33), but not collected. Similarities in the artifacts from Area 3A and 3B were the overwhelming predominance of architectural material over the other groups, the presence of numerous drainpipe fragments, and the presence of clam shell.

Archaeological Area 4 (Site A09909.000006, John McKnight Farmstead)

Site Discussion. Archaeological Area 4, deeded to John McKnight Sr. in 1824, is located east of Site A09909.000006 in the southwest corner of the project area (Plate 6-9). Only 10 of 40 STPs excavated in Area 4 contained cultural material (Figure 6-8). Archaeological Area 4 also contained a well feature in the southern portion of the site, located at 19N/204E (Figure 6-8; Plate 6-10). This part of Area 4 had been disturbed by extensive grading activities associated with the construction of the drainage ditch and bunkers, immediately south of the site (Figure 5-1). The well feature was noticeably disturbed by these mechanical grading activities.

Soil Description. Like the soils in Area 3, the soils in Archaeological Area 4 were variable and often disturbed from grading and/or redeposited fill, especially along the southern margin of the site. Figure 6-9A illustrates a typical STP from the northeast portion of the site. Stratum A, the root mat and plow zone, varied between 10 and 25 cm in thickness and consisted of 10YR 4/2 dark brown, silt loam with rounded pebbles and many rootlets. Stratum B, located beneath the rootmat was a 10YR 5/2 brown, compact silt loam with rounded pebbles. Stratum B generally ranged from 15 to 25 cm in thickness in the undisturbed portions of the site (Figure 6-9A). Stratum C consisted of a 10YR 6/2 light brown, compact silty clay loam, with some fine sand and increasing pebbles with depth. All three soil layers were sterile.



Plate 6-9. Area 4, Site A09909.000006, view west



Plate 6-10. Site A09909.000006, well feature, view south

Source: Parsons Engineering Science







A. SEAD-12, Area 4 Site A09909.000006, STP 70N/240E

- Stratum A (0-10cm): 10YR 4/2 dark brown; silt loam with numerous roots and rounded pebbles; sterile
- Stratum B (10-26cm): 10YR 5/2 brown; compact silt loam with rounded gravel; sterile
- Stratum C (26-35cm): 10YR 6/2 light brown mottled with 10YR 7/2 light grayish brown; very compact silty clay loam with fine sand and manganese staining; sterile

B. SEAD-12, Area 4 Site A09909.000006, STP 70N/190E

Stratum A (0-22cm): 2.5Y 5/2 grayish brown; silt loam with numerous roots and occasional gravel; sterile
Stratum B (22-46cm): 2.5Y 5/1 dark gray; compact silt loam with occasional gravel and shale fragments; historic artifacts
Stratum C (46-80cm): 2.5Y 5/1 very dark gray mottled with 10YR 5/6 yellowish brown; loosely compact silty clay loam with occasional shale fragments; historic artifacts
Stratum D (80-90cm): 2.5Y N4 dark gray mottled with 10YR 4/6 yellowish brown; dense, compact silty clay loam with increasing shale fragments; sterile



Source: Parsons Engineering Science



C. SEAD-12, Area 4 Site A09909.000006, STP 50N/250E

Stratum A (0-19cm): 2.5Y 4/3 olive brown; wet, silty clay with numerous roots, shale fragments and rounded gravel; sterile
Stratum B (19-42cm): 2.5Y 5/1 gray; compact silty clay with shale fragments and rounded gravel; sterile

Stratum C (42-51cm): 2.5Y 6/2 light grayish brown mottled with 10YR 5/6 yellowish brown; dense, compact silty clay; sterile



Figure 6-9 Representative Soil Profiles

Figure 6-9B illustrates a positive STP from the northwest corner of the site, south of the abandoned railroad cut. This STP exhibited four different soil layers, the middle two of which contained historic artifacts. Stratum A (0-22 cm) was a 2.5Y 5/2 grayish brown, silt loam with numerous rootlets and occasional pebbles. Stratum B (22-46 cm), which contained artifacts, was a 2.5Y 5/1 dark gray, compact silt loam with angular shale fragments and pebbles. Stratum C, which also contained historic artifacts, was similar to Stratum B except that the soil was mottled with a 10YR 5/6 yellowish brown silty clay loam. Stratum D, sterile subsoil was a 2.5Y N4 dark gray silty clay loam mottled with a 10YR 4/6 yellowish brown silty clay loam. Stratum C

Figure 6-9C depicts a typical shovel test in the central portion of the site, which like Figure 6-9A, is also sterile. In fact only 10 of 40 STPs in this area were positive. The STP depicted in this figure also exhibits three soils. Stratum A (0-19 cm) is a plow zone that contains a 2.5Y 4/3 olive brown, silty clay with numerous rootlets, shale fragments, and many gravels or pebbles. Stratum B (19-42 cm) is a 2.5Y 5/1 gray silty clay with shale fragments and rounded pebbles. Stratum B in these areas appears to be the E horizon. Sterile subsoil (Stratum C) in these units was a 2.5Y 6/2 light grayish brown, compact silty clay mottled with a 10YR 5/6 silty clay. Stratum C also contained angular shale fragments which increased in frequency with depth.

Features. A cultural feature (Feature 1), possibly a rock-lined well or cistern, was discovered during the pedestrian survey in Archaeological Area 4. The feature. located at 18N/204E, was found in the extreme southern part of the site (Figure 6-8; Plate 6-10). The feature, which measured ca. 2 m (E-W) by 1.9 m (N-S), was constructed of uncut field stones. The top of the feature had been severely disturbed (truncated) by grading activities, as seen in Plate 6-10. After photographing the feature, a STP was excavated immediately northeast of the well, but it produced negative results. Given the size and shape of the feature as well as the location of the feature (i.e., in proximity to the former farmstead and at the base of the slope) it is likely that this feature represents a well or cistern.

Artifacts. A total of 42 artifacts was recovered from 10 STPs at Site A09909.000006. Most of the artifacts (74%) were recovered from a dark gray brown silt loam between 20-80 cm below surface from three shovel tests in the northwestern portion of the site (70N/180E, 70N/190E and 80N/190E). Outside of that area the artifacts consisted of a thin scatter of architectural material, few of which allowed for precise dating. Twentieth century machine-

made glass fruit jar sherds and wire nails were present, and a possible nineteenth century component is suggested by the presence of salt-glazed stoneware. Despite evidence suggesting that this site was occupied by the early nineteenth century, artifacts dating to this period are extremely rare at the site. The artifacts are listed in Table 6.5.

Group	Material	Count
Architectural	Brick fragment	8
	Window glass fragment	1
	Mortar/plaster fragment	5
	Cut nail	5
	Wire nail	3
	Fence wire fragment	3
Domestic	Glass bottle/ fruit jar sherd	5
	Glass tumbler sherd, anchor closure	1
	Whiteware/ ironstone ceramic sherd	3
	Salt-glazed stoneware sherd	1
Fauna	Mammal bone fragment	4
Unidentified	Metal fragment	3
	Total	42

Table 6.5 Archaeological Area 4, Site A09909.000006, Artifact Totals

6.2 MEDIUM PROBABILITY AREAS

Archaeological Area 7 (Site A09909.000007, Jesse's Dump)

Site Discussion. The site is located in a forested area in the east-central portion of SEAD-12, south of a wetland (Plate 6-11). The site consists of a small. localized. but dense scatter of nineteenth and twentieth century artifacts (Figure 6-10, Plate 6-12). With the exception of one STP (817N/1107E), all the STPs excavated in the dump area were negative. A large number of historic artifacts (n=593) was recovered in this STP, and combined with a sampling of other artifacts on the surface, produced a large assemblage. The artifacts from the STP were recovered in Stratum A, which consists of rootmat. This site most likely represents the dumping activities of refuse from a local farmstead.



Plate 6-11. Area 7, Site A09909.000007, view east



Plate 6-12. Site A09909.000007, dump area, view south

Source: Parsons Engineering Science





Soil Description. Figure 6-11A depicts the positive STP from this site. The artifacts were confined to Stratum A, the rootmat and plow zone. Stratum A (0-16 cm in thickness) is a 2.5Y 4/2 very dark grayish brown, silt loam with numerous roots and occasional gravels. The sterile subsoil (16-42 cm below surface) consists of a 2.5Y 7/2 light gray, compact silty clay, mottled with a 2.5Y 6/8 olive yellow, compact silty clay. The subsoil (Stratum B) contained increasing amounts of angular shale fragments with depth.

Artifacts. A total of 593 artifacts was collected from Area 7. The majority (88 percent) came from Stratum A, the rootmat, of STP 817N/1107E. The remainder were collected from an area ca. 10 meters in diameter, on and around that STP. Most of the artifacts (85 percent) were classified as domestic, and consisted of sherds of ceramic vessels, glass vessels, lamp chimney glass, as well as tin can fragments and a piece of furniture hardware. Architectural material, consisting of a key plate, window glass, and nails, only accounted for 12 percent of the artifacts collected. Other artifacts included flowerpot sherds, saw blade fragments, a washer, a leather shoe fragment, animal bones, and personal items such as two sherds from a glass inkwell, a tobacco pipe, and a possible pillbox. A summary table of the artifacts is below (Table 6.6).

Group	Material	Count
Activity	Flowerpot sherd	2
	Hardware (washer)	1
	Saw blade fragment	4
Architectural	Ferrous key plate	1
	Window glass fragment	49
	Cut nail	13
	Wire nail	8
Clothing	Leather shoe fragment	1
Domestic	Glass bottle/ fruit jar/ vessel sherd	121
	Ceramic vessel sherd*	273
	Tin can fragment	22
	Lamp burner/chimney glass fragment	87
	Furniture handle plate	1
Fauna	Mammal bone fragment	1
Personal	Glass inkwell sherd	2
	Small ferrous container (pillbox?)	1
	Ballclay tobacco pipe bowl/stem	1
Unidentified	Metal fragment	5
	Total	593

Table 6.6 Archaeological Area 7, Site A09909.000007, Artifact Totals

* the ceramic types are listed in Table 6.7.



A. SEAD-12, Area 7 Site A09909.000007, STP 817N/1107E

Stratum A (0-16cm): 2.5Y 4/2 very dark grayish brown; silt loam with numerous roots and occasional gravel; historic artifacts
Stratum B (16-42cm): 2.5Y 7/2 light gray mottled with 2.5Y 6/8 olive yellow; very compact silty clay with shale fragments; sterile

B. SEAD-12, Area 8 Site A09909.000008, STP 860N/ 1005E

Stratum A (0-15cm): 10YR 3/2 very dark grayish brown; silt loam with numerous roots and occasional rounded gravel; sterile
Stratum B (15-26cm): 10YR 4/1 dark gray mottled with 10YR 5/3 brown; compact silty clay loam with occasional gravel; sterile
Stratum C (26-37cm): 10YR 5/1 gray mottled with 10YR 6/4 light yellowish brown; very dense, compact silty clay; sterile





Source: Parsons Engineering Science

Figure 6-11 Representative Soil Profiles The ceramics represent types commonly found on sites dating to the late nineteenth and early twentieth century (Table 6.7). Over 80 percent of the ceramics were ironstone, all of which was undecorated with the exception of 2 gilt sherds and 1 decaled sherd. Within Stratum A of STP 817N/1107E, the ironstone represented at least 19 different vessels, based on the rim sherds. Several had fine curvilinear molded rim patterns, and other molded motifs included the wheat pattern and a petal pattern. The whiteware sherds were transfer-printed, shell-edged, or undecorated. Semi-porcelain, yellowware, and Rockingham/Bennington sherds also were found at the site. Food storage wares were exclusively Albany slip-glazed stoneware sherds, 10 of which were salt-glazed on the exterior, and 2 of which had a Bristol glazed exterior. Table 6.7 presents a list of ceramic wares by type and count.

Class	Туре	Count
Food Consumption/Serving	Hardpaste Porcelain	1
	Semi-porcelain	2 -
,	Ironstone	225
	Whiteware	18
	Rockingham/Bennington	2
	Yellowware	13
Food Preparation/Storage	Albany slip-glazed Stoneware	12
	Total	273

Table 6.7 Archaeological Area 7, Site A09909.000007, Ceramics

Table 6.8 lists the artifacts that contain makers-marks that were recovered from the site. Of the domestic glass that could be identified as to manufacture technique, nine percent was machine-made, and the remainder was blown-in-mold. Glass vessel functions included fruit jar sherds (n=9), pharmaceutical bottles (n=14), condiment bottles (n=3), a baking soda bottle, and liquor (n=18), beer (n=2), and wine bottles (n=1). Glass tableware included stemware and tumbler sherds and a salt shaker. Eleven of the domestic glass sherds were solarized, indicating that they were produced between ca. 1880 and 1915, the period when manganese was used to decolorize glass (Munsey 1970). In addition, a number of the glass vessels and ceramics had maker marks that could be dated. Date ranges for artifacts with makers-marks are presented in Table 6.8. Together the maker marks and the artifact types indicate a ca. 1880 to 1910 date to the artifacts. Very little architectural material was found, and no structure was seen on historic maps

in this location. Therefore this site appears to be a small, but dense household refuse dump that was used by local landowners at the turn of nineteenth century.

Artifact Type	Mark	Date Range
Undecorated ironstone vessel	W.E.P. Company	1893-ca. 1910
Undecorated semi-porcelain plate	O.P. Company, Syracuse, NY	1886-1898
Undecorated ironstone plate	Baker & Company, England	1839-1893
Clear blown-in-mold condiment bottle	The R.T. French Company	1892+
Clear blown-in-mold pharmaceutical bottle	Dr. Koch's Remedies, Winona, Minn.	ca. 1900
Aqua blown-in-mold fruit jar	Hero Fruit Jar Company (cross emblem)	1884 - 1900
Aqua blown-in-mold fruit jar	Davey & Moore, LTD., England	ca. 1870-1900
Milk glass fruit jar lid liner	Consolidated Fruit Jar Company (monogram)	1871-1882
Aqua glass fruit jar lid	Consolidated Fruit Jar Company (monogram)	1871-1882
Aqua blown-in-mold fruit jar	Hero Glass Works (GEM)	1867-1880
Ballclay tobacco pipe	"M & T HO", Germany	1891+

 Table 6.8 Archaeological Area 7, Site A099 9.000007, Artifact Marks

Archaeological Area 8 (Site A09909.000008, Andy's Dump)

Site Discussion. Site A09909.000008 is located in the north-central portion of SEAD-12, immediately adjacent to a north-south military road (Figure 5-1, Plate 6-13). The site consisted of a sparse and extremely localized scatter of historic artifacts situated around target EM-16 (Figure 6-12). None of the STPs excavated at the site contained cultural material, as the collected artifacts were all confined to the surface. Historic maps indicate no buildings or structures were present in this area during the nineteenth and twentieth centuries. Artifacts from this small refuse dump date to the second quarter of the twentieth century, suggesting a possible military origin of the site debris.

Soil Description. Figure 6-11B illustrates a typical STP (860N/1005E) from Area 8. The soils from this area consist of three strata, all of which were sterile. Stratum A (0-15 cm) is a 10YR 3/2 very dark grayish brown, silt loam with roots and occasional pebbles. Stratum B (15-26 cm) is a 10YR 4/1 dark gray, compact silty clay loam mottled with 10YR 5/3 brown compact silty clay loam. The stratum contains occasional pebbles and angular shale fragments. Stratum C (26-37 cm), is a very compact 10YR 5/1 gray, silty clay mottled with a 10YR 6/4 yellowish brown silty clay.



Source: Parsons Engineering Science



Artifacts. A total of twelve artifacts (Table 6.9) was collected from the surface around a single shovel test (855N/1020E) in Area 8. All six STPs at the site produced negative results. No subsurface artifacts were found in this area, nor was the source of the EM target *A*-16) identified through the excavation of the STPs. All of the vessel glass (n=8) was machimade, and two of the bottle fragments bore maker marks indicating more specific date ges of manufacture. One bottle was made by the Owens Illinois Glass Company betwee 929 and 1954, and another bottle was produced by Swindell Brothers manufacturers betwe n ca. 1920 and 1959 (Toulouse 1971). The remainder of the artifacts collected were consistent with that period. Therefore, the artifacts collected from Site A09909.000008 represent a light surface scatter of domestic refuse dating to the second quarter of the twentieth century. This date range suggests a possible military origin for the artifacts.

Group	Material	Count
Clothing	Glass button	1 -
,	Leather boot upper fragment	1
Domestic	Glass bottle/fruit jar sherd	8
	Porcelain ceramic sherd	1 ·
	Ironstone ceramic sherd	1
	Total	12

Table 6.9 Archaeological Area 8, Site A09909.000008, Artifact Totals

Archaeological Area 9 (Site A09909.000009, Sandy's Well)

Site Discussion. Site A09909.000009, located in a forested area in the extreme southeastern corner of SEAD-12, occupies property originally owned by John McKnight Sr., and subsequently deeded to his son John McKnight Jr. in 1851. Historic maps indicate no buildings or structures were present in this area during the nineteenth and twentieth centuries. The site consists of a historic trash dump, a well, and the associated artifacts recovered from three STPs. A total of 45 STPs was excavated in Area 9 during the survey, but only three STPs produced historic artifacts. The dump area was located ca. 20 m northwest of the well (Feature 1) (Figure 6-13; Plate 6-14), in the northern section of the area tested. The dump area and the well occupy the base of a gentle slope that dips northward into a wetland (Figure 6-13).







Plate 6-14. Area 9, Site A09909.000009, dump area, view east



Plate 6-15. Site A09909.000009, well feature, view south

Source: Parsons Engineering Science

Soil Description. The soils in Area 9 exhibited three strata; however, only the first strata (Stratum A) contained artifacts. Figure 6-14A illustrates a typical profile in this area. Stratum A (0-22 cm) is a 10YR 3/1 very dark gray, fine silt loam with numerous roots and historic artifacts. Stratum B is a 2.5Y grayish brown silty clay loam mottled with a 10YR 5/8 yellowish brown with iron staining and shale fragments. Strata B and C are sterile. Stratum C is a 2.5Y 7/2 light gray, compact silty clay with increasing shale fragments with depth.

Features. Feature 1, located at the base of a small slope, is a stone-lined well, several feet of which are exposed on the surface (Plate 6-15). The well was manufactured from rough uncut-field stone and measures ca. 3 ft in diameter. Several courses of stone are exposed along the interior of the well along the base of the aforementioned slope. Sediments within the well were loose and spongy, and given the potential safety concerns, no STPs were excavated within the feature at this time, pending future evaluations.

Artifacts. A total of 85 artifacts was recovered from Archaeological Area 9, Site A09909.000009. Of the three positive STPs, one produced 3 fragments of barbed wire and another STP produced 6 pieces of clear, machine-made bottle glass. The third positive STP, located along the edge of the surface dump, contained 51 artifacts. These included a variety of domestic artifacts such as bottle glass fragments, stoneware, ironstone, porcelain, and redware sherds, lamp chimney glass, and tinware. Approximately 70 percent (n=60) of the artifacts were found in Stratum A within the three shovel tests; the remaining artifacts were collected from the surface of the site. No artifacts were found in Stratum B. The artifacts consisted almost exclusively of domestic glass and ceramic sherds, as listed in Table 6.10. As illustrated below, over 75 percent of the artifacts consist of container glass (bottles, fruit jars, etc.) or chimney lamp glass. The ceramics recovered from the site include a variety of red earthenware, ironstone, stoneware, and porcelain.

Eighty-six percent of the identifiable container glass was machine made (19 of 22 sherds), and the remainder was blown-in-mold. Vessel glass included a solarized tumbler fragment and an orange/lemon squeezer. Ceramic tablewares, listed in Table 6.10, consisted of undecorated ironstone and decaled porcelain. Several of the bottles and ceramics bore maker



A. SEAD-12, Area 9 Site A09909.000009, STP 70N/1110E

Stratum A (0-22cm): 10YR 3/1 very dark gray; fine silt loam with numerous roots; historic artifacts

Stratum B (22-38cm): 2.5Y 5/2 grayish brown mottled with 10YR 5/8 yellowish brown iron staining; compact, moist silty clay; sterile

Stratum C (38-45cm): 2.5Y 7/2 light gray; very compact silty clay; sterile

B. SEAD-12, Area 16 Site A09909.000010, STP 945N/875E

- Stratum A (0-18cm): 10YR 4/3 brown; silt loam with numerous roots and occasional small, rounded gravel; prehistoric artifact
- Stratum B (18-24cm): 10YR 5/3 yellowish brown; compact silty clay loam with occasional rounded gravel and angular shale and chert fragments; sterile
- Stratum C (24-35cm): 10YR 6/2 light brownish gray mottled with 10YR 5/6 dark yellowish brown; very compact silty clay with decomposing shale fragments; sterile



20 Centimeters

Source: Parsons Engineering Science

Figure 6-14 Representative Soil Profiles

marks (see Table 6.11). The date ranges of the artifact maker marks, as well as technological attributes of other artifacts, indicate that the artifacts were deposited in the first two decades of the twentieth century; i.e., 1900-1920.

Group	Material	Count
Architectural	Barbed wire fragment	3
Domestic	Glass bottle/ fruit jar/ vessel sherd	40
	Porcelain ceramic sherd	1
	Ironstone ceramic sherd	7
	Coarse redware ceramic sherd	1
	Stoneware ceramic sherd	4
	Tinware fragment	1
	Lamp chimney glass sherd	28
	Total	85

Table 6.10 Archaeological Area 9, Site A09909.00009, Artifact Totals

Table 6.11 Archaeological Area 9, Site A09909.000009, Artifact Marks

Artifact Type	Mark	Date Range
Clear machine-made glass bottle with cork closure	Atwood's Jaundice Bitters, Georgetown, Mass., Pierce Glass Company	1905-1907
Undecorated ironstone plate	Royal Arms, Johnson Brothers, England	1883-1913
Albany slip-glazed stoneware crock	"J FI", likely Jacob Fisher, Lyons, NY	1872-1902
Aqua pharmaceutical bottle	Fellow & Co. Chemists, St. John N.B.	1849+

6.3 LOW PROBABILITY AREAS

Archaeological Area 16 (Site A09909.000010, JR's Rolling Stone)

Site Discussion. Site A09909.000010, located in the north-central portion of the project area, was situated on a slight rise overlooking an unnamed intermittent stream to the north (Plate 6-16). The area was tested because it was considered to have low- to moderate potential for containing prehistoric resources. Only one of 20 STPs excavated in Area 16 was positive (Figure



Source: Parsons Engineering Science
6-15). A prehistoric artifact (a Late Archaic side-notched projectile point) was recovered from STP (945N/875E) in Archaeological Area 16. The point appears to be an isolated find, as eight radial STPs, excavated at five meter intervals in the four cardinal directions, produced negative results (Figure 6-15).

Soil Description. Figure 6-14B illustrates the soil profile from the STP that produced the projectile point. The profile indicates three strata occur at the site, the second and third of which were sterile. Stratum A (0-18 cm) is a 10YR 4/3 brown, silt loam with numerous roots and occasional pebbles. Stratum B (18-24), the lower portion of the plow zone, is a 10YR 5/3 yellowish brown, compact silty clay loam with rounded pebbles and angular shale fragments. The sterile subsoil (Stratum C) measures 24-35 cm in depth and is a 10YR 6/2 light brownish gray silty clay, mottled with a 10YR 5/6 dark yellowish brown. Stratum C exhibits increasing shale fragments with depth.

Artifacts. The artifact recovered from this site was a broken, side-notched projectile point, manufactured from Onondaga chert (Figure 6-16). The point exhibited breakage along one basal corner, the opposite shoulder, and the extreme distal portion of the point. Although the point was undoubtedly resharpened on several occasions, the extensive breakage patterns of the point suggest it was broken during impact, presumably during a hunting expedition. The point resembles the Orient Fishtail type, which dates to the Late Archaic or Transitional Period (ca. 1200-700 B.C.) No other artifacts were found, further suggesting the point may represent a hunting loss. The knoll on which the point was recovered overlooks the unnamed stream to the north.

Miscellaneous Isolated Artifacts

Several archaeological areas produced what are considered herein as isolated artifacts. The areas that produced such artifacts include the following: Areas 10, 11, 14, 17, 18, 19, and 20. Of these, Areas 17-20 were associated with EM targets. The recovered artifacts reflect a variety of architectural and domestic activities and include brick, mortar, cut-nails, barbed wire, stoneware, and bottle glass. The artifacts are discussed below by area.





Archaeological Area 10. Excavations at Area 10 resulted in the recovery of one artifact. The artifact, a cut nail, was recovered from STP 305N/405E (Stratum A) in a graded area in the northwest corner of the tested area. The artifact is not related to an EM target, and no other artifacts were found in Area 10. The artifact may or may not be historic (i.e. 50 years of the greater), given that cut-nails are still manufactured today.

Archaeological Area 11. Two STPs within Area 11 contained artifacts. STP 390N/ 590E contained one cut-nail, and STP 410N/590E produced a piece of barbed wire. Both artifacts were recovered from a disturbed context and are confined to Stratum A. The artifacts may or may not be historic (i.e. 50 years of age or greater), given that cut-nails and barbed wire are still manufactured today. The artifacts are not related to an EM target, and no other artifacts were found in Area 11.

Archaeological Area 14. STP excavations in Archaeological Area 14 resulted in one positive shovel test (925N/590E). One Albany slip-glazed stoneware sherd was-collected from the surface of STP 925N/590E. The artifact likely dates to the late nineteenth or the early twentieth century. The artifacts are not related to an EM target, and no other artifacts were found in Area 14.

Archaeological Area 17. Archaeological Area 17, located in the southeastern portion of the project area, combined both a low probability area with testing of three EM targets: EM-12, EM-13, and EM-30. The area occupies a large knoll, but parts of the area have been graded and filled. While no historically significant cultural resources were found, a few artifacts and one feature were discovered in this area. The feature consist of a portion of terra cotta drain pipe, most likely related to the McKnight farmstead. The pipe was undoubtedly used to drain an agricultural field. A total of six architectural artifacts was collected in Area 17. The artifacts, which may or may not be historic (i.e. 50 years of age or greater), were recovered from disturbed contexts within Stratum A, the uppermost stratum, in three shovel tests. The artifacts included a wire fragment (possibly related to EM-13) from STP 40N/785E, 2 brick and 2 mortar fragments from STP 60N/825E, and a brick fragment from STP 80N/825E. No other artifacts were found in Area 17.

Archaeological Area 18. Archaeological Area 18, situated in the south-central portion of SEAD-12, was selected for testing due to target EM-8. The area consists of an open, grassy field north of the abandoned railroad cut. Excavations at Area 18 resulted in the recovery of a single brick fragment from STP 220N/440E, Stratum A. The brick fragment is presumably the source of the magnetic anomaly. No other artifacts were found in Area 18.

Archaeological Area 19. Archaeological Area 19 was selected for archaeological testing based on the presence of three geophysical anomalies (EM-9, EM-10, and EM-31) that were detected in this vicinity. Additionally, the area was considered to have a low to moderate potential for containing prehistoric artifacts due to the commanding view from the knoll. Only 3 of the 32 STPs were positive. Two positive STPs (STP 395N/765E, Stratum B and STP 395N/767E, Stratum A) were located within target EM-9, and one positive STP (STP 363N/864E, Stratum C) was recorded within target EM-10. No artifacts were associated with target EM-31.

Artifacts collected from EM-9 (STP 395N/765E, Stratum B) consisted of a Winchester .22 cartridge and 2 fence wire fragments. Just to the east, at STP 395N/767E, 2 additional fence wire fragments were found in Stratum A. STP 363N/864E, Stratum C at target EM-10 produced .one ironstone ceramic sherd, 4 bottle glass sherds, 5 brick fragments, and 1 mortar fragment. 10. The artifacts from this STP were recovered from a highly disturbed disposal pit that also contained recent artifacts that were not collected. It is likely that the ironstone sherd and the brick fragments account for the EM anomaly. No other artifacts were recovered from Area 19.

Archaeological Area 20. Archaeological Area 20 was selected for subsurface testing due to the presence of target EM-28 as well as the potential to contain prehistoric materials. The EM target consisted of a series of anomalies that were located during the geophysical study. Only one of the 19 STPs excavated in this area produced artifacts. STP 680N/955E produced two fence wire fragments in Stratum B. These artifacts may or may not be historic (i.e. 50 years of age or greater). However, no significant archaeological finds were made in this location, and no other artifacts were found in Area 20.

EM-29. STP N176/E844, excavated at Target EM-29, produced one unidentified copper fragment from Stratum A.

Culturally Sterile Areas

Archaeological Areas 5, 6, 12, 13, 15, and 21 were subjected to pedestrian survey and the excavation of several STPs on a 20-meter grid. The number of STPs excavated in these areas ranged from a low of eight STPs in Area 12 to as many as 17 STPs in Area 6. Two of the areas, Area 12 and Area 21, were situated around EM targets, EM-4 and EM-7 respectively. Despite the excavation of over 70 STPs in these areas, no cultural material was encountered. Moreover, the source of EM-4 and EM-7 were not identified through the excavation of STPs. Given the absence of cultural materials from Areas 5, 6, 12, 13,15, and 21, it is recommended that no additional archaeological investigations are necessary in these areas.

General Soil Description for Low Probability Areas

Soils in low probability areas were generally similar throughout the project area, as most of the tested areas were in open grassland. Some variation was detected, but differences were generally attributed to cultural processes, such as grading or stripping of top soils in order to even out various landforms for line of site, or to cover the ammunition bunkers with the locally available sod. Although most STPs encountered in low probability areas exhibited three soil 'levels (e.g., Figure 6-17A), some STPs were terminated after only two levels because bedrock was encountered close to the surface (e.g., Figure 6-17B).

As depicted in Figure 6-17A, Stratum A (plow zone, 5-15 cm in thickness) generally ranged from a 10YR 4/2 dark grayish brown to 2.5Y3/2 to 4/1 very dark grayish brown to dark grayish brown silt loam with occasional pebbles and angular shale fragments. Stratum B consisted of 10YR 5/2 grayish brown to 2.5Y 4/2 dark grayish brown silty clay loam with an increase in the percentage of rocks and pebbles. Stratum B typically ranged from 15 to 25 cm in thickness (Figure 6-17A). Sterile subsoil (Stratum C) in the low probability areas was fairly consistent across the entire project area and is comprised of a 10YR 7/1 dense, compact silty clay with decomposed shale fragments mottled with 10YR 5/4 yellowish brown silty clay (Figure 6-17A). Figure 6-17B illustrates a profile of a STP terminated by bedrock that was near the ground surface. In this instance, Stratum B consisted of a 10YR 5/3 brown silty clay loam with increasing clay content and shale fragments with depth. These soils often measured 25-35 cm in thickness (Figure 6-17B).



B. SEAD-12, Area 17 STP 80N/865E

Stratum A (0-15cm): 10YR 4/2 dark grayish brown; silt loam with numerous angular shale fragments; sterile (plowzone)

Stratum B (15-46cm): 10YR 5/3 silty clay with increasing shale fragments with depth, terminated at bedrock; sterile

A. SEAD-12, Area 15 STP 855N/710E

Stratum A (0-12cm): 10YR 4/2 dark grayish brown; silt loam with rounded pebbles; sterile (plowzone)

Stratum B (12-27cm): 10YR 5/2 grayish brown; silty clay loam with increased number of pebbles; sterile (plowzone)

Stratum C (27-35cm): 10YR 7/1 gray mottled with 10YR 5/4 yellowish brown; silty clay with decomposed shale; sterile





Source: Parsons Engineering Science

Seneca Army Depot, SEAD-12

Figure 6-17 Representative Soil Profiles in Low Probability Areas

A. (31) VII-13, American (* STT \$8105.7761.

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SECTION 7.0

SUMMARY AND RECOMMENDATIONS

7.1 SUMMARY

As part of the on-going remedial response activities at the Seneca Army Depot Activity (SEDA) in Romulus, New York, Parsons ES-Boston conducted an expanded site inspection (ESI) at SEAD-12. After completion of geophysical investigations and prior to conducting extensive remediation activities, the Cultural Resources Department of Parsons ES-Fairfax, performed Phase I investigations at SEAD-12. The Phase I archaeological survey of SEAD-12 consisted of background research, a pedestrian survey of the entire 360-acre parcel, and the systematic excavation of STPs in areas of high-, medium-, and low probability. High probability areas (Archaeological Areas 1-4), which were identified through archival research as the location of former farmsteads, were tested at 10 meter intervals; medium probability areas (Archaeological Areas 7-9), which were designated around historic dumps discovered during the pedestrian survey, were shovel tested at 20 meter intervals with additional judgmental STPs excavated at the discretion of the field director; and finally, low probability areas (Archaeological Areas 5, 6, and 10-21), also tested at 20 meter intervals, were considered to have a low to moderate potential for containing prehistoric materials. The Phase I survey resulted in the identification of 8 archaeological sites (7 historical sites and 1 prehistoric site) and 8 isolated finds, 5 of which were associated with EM targets. Figure 7-1 illustrates the location of the eight archaeological sites within SEAD-12.

The breakdown of artifact categories from the eight sites is shown in Table 7.1. The artifacts fall into three basic categories: (1) artifacts associated with recorded historic structures (Sites A09909.000003-A09909.000006), (2) artifacts associated with historic dumps (Sites A09909.000007-A09909.000009), and (3) a prehistoric site (A09909.000010). Four of the sites (A09909.000003-A09909.000006) occur where historical records and maps indicate former historic residences were located. As discussed below, the artifacts recovered from these sites support this interpretation.



Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12

Figure 7-1 SEAD-12 Project Area **Showing Archaeological Site Locations**

Table 7.1. Artifact Group Counts By Site

		Site	es of Rec	corded 1	Historic	Structu	Ires			Hi	storic D	ump Sit	cs		Prehi Si	storic te
act p	Site A 000	09909. 003	Site A 000	09909. 004	Site A(000	09909. 005	Site A 000	09909. 006	Site A(000	09909. 007	Site A(000	09909.	Site A 000	09909. 009	Site A 000	09909. 010
ſź	Ξ	3%	9	4%	0	%0	0	%0	7	1%	0	%0	0	0%0	0	0%0
ectural	195	57%	70	46%	141	83%	25	59%	71	12%	0	%0	m	4%	0	0%0
цß	—	<1%	2	1%	0	%0	0	%0	—	<1%	7	17%	0	%0	0	0%0
stic	82	24%	53	35%	13	8%	10	24%	504	85%	10	83%	82	96%	0	%0
	40	12%	9	4%	12	7%	4	10%	-	<1%	0	0%0	0	%0	0	%0
	2	<1%	2	1%	3	2%	0	%0	0	%0	0	%0	0	%0	0	%0
lal	5	<1%	0	%0	0	%0	0	0%0	4	<1%	0	%0	0	%0	0	%0
uma	6	3%	14	9%	1	<1%	3	7%	5	1%	0	%0	0	%0	0	0%0
toric	0	0%	0	0%0	0	0%0	0	0%	0	0%0	0	0%0	0	%0	—	100%
Count	342	100%	153	100%	170	100%	42	100%	593	100%	12	100%	85	100%	—	100%

11/731924\SS7302JA.DOC

Site A09909.000003 is the location of the former Thomas Sample Sr. farmstead. The site included structural remains (e.g., a stone foundation wall), features (e.g., a cobble stone surface or path and a depression or well), and numerous artifacts. Historic records indicate that Thomas Sample Sr. owned the property (Lot 52, plat 18) as early as 1822. Although historic records are not clear when he first lived on the property, maps indicate a house occupied the same location as Site A09909.000003 at least by the 1850s. Artifacts recovered from the site reflect two distinct periods: the early nineteenth century and the early- to mid-twentieth century. Diagnostic artifacts from the nineteenth century include creamware and pearlware, whereas diagnostic artifacts from the twentieth century include machine-made bottle glass and vessel glass. As noted in Table 7.1, artifacts within the architectural group constitute 57% of the artifacts from the site, followed by the domestic group (24%), and fauna (12%). The remaining 7% of the artifacts is comprised of artifacts in the following groups: activity, clothing, fuel, personal, and unknown. The majority of the twentieth century artifacts were recovered from the cellar fill in Feature 1, whereas the artifacts dating to the early nineteenth century were distributed more evenly across the site. A large disposal pit (EM-5) precluded testing in the eastern portion of the site; however, the density of artifacts along the transects immediately west of the EM target was among the highest for the entire site area.

Sites A09909.000004 (the W.G. Sample Farmstead), A09909.000005 (the J. McKnight Farmstead), and A09909.000006 (the John McKnight Farmstead) are located in the same general area that historic maps indicate historic farmsteads. Although records are unclear as to when these residences were erected, they all appear on historic maps between the late 1850s and the early 1870s. The land surrounding the W.G. Sample Farmstead was originally owned by his father, Thomas Sample Sr., who deeded the property to his son in 1868. Historic maps indicate a residence in this location by the late 1850s. The J. McKnight Farmstead was probably constructed in the mid- to late 1820s although maps depicting the farmstead do not appear until the 1850s. The John McKnight (Jr.) Farmstead was deeded to John McKnight Jr. by his father John McKnight Sr. in 1851. Thus, it is likely that John McKnight Jr. lived in both residences during his lifetime. With the exception of a possible well or cistern at Site A09909.000006, no structural remains or features were found at the aforementioned three sites.

Archaeological materials recovered from the above three sites primarily consisted of architectural and domestic artifacts. Architectural artifacts such as nails, brick, mortar, window glass etc. comprise between 46% (A09909.000004) to 83% (A09909.000005) of the artifacts from these sites. Domestic artifacts (ceramics, bottle and vessel glass, etc.), the second most

popular artifact group, constitute from 8% (A09909.000005) to 35% (A09909.00004). The remaining artifact categories, which include activity, clothing, fauna, fuel, and unknown, were differentially represented at these sites (see Table 7.1). Artifacts recovered from Sites A09909.000004 through A09909.000006 dated from the mid- to late nineteenth century as well as the early to mid-twentieth century. All three residences remained occupied by descendants of the original owners until the property was purchased by the military and the houses razed .

The three remaining historical sites (A09909.000007-A09909.000009) represent dump sites and were located where there was no historical record of a structure. The artifacts found at these sites were consistent with the sites having been used as small domestic refuse dumps. That is, as indicated in Table 7.1, domestic artifacts (such as ceramics, bottle and vessel glass, chimney glass, and tin can fragments) comprise between 83% and 96% of these assemblages. The diversity of artifact groups represented at the dump sites is more restricted when compared to the number of artifact groups represented at the house sites (see Table 7.1). For example, only two artifact groups are represented by seven artifact groups. Sites A09909.000008 and A09909.000009 were also represented by artifact groups including clothing and architectural groups, respectively. Artifacts recovered from these sites were collected from the surface as well as from Stratum A at any of these three sites. However, it should be noted that no shovel tests were excavated in the well at Site A09909.000009 because of safety reasons.

The diagnostic artifacts recovered from Site A09909.000007 date from the latenineteenth to the early twentieth century (ca. 1880-1910), and the artifacts from Site A09909.000009 date from ca. 1900-1920. Thus, the artifacts from Sites A09909.000007 and A09909.000009 suggest these dumps were in use for a limited period of time. Conversely, the artifacts from Site A09909.000008 primarily date from the mid-twentieth century, and overlap considerably with the purchase of the property by the military in 1941. The artifacts collected from these dump sites support the conclusion that the above sites contained less architectural material and a higher proportion of ceramic and glass wares than the sites associated with the former domestic structures.

Site A09909.000010, the prehistoric site, is represented by a single isolated projectile point fragment. Despite the excavation of eight radial shovel tests at 5-meter intervals, no additional prehistoric materials were recovered. The point resembles an Orient Fishtail type

(1200-700 B.C.), and based on the fragmentary nature of the point as well as the breakage patterns on the artifact, it is most likely that the point reflects hunting loss rather than discard or breakage during tool resharpening. The location of the site, i.e., on a knoll overlooking an intermittent stream, also suggests that hunting loss is the most probable explanation to account for the presence of the point.

Seven archaeological areas (Areas 10, 11, 14, and 17-20) and one additional EM target (EM-29) produced one or more artifacts (considered herein as isolated finds). Five areas (Areas 17-20 and target EM-29) produced artifacts associated with electro-magnetic signatures. For the most part, the artifacts from these locations were generally architectural in nature and consisted of nails or nail fragments, barbed wire fragments, wire fencing fragments, brick or brick fragments, mortar, and terra cotta pipe. Ceramics and bottle glass sherds were also recovered from some locations. The artifacts recovered from these areas are considered as isolated finds and are not significant.

7.2 RECOMMENDATIONS

The archaeological sites identified from SEAD-12 were evaluated for National Register eligibility, based on the results of archival research, the presence or absence of structural remains and features, artifact density, site integrity, and the historic context. The National Register Criteria of Eligibility (36 CFR 60.4) was applied, following Secretary of Interior guidelines, in order to evaluate the potential significance of these sites. Table 7.2 summarizes the results of the archaeological survey by area and presents management recommendations. Only two sites (A09909.000003 and A09909.000009) are recommended potentially eligible to the National Register under criterion "d." Both sites appear to have the potential to contain information important to regional history, and they retain a sufficient degree of integrity to warrant further investigations. It is recommended that Sites A09909.000003 and A09909.000009 be evaluated for National Register eligibility, should they be impacted by remediation, construction, or other types of ground-disturbing activities.

Archaeological Area	Historical Artifacts	EM Target & No.	Isolated Find	Archaeological Site	NRHP Eligibility ¹
Archeological Area # 1	Yes	Yes EM-5		A09909.000003	PE
Archeological Area # 2	Yes	Yes EM-40		A09909.000004	NE
Archeological Area # 3	Yes	Yes EM-33, 34, 35		A09909.000005	NĔ
Archeological Area # 4	Yes	No		A09909.000006	NE
Archeological Area # 5	No	No	-	-	N/A
Archeological Area # 6	No	No	-	-	N/A
Archeological Area # 7	Yes	No		A09909.000007	NE
Archeological Area # 8	Yes	Yes EM-16		A09909.000008	NE
Archeological Area # 9	Yes	No		A09909.000009	PE
Archeological Area # 10	Yes	No	Yes	-	NE
Archeological Area # 11	Yes	No	Yes	-	NE
Archeological Area # 12	No	Yes EM-4	-	-	N/A
Archeological Area # 13	No	No	-	-	N/A
Archeological Area # 14	Yes	No	Yes	-	NE
Archeological Area # 15	No	No	-	-	N/A
Archeological Area # 16	Prehistoric	No	Yes	A09909.000010	NE
Archeological Area # 17	Yes	Yes EM-12, 13, 30	Yes		NE
Archeological Area # 18	Yes	Yes EM-8	Yes		NE
Archeological Area # 19	Yes	Yes EM-9, 10, 31	Yes		NE
Archeological Area # 20	Yes	Yes EM-28	Yes		NE
Archeological Area # 21	No	Yes EM-7	-	_	N/A
-	Yes	Yes EM-29	Yes	-	N/A

Table 7.2 Summary of Archaeological Sites and Recommendations

PE = Potentially Eligible (criterion "d")

NE = Not Eligible

N/A = Not Applicable

Site A09909.000003 dates from the second-quarter of the nineteenth century and contains intact structural remains (foundation wall) and several features (e.g., cellar fill, a possible well, and a cobble surface or pathway). Artifacts recovered from the site represent a variety of a fact groups including: architectural (57%), domestic (24%), fauna (12%), and several others. ifact density is relatively high at the site, especially along the eastern edge of the site, adjacer o the large disposal pit (?), target EM-5. Because of the high density of nineteenth century rtifacts located along the transects immediately adjacent to EM-5, it is further recommend that this area be monitored by an archaeologist during any investigative backhoe trenching conducted at target EM-5. The monitoring of backhoe trenching at EM-5 is recommended in addition to the Phase II evaluation at the site.

Site A09909.000009 contains a well and a dense surface scatter of domestic artifacts. Diagnostic artifacts date from ca. 1900-1920, although it is possible that some of the artifacts may date from the late nineteenth century. The well, constructed of uncut field stone, was not tested for two reasons: (1) it was determined that a single shovel test would be insufficient to assess the integrity of the deposits (i.e., a larger area should be excavated) and (2) the Health and Safety Plan made to provisions for the excavation of wells or other "enclosed space features". Based on the integrity of the well feature, the density of artifacts from the associated dump, and the restricted timeframe from which the artifacts appear to have been deposited, it is recommended that Site A09909.000009 be evaluated for National Register. It is further recommended that Site A09909.000009 be evaluated for National Register eligibility, if it is impacted by remediation, construction, or other types of ground-disturbing activities.

The remaining six sites (A09909.000004 - A09909.000008 and A09909.000010) and the eight isolated finds lack both integrity and the potential to contribute information important to regional history. Because these archaeological resources lack both integrity and the potential to contain significant information, it is recommended that these archaeological resources are not eligible for the National Register. Therefore, no additional investigations are warranted at these locations.

SECTION 8.0

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South, Stanley

1977 Method and Theory in Historical Archaeology. Academic Press, New York.

Spafford, Horatio Gates

1813 A General Summary, Geographical and Statistical View of the County of Seneca in the State of New *York*. W.E. Morrison & Co., Ovid, New York.

Tooker, Elisabeth

1967 Iroquois Culture, History, and Prehistory: Proceedings of the 1965 Conference on *Iroquois Research*. Editor. New York State Museum and Science Service. Albany, New York.

Toulouse, Julian Harrison

1971 Bottle Makers and Their Marks. Thomas Nelson, New York.

Trager, James

1992 The Peoples Chronology. Henry Holt, New York.

Trubowitz, Neal L.

1983 Highway Archaeology and Settlement Study in the Genesee Valley. Occasional Publications in Northeast Anthropology 8. Franklin Pierce, NH.

Tuck, James A.

1978 Northern Iroquoian Prehistory. In: Handbook of North American Indians, Volume 15. Edited by Bruce G. Trigger. Pp 322-334. Smithsonian Institution, Washington, D.C.

United States Geological Survey (USGS)

1902 Geneva Quadrangle. 15 minute series. Map on file, USGS, Reston, Virginia.

Wallace, Anthony F.C.

1970 The Death and Rebirth of the Seneca. Albert A. Knopf, New York.

Watrous, Hilda

1982 The County Between the Lakes: A History of Seneca County, New York. Seneca County Board of Supervisors, Waterloo, New York.

White, Henry P. and Burton D. Munhall

1977 Cartridge Headstamp Guide. Revised by R.T. Huntington and D.R. Dunn. H.P. White Laboratory, Bel Air, Maryland.

Wilson, Bill and Betty Wilson

1971 19th Century Medicine in Glass. 19th Century Hobby & Publishing, Amador City, California.

Woodhead, E.I. and C. Sullivan and G. Gusset

1984 Lighting Devices in the National Reference Collection, Parks Canada. Studies in Archaeology, Architecture and History, National Historic Parks and Sites Branch, Parks Canada, Environment Canada.

Wray, Charles F.

1973 Manual for Seneca Iroquois Archaeology: Primitive Cultures. Rochester, New York.

Zumwalt, Betty

1980 Ketchup, Pickles, Sauces - 19th Century Food in Glass. Mark West Publishers, Fulton, California.

APPENDIX A NEW YORK STATE ARCHAEOLOGICAL SITE FORMS

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Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12



NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

For Office Use Only--Site Indentifier SAMPLE FARMSTEAD

Project Identifier Seneca Army Depot, SEAD-12 Date September 29, 1997 Your Name Julie Abell Phone (703) 591-7575 Address 10521 Rosehaven Street Fairfax, Virginia Zip 22030
Organization (if any) Parsons Engineering Science, Inc.
 Site Identifier(s) A09909.000003 (A.K.A. SAD-6 T. Sample Farmstead: County Seneca One of the following: Klein 1986 report) City Town Varick (Depot Headquarters in Romulus) Incorporated Village Unincorporated Village or Hamlet
3. Present Owner Seneca Army Depot Activity (SEDA) Address 5786 State Route 96 Romulus, New York Zip 14541-5001
4. Site Description (check all appropriate categories): Structure/site Superstructure: completepartialcollapsednot evident_X Foundation: abovebelowX_(ground level) not evident Structural subdivisions apparentOnly surface traces visible X_Buried traces detected List construction materials (be as specific as possible): Subsurface mortared brick, load-bearing wall for structure approximately 80cm (31 inches) wide found in center of site; probable stone-lined well and cobble surface adjoining foundation.
Grounds
* Submission should be 8 1/2" X 11", if feasible
Investigator <u>Parsons Engineering Science, Inc.</u> Manuscript or published report(s) (reference fully): SEE ATTACHMENT A

Present repository of materials _____Parsons Engineering Science, Inc.____

•

б.	Site inventory: a. date constructed or occupation period <u>ca. 1820s-1940s</u> b. previous owners, if known Thomas Sample, Sr. and wife (ca.1820s-1870s Thomas Sample, Jr. and wife (1870s-1900s); william Hogan and wife (1900s-1940s)
	c. modifications, if known
	(append additional sheets, if necessary)
7.	Site documentation (append additional sheets, if necessary): a. Historic map references SEE ATTACHMENT A 1) Name Date Source Present location of original, if known
	2) Name Date Source Present location of original, if known b. representation in existing photography None Known 1) Photo date Where located 2) Photo date Where located
	c. Primary & secondary source documentation(reference fully) Seneca County, NY deeds;
	Agnes McGrane 1975 Varick, A History of Varick, Seneca County, New York. The Seneca d. Persons with memory of site: Falls Historical Society, Seneca Falls, 1) NameAddressNY. 2) NameAddress
8. A Total A p	List of material remains other than those used in construc- tion (be as specific as possible in identifying object and material): rtifact Types: butchered animal bone; ballclay tobacco pipe stem; creamware, pearlware, whiteware/ironstone, coarse and refined redware, and stoneware ceramics; blown-in-mold and machine-made bottle/ vessel glass; coal and clinker; cut and wire nails; window glass; brick and mortar rtifact Count: 350 EST. Date Range: early 19th century, and late 19th-20th century concentrations f prehistoric materials are evident, check here and fill out rehistoric site form.
9.	Map References: Map (s) showing exact location and extent of site must accompany this form and must be identified be source & date. Keep this submission to 8 1/2" X 11" if feasible.
USG	S 7 1/2 Minute Series Quad. Name Geneva South, NY
For	Office Use OnlyUTN Coordinates
10.	Photography (optional for environmental impact survey): Please submit a 5" X 7" black & white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.

NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

5. Site Investigation (Continued)

Manuscript or published report(s):

J. Sanderson Stevens, Julie Abell, John Rutherford and Carter Shields

- 1998 Phase I Archaeological Survey of the Radiological Waste Burial Sites (SEAD-12), Seneca Army Depot Activity, Romulus, New York. Prepared by Parsons Engineering Science, Inc., Fairfax, Virginia for U.S. Army Corps of Engineers, Huntsville Division.
- Joel I. Klein
- 1986 An Archeological Overview and Management Plan for Seneca Army Depot. Prepared by Envirosphere Company, Lyndhurst, New Jersey for National Park Service and U.S. Army Materiel Development and Readiness Command.
- 7. Site documentation (Continued)
 - a. Historic map references
 - P.J. Browne
 - 1850- Map of Seneca County, New York. A.G. Gillette, Philadelphia. On file t the Geography and Maps Division, Library of Congress.
 - William T. Gibson
 - 1850 <u>Topographical Map of Seneca County, New York</u>. Made for J. Delafield, Esq. On file at New York State Archives.
 - William T. Gibson
 - 1852 <u>Topographical Map of Seneca County, New York</u>. Made for J. Delafield, Esq. On fiel at New York State Archives.
 - O.W. Gray
 - 1859 Map of Cayuga and Seneca Counties, New York. Published by A.R.Z. Dawson, Philadelphia. On file at New York State Archives.
 - Beach Nichols
 - 1874 <u>Atlas of Seneca County, New York</u>. Pomeroy Whitman and Co., Philadelphia. On file at New York State Archives.

USGS

- 1902 <u>Geneva, NY</u>. 15 minute quadrangle. On file at Geography and Maps Division, Library of Congress.
- H.N. Pratt
- 1909 Seneca County, New York. Published by C.C. Ferris, Syracuse, New York.
 - On file at the Geography and Maps Division, Library of Congress.



Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12

NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

For Office Use Only--Site Indentifier SAMPLE FARMSTEAD

Project IdentifierSeneca Army Depot, SEAD-12Date September 2Your NameJulie AbellPhone (703) 591-7575Address10521 Resenaven Street	<u>9</u> , 1997
Zip22030	
Organization (if any) Parsons Engineering Science, Inc.	
1. Site Identifier(s) A09909.000004 (A.K.A. SAD-10 W.G. Sample farms	tead:
2. County Seneca One of the following: Klein 1986	report)
City	r ,
Town Varick (Depot Headquarters in Romulus)	
Incorporated Village	
Unincorporated village or Hamlet	
3. Present Owner Seneca Army Depot Activity (SEDA)	
Address 5786 State Route 96	

Adress		5786 State Route 96
		Romulus, New York
	Zip	14541-5001

4. Site Description (check all appropriate categories): Structure/site Superstructure: complete_partial_collapsed_not evidentX Foundation: above_below_(ground level) not evidentX Structural subdivisions apparent_Only surface traces visible_Buried traces detected List construction materials (be as specific as possible):

N/A

Grounds

Under cultivation Sustaining erosion Woodland Upland Never cultivated X Previously cultivated Floodplain X Pastureland Soil Drainage: excellent good fair poor X Slope: flat gentle X moderate steep Distance to nearest water from structure (approx.) Reeder Creek 1500 Elevation: 635 feet feet

5. Site Investigation (append additional sheets, if necessary: Surface--date (s) <u>8/11/97=8/15/97</u> ________Site Map (Submit with form*) ______Collection Subsurface--date (s) <u>8/20/97 to 8/21/97</u> Testing: shovel X coring_other_______unit size^{50cm} diamete no. of units <u>40</u> (Submit plan of units w/form*) Excavation: unit size _______no. of units _______(Submit plan of units w/form*) * Submission should be 8 1/2" X 11", if feasible

Investigator <u>Parsons Engineering Science, Inc.</u> Manuscript or published report(s) (reference fully):

SEE ATTACHMENT A

Present repository of materials _____ Parsons Engineering Science, Inc.____

- 6. Site inventory:
 - a. date constructed or occupation period ca. 1860s-1940s

b. previous owners, if known Thomas Sample and wife (ca. 1820s-1868); Wilson G. Sample and wife (1868-1882); Theodore and/or Ruth Russell (1882-1898); James and Margaret McGrane (1868-1940s)
 c. modifications, if known

(append additional sheets, if necessary)

- Site documentation (append additional sheets, if necessary): 7. a. Historic map references SEE ATTACHMENT A
 - 1) Name Date Source Present location of original, if known
 - 2) Name Date Source Present location of original, if known representation in existing photography None Known b.
 - 1) Photo date _____ Where located Photo date Where located 2)
 - C. Primary & secondary source documentation(reference fully)

Seneca County, NY deeds; McGrane 1975

d. Persons with memory of site:

1) Name	Address
2) Name	Address

8. List of material remains other than those used in construction (be as specific as possible in identifying object and material):

Artifact Types: leather shoe fragments; butchered bone; pearlware (n=1), whiteware/ironstone (n=20), and redware ceramics; bottle/ vessel glass; lamp chimney glass; ferrous fragments with rivets and strap loops (poss. plow parts); ferrous crow bar; bolts/nuts; cut and wire nails; brick and mortar; coal

Total Artifacts Count: 160 Est. Date Range: mostly late 19th-20th century If prehistoric materials are evident, check here and fill out prehistoric site form.

Map References: Map (s) showing exact location and extent of 9. site must accompany this form and must be identified be source & date. Keep this submission to 8 1/2" X 11" if feasible.

USGS 7 1/2 Minute Series Quad. Name Geneva South, NY

For Office Use Only--UTN Coordinates

10. Photography (optional for environmental impact survey): Please submit a 5" X 7" black & white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.

NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

5. Site Investigation (Continued)

Manuscript or published report(s):

J. Sanderson Stevens, Julie Abell, John Rutherford and Carter Shields

- 1998 Phase I Archaeological Survey of the Radiological Waste Burial Sites (SEAD-12), Seneca Army Depot Activity, Romulus, New York. Prepared by Parsons Engineering Science, Inc., Fairfax, Virginia for U.S. Army Corps of Engineers, Huntsville Division.
- Joel I. Klein
- 1986 An Archeological Overview and Management Plan for Seneca Army Depot. Prepared by Envirosphere Company, Lyndhurst, New Jersey for National Park Service and U.S. Army Materiel Development and Readiness Command.
- 7. Site documentation (Continued)
 - a. Historic map references

O.W Gray

1859 Map of Cayuga and Seneca Counties, New York. Published by A.R.Z. Dawson, Philadelphia. On file at New York State Archives.

Beach Nichols

1874 <u>Atlas of Seneca County, New York</u>. Pomeroy, Whitman & Co., Philadelphia. On file at New York State Archives.


Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12

NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM For Office Use Only--Site Indentifier MCKNIGHT FARMSTEAD Project Identifier Seneca Army Depot, SEAD-12 Date September 29, 1997 Your Name Julie Abell Phone (703) 591-7575 Address 10521 Rosehaven Street Fairfax, Virginia Zip 22030 Organization (if any) Parsons Engineering Science, Inc. 1. Site Identifier(s) A09909.000005 (a.k.a. SAD-201 J. McKnight farmstead: 2. County Seneca One of the following: Klein 1986 City report) Town Varick (Depot Headquarters in Romulus) Unincorporated Village or Hamlet Incorporated Village 3. Present Owner Seneca Army Depot Activity (SEDA) Address 5786 State Route 96 Romulus, New York Zip 14541-5001 4. Site Description (check all appropriate categories): Structure/site Superstructure: complete partial collapsed not evident X Foundation: above below (ground level) not evident X ______Structural subdivisions apparent__Only surface traces visible Buried traces detected List construction materials (be as specific as possible): N/A Grounds ____Under cultivation X Sustaining erosion ____Woodland __Upland ____Never cultivated ____XPreviously cultivated ____Floodplain X Pastureland Soil Drainage: excellent good fair poor X Slope: flat gentle X moderate steep Distance to nearest water from structure (approx.) Reeder Creek 1000 Elevation: 630 feet feet to west 5. Site Investigation (append additional sheets, if necessary: Surface--date (s) <u>8/11/97-8/15/97</u> Site Map (Submit with form*) Collection Collection Subsurface--date (s) 8/16/97 to 8/18/97 Testing: shovel X coring other unit size 50cm diameter no. of units 48 (Submit plan of units w/form*) Excavation: unit size no. of units (Submit plan of units w/form*) * Submission should be 8 1/2" X 11", if feasible Investigator Parsons Engineering Science, Inc. Manuscript or published report(s) (reference fully): SEE ATTACHMENT A. Present repository of materials ____ Parsons Engineering Science, Inc.___

б.	sit a. b. c.	e inventory: date constructed or occupation period <u>centrueis</u> previous owners, if known Anna McKnight and Clara Cook (1902-1940s); John McKnight, Jr. (1851-1902); John McKnight, Sr. (1825-1851) modifications, if known
	(ap	pend additional sheets, if necessary)
7.	sit a.	e documentation (append additional sheets, if necessary): Historic map references SEE ATTACHMENT A. 1) Name DateSource Present location of original, if known
	b.	2) Name Date Source Present location of original, if known representation in existing photography None Known 1) Photo date Where located 2) Photo date Where located
	c.	Primary & secondary source documentation(reference fully)
		Seneca County, NY deeds: McGrane 1975
	d.	Persons with memory of site: 1) Name Address Address
8. If pr	List tion mat Arti Cotal pre cehis	<pre>c of material remains other than those used in construc- n (be as specific as possible in identifying object and cerial): fact Types: animal bone and oyster shell; whiteware and redware ceramics,</pre>
9.	Мар	References: Map (s) showing exact location and extent of site must accompany this form and must be identified be source & date. Keep this submission to 8 1/2" X 11" if feasible.
USGS	7 1	/2 Minute Series Quad. Name Geneva South, NY
For	offi	ce Use OnlyUTN Coordinates
10.	Phot Plea curr on a	ography (optional for environmental impact survey): se submit a 5" X 7" black & white print(s) showing the ent state of the site. Provide a label for the print(s) separate sheet.

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NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

5. Site Investigation (Continued)

Manuscript or published report(s):

J. Sanderson Stevens, Julie Abell, John Rutherford and Carter Shields

- 1998 Phase I Archaeological Survey of the Radiological Waste Burial Sites (SEAD-12), Seneca Army Depot Activity, Romulus, New York. Prepared by Parsons Engineering Science, Inc., Fairfax, Virginia for U.S. Army Corps of Engineers, Huntsville Division.
- Joel I. Klein
- 1986 An Archeological Overview and Management Plan for Seneca Army Depot. Prepared by Envirosphere Company, Lyndhurst, New Jersey for National Park Service and U.S. Army Materiel Development and Readiness Command.
- 7. Site documentation (Continued)
 - a. Historic map references

Beach Nichols

1874 Atlas of Seneca County, New York. Pomeroy Whitman & Co., Philadelphia. On file at New York State Archives.

USGS

- 1902 <u>Geneva, NY</u>. 15 minute quadrangle. On file at Geography and Maps Division, Library of Congress.
- H.N. Pratt
- 1909 <u>Seneca County, New York</u>. Published by C.C. Ferris, Syracuse, New York. On file at the Geography and Maps Division, Library of Congress.



Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12

.

NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

For Office Use Only--Site Indentifier JOHN MCKNIGHT FARMSTEAD

Project IdentifierSeneca Army Depot, SEAD-12Date September 29, 1997Your NameJulie AbellPhone (703) 591-7575Address10521 Rosehaven StreetFairfax, VirginiaZip22030		
Organization (if any) Parsons Engineering Science, Inc		
 Site Identifier(s) A09909.000006 (a.k.a. SAD-31 John McKnight Farmstead: County Seneca One of the following: Klein 1986 report) City Town Varick (Depot Headquarters in Romulus) Incorporated Village Unincorporated Village or Hamlet 		
3. Present Owner Seneca Army Depot Activity (SEDA) Address 5786 State Route 96 Romulus, New York Zip 14541-5001		
4. Site Description (check all appropriate categories): Structure/site Superstructure: complete_partial_collapsed_not evident Foundation: above_below x (ground level) not evident Structural subdivisions apparent_Only surface traces visible X Buried traces detected List construction materials (be as specific as possible): Stone and brick, mortared foundation rubble, flagstones and stone-lined well foundation		
Grounds Under cultivation <u>X</u> Sustaining erosion <u>WoodlandUpland</u> Never cultivated <u>X</u> Previously cultivated <u>Floodplain</u> <u>X</u> Pastureland <u>Soil Drainage: excellent good fair poor <u>X</u> Slope: flat <u>X</u> gentle <u>moderatesteep</u> Distance to nearest water from structure (approx.) <u>Reeder Creek 1500</u> <u>Elevation:640 feet</u></u>		
<pre>5. Site Investigation (append additional sheets, if necessary: Surfacedate (s) <u>8/11/97=8/15/97</u> </pre>		
Investigator Parsons Engineering Science, Inc. Manuscript or published report(s) (reference fully):		
SEE ATTACHMENT A		

Present repository of materials <u>Parsons Engineering Science, Inc.</u>

6. Site inventory:

b.

- a.
- date constructed or occupation period 1820s-1940s previous owners, if known Anna McKnight and Clara Cook (1902-1940s) John McKnight, Jr. (1851-1902), John McKnight, Sr. (1825-1851) b.
- modifications, if known C.

(append additional sheets, if necessary)

- 7. Site documentation (append additional sheets, if necessary): Historic map references SEE ATTACHMENT A. a.
 - 1) Name Source Date Present location of original, if known
 - 2) Name Date Source Present location of original, if known representation in existing photography None Known
 - 1) Photo date Where located
 - 2) Photo date Where located
 - c. Primary & secondary source documentation(reference fully)

Seneca County, NY deeds

- Persons with memory of site: d. 1) Name Address 2) Name Address
- List of material remains other than those used in construc-8. tion (be as specific as possible in identifying object and material):

Artifact Types: mammal bone; whiteware and stoneware ceramics; bottle/ vessel glass; cut and wire nails; window glass; brick and mortar

Total Artifact Count: 40 Estimated Date Range: mid-late 19th and early 20th century If prehistoric materials are evident, check here and fill out prehistoric site form.

Map References: Map (s) showing exact location and extent of 9. site must accompany this form and must be identified be source & date. Keep this submission to 8 1/2" X 11" if feasible. Geneva South, NY and

Romulus, NY (overlaps both maps) USGS 7 1/2 Minute Series Quad. Name

For Office Use Only--UTN Coordinates

10. Photography (optional for environmental impact survey): Please submit a 5" X 7" black & white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.

NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

5. Site Investigation (Continued)

Manuscript or published report(s):

J. Sanderson Stevens, Julie Abell, John Rutherford and Carter Shields

- 1998 Phase I Archaeological Survey of the Radiological Waste Burial Sites (SEAD-12), Seneca Army Depot Activity, Romulus, New York. Prepared by Parsons Engineering Science, Inc., Fairfax, Virginia for U.S. Army Corps of Engineers, Huntsville Division.
- Joel I. Klein
- 1986 An Archeological Overview and Management Plan for Seneca Army Depot. Prepared by Envirosphere Company, Lyndhurst, New Jersey for National Park Service and U.S. Army Materiel Development and Readiness Command.
- 7. Site documentation (Continued)
 - a. Historic map references
 - P.J. Browne
 - 185 <u>Map of Seneca County, New York</u>. A.G. Gillette, Philadelphia. On file at the Geography and Maps Division, Library of Congress.
 - William T. Gibson
 - 1852 <u>Topographical Map of Seneca County, New York</u>. Made for J. Delafield, Esq. On file at New York State Archives.
 - O.W. Gray
 - 1859 Map of Cayuga and Seneca Counties, New York. Published by A.R.Z. Dawson, Philadelphia. On file at New York State Archives.



Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12

NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM For Office Use Only--Site Indentifier JESSE'S DUMP Project Identifier Seneca Army Depot, SEAD-12 Date September 29, 1997 Your Name Julie Abell Phone (703) 591-7575 Address 10521 Rosehaven Street Fairfax, Virginia Zip 22030 Organization (if any) Parsons Engineering Science, Inc. 1. Site Identifier(s) ______ A09909.000007
2. County ______ Seneca ______ One of the following: City Town Varick (Depot Headquarters in Romulus) Incorporated Village Unincorporated Village or Hamlet 3. Present Owner <u>Seneca Army Depot Activity (SEDA)</u> Address <u>5786 State Route 96</u> Address 5786 State Route 96 Romulus, New York Zip 14541-5001 4. Site Description (check all appropriate categories): Structure/site Superstructure: complete partial collapsed not evident X Foundation: above below (ground level) not evident X Structural subdivisions apparent Only surface traces visible Buried traces detected List construction materials (be as specific as possible): N/A - dump site only Grounds <u>Under cultivation</u> Sustaining erosion \underline{X} Woodland Upland Never cultivated Previously cultivated Floodplain Pastureland Soil Drainage: excellent good fair poor X Slope: flat X gentle moderate steep Distance to nearest water from structure (approx.) intermittent drainage Elevation: 660 feet (tributary of Reeder Creek) is 500 feet to north 5. Site Investigation (append additional sheets, if necessary: Surface--date (s) <u>8/11/97=8/15/97</u> Site Map (Submit with form*) X Collection ubsurface--date (s) <u>8/27/97</u> Testing: shovelXcoring_other_____unit size^{50cm diameter} no. of units <u>19</u> (Submit plan of units w/form*) Excavation: unit size_____ no. of units ______ Subsurface--date (s) 8/27/97 (Submit plan of units w/form*)
* Submission should be 8 1/2" X 11", if feasible Investigator Parsons Engineering Science, Inc. Manuscript or published report(s) (reference fully): J. Sanderson Stevens, Julie Abell, John Rutherford and Carter Shields 1998 Phase I Archaeological Survey of the Radiological Waste Burial Sites (SEAD-12), Seneca Army Depot Activity, Romulus, New York. Prepared by Parsons Engineering Science, Inc., Fairfax, Virginia for U.S. Army Corps of Engineers, Huntsville Division. Present repository of materials ______ Parsons Engineering Science, Inc._____

- Site inventory: 6.
 - a.
 - date constructed or occupation period <u>ca. 1880-1915</u> previous owners, if known William Hogan and wife (1900s-1940s); b.
 - Thomas Sample, Jr. and wife (1870s-1900s); Thomas Sample, Sr. and wife (ca. 1820s-1870s) modifications, if known c.
 - (append additional sheets, if necessary)
- 7. Site documentation (append additional sheets, if necessary): None a. Historic map references
 - 1) Name Date Source Present location of original, if known 2) Name Date Source Present location of original, if known
 - representation in existing photography None Known b. Where located 1) Photo date 2) Photo date Where located
 - c. Primary & secondary source documentation(reference fully)

Seneca County, NY deeds

d. Persons with memory of site:

1)	Name	Address
2)	Name	Address

List of material remains other than those used in construc-8. tion (be as specific as possible in identifying object and material):

ballclay tobacco pipe; leather shoe fragment; porcelain, semi-porcelain, whiteware, ironstone, yellowware, stoneware, and redware ceramics, blown-in-mold and early machine-made bottle glass; cupreous lamp burners and lamp chimney glass; cut and wire nails, saw blade; window glass Artifact Types:

. .

Estimated Date Range: ca. 1880-1915 Total Artifact Count: 600 If prehistoric materials are evident, check here and fill out prehistoric site form.

9. Map References: Map (s) showing exact location and extent of site must accompany this form and must be identified be source & date. Keep this submission to 8 1/2" X 11" if feasible.

USGS 7 1/2 Minute Series Quad. Name Romulus, NY

For Office Use Only--UTN Coordinates

10. Photography (optional for environmental impact survey): Please submit a 5" X 7" black & white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.



Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12



NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM For Office Use Only--Site Indentifier ANDY'S DUMP Project Identifier Seneca Army Depot, SEAD-12 Date September 29, 1997 Your NameJulie AbellPhone (703)591-7575Address10521 Rosehaven Street Fairfax, Virginia Zip 22030 Organization (if any) Parsons Engineering Science, Inc. Site Identifier(s) A09909.000008 1. 2. County Seneca One of the following: City Town Varick (Depot Headquarters in Romulus) Incorporated Village Unincorporated Village or Hamlet 3. Present Owner <u>Seneca Army Depot Activity (SEDA)</u> Address <u>5786 State Route 96</u>
 Address
 5786 State Route 96

 Romulus, New York

 Zip
 14541-5001
 4. Site Description (check all appropriate categories): Structure/site Superstructure: complete partial collapsed not evident X Foundation: above below (ground level) not evident X Structural subdivisions apparent Only surface traces visible Buried traces detected List construction materials (be as specific as possible): N/A - dump site only Grounds ___Under cultivation ___Sustaining erosion X Woodland __Upland Never cultivated Previously cultivated Floodplain Pastureland Soil Drainage: excellent good fair poorX Slope: flat X gentle moderate steep Distance to nearest water from structure (approx.) intermittent drainage Elevation: 655 feet (tributary of Reeder Creed) 600 feet to northeast 5. Site Investigation (append additional sheets, if necessary: Surface--date (s) _______8/11/97=8/15/97______ Site Map (Submit with form*) x Collection Subsurface--date (s) 8/27/97 Investigator Parsons Engineering Science, Inc. Manuscript or published report(s) (reference fully): J. Sanderson Stevens, Julie Abell, John Rutherford and Carter Shields 1998 Phase I Archaeological Survey of the Radiological Waste Burial Sites (SEAD-12) Seneca Army Depot Activity, Romulus, New York. Prepared by Parsons Engineerir Science, Inc., Fairfax, Virginia for U.S. Army Corps of Engineers, Huntsville Present repository of materials ______ Parsons Engineering Science, Inc._____

- 6 . Site inventory:
 - a.
 - date constructed or occupation period <u>1930s-1940s</u> previous owners, if known William Hogan and wife (1900s-1940s); Thomas Sample, Jr. and wife (1870s-1900s); Thomas Sample, Sr and wife b.
 - modifications, if known (ca. 1820s-1970s) C.

(append additional sheets, if necessary)

- 7. Site documentation (append additional sheets, if necessary): a. Historic map references None
 - 1) Name Date Source Present location of original, if known
 - Source 2) Name Date Present location of original, if known_ representation in existing photography None Known b.
 - 1) Photo date _____ Where located 2) Photo date Where located
 - c. Primary & secondary source documentation(reference fully) Seneca County, NY deeds
 - d. Persons with memory of site: None Address 1) Name 2) Name Address
- 8. List of material remains other than those used in construction (be as specific as possible in identifying object and material):

Artifact Types: glass button; leather boot upper; decaled porcelain, undecorated ironstone ceramics; machine-made bottle glass

Total Artifact Count: 12

Estimated Date Range: 1930s-1940s

If prehistoric materials are evident, check here and fill out prehistoric site form.

9. Map References: Map (s) showing exact location and extent of site must accompany this form and must be identified be source & date. Keep this submission to 8 1/2" X 11" if feasible.

USGS 7 1/2 Minute Series Quad. Name Romulus, NY

For Office Use Only--UTN Coordinates

10. Photography (optional for environmental impact survey): Please submit a 5" X 7" black & white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.

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Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12



NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

For Office Use Only--Site Indentifier SANDY'S WELL

Project Identifier Seneca Army Depot, SEAD-12 Date September 29, 1997 Your Name Julie Abell Phone (703) 591-7575 Address 10521 Rosehaven Street Fairfax, Virginia Zip 22030
Organization (if any) Parsons Engineering Science, Inc
 Site Identifier(s) <u>A09909.000009</u> County <u>Seneca</u> One of the following: City Townedify <u>Varick (Depot Headquarters in Romulus)</u> Incorporated Village Unincorporated Village or Hamlet
3. Present Owner Seneca Army Depot Activity (SEDA) Address 5786 State Route 96 Romulus, New York Zip 14541-5001
4. Site Description (check all appropriate categories): Structure/site Superstructure: completepartialcollapsednot evident_X Foundation: abovebelow(ground level) not evident_X Structural subdivisions apparentOnly surface traces visible Buried traces detected List construction materials (be as specific as possible): Stone-lined well and dump site (possible related)
GroundsUnder cultivation <u>X</u> Sustaining erosion <u>X</u> Woodland <u>Upland</u> Never cultivated <u>Previously cultivated</u> <u>Floodplain</u> Pastureland Soil Drainage: excellent <u>good</u> fair <u>poor X</u> Slope: flat <u>X</u> gentle <u>moderate</u> <u>steep</u> Distance to nearest water from structure (approx.) <u>Kendig Creek</u> Elevation: <u>660 Feet</u> <u>3000 feet to east; unnamed</u> tributary of Reeder Creek 3000 feet
<pre>5. Site Investigation (append additional sheets, if necessary: Surfacedate (s) <u>8/11/97=8/15/97</u> Site Map (Submit with form*) X Collection Subsurfacedate (s) <u>8/26/97-8/29/97</u> Testing: shovel X coring other unit size^{50cm} diamete: no. of units <u>45</u> (Submit plan of units w/form*) Excavation: unit size no. of units (Submit plan of units w/form*) * Submission should be 8 1/2" X 11", if feasible</pre>
<pre>Investigator Parsons Engineering Science, Inc. Manuscript or published report(s) (reference fully): J. Sanderson Stevens, Julie Abell, John Rutherford and Carter Shields 1998 Phase I Archaeological Survey of the Radiological Waste Burial Sites (SEAD-12). Seneca Army Depot Activity, Romulus, New York. Prepared by Parsons Engineering Science, Inc., Fairfax, Virginia for U.S. Army Corps of Engineers, Huntsville</pre>
Present repository of materials <u>Parsons Engineering Science</u> , Inc.

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- 6. Site inventory:
 - a. date constructed or occupation period ca. 1900-1925
 - previous owners, if known Anna McKnight and Clara Cook (1902-1940s); b.
 - John McKnight, Jr. (1851-1902); John McKnight, Sr. (1825-1851).
 - modifications, if known C.

(append additional sheets, if necessary)

- 7. Site documentation (append additional sheets, if necessary):
 - Historic map references None a.
 - Date Source _____ 1) Name Present location of original, if known
 - 2) Name Date Source Present location of original, if known representation in existing photography None Known b.
 - 1) Photo date _____ Where located _____ 2) Photo date _____ Where located _____
 - c. Primary & secondary source documentation(reference fully) . Seneca County, NY deeds

d.	Pei	rsons	with	memory	of	site:	None	
	1)	Name					Address	
	2)	Name					Address	

List of material remains other than those used in construc-8. tion (be as specific as possible in identifying object and material):

Artifact Types: decaled porcelain, undecorated ironstone, stoneware and tinware bowl; machine-made and bown-in-mold bottle/vessel glass; barbed wire; brick

Total Artifact Count: 100

Estimated Date Range: ca. 1900-1925

- If prehistoric materials are evident, check here and fill out prehistoric site form.
- 9. Map References: Map (s) showing exact location and extent of site must accompany this form and must be identified be source & date. Keep this submission to 8 1/2" X 11" if feasible.

USGS 7 1/2 Minute Series Quad. Name Romulus, NY

For Office Use Only--UTN Coordinates

10. Photography (optional for environmental impact survey): Please submit a 5" X 7" black & white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.



Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12



NEW YORK STATE PREHISTORIC ARCHA	EOLOGICAL SITE INVENTORY FORM
For Office Use OnlySite Identifier	s Rolling Stone
Project IdentifierSeneca Army Depot, SEAD-12Your Name AddressJohn RutherfordIO521 Rosehaven Street Fairfax, VirginiaZip22030	Date September 29, 1997 Phone (03) 591-7575
Organization (if any) Parsons Engineering Sc	ience, Inc.
1. Site Identifier(s) A09909.000010	
2. County <u>Seneca</u> One of following:	City Varick (Depot Headquarters in Incorporated Village Romulus) Unincorporated Village or Hamlet
3. Present Address Commer Seneca Army Depot Activity (5786 State Route 96 Romulus, New York Zip 14541-5001	SEDA)
4. Site Description (check all appropria	te categories):
Site X Stray find Pictograph Burial Surface evidence Material below plow zone X Single component Multicompo	helterWorkshop Mound enVillage X Material in plow zone denceIntact occupation floor f featuresStratified nent
Location Under cultivation X Pastureland Upland Upland	ivated X Previously cultivated Floodplain X Sustaining erosion
Soil Drainage: excellentgood fa Slope: flat <u>X</u> gentlemoderate Distance to nearest water from site (ap Elevation: <u>650 Feet</u>	ir poor _X steep prox.) Intermittent drainage (tributary of Reeder Creek) is 500 feet to Northea
5. Site Investigation (append additional	sheets, if necessary):
Surfacedate(s) 8/11/97 to 9/15/97 Site Map (Submit with form*) Collection	1. I I I I I I I I I I I I I I I I I I I
Subsurfacedate(s) 8/25/97 to 8/30/97 Testing: shovelx_coringother no. of units20(S) unit size ^{50cm} diamete Submit plan of units with form*)
Excavation: unit sizen (Submit plan of units * Submission should be 8½"xll", if	NO. of units with form*) ====================================
Investigator Parsons Engineering Science,	Inc.

Page 2

Manuscript or published report(s) (reference fully):

J. Sanderson Stevens, Julie Abell, John Rutherford and Carter Shields 1998 Phase I Archaeological Survey of the Radiological Waste Burial Sites (SEAD-12), Seneca Army Depot Activity, Romulus, New York. Prepared by Parsons Engineering Science, Inc., Fairfax, Virginia for U.S. Army Corps of Engineers, Huntsville Division. Present repository of materials Parsons Engineering Science, Inc.

6. Component(s) (cultural affiliation/dates):

Late Archaic/Transitional (ca. 1700-700 B.C.)

7 List of material remains (be as specific as possible in identifying object and material): Isolated find:

Onondaga chert projectile point fragment (Orient Fishtail/Susquehanna)

If historic materials are evident, check here and fill out historic site form.

8. Map References: Map or maps showing exact location and extent of site must accompany this form and must be identified by source and date. Keep this submission to 84"x11", if possible.

USGS 74 Minute Series Quad. Name Romulus, New York

For Office Use Only UTM Coordinates

9. Photography (optional for environmental impact survey): Please submit a 5"x7" black and white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.



Source: USGS 7.5 Min. Geneva South (1953/1978) and Romulus (1953) NY Quads Seneca Army Depot, SEAD-12



APPENDIX B ARTIFACT INVENTORY

PARSONS ENGINEERING SCIENCE

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APPENDIX B ARTIFACT INVENTORY

Most of the inventory entries consist of words that are self-explanatory, however others were too lengthy to fit into the printed format and have been abbreviated. The abbreviated codes are listed below. The inventory is ordered by archaeological area and north/east shovel test coordinates within each area.

COLUMN HEADINGS:

STP	Shovel Test Pit
STR	Stratum
MATER	Material
SUB 1, etc.	Subtechnology
BCOL	Body Color
GCOL	Glaze Color
DCOL	Decoration Color
BAG	Bag Number
ART	Artifact Number

COLUMN DATA:

.

GROUP	
ACT	Activity
ARCH	Architectural
CLOTH	Clothing
FAUN	Fauna
DOM	Domestic
PER	Personal
PREH	Prehistoric
UNREC	Unrecognizable

CLASS	
AMMO	Ammunition
BOTT	Bottle
C/F	Clothing/Footwear
CM	Construction material
CONTR	Container
D/P	Draining/plumbing
FAST	Fastener
FC/S	Food consumption/serving
FPREP	Food preparation
FSTOR	Food storage
FURN	Furniture
HARD	Hardware
L/H	Lighting/heating
MAMM	Mammal
REC	Recreation
UNREC	Unrecognizable
VESS	Vessel
WRITE	Writing

MATERIAL

CA	Cupreous Alloy
CE	Coarse earthenware
FA	Ferrous alloy
PORC	Porcelain
RE	Refined earthenware
SW	Stoneware
SYN	Synthetic
WHTMET	White metal
TYPOLOGY	7
AMSW	American Stoneware
AUTO	Machine-molded
BLOWN	Blown-in-Mold
CW	Creamware
HPASTE	Hardpaste porcelain
IS	Ironstone
PW	Pearlware
RB	Rockingham/Bennington
RW	Redware
SEMI-PORC	Semi-porcelain
TERRA	Terra cotta
WRT	Wrought
ww	Whiteware
VW	Vellouware
1 **	1 chow wate
FUNCTION	
BSODA	Baking soda
DPIPE	Drain nine
FW	Flatware
	Hollowayare
	Dharmacautical
	Window papa
WINDOW	window pane
SUP1	
ALDI	Alberry align aloged interior
ALD/I	Another elements
ANCHR	Anchor closure
CODY	Crown cap closure
CORK	Clock closure
	Giazed interior
LG/I	Lead-glazed interior
LIGHT	Lightning closure
SCREW	Screw closure
SG/I	Salt-glazed interior

SUB 2		COLOR	(Body, Glaze and Decoration)
ALB/E	Albany slip-glazed exterior	AMB	Amber
BRI/E	Bristol glazed exterior	AME	Amethyst
G/E	Glazed exterior	AQU	Aqua
LTOOL	Lipping tool	BLK	Black
SG/E	Salt-glazed exterior	BLU	Blue
UG/E	Unglazed exterior	BRN	Brown
	5	BUF	Buff
		CLR	Clear
SUB 3		GLD	Gold
DAVIS	Davis lip	GRN	Green
DECAL	Decalcomania	GRY	Grey
DECAL/G	Decalcomania and gilded	OLV	Olive-green
FLANGE	Flanged lip	PNK	Pink
GROUND	Ground lip	POL	Polychrome
HP	Hand-painted	WHT	White
PATENT	Patent lip	YEL	Yellow
PRESCR	Prescription lip		
ROUND	Rounded lip		
SE	Shell edged		
STRT	Straight lip		
TP	Transfer-printed		
UNDEC	Undecorated		
SUB 4			
FLORAL	Floral style decoration		
FLOW	Flow-blue decoration		
PONTIL	Pontil marked base		

SUB 5 BURN

VALVE

BURN	Burned
BUTCH	Butchered
COMP	Composite materials
EMBOS	Embossed
ETCH	Etched
INCIS	Incised
MOLD	Molded
MMARK	Maker mark
OG	Overglaze decoration
SOLAR	Solarized
STAMP	Stamped

Valve marked base

SEGMENT

BOD	Body
FRAG	Fragment

		NOTES	EM-29, 176.76N/844.44E (NO AREA # HALF-SPHERE, POSS. BICYCLE BELL C			BURNED SHELL PLASTER		(1 cur)		SPALL
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		FUNCTION			MOQNIM		NAIL	NAIL		
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•		Q		E A09						

		GCL
		BCL
	ORY	SUB5
1 9	INVENT	SUB4
SEA	ARTIFACT	SUB3

NOTES		SLIP-GLAZED W/ WHITEWASH CALCINED	SAND/LIME
SEGMENT FRAG	R IM BODY FRAG	RIM RIM BASE BASE FRAG FRAG	BASE/BOD BODY BODY BODY STEM
BCL GCL DCL	BLU	BLL BRN AQU	BRN
sub5	AL SPALL	AL BURN BURN	BURN
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COUNT	/ - M		M F F J O F J O

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SEAD I

"N" IN SQUARE, & "7" (OBEAR-NESTER GL/ CO., EAST ST. LOUIS, ILL. - MARK USED FROM 1915 ONWARD) (TOULOUSE 1971:374) LEFT,"2" BELOW (OWENS-ILLINOIS GLASS (".. CO. " ON HEEL, "N"? IN TRIANGLE W 2-SIDED PHONOGRAPH DISK (1908+) (TRAG 1" DIAMETER NUT W/ 3/8" DIAMETER BOLT W/ RIVETS, STAMPED "SHURHIT PRODUCTS "TIGHT" ON NECK (OLD STYLE LIGHTNING MARK USED FROM 1929-1954) (TOULOUSE "I'" IN DIAMOND & CIRCLE, "12" TO FLAT FRAGS, POSS TIN CAN FRAGS. CURSIVE "..L.." (BALL MASON?) (1849+) (TRAGER 1992:451) SOME W/ MOLDED FACETS "298 2" BELOW ON BASE "...SO..." OR "...OS..." EMBOSSED SUNBURSTS MIN. 2 VESSELS 1971:403) AQUA BLUE 1992:678) STOPPER) CHICAGO" "..ED" "10" BASE/BOD LIP/NECK BOD/BASE SHOULDER WHOLE WHOLE FRAG BODY BASE BASE BODY BODY BODY HEEL BODY FRAG BODY BODY BODY CLR CLR CLR CLR CLR CLR CLR CLR AQU AQU AMB GRN AME AQU EMBOS EMBOS EMBOS EMBOS EMBOS EMBOS EMBOS EMBOS EMBOS SOLAR STAMP SPALL MOLD VALVE UNDEC SCREW LIGHT SAFETY PIN MUSIC DISK SCREW CAP FLOWERPOT NUT/BOLT **FRUITJAR BRACKET** FRUITJAR FRUITJAR LIQUOR L I QUOR MODINIM SCREW BEER 昰 TERRA AUTO AUTO AUTO AUTO IS WHETAL GLASS SYN FA FA F Ł R GARDEN CE CONTR CONTR CONTR **3 UNREC UNREC** FC/S BOTT HARD HARD BOTT 1 CLOTH FAST 1 UNREC HARD REC S ARCH 1 DOM 1 ACT 1 ACT 6 DOM 2 ACT 1 DOM 1 DOM 1 DOM 1 DOM MOD MOD MOD MOD Mod 1 PER 1 DOM 1 DOM ŝ --m -2 -

ARTIFACT INVENTORY

SUB4

SUB3

SUB2

SUB1

FUNCTION

TYPOLOGY

MATER

DUNT GROUP CLASS

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BCL GCL DCL SEGMENT SUB5

NOTES

SEAD I ARTIFACT INVENTORY .

L DCL SEGMENT NOTES	FRAG POSS. LIGHTWING STOPPER WIRE P			FRAG STAMPED "SU"	FRAG	SAND/LIME	W/ LARGE STONES	ANTHRACITE	MANDIBLE INCL. 4 TEETH	FRAG	RIM 670N/95.5E, FEATURE 3, LVL. 1	WEST OF FEAT. 2)	BODY 670N/95.5E, FEATURE 3, LVL. 1	WEST OF FEAT. 2), IMITATION JA	STYLE	BODY 670N/95.5E, FEATURE 3, LVL. 1	WEST OF FEAT. 2), YELLOW-GREEN	BODY	FRAG POSS. BRACKET OR LATCH PART	FRAG				FRAG		LK RODY
BCL GC				BUF												YEL										
SUB5				STANP						BUTCH																
SUB4																										
SUB3											UNDEC															
SUB2																										1 G/E
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FUNCTION	WIRE	NAIL	NAIL										Ŧ					FLOWERPOT	BRACKET?	WIRE	NAIL					TH I
TYPOLOGY		WIRE	CUT								C		RW					TERRA			WIRE					na Na
MATER	FA	FA	FA	BRICK	BRICK	MORTAR	PLASTER	COAL	BONE	BONE	RE		RE			GLASS		CE	FA	FA	FA	BRICK	PLASTER	BONE	BRICK	ų
SSALS	ARD	HARD	HARD	W	W	N	W	H/H	PIG	MAMM	FC/S		FC/S			VESS		GARDEN	HARD	HARD	HARD	S	CM	MAMM	B	FPREP
NT GROUP (1 UNREC P	2 ARCH	5 ARCH	1 ARCH	8 ARCH	2 ARCH	5 ARCH	1 FUEL 1	2 FAUN	5 FAUN	1 DOM		6 DOM			1 DOM		1 ACT	1 UNREC	1 UNREC	2 ARCH	5 ARCH	1 ARCH	1 FAUN	1 ARCH	1 DOM

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BONE	PLASTER	BRICK	FA	FA	GLASS	CE	RE	RE	RE	RE		BRICK	BONE	GLASS	BRICK	FA	FA	FA	FA	FA	RE	RE	RE	BONE	PLASTER	BRICK	FA	CE	-	MATER					
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							FLORA																							SUB4	T INVENI	EAD I			
BURN					BURN	SPALL	•														BURN		SPALL					SPALL		SUB2	ORY				
					CLR	BR	÷							AQU														CL		BCL GC					
						Z	BLU	BRN																				R		L DCL					
					BODY	BODY	BODY	BODY	BODY	BASE						LINK FRA	WHOLE				BODY	BODY	BASE					BODY		SEGMENT					
	W/ WHITEWASH			FLAT FRAG.			LIGHT BLUE PRINT									G	WITH 2 WASHERS				SPALL									NOTES					

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CHAIN	NAIL		NAIL		NAIL	JAR	WINDOW	NAIL	H	H		FUNCTION		
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FRAG	FRAG					RIM		FRAG	RIM	BODY		L SEGMENT		
2 LINKS, EACH CA. 2" LONG IN F									FOLDED FRAG.			NOTES		
	1 ACT HARD FA CHAIN	3 ARCH HARD FA CUT MAIL FRAG 1 ARCH HARD FA MIRE MAIL FRAG 1 ACT HARD FA CHAIN FRAG 2 LINKS, EACH CA. 2" LONG IN FRAG 1 ACT HARD FA CHAIN FRAG 2 LINKS, EACH CA. 2" LONG IN FRAG	1 ARCH CN BRICK 3 ARCH HARD FA CUT MAIL 1 ARCH HARD FA UIRE NAIL 1 ARCH HARD FA UIRE NAIL	1 ARCH HARD FA CUT MAIL 1 ARCH HARD FA CUT MAIL 3 ARCH HARD FA CUT MAIL 1 ARCH HARD FA VIRE NAIL 1 ARCH HARD FA VIRE NAIL	1 ARCH CM BRICK 1 ARCH HARD FA CUT NAIL 1 ARCH HARD FA CUT NAIL 3 ARCH HARD FA CUT NAIL 3 ARCH HARD FA CUT NAIL 1 ARCH HARD FA VIRE NAIL 1 ARCH HARD FA VIRE NAIL 1 ARCH HARD FA CUT NAIL 1 ARCH HARD FA CUT NAIL 1 ARCH HARD FA VIRE NAIL 1 ARCH HARD FA VIRE NAIL 1 ARCH HARD FA VIRE NAIL	J AKCH HARD FA UT HAIL 1 ARCH HARD FA CUT HAIL	1 DOM FSTOR SV AMS SC/1 SC/E GRY GRY RIM 3 ARCH MADD FA CUT MALL MALL HARD FA VIRE MALL 1 ARCH MADD FA CUT MALL HARD FA CUT MALL 1 ARCH MADD FA CUT MALL HARD FA CUT MALL 1 ARCH MADD FA CUT MALL FA FA FA 3 ARCH MADD FA CUT MALL FA FA 1 ARCH MADD FA CUT MALL FA 3 ARCH MARD FA CUT MALL FA 3 ARCH MARD FA CUT MALL FA 3 ARCH MARD FA CUT MALL 1 ARCH MARD FA CUT MALL	2 ARCH CH GLASS WINDOW AQU 1 DOM FSTOR SN MSN JAR SG/1 SG/E GRY GRY RIN 1 ARCH HARD FA CUT MAIL SG/1 SG/E GRY GRY RIN 1 ARCH HARD FA CUT MAIL SG/1 SG/E GRY GRY RIN 1 ARCH HARD FA CUT MAIL SG/1 SG/E GRY GRY RIN 1 ARCH HARD FA CUT MAIL SG/1 SG/E FRAG 1 ARCH HARD FA CUT MAIL FRAG 1 ARCH HARD FA CUT MAIL 1 ARCH HARD FA CUT <td>3 ARCH MAD FA WIRE WALL FRAG 1 ARCH CH BRICK WINDOW FA CUT MALL 1 ARCH MAD FA CUT MALL FRAG 1 ARCH MAD FA CUT FRAG CUT</td> <td>1 DIM FC/S RE 15 H4 UNDEC RIM FUDED RIM 1 UNREC IVA IVARE IVA IVARE IVA IVARE IVA IVARE IVA IVARE IVA</td> <td>1 DORFRECENHLG/ESPALBNBOY1 UNRECFE15HHUNDECFIFI1 UNRECFRBRICKHIHIFIFRG1 UNRECGNBRICKHIHIFIFRG1 ARCHGNBRICKHISC/I SC/EGRY GRYFRG1 ARCHGNFACUTMALSC/I SC/EGRY GRYFRG1 ARCHGNFACUTMALSC/I SC/EFRGFRG1 ARCHGNFACUTMALSC/I SC/EFRGFRG1 ARCHGNFACUTMALSC/I SC/EFRGFRG1 ARCHGNFACUTMALSC/I SC/EFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHFAGUTMALFRGFRG1 ARCHFRGFRGCUTFRGFRG1 ARCHFRGFRGFRGFRGFRG1 ARCHFRGFRGFRGFRGFRG1 ARCHFRGFRGFRGFRGFRG</td> <td>1 DOM FREP CE Nu Hu LG/E SPAL BRI B07 1 DUMCE FA HA LG/E SPAL BRI FIA 1 DUMCE FA HA HIDON FA HIDON FA 1 ARCH HAD FA HIT HIDON FA HIT 1 ARCH HAD FA HIT HIDON FA HIT 1 ARCH HAD FA HIT HIT FA FA 1 ARCH FA HIT HIT FA F</td> <td>$\begin{array}{cccccccccccccccccccccccccccccccccccc$</td> <td>IT GROUP CLASS NUER IT PROLOPY FUNCTION SEDE TARE INVENTORY ARTIFACT INVENTORY 1 1000 FACS RE 15 RL LLC/E SPAL BRN BRN BODY 1 1000 FACS RE 15 RL LLC/E SPAL BRN BODY FAD 1 1000 FACS RE 15 RL LLC/E SPAL BRN BODY FAD 1 1000 FACS RE 15 RL HAL LLC/E SPAL BRN BODY 1 1000 FACS RE 1000 RL VIRE RL FAD FAD</td>	3 ARCH MAD FA WIRE WALL FRAG 1 ARCH CH BRICK WINDOW FA CUT MALL 1 ARCH MAD FA CUT MALL FRAG 1 ARCH MAD FA CUT FRAG CUT	1 DIM FC/S RE 15 H4 UNDEC RIM FUDED RIM 1 UNREC IVA IVARE IVA IVARE IVA IVARE IVA IVARE IVA IVARE IVA	1 DORFRECENHLG/ESPALBNBOY1 UNRECFE15HHUNDECFIFI1 UNRECFRBRICKHIHIFIFRG1 UNRECGNBRICKHIHIFIFRG1 ARCHGNBRICKHISC/I SC/EGRY GRYFRG1 ARCHGNFACUTMALSC/I SC/EGRY GRYFRG1 ARCHGNFACUTMALSC/I SC/EFRGFRG1 ARCHGNFACUTMALSC/I SC/EFRGFRG1 ARCHGNFACUTMALSC/I SC/EFRGFRG1 ARCHGNFACUTMALSC/I SC/EFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHGNFACUTMALFRGFRG1 ARCHFAGUTMALFRGFRG1 ARCHFRGFRGCUTFRGFRG1 ARCHFRGFRGFRGFRGFRG1 ARCHFRGFRGFRGFRGFRG1 ARCHFRGFRGFRGFRGFRG	1 DOM FREP CE Nu Hu LG/E SPAL BRI B07 1 DUMCE FA HA LG/E SPAL BRI FIA 1 DUMCE FA HA HIDON FA HIDON FA 1 ARCH HAD FA HIT HIDON FA HIT 1 ARCH HAD FA HIT HIDON FA HIT 1 ARCH HAD FA HIT HIT FA FA 1 ARCH FA HIT HIT FA F	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	IT GROUP CLASS NUER IT PROLOPY FUNCTION SEDE TARE INVENTORY ARTIFACT INVENTORY 1 1000 FACS RE 15 RL LLC/E SPAL BRN BRN BODY 1 1000 FACS RE 15 RL LLC/E SPAL BRN BODY FAD 1 1000 FACS RE 15 RL LLC/E SPAL BRN BODY FAD 1 1000 FACS RE 15 RL HAL LLC/E SPAL BRN BODY 1 1000 FACS RE 1000 RL VIRE RL FAD FAD

	NOTES		PANELED			E MEDIUM MAMMAL					GOLD BAND						WATER-ROLLED MILK GLASS FRAG.		
	IL DCL SEGMENT		BODY			LONGBONE	FRAG	BODY	BODY		GLD RIM	BLU RIM	RIM	RIM			BODY	BODY	
	BCL GC		AMB	Aqu				AMB							AQU		WHT	CLR	
TORY	SUB5					BUTCH						_	MOLD	SPALL					
INVEN	SUB4									-		FLORA							
ARTIFACT	SUB3								UNDEC		GILT	ΤP	UNDEC						
	SUB2													UG/E					
	SUB1																		
	FUNCTION			NAIL WINDOW							TEACUP	PLATE	H	BOWL	MODNIM	NAIL			
	TYPOLOGY			CUT					IS		SI	PU	IS	RU		CUT			
	MATER		GLASS	FA GLASS	BRICK COAL	BONE	BONE	GLASS	RE	BRICK	RE	RE	RE	CE	GLASS	FA	GLASS	GLASS	BRICK
	CLASS	()	BOTT	HARD CM	C, M	MMMM	MAMM	BOTT	FC/S	G	FC/S	FC/S	FC/S	FPREP	CM	HARD	VESS	VESS	CM
	r group	700000-6	MOdi	ARCH	I ARCH	I FAUN	I FAUN	MOD	MOD	1 ARCH	MOD	HOM I	HOQ 1	1 DOM	1 ARCH	1 ARCH	1 DOM	1 DOM	2 ARCH
	COUNT	E A0990	£			-	• -	₹	÷	•	£.	•-		•		-			

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NOTES H.CII(2)	SOFT RUBBER, POSS. PLUNGER PAR	W/ METAL GROMMETS SQUARE, 1" DIAMETER SQUARE, 0.5" DIAMETER
SEGMENT BODY FRAG Longbone Base Frag	BODY	LPPER
BCL GCL DCL 9	CLR AQU AQU	
SUB5 BURN EMBOS		COMP
AD I Invento Sub4		
RTIFACT SUB3 SUB3 UNDEC		
sub2		
Sub 1		
FRUITJAR	WINDOW WINDOW WIRE	SHOE NAIL NAIL NAIL WIRE SCREW NUT NUT
TYPOLOGY WH BLOWN		WIRE WIRE CUT
MATER MATER Re Bone Bone Brick Bone	GLASS GLASS GLASS RUBBER GLASS FA	LEATHER Fa Fa Fa Fa
CLASS FC/S FC/S FC/S CONTR CM MAMM	BOTT CM UNREC CM HARD	L/F HARD HARD HARD HARD HARD HARD HARD HARD
2 UNREC 1 DOM 2 UNREC 1 FAUN 1 ARCH	1 DOM 1 ARCH 1 UNREC 1 ARCH 1 UNREC	1 CLOTH 1 ARCH 7 ARCH 2 UNREC 1 ACT 1 ACT 1 ACT

	NOTES	POSS. WALL ANCHOR WITH HEAVY BOLT (5/8TH") AND HEX NUT			"[IMPR] OVED "																							
	SCL DCL SEGMENT			BODY	BODY	BODY							GLD RODY									1000	1009			VERTEBRA	GRN RIM	BOD/BASE
	BCL (AQU		AQU	NoN			AQU														Adu	AQU				
TORY	SUB5				EMBOS							SPALL															_	
EAD I T INVENT	SUB4																										FLORAI	
S ARTIFAC	SUB3												GILT									UNDER					HP	UNDEC
	SUB2																											
	suB1	F																										
	FUNCTION	PLATE/BOL	MINDOW	FLONERPOT	FRUITJAR				MODNIM						MOONIM	NAIL	WIRE							MODINIM	WIRE		FU	
	TYPOLOGY			TERRA									3			CUT					5	21			BARBED		M	3
	MATER	FA	GLASS	CE	GLASS	GLASS	PLASTER	MORTAR	GLASS	PLASTER	MORTAR	BONE	La La	301 10		FA	FA	MORTAR	PLASTER	BRICK	L		GLASS	GLASS	FA	BONE	RE	RE
	CLASS	HARD	N	GARDEN	CONTR	B0TT	CM	CM	N	CM	CM	MAMM	FC/S		5	HARD	HARD	CM	CM	CM	0/01	10/0	ROI	CM	HARD	MAMM	FC/S	FC/S
	T GROUP	1 UNREC	1 ARCH	1 ACT	1 DOM	MOG 2	2 ARCH	2 ARCH	I ARCH	5 ARCH	3 ARCH	1 FAUN	A DOM			2 ARCH	I UNREC	5 ARCH	1 ARCH	2 ARCH	104		MON	1 ARCH	1 ARCH	1 FAUN	1 DOM	2 DOM
	.NO		-	•	•		. 4	• •	•			•	re.		- 1			-	•					-	-			

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SEAD I ARTIFACT INVENTORY .

NOTES	MOLDED PATTERN						BEADED LIPS, CA. 1883 - EARLY 20TH C.	(WOODHEAD ET AL. 1984:62)		BUCKLE/CLASP WITH 3 ROTATING ATTACHME	LAYERED FLAT FRAGS, POSS. TIN CAN FRA														STRIP W/ 3 SCKL *TTACHMENT		0.5M NORTH OF STP, 11" LONG	0.5M NORTH OF STP, V-SHAPED SUPPORT V 3 RIVETS, PORTIONS W/ WOOD ADHERING
CL SEGMENT	BODY	LIP	BODY	BOD/BASE	BODY	BODY	CHIMNEY								BODY	BODY				AUDI BONY	BODY						MHOLE	MHOLE
BCL GCL D		CLR	CLR	CLR	AQU	AQU	CLR		AQU							CLR	AQU				CLR	AQU						
SUB5	BURN	BURN	BURN			BURN	MOLD													NOID								
SUB4																												
SUB3	UNDEC														UNDEC					10	:							
SUB2																												
SUB1		SCREW																										
FUNCTION	1H						LAMP		MODINIM	CLASP		NAIL					NOUNIN	NAIL	WIRE			MUDON	SCREW	NAIL	BRACKET ?	TILE	CROWBAR	ROD
TYPOLOGY	SI	AUTO										CUT			IS			WIRE		1	E			CUT		TERRA		
MATER	RE	GLASS	GLASS	GLASS	GLASS	GLASS	GLASS		GLASS	CA	FA	FA	MORTAR	COAL	RE	GLASS	GLASS	FA	FA	ų	GLASS	GLASS	FA	FA	FA	빙	FA	FA
STASS	sc/s	3011	/ESS	/ESS	3011	3011	H/T		M	FAST	UNREC	HARD	CM	H/H	FC/S	BOTT	CM	HARD	HARD	50 10	BOTT	N	HARD	HARD	HARD	CM	TOOL	HARD
DUNT GROUP (2 DOM	1 DOM	4 DOM	3 DOM	4 DOM	1 DOM	2 DOM		3 ARCH	1 CLOTH	2 UNREC 1	3 ARCH	1 ARCH	1 FUEL	3 DOM	1 DOM	1 ARCH	1 ARCH	1 UNREC	NOM &	2 DOM	1 ARCH	1 ACT	4 ARCH	1 UNREC	1 ARCH	1 ACT	1 UNREC

.

		NOTES													TILE OR DRAINPIPE				DRAINPIPE OR TILE	SPALLED FROM PRYING
		CL DCL SEGMENT	BODY			BLU BODY				BLU BODY	BODY									LIP
		BCL G	AME											AQU						CLR
	DRY	SUB5	SOLAR		SPALL	SPALL				SPALL	SPALL				SPALL					
	AD I INVENT(SUB4				FLORAL														
v	SE ARTIFACT	SUB3				ТР				H	UNDEC									GROUND
		SUB2																		
		SUB1																		
		FUNCTION		NAIL			NAIL					TILE		MOGNIM	TILE			NAIL	DPIPE	FRUITJAR
		TYPOLOGY		UIRE CUT	5	М	CUT			3	R	TERRA			TERRA			UIRE	TERRA	BLOWN
		MATER	BRICK GLASS	FA	BRICK	RE	FA	BRICK	BRICK	RE	RE	CE	BRICK	GLASS	CE	PLASTER	BRICK	FA	CE	GLASS
		CLASS	CM VESS	HARD	CM	FC/S	HARD	CM	CM	FC/S	FC/S	CM	CM	CM	G	CM	S	HARD	D/P	CONTR
-		COUNT GROUP	1 ARCH 1 DOM	5 ARCH	1 ARCH	1 DOM	1 ARCH	3 ARCH	2 ARCH	1 DOM	1 DOM	1 ARCH	3 ARCH	1 ARCH	1 ARCH	1 ARCH	3 ARCH	1 ARCH	12 ARCH	1 DOM

		4T NOTES	0.5M NORTH OF STP, 1" WIDE, CA. 3' CURVED STIP W/ 7 BOLTS/MUTS FOR ATTACHMENT TO WOOD, LOOP END FOR THREADED STRAP, 2 SUPPORT RODS					PIPE OR COASE TILE FRAG.		95." X 7.5" RECTANGULAR PLATE, PO STOVE PART	DARK BLUE
		GCL DCL SEGMEN					BRN	BLU BODY FRAG			810 B00Y
		BCL		AQU					NON		
	RY	SUB5						SPALL			SPALL
	AD I INVENTO	SUB4						FLOW			
	SE SE	SUB3						Ч			4
	~	SUB2					UG/E				
		SUB1					1/91				
		FUNCTION	PLOWPART?	NAIL WINDOW			HW NAIL	DPIPE	NATI NATI	PLATE	FW
		TYPOLOGY		CUT			RW CUT	I S TERRA	CUT		eur Cur
		MATER	FA	FA GLASS		BRICK	CE FA BRICK	CE E	GLASS Brick Mortar Fa	FA	RE
		SSAL	IARD .	ARD	-	Ŧ	FPREP 1ARD M	FC/S	CH CH	CLAM	FC/S HARD
-		COUNT GROUP C	1 UNREC H	2 ARCH 1 2 ARCH 0	09909.000005	2 ARCH C	1 DOM 1 2 ARCH 1 3 ARCH 0	1 DOM 1 1 ARCH E	1 ARCH 1 5 ARCH 1 2 ARCH 1 10 ARCH 1	1 FAUN	1 DOM 1 ARCH

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								SE ARTIFACT	AD I	ORY			
COUNT	GROUP	CLASS	MATER	TYPOLOGY	FUNCTION	SUB1	SUB2	SUB3	SUB4	sub5	BCL GCL DI	CL SEGMENT	NOTES
	POM FAUN	BOTT MAMM	GLASS BONE								CLR	BODY	
-	ARCH	HARD	FA	CUT	NAIL								
м	ARCH	D/P	CE	TERRA	DPIPE					SPALL			DRAINPIPE OR TILE
~1 M IA	FAUN FUEL ARCH	CLAM L/H D/P	SHELL CL INKER CE	TERRA	DPIPE								DRAINPIPE OR TILE
~ -	DOM	BOTT CM	GLASS BRICK							SPALL SPALL	AMB	BODY	·
5 1 7	ARCH ARCH ARCH	CM HARD CM	GLASS FA BRICK	UNREC	WINDOW NAIL					SPALL	AQU		NAIL/TACK
	DOM ARCH ARCH ARCH FAUN	BOTT CM D/P CLAM	GLASS GLASS BRICK CE SHELL	TERRA	WINDOW						Nev	BODY	(POSS. BLOWN) DRAINPIPE OR TILE
- 14 -	I ARCH 5 ARCH	HARD CM	FA Brick Brick	WIRE	NAIL								

	NOTES						EM-34, 80.5N/27E, CA. 1" THIC		BRICK/TILE	FACETED		
	. DCL SEGMENT						FRAG					
	BCL GCI						GRY			BRN	Agu	
RY	SUB5			SPALL	SPALL			٠	SPALL		SPALL	
D I INVENTO	SUB4											
SEA	1083											
AR	sub2 s											
	SUB1											
	FUNCTION	MODNIM	NAIL		NAIL	NAIL	DPIPE	NAIL		DPIPE	MOUNTW	NAIL
	TYPOLOGY		CUT		CUT	WIRE		CUT				CUT
	MATER	GLASS	FA	PLASTER BRICK	FA	FA	MS	FA	BRICK	NS	GLASS BRICK	FA
٠	CLASS	CM	HARD	N N	HARD	HARD	d/0	HARD	N	D/P	88	HARD
	JNT GROUP	2 ARCH	2 ARCH	1 ARCH 3 ARCH	1 ARCH 2 FAUN	2 ARCH	4 ARCH	1 ARCH	2 ARCH	1 ARCH	2 ARCH 1 ARCH	1 ARCH

	NOTES	FLAT FRAG. POSS. TIN CAN				(EARLY MACH. MADE)	LIGHINING IYPE		PROB. FENCE WIRE								FLUTED PORTION		POSS. FENCE WIRE			DUMP SURFACE, VERTICAL WICK BURNER, "*VENUS* E.M. & CO./ MADE IN U.S.A" (THUMBWHEEL	
	GCL DCL SEGMENT			BODY	HEEL	BASE	LID										BODY					BURNER	
	BCL	AQU			BUF	CLR CLR	CLR										CLR						
ORY	SUB5																						
AD I	SUB4																						
SE RTIFACT	SUB3			UNDEC																			
×	SUB2				SG/E																		
	SUB1				ALB/I												ANCHR						
	FUNCTION	VINDOW	NAIL		NH	FRUITJAR	FRUITJAR	NAIL	WIRE				WIRE	NAIL	NAIL		TUMBLER		WIRE			LAMP	
	TYPOLOGY		WIRE	SI	AMSW	AUTO	110	CUI					BARBED	WIRE	CUT								
	MATER	GLASS BRICK FA	FA	RE	MS	GLASS	GLASS	FA	FA	PLASTER	MORTAR	BRICK	FA	FA	FA	BRICK	GLASS	BRICK	FA	PLASTER		CA	
	CLASS	CM CM	HARD	FC/S	FSTOR	CONTR	CONTR	HARD	HARD	S	G	N.	HARD	HARD	HARD	N.	VESS	S	HARD	CM	£	L/H	
	GROUP	ARCH ARCH	ARCH	MOD	MOD	DOM	MOD	ARCH	UNREC	ARCH	ARCH	ARCH	ARCH	ARCH	ARCH	ARCH	MOD	ARCH	UNREC	ARCH	.00000	WOO	
	COUNT	- 4 -		2	-	M ·			-	-	2	- 1	m	-	-	-	٢	2	-	2	60660	-	

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HIGHLY WEATHERED (Md .SSOG) PANELED NOTES BCL GCL DCL SEGMENT SPALL NECK BODY RIM AQU BRN BRN CLR CLR SPALL SPALL SUB5 BURN ARTIFACT INVENTORY SUB4 ...+ UNDEC SUB1 SUB2 SUB3 G/E TYPOLOGY FUNCTION WINDOW DP I PE NAIL NAIL NAIL NAIL WIRE CUT CUT GUT 3 BRICK GLASS BRICK BONE GLASS BRICK GLASS UNT GROUP CLASS MATER BONE F FA R MS Ł F FC/S 2 DOM BOTT 1 ARCH CM HARD HARD CM MAMM HAMM BOTT HARD 1 ARCH HARD D/P CM (900000*606) 2 ARCH 1 ARCH 1 ARCH 1 ARCH 3 FAUN 4 FAUN 2 ARCH 4 ARCH 2 ARCH 1 DOM 1 DOM

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	LIP		AME	SOLAR		STRT	LTOOL	CORK	LIQUOR	BLOWN	GLASS	BOTT	MOD	
PATENT-LIKE SHAPE	LIP		AQU					CORK		AUTO	GLASS	BOTT	MOD	÷-
	LIP		AQU			STRT	LTOOL	CORK		BLOWN	GLASS	BOTT	MOD	
	LIP		AQU			PATENT	LTOOL	CORK		BLOWN	GLASS	BOTT	MOD	*-
DAVIS-LIKE SHAPE	LIP		CLR					CORK		AUTO	GLASS	BOTT	MOD	
	LIP		CLR			ROUND	LTOOL	CORK		BLOWN	GLASS	BOTT	MOD	
	LIP		CLR			DAVIS	LTOOL	CORK		BLOWN	GLASS	BOTT	MOD	-
	LIP		CLR			PATENT	LTOOL	CORK	PHARM	BLOWN	GLASS	BOTT	MOD	6
	BASE		CLR							BLOWN	GLASS	BOTT	MOD	
WINONA, MINN.", CA. 1900 (FIKE 19														
VEGETARIE// EVEGETIARIE TEA CO/														
"DR. KOCH'S TRADE MARK/ REMEDIES/	BOD/BASE		CLR	EMBOS					PHARM	BLOWN	GLASS	BOTT	MOD	-
"A.B. / 107S"	BASE		OLV	EMBOS					WINE	BLOWN	GLASS	BOTT	MOD	-
	LIP		AMB					CCAP	BEER	AUTO	GLASS	BOTT	MOD	-
LONG NECK	LIP		AMB			STRT	LTOOL	CORK		BLOWN	GLASS	BOTT	MOD	-
	LIP		AMB			ROUND	LT00L	CORK		BLOWN	GLASS	BOTT	MOD	F
"H.T. & CO." ON SHOULDER	LIP/BOD		AMB	EMBOS		PATENT	LTOOL	CORK		BLOWN	GLASS	BOTT	MOD	-
	BASE		AMB						PHARM	BLOWN	GLASS	BOTT	MOD	t-
[D1] SORDERS"														
II FEATD DVSDE FDSTAT D BLADDE	RODY		AMR	FMROS					PHARM	BLOUN	GLASS	ROTT	MOD	-
	BODY	BLU	GRY		FLORAL	НР	SG/E	ALB/I	CROCK	AMSW	MS	FSTOR	MOI	ſ
	RIM		GRY			UNDEC	SG/E	ALB/I	CROCK	AMSW	NS	FSTOR	MOD	ſ
	RIM		GRY			UNDEC	BRI/E	ALB/I	CROCK	NMSW	NS	FSTOR	MOD	-
PINK AND GREEN	RIM/BASE	Pol			FLORAL	DECAL			SAUCER	HPASTE	PORC	FC/S	MOI	1
CHINA", 1886-1898 (KOVEL & KOVEL 1986:195)														
BROWN PRINTED "O.P.CO./ SYRACUSE/	RIM/BASE			MMARK		UNDEC			PLATE	SEMI - PORC	PORC	FC/S	MOQ	-
SERVING BOWL WITH WHEAT PATTERN	R I M/BASE			MOLD		UNDEC			BOUL	IS	RE	FC/S	MOD	-
· · · · · · · · · · · · · · · · · · ·	RIM/BASE					UNDEC			BOWL	IS	RE	FC/S	MOD	-
BELOW ROYAL ARMS, 1859-1895 (GUUD 1001:51) (2 SEP. VESSELS)														
BLACK PRINTED "BAKER & CO." ON BA	BASE			MMARK		UNDEC				SI	RE	FC/S	DOM	N.
DECORATIVE KEYPLATE	WHOLE								KEYPLATE		FA	HARD	ARCH	- (
DUMP SURFACE, VERTICAL WICK DEFLE	DEFLECTOR								LAMP		CA	L/H	MOD	
NOTES	SEGMENT	CL DCL	BCL G	SUB5	SUB4	SUB3	SUB2	SUB1	FUNCTION	TYPOLOGY	MATER	CLASS	GROUP	COUNT
				ORY	INVENT	ART I FACT								
					AD I	SE								
														-

SEAD I ARTIFACT INVENTORY

[EN] GL [AND]"	KIR/BASE		MAKK		UNDEC			SAUCEK	IS	RE	FC/S	Z DOM	
ILLEGIBLE STAMPED MARK (CIRCULA	BASE		MMARK		UNDEC			H	SI	RE	FC/S	2 DOM	
1991: 51)													
BLACK PRINTED "BAKER & CO" ON B/	BASE		MMARK		UNDEC			PLATE	SI	RE	FC/S	1 DOM	
(GATES & ORMEROD 1982:316)													
"W.E.P. C[0] / CHINA", 1893- CA.	BASE		MMARK		UNDEC				SI	RE	FC/S	1 DOM	
H W & T HO / [G]ERMANY" (18	BOWL/STEP		MOLD					PIPE	IY .	BALLCL	TOB	1 PER	
(WOODHEAD ET AL. 1984:62)													
BEADED LIPS, CA. 1883 - EARLY 20	CHIMNEY	CLR	MOLD					LAMP		GLASS	H/H	2 DOM	
	BASE	CLR	MOLD					STEMUARE		GLASS	VESS	2 DOM	
	LIP/BASE	AME	SOLAR				ANCHR	TUMBLER		GLASS	VESS	1 DOM	
	MHOLE	AME	SOLAR					SALTSHAKER	PRESS	GLASS	VESS	1 DOM	
ROUND CONICAL	LIP/BASE	AME	SOLAR				CORK	INKNELL	AUTO	GLASS	WRITE	1 PER	
"QUEEN/ PATENTED NOV. 2, 1869"	LID	AQU	EMBOS					FRUITJAR		GLASS	CONTR	1 DOM	
MAY 23, 1871" WITH CFJ CO. MONOGR 1871-1882 (TOULLOUSE 1071-123)													
"TRADE MARK MASONS IMPROVED/ REG	LID	NON	EMBOS					FRUITJAR	BLOWN	GLASS	CONTR	1 DOM	
1971:123)													
WITH MONOGRAM, 1871-1882 (TOULOU													
"CONSOLIDATED FRUIT JAR COMPAN [Y	LIDLINER	WHT	EMBOS					FRUITJAR	BLOWN	GLASS	CONTR	1 DOM	
(TOULOUSE1971:223)													
WORKS (GEM), 1867-1880												5	
"P [AT.] NOV. 26 67 / 5", HERO GL	BASE	AQU	EMBOS					FRUITJAR	BLOWN	GLASS	CONTR	1 DOM	
D33"	BASE	AQU	EMBOS					FRUITJAR	BLOWN	GLASS	CONTR	1 DOM	
TANIN MILE 4074.457	DAJE		Energ					NALITUNI	DLUWN	6CA10	CONTR	Lind	
HALLEY & MOODE ITD CA 187	DACE		SULAR				SLKEW	CUNUTINENI	NIN	GLASS	IINS	Ling I	
"IZZI" UN BASE	BASE	AME	SULAK					PHAKM		GLASS	1109	HOOL	
	BASE	AME	SOLAR					PHARM	BLOWN	GLASS	BOTT	1 DOM	
	LIP	AME	SOLAR		PRESCR	LTOOL	CORK	PHARM	BLOWN	GLASS	BOTT	1 DOM	
	LIP	ANE	SOLAR		FLANGE	LTOOL	CORK	PHARM	BLOWN	GLASS	BOTT	1 DOM	
NOTES	SEGMENT	BCL GCL DCL	SUB5	SUB4	SUB3	SUB2	SUB1	FUNCTION	TYPOLOGY	MATER	CLASS	INT GROUP	0

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SEAD I ARTIFACT INVENTORY

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TES	H. 1 VESSEL	<pre>4. 1 VESSEL</pre>	<pre>4. 1 VESSEL, POSS. TOY TEA SAUCER</pre>	<pre>N. 1 VESSEL, SMALL DISH</pre>	<pre>N. 2 VESSELS</pre>	W. 1 VESSEL, PETAL-LIKE MOLDED RIM	<pre>N. 3 VESSELS</pre>	<pre>N. 2 VESSELS, CURVILINEAR PATTERNS</pre>	<pre>N. 3 VESSELS</pre>	<pre>N. 4 VESSELS, CURVILINEAR PATTERNS</pre>	N. 1 VESSEL, WHEAT PATTERN, BURNED	ALLS	N. 2 VESSELS, WHEAT PATTERN, (INCL.	SVING BOWL)	ME BURNED		N. 1 VESSEL	N. 1 VESSEL	N. 1 VESSEL	N. 1 VESSEL	N. 2 VESSELS	N. 1 VESSEL	N. 1 VESSEL, STAMPED AND INCISED	CORATION	RAPPED FLASK, MEND TO FORM SINGLE	SSEL		. [CON] SUMP [TION]	.D"			CESSED PANEL	F J CO." IN WINGS OF CROSS, HERO	UIT JAR CO., 1884-1900 (TOULOUSE	71:249)
T NOT	SEMIN	MIM	MIN	IN BU	MIM	MIM	MIM	MIN	MIN	MIM	MIM	SP/	MIM	SEF	ISE SO	\SE	IN 3S	UIN O	UIM O	MIN	UIN D	MIN	IIN OC	DE(STI	VE		='	='			RE	Η.	FR	19
SEGMEN	I RIM/BA	RIM	RIM	RIM/B/	I RIM	RIM	RIM	RIM	RIM	RIM	RIM		RIM		B00/B/	BOD/B/	RIM/B/	LID/BC	RIM/BC	BODY	B00/L1	BODY	RIM/BC		MHOLE		BODY	BODY	BODY	LIP	BASE	BASE	BODY		
SCL DCL	BLU	GLD	GLD		BLU																														
BCL (GRY	GRY				AMB		AMB	AQU	AQU	AQU	AQU	AQU	AQU		
SUB5			MOLD			MOLD		MOLD		MOLD	MOLD		MOLD		SPALL								INCIS					EMBOS	EMBOS				EMBOS		
SUB4	FLORAL																			-											PONTIL				
10B3	٩	ILT	ILT	JNDEC	ň	INDEC	JNDEC	JNDEC	INDEC	UNDEC	JNDEC		NDEC		INDEC	UNDEC	JNDEC								SIVA					PATENT					
sub2 s	-	0	0	_				2			2		2							BRI/E	SG/E				LT00L [LT00L					
SUB1																				ALB/I	ALB/I				CORK					CORK					
FUNCTION	SAUCER	HU	FU	FW	PLATE	BOWL	CUP	SAUCER	PLATE	PLATE	PLATE		BOWL				PLATE	H		H	H	FLOWERPOT	FLOWERPOT		FLASK			PHARM		BSODA			FRUITJAR		
TYPOLOGY	3	IS	IS	IS	3	IS	IS	3	IS	IS	IS		IS		IS	IS	SEMI - PORC	RB	μ	AMSW	AMSW	TERRA	TERRA		BLOWN			BLOWN		BLOWN	BLOWN	BLOWN	BLOWN		
MATER	RE	RE	RE	RE	RE	RE	RE	RE	RE	RE	RE		RE		RE	RE	PORC	RE	RE	MS	MS	CE	CE		GLASS		GLASS	GLASS	GLASS	GLASS	GLASS	GLASS	GLASS		
CLASS	FC/S	FC/S	FC/S	FC/S	FC/S	FC/S	FC/S	FC/S	FC/S	FC/S	FC/S		FC/S		FC/S	FC/S	FC/S	FC/S	FC/S	FSTOR	FSTOR	GARDEN	GARDEN		BOTT		BOTT	BOTT	BOTT	BOTT	BOTT	BOTT	CONTR		
UNT GROUP	1 DOM	1 DOM	1 DOM	5 DOM	10 DOM	1 DOM	3 DOM	7 DOM	6 DOM	11 DOM	16 DOM		3 DOM		131 DOM	31 DOM	1 DOM	2 DOM	12 DOM	1 DOM	7 DOM	1 ACT	1 ACT		17 DOM		5 DOM	1 DOM	1 DOM	1 DOM	1 DOM	1 DOM	1 DOM		

Intender Kurst Freductor Function <							-	SE	INVENT	DRY			
UIT RUIT MIE TYPOLOF FMETION ENDINE SUB SUB CC CL CC CC <thc< th=""> CC CC CC<th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></thc<>													
1 0 0 0 00 0 0 0	UNT GROUF	CLASS	MATER	TYPOLOGY	FUNCTION	SUB1	SUB2	SUB3	SUB4	SUB5	BCL GCL DC	CL SEGMENT	NOTES
1 0000 CMIT LMIT RUIT AM COND GOVID CMMA CMMA FAUIT AM COULOUSE FAUIT FAUIT </td <td></td>													
3 Unit 6 Unit<	1 DOM	CONTR	GLASS		FRUITJAR					EMBOS	AQU	BODY	"MA [SON]", MASON FRUIT JAR CO., 185
2 3 001 GLAS BLOW FRIER 1.1 RIF 1.1 <td></td> <td>(TOULOUSE 1971:345)</td>													(TOULOUSE 1971:345)
1 004 017 GLASS BLOM CONDIMENT EMBOS CLA BOOM ARCEST TTER IT, ITERCH CO." ON MERCESS 1 004 017 GLASS BLOM PMARM CORK LTOWER 192-2. (2UWMLT 1900:157) 1 004 017 GLASS PMARM CORK LTOWER EMBOS 1.00 1 004 EDTS GLASS PMARM CORK LTOWER EMBOS LLAWER 1.00-C 1 004 ELASS PMARM ANCHR SOLAR SOLAR MER EDOY MR. ERESSED PMEL 2 004 ELASS ELANS SOLAR SOLAR MCR EDOY MR. EDOY MR. ER. ERESSED PMEL 2 004 ELASS ELANS SOLAR MCR EDOY MR. EDOY MR. EDOY MR. EDOY ER. ERESSED PMEL EDOY ER. ER. ER. ER. ER. ER. ER. ER. ER.	Z3 DOM	BOTT	GLASS								AQU	BODY	
100 617 6.483 8.044 PMBH CORK LTOOL PRECK CLR 100°	1 DOM	BOTT	GLASS	BLOWN	CONDIMENT					EMBOS	CLR	BOD/BASE	"THE R.T. FRENCH CO." ON RECESSED PAN
1 0.00 0.11 0.415 0.00 1.0,10 1 0.01 6.453 0.445 0.445 0.45 0.45 1 0.01 6.453 P.MAM 0.004 10.01 8.007 46													1892+ (ZUMWALT 1980:157)
1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	HOO	8011	GLASS	BLOWN	PHARM	CORK	LTOOL	PRESCR			CLR	LIP/NECK	
11 DOM BOTY GLAS FMARH CLR BODY GLAS FMARH 1001 BOTY GLAS FMARH SOLA ME BODY GLAS ME BODY 1001 BOTY GLAS FMARH SOLA ME BODY HARH SOLA ME BODY	DOM	BOTT	GLASS							EMBOS	CLR	BODY	"Ro"
1000 617 6.4455 PAMA 50.48 AME 6007 1Re ¹ ON RECESSED PAMEL 1 000 617 61.455 7404 6007 0.1 6007 1Re ¹ ON RECESSED PAMEL 1 000 VESS 61.455 7106 KE 6007 1.0 KE 6007 1.0 KE 6007 1.0 KE 6007 KE KE 6007 KE 6007 KE 6007 KE 6007 KE 6007<	11 DOM	BOTT	GLASS								CLR	BODY	
1004 6017 6.14.85 PHAMH 50.0.48 AME 6007 1 0.01 6.15.8 1.04.8 0.01 6007 1.04.8 6007 2 0.01 VESS 6.14.55 1.046.16 AICHE AICHE AICHE AICHE 6007 1.048.6 EXESS 2 0.01 VESS 6.14.55 AICHE AICHE <t< td=""><td>1 DOM</td><td>8011</td><td>GLASS</td><td></td><td>PHARM</td><td></td><td></td><td></td><td></td><td>SOLAR</td><td>AME</td><td>BODY</td><td>"Re" ON RECESSED PANEL</td></t<>	1 DOM	8011	GLASS		PHARM					SOLAR	AME	BODY	"Re" ON RECESSED PANEL
4 D0M Ed.KS 1.04 B007 EL.R B007 1 D0M VESS GLAS CLR B007 LARGE VESSEL 3 D0M VESS GLASS CLAS CLR B007 STARS, ONALS, CROSSIMTCHING 3 D0M VESS GLASS PRESS LAMP CLR B007 STARS, ONALS, CROSSIMTCHING 3 D0M VESS GLASS PRESS LAMP CLR B007 STARS, ONALS, CROSSIMTCHING 3 D0M L/H GLASS LAMP CLR B007 STARS, ONALS, CROSSIMTCHING 3 D0M L/H GLASS LAMP CLR B007 STARS, ONALS, CROSSIMTCHING 3 D0M L/H GLASS LAMP CLR B007 STARS, ONALS, CROSSIMTCHING 3 D0M L/H GLASS LAMP CLR B007 STARS, UNALS, CROSSIMTCHING 3 D0M L/H GLASS L/H GLASS CLR B007 STARS, UNALS, CROSSIMTCHING 4 CASS L/H GLASS L/H<	1 DOM	BOTT	GLASS		PHARM					SOLAR	AME	BODY	
1 D0M VESS G.LAS TUMBLER MCHR C.LR BODY LARGE VESSEL 2 D0M VESS G.LAS C.AS C.R BODY LARGE VESSEL 3 D0M VESS G.LAS P.RESA C.R BODY LARGE VESSEL 3 D0M VESS G.LAS P.RESA C.R BODY LARGE VESSEL 3 D0M VESS G.LAS P.RESA C.R BODY LARGE VESSEL 3 D0M L/H G.LAS C.MP P.RESA HOLD C.R BODY ALL 3 D0M L/H G.LAS LAMP P.RE C.R G.GASA ALL C.R ALL C.R ALL C.R G.GASA ALL C.R	4 DOM	BOTT	GLASS								OLV	BODY	
2 D0H VESS GLAS CLR B00Y LARE VESS GLASS 3 D0H VESS GLASS FRESS CLAS PRES CLAS PRES 3 D0H VESS GLASS FRESS CLASS PRES CLANE PROV STAGE CONCLS/ STAGE STAGE CONCLS/ STAGE CONCLS/ STAGE CONCLS/ STAGE STAGE<	1 DOM	VESS	GLASS		TUMBLER	ANCHR					CLR	BODY	
3 DOH VESS G.ASS PRESS 35 DOH VES C.LMP P.L. 37 DOH VE GLASS LAMP 37 DOH VE GLASS LAMP 37 DOH VE GLASS LAMP 37 DOH VE GLASS LAMP TOL 37 DOH VE GLASS LAMP TOL 37 DOH VE GLASS LAMP TOL 4 ACT TOL GLASS GLARS GLONO 4 ACT BLADE FLAN GLARS GLONO MUTTH 4 ACT TOL GLAS GLARS GLARS <t< td=""><td>2 DOM</td><td>VESS</td><td>GLASS</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>CLR</td><td>BODY</td><td>LARGE VESSEL</td></t<>	2 DOM	VESS	GLASS								CLR	BODY	LARGE VESSEL
3 DOH VESS GLASS PRESS 2 DOH L/H GLASS LANP CLR CITNEY EAODEL LIPS, CA. 1883 - EARLY 2 36 DOH L/H GLASS LANP CLR CITNEY EAODEL LIPS, CA. 1883 - EARLY 2 36 DOH L/H GLASS LANP CLR CILR CILR CILR CILR 37 DOH L/H GLASS LANP ETCHED FLANEY CLR CILR CILR CILR CILR 37 DOH L/H GLASS LANP ETCHED FLANEY CLR CILR	3 DOM	VESS	GLASS							MOLD	CLR	BODY	
Z DOM L/H GLAS L/MP MOLD CLR CHIMEY BEADED LIPS, CA. 1833 - EARLY 2 36 DM L/H GLASS L/MP C.R CHIMEY CLAS CONDEAD ET AL. 1984:62) 37 DOM L/H GLASS L/MP CLR CHIMEY CHOMOFEAD ET AL. 1984:62) 37 DOM L/H GLASS L/MP CLR CHIMEY CHOMOFEAD ET AL. 1984:62) 37 DOM CLAS L/MP CLS CHIMEY CHOMOFEAD ET AL. 1984:62) 37 DOM GLASS L/MP CLR CHIMEY CLOBE CLOBE CLOBE CLOBE CLOBE CLOBE CLOBE CLOBE CLOBE CLANTIFIBADO OF CLOBY UNIT 4 ACI TOOL FA BLADE FRAGS. CLAN ETCHE CLAN ETCHE CLANTIFIBADO OF CLOBY UNIT 4 ACI TOL FA BLADE FRAGS. ETCHE FRAGS. ETCHE ETCHE ETCHE ETC	3 DOM	VESS	GLASS	PRESS							CLR	BODY	STARS, OVALS, CROSSHATCHING
36 DM L/H GLAS LAMP CLR CHINNEY 1 DOM L/H GLASS LAMP CLR CHINNEY 37 DOM L/H GLASS LAMP POL CLR CHINNEY 49 ALCI TOU ELASS LAMP POL GLOBE ETCHED FLORAL DECORATION 49 ALCI TOU ELAS VIIDON POL GLOBE ETCHED FLORAL DECORATION 4 ALCI TOU FA VIIDON POL GLOBE ETCHED FLORAL DECORATION 4 ALCI TOU FA VIIDON POL GLOBE ETCHED FLORAL DECORATION 1 UNREC HARD FA VIIRE POL GLOBE ETCHED FLORAL DECORATION 1 UNREC HARD FA VIIRE POL GLOBE ELCHA UITH BANDS OF CLOUDY WHIT 1 PER CONTR FA VIIRE PAL BLADE ELAR VIITH BANDS OF CLOUDY WHIT 1 PER CONTR FA RIVET GLIDE BLADE ELAR VIITH BANDS OF CLOUDY WHIT 1 PER CONTR FA RIVET GLIDE BLADE FRAGS. 2 UNREC HARD FA PLUE PLUE RIVER RIVER 1 PER CONTR FA PLA	2 DOM	H/1	GLASS		LAMP					MOLD	CLR	CHIMNEY	BEADED LIPS, CA. 1883 - EARLY 20TH C.
36 DOM L/M GLAS L/MP 37 DOM L/M GLASS L/MP ETCH CLR CLME ETCHED													(WOODHEAD ET AL. 1984:62)
1 DOM L/H GLOBE ETCHED FLORAL DECORATION 37 DOM L/H GLOSE LAMP POL GLOBE ETCHED FLORAL DECORATION 4 ACT TOOL FA NINDOU AOU BLADE RAUTH BANDS OF CLOUDY UNIT 4 ACT TOOL FA SMU AOU BLADE RADE FRAGS. 1 UNREC ARD FA RIVET AOU BLADE RADE FRAGS. 1 UNREC ARD FA RIVET GLIT RADE FRAGS. 1 UNREC ARD FA RIVET GLIT RADE FRAGS. 1 UNREC ARD FA RIVET GLIT RIVET 1 UNREC ARD FA RIVET RADE FRAGS. 1 NREC ARD FA RIVEN SMILL DISK SHAPED CONTANINGR 1 ACT HAP VIRAGS. MALL TINUARE MAD	36 DOM	H/1	GLASS		LAMP						CLR	CHIMNEY	
37 DOM L/H GLASS LAMP POL GLASS LAMP AQU 4 ACT TOU FA VINDON AQU BLADE FA MITH BANDS OF CLOUDY WHIT 4 ACT TOU FA VINDON BLADE FA GONET MAL 2 UNREC MRD FA VIRE SAU BLADE BLADE FRAGS. 1 UNREC MRD FA RIVET GILT BLADE BLADE FRAGS. 1 UNREC MRD FA RIVET GILT MAL BLADE FRAGS. 1 VIRC MRD FA RIVET GILT BLADE FRAGS. 1 FR CWIR FA RIVET GILT FRAGS. 2 DOM FA MAR BRALL MISS SHAPED CONTAINER 1 ACT HAR FA MALL FRAGS. 1 ACT HAR FA MALL FRAGS. 1 ACT HAR FA MAR FRAGS. 1 ACT HAR FA <td>1 DOM</td> <td>H/H</td> <td>GLASS</td> <td></td> <td>LAMP</td> <td></td> <td></td> <td></td> <td></td> <td>ETCH</td> <td>CLR</td> <td>GLOBE</td> <td>ETCHED FLORAL DECORATION</td>	1 DOM	H/H	GLASS		LAMP					ETCH	CLR	GLOBE	ETCHED FLORAL DECORATION
 4 ACT TOU FA CIME CLASS VINDOU 4 ACT TOU FA SAM 2 UNREC HARD FA SAM 2 UNREC HARD FA CIT 1 UNREC HARD FA CONTR FA CROMMET 1 UNREC HARD FA CONTR FA CROMMET 1 UNREC HARD FA CONTR FA CONTR FA CROMMET 1 UNREC HARD FA CONTR FA CONTR FA CROMMET 1 ER CONTR FA TIN CAN 2 EDM CONT FA TIN CAN 3 ACH HARD FA CUT 1 FAUL AND FA CUT 1 FAUL AND FA CUT 3 ACH HARD FA CUT 1 FAUL AND FA CUT 3 COM FC/S RE 1S HU UNDEC 	37 DOM	H/H	GLASS		LAMP						POL	GLOBE	CLEAR WITH BANDS OF CLOUDY WHITE
4 ACT TOOL FA SAU 2 UNREC MARD FA VIRE NIRE 2 UNREC MARD FA VIRE NIRE 1 UNREC MARD FA CROMMET SAU 1 UNREC MARD FA RIVET GEOMMET 1 UNREC MARD FA RIVET GEOMMET 1 UNREC MARD FA RIVET GEOMMET 1 DUREC MARD FA RIVET GILT 1 NOREC MARD FA RIVET GILT 1 NOREC MARD FA RIVET GILT 22 DOM CONTR FA TINUARE AND TINCAM FRAGS. 1 ACT HARD TIN MASHER 1 ACT HARD FA CUT 3 RCH HARD MAL MALL 1 ACT HARD MALL POL 1 ACT HARD MALL POL 1 ACH FCA FLO	49 ARCH	G	GLASS		NOGNIN						AQU		
2 UNREC HARD FA VIRE 1 UNREC HARD FA GROMMET 1 UNREC HARD FA REVET 2 UNREC HARD FA REVET 1 UNREC HARD FA REVET 2 DOM CONTR FA FA FULBOX7 2 DOM CONTR FA FA FULBOX7 2 DOM CONTR FA FA FULBOX7 1 ACT HARD FA CUNTAINER 1 ACT HARD FA CUNTAINER	4 ACT	TOOL	FA		SAW							BLADE	BLADE FRAGS.
1 UNREC HARD FA GROMIET 1 UNREC HARD FA RIVET 1 UNREC HARD FA RIVET 1 PER CONTR FA RIVET 22 DOM CONTR FA PILLBOX? 22 DOM CONTR FA PILLBOX? 22 DOM CONTR FA VARHER 1 ACT HARD FA UNARE AND TINCAN FRAGS. 1 ACT HARD FA UIRE 1 ACT HARD FA UIRE 1 ACH HARD FA UIRE 3 ARCH HARD I UIRE 1 FAUA LURE IS HU 1 FAUA E IS HU 1 FAUA E IN DECAL 1 FAUA E IS HU 2 DOM FC/S R IS 3 DOM FC/S R IS	2 UNREC	HARD	FA		WIRE								
1 UNREC HARD FA RIVET GILT 1 PER CONTR FA PILLBOX? 22 DOM CONTR FA TIN CAN 22 DOM CONTR FA TIN CAN 22 DOM CONTR FA VARHER 1 ACT HARD FA VARHER 1 ACT HARD FA VARHER 13 ARCH HARD FA VARHER 1 FAUM HARD FA VARHER 1 FAUM HONE POL RIM 1 DOM FC/S RE IS HU 2 DOM FC/S RE IS HU 3 DOM FC/S RE IS MOLD 3 DOM FC/S RE IS MOLD	1 UNREC	HARD	FA		GROMMET								
1 PER CONTR FA PILLBOX7 22 DOM CONTR FA TIN CAN 22 DOM CONTR FA TIN CAN 1 ACT HARD FA WASHER 1 ACT HARD FA WASHER 1 ACT HARD FA MASHER 1 ACT HARD FA MASHER 1 ACT HARD FA MALL 8 ARCH HARD FA MAIL 1 FAUN HONE MAIL PILLBOX7 1 FAUN HONE FLORAL FLORAL POL 1 DOM FC/S RE IS HU UNDEC 2 DOM FC/S RE IS HU UNDEC 3 DOM FC/S RE IS MOLD RIN/BASE	1 UNREC	HARD	FA		RIVET					GILT			
22 DOM CONTR FA TINUARE AND TINCAN FRAGS. 1 ACT HARD FA WASHER 13 ARCH HARD FA CUT 13 ARCH HARD FA CUT 13 ARCH HARD FA CUT 15 ARCH HARD FA POIR 1 FAUN Mole Nail 1 FAUN MON FC/S RE 1 DOM FC/S RE IS 2 DOM FC/S RE IS 3 DOM FC/S RE IS	1 PER	CONTR	FA		P1LLBOX7								SMALL DISK SHAPED CONTAINER
1 ACT HARD FA WASHER 13 ARCH HARD FA CUT NAIL 8 ARCH HARD I UNDEC HARD I CUT NAIL 1 FAUN 60NE 1 DOM FC/S RE IS HU DECAL FLORAL POL RIM BROWN DECAL W/ PINK OVERGLAZE H 2 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE 3 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE 3 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE 3 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE	22 DOM	CONTR	FA		TIN CAN								TINUARE AND TINCAN FRAGS.
13 ARCH HARD FA CUT NAIL 8 ARCH HARD FA CUT NAIL 1 FAUN HONE IN UIRE NAIL 1 FAUN HONE FC/S RE IS HU DECAL FLORAL POL RIM BROWN DECAL W/ PINK OVERGLAZE H 2 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE 3 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE 3 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE	1 ACT	HARD	FA		WASHER								
8 ARCH HAPP IN MIRE NAIL 1 FAUN 40NE 1 DOM FC/S RE IS HU DECAL FLORAL POL RIM BROWN DECAL W/ PINK OVERGLAZE H 2 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE 3 DOM FC/S RE IS UNDEC BASE/BOD 3 DOM FC/S RE IS UNDEC	13 ARCH	HARD	FA	CUT	NAIL								
1 FAUN YON BONE 1 DOM FC/S RE IS HU DECAL FLORAL POL RIM BROWN DECAL W/ PINK OVERGLAZE H 2 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE 3 DOM FC/S RE IS UNDEC BASE/BOD	8 ARCH	HARN		WIRE	NAIL								
1 DOM FC/S RE IS HU DECAL FLORAL POL RIM BROWN DECAL W/ PINK OVERGLAZE H 2 DOM FC/S RE IS HU UNDEC MOLD RIM/BASE 3 DOM FC/S RE IS UNDEC BASE/BOD	1 FAUN	No.02	NONE										
Z DOM FC/S RE IS HU UNDEC MOLD RIM/BASE . 3 Dom Fc/s re is undec base/bod .	1 DOM	FC/S	RE	SI	Ŧ			DECAL	FLORAL	6	PC	OL RIM	BROWN DECAL W/ PINK OVERGLAZE HIGHLIG
3 DOM FC/S RE IS UNDEC BASE/BOD	2 DOM	FC/S	RE	SI	ħ			UNDEC		MOLD		RIM/BASE	
	MOG E	FC/S	RE	IS				UNDEC				BASE/BOD	

	10 10 10 10 10		<u>יי</u> ורידיר	SITE A09	22
3 ARCH	1 DOM 1 DOM 4 DOM	2 DOM 1 DOM 1 DOM 2 DOM	1 DCM 1 DCM 1 DCM 1 DCM 1 DCM 1 DCM 8 DCM	NT GROUP 1 CLOTH 909,00000	-
FC/S	VESS VESS L/H	8011 8011 8011 8011	FC/S FC/S FSTOR FSTOR FSTOR FSTOR BOTT	CLASS C/F 9)	
RE	GLASS GLASS GLASS FA	GLASS GLASS GLASS	GLASS	MATER	
SI	BARBED	BLOWN AUTO AUTO AUTO	IS IS AMSW AMSW RW AUTO	TYPOLOGY	
PLATE	TUMBLER JUJCER LAMP WIRE	PHARM PHARM PHARM EXTRACT	PLATE CUP CROCK HW HW PHARM	FUNCTION	
		CORK CORK SCREW	ALB/I ALB/I G/I CORK	SUB 1	
			ALB/E BR1/E G/E	SUB2	
UNDEC			UNDEC	SUB3	NRTIFAC S
				SUB4	EAD I T INVEN
MMARK	SOLAR	EMBOS	STAMP	SUB5 COMP	TORY
	CLR CLR	AQU CLR AMB	RED CLR	BCL GCL DC	
RIM/BASE	BASE RIM/BASE CHIMNEY FRAG	BODY LIP LIP LIP/BASE	RIM BASE RIM BASE LID LIP/BASE	L SEGMENT UPPER	
MEND, BLACK PRINTED "ROYAL IRO CHINA/ JOHNSON BROS/ ENGLAND" 1	STARBURST MOLDED BASE, FACETED Orange/lemon squeezer	"[FELLOW &] CO./ CHEMISTS/ ST N.B.", 1849+ (WILSON & WILSON COBALT BLUE, PATENT-SHAPED LIP LUG-SCREW LIP, "I" IN DIAMOND (ILLINOIS GLASS CO., 1916- 1929 1971:264)	STAMPED "J FI", LIKELY JACO POTTER, LYONS, NY, 1872- 1902 1991:74) "ATWOOD'S/ JAUNDICE BITTERS/ FI MADE BY/ MOSES ATWOOD/ GEORGETI MASS.", MIN. 5, 1 W/ "P" ON BA	NOTES EM-16, W/ GROMMETS	

							-	RTIFACT	INVENT	ORY				
zi O	OUNT GROUS	CLASS	MATER	TYPOLOGY	FUNCTION	SUB1	SUB2	SUB3	SUB4	SU85	BCL GCL	DCL S	EGMENT	NOTES
			ñ	4				INNED						
	1 DOM	FSTOR	SH	AMSH	CROCK	ALB/I	SG/E	010-0			GRY	20 1	IM/LUG	
	1 CLOTI	H C/F	LEATHER		SHOE							-	PPER	
ч	1 DOM	L/H	CA		LANP								URNER	VERTICAL WICK LAMP BURNER, "
	1 DOM		S		LAMP							0	EFLECTOR	VERTICAL WICK DEFLECTOR
'n	1 UNRE	C UNREC	CA							STAMP				SPOOL/REEL SHAPED OBJECT WITH
".	1 DOM	FURN	CA		PLATE					MOLD			HOLE	BAIL HANDLE PLATE W/ FLORAL I
	1 PER	WRITE	GLASS	BLOWN	INKWELL	CORK	LTOOL	ROUND			AQU	_	IP/BOD	ROUND CONICAL
	1 DOM	CONTR	GLASS		FRUITJAR					EMBOS	AQU		ASE	
	1 DOM	BOTT	GLASS	BLOWN	PHARM	CORK	LTOOL	FLANGE			CLR		HOLE	PANELED SQUARE, W/ PLATE FOR
		BOTT	GLASS	AUTO	LUND I MEN I	CURK		CTDT			AMR		TD /NECK	
'n	1 DOM	BOTT	GLASS	BLOWN						EMBOS	AMB		ODY	"EN
	1 DOM	VESS	GLASS		TUMBLER	ANCHR				SOLAR	AME	-	ODY	
	1 DOM	VESS	GLASS							MOLD	CLR	-	YODY	
	4 DOM	L/H	GLASS		LAMP						CLR	-	HIMNEY	
	1 DOM	L/H	GLASS		LAMP						WHT	-	LOBE	MILK GLASS LAMP GLOBE
ITE AO	9909.0000	08)												
20														
-	1 DOM	FC/S	RE	IS	BOWL			UNDEC					IM/BASE	EM-16
-	1 DOM	FC/S	PORC	HPASTE	BOWL			HP	FLORAL	06		POL F	IM	EM-16, BLUE AND ORANGE
-	4 DOM	BOTT	GLASS	AUTO	CLEANSER	SCREW				EMBOS	CLR	-	HOLE	CO. MARK U/ "17" " 6" AND
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APPENDIX C RESUMES

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Biographical Data

J. SANDERSON STEVENS

Senior Archaeologist

EXPERIENCE SUMMARY

Mr. Stevens has over 18 years of experience as an archaeologist throughout the eastern and western United States in work related to compliance with Sections 106 and 110 of the National Historic Preservation Act (NHPA) of 1966, as amended, as well as other federal, state, and local legislation. Responsibilities have included project management and coordination as well as the design, direction, organization, and implementation of both large- and small-scale projects, including all phases of field work, artifact and data analysis, and report preparation. His tasks and responsibilities have also included NEPA documentation for the preparation of environmental assessments (EAs), environmental impact statements (EISs), and cultural resources management plans (CRMPs), for Department of Defense agencies, State Departments of Transportation, and pipeline and transmission line corridor studies.

EXPERIENCE RECORD

Nov. 1994 Date	Parsons Engineering Science. Senior Archaeologist/Project Manager. Responsible for project management, proposals, research design, field direction, artifact and data analysis, and report preparation in compliance with Sections 106 and 110 of NHPA, as amended and NEPA guidelines. Projects include Phase I, II, and III investigations of both prehistoric and historic sites as well as historic architectural investigations.
•	Phase II Evaluation of Prehistoric Sites for Housing Development in southern Maryland; Miller Smith Homes, Fairfax, Virginia.
•	Phase I Inventory of Fiber Optic Transmission System, Vandenberg AFB, California; DoD Armstrong Laboratories Contract, Brooks AFB, Texas.
•	Cultural Resources Management Plan and Phase I Architectural/Historic Inventory of Bolling AFB, Washington, D.C.; AFCEE Contract, Brooks AFB, Texas.
•	Preparation of EIS and technical support documents for Woodrow Wilson Bridge Improvement Study, Washington, D.C.; Alexandria, Virginia; Maryland State Highway Administration and Virginia Department of Transportation.
•	Preparation of EA for Route 32 Roadway Improvements, St. Thomas, U.S. Virgin Islands; Department of Public Works.
March 1987 March 1989	John Milner Associates, Inc., Alexandria, Virginia. Project Archaeologist.
March 1989 March 1994	John Milner Associates, Inc., Alexandria, Virginia. Project Manager/Principal Archaeologist . Responsible for project management, proposals, research design, field direction, artifact and data analysis, and report preparation in compliance with Sections 106 and 110 of the NHPA, as amended and NEPA guidelines. Projects include Phase I, II, and III investigations of both prehistoric and historic sites as well as historic architectural investigations.

J. SANDERSON STEVENS Senior Archaeologist Page 2

Representative DoD projects include: Phase I and II investigations for the Naval Facilities Engineering Command. Phase I and II archaeological investigations at Fort Belvoir, Virginia. Phase I investigations for Indian Head Naval Surface Warfare Center, Maryland. Phase I and II investigations for the Veterans Administration, Perry Point Medical Center, Cecil County, Maryland. Representative DOT projects include: Phase I and II cultural resources investigations for the Virginia Department of Transportation; the West Virginia Department of Transportation; and the Maryland State Highway Administration. Representative projects for private sector clients include: Phase I, II, and III investigations in Prince George's County, Maryland for James T. Lewis Enterprises, Ltd. Phase III data recoveries in New York and Connecticut for the Iroquois Gas Transmission System. Phase I surveys associated with Civil War sites in Prince William and Loudoun counties Virginia. Project Coordinator and Project Manager for Indefinite Quantity Contract for the National Park Service, Denver Service Center. June 1983 Western Cultural Resources Management, Boulder, Colorado. Project Manager. Phase I Dec. 1983 surveys of large scale timber sales in the Black Hills, South Dakota and Wyoming. Jan. 1983 URS-Berger, Inc., Denver, Colorado. Assistant Principal Investigator. Prepared draft environmental impact statement and technical report for the F.E. Warren Air Force Base, May 1983 Cheyenne, Wyoming, MX Missile Project. Historical Research Associates, Missoula, Montana. Project Manager. Directed Phase II May 1981 evaluations and Phase III data recovery investigations at the Antelope Creek Coal Mines, October 1982 Converse County, Wyoming; and Phase III investigations of a prehistoric site on the Sun River, Great Falls, Montana. May 1980 Centuries Research, Inc., Montrose, Colorado. Project Archaeologist. Directed Phase I May 1981 surveys for Shell Oil seismic line studies in Colorado, Utah, and New Mexico. University of Iowa, Iowa City, Iowa. Research Assistant and Teaching As istant. August 1977 July 1979 Projects included: Directed Calvin Lake Basin, Paleo-Indian survey; Assistan Director Field School, Decorah, Iowa; Crew Chief Salto Caves (Mesolithic-Roman), Cogne, Italy; Ceramic Analysis of Neolithic artifacts from the Philippines.

EDUCATION

B.A., Anthropology (honors), May 1975, University of Colorado, Boulder, ColoradoM.A., Anthropology, December 1979, University of Iowa, Iowa City, IowaB.A., International Relations (deans list), May 1986, University of Colorado, Boulder, Colorado

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J. SANDERSON STEVENS Senior Archaeologist Page 3

PROFESSIONAL AFFILIATIONS

Council for Underwater Archaeologists Council of Virginia Archaeologists Committee for Maryland Archaeologists Eastern States Archaeological Federation Middle Atlantic Archaeological Conference Society for American Archaeology Society for Historical Archaeology

PAPERS AND PUBLICATIONS

"Questions Forgotten or Never Asked: Misunderstanding the Issues of Context, Integrity and Significance." Middle Atlantic Archaeological Conference, Ocean City, Maryland, 1996.

"Ceramic Attributes and Accokeek Creek Chronology: An Analysis of Sherds from the Falcon's Landing (18PR13) and the Accotink Meander (44FX 1908) Sites." *North American Archaeologist*, 1996 (in press)(coauthor Michael J. Klein, Ph.D.).

"A Comparison of Technological and Adaptive Strategies between Normanskill Occupations in the Delaware and Hudson Valleys." *North American Archaeologist*, 1995: 16(3):239-279.

"Late Holocene Alluviation and Archaeological Site Burial in Virginia." Middle Atlantic Archaeological Conference, Ocean City, Maryland, 1995 (junior author).

"Examination of Shepard and Potomac Creek Wares at a Montgomery Complex Site (44LD 521) in the Northern Virginia Piedmont, Loudoun County." Middle Atlantic Archaeological Conference, Ocean City, Maryland, 1995.

"Ceramic Trends or Cultural Chronologies. A Comparison of Ceramic Attributes among Accokeek Phase Occupations along the Coastal Plain Potomac." Middle Atlantic Archaeological Conference, Ocean City, Maryland, 1994.

"Collectors or Foragers: A Comparison of Technical Systems and Adaptive Strategies between Normanskill Occupations in the Delaware and Hudson Valleys." Eastern States Archaeological Federation, Albany, New York, 1994.

"Archaeological Data Recovery at the Waterfall Site (191-5-1) Town of Coxsackie, Greene County, New York." 77th Annual New York State Archaeological Association Conference. Niagara Falls, New York, 1993.

"Continuity with Change: Views from an Accokeek Phase Occupation Prince George's County, Maryland." Middle Atlantic Archaeological Conference, Ocean City, Maryland, 1993.

"Archaeological Investigations at Falcon's Landing, Site 18PR131: A Late Archaic through Middle Woodland Occupation, Prince George's County, Maryland." 58th Annual Eastern States Archaeological Federation, Williamsburg, Virginia, 1991.

"Paleoecology, Subsistence Change, and Landscape Alternation During the Late and Early Woodland: A View from Virginia." Middle Atlantic Archaeological Conference, Ocean City, Maryland, 1991.

"Technological Strategies and Interaction Spheres: Result of a Phase I Survey at the Verdon Quarry Site (44HN180), Hanover County, Virginia." 50th Annual Archaeological Society of Virginia, Richmond, Virginia, 1990.

"A Story of Plants, Fire, and People: The Paleoecology and Subsistence in the Late Archaic and Early Woodland in Virginia (ca. 4500 to 2500 B.P.)." In *Late Archaic and Early Woodland R arch in Virginia: A Synthesis*, pp. 185-220. Edited by Theodore R. Reinhart and Mary Ellen N odges. Special Publication of the Archaeological Society of Virginia, 1990.

"Environmental Site Predictors and Prehistoric Settlement Patterns in the Central Pieumont of Virginia." Middle Atlantic Archaeological Conference, Rehoboth, Delaware, 1989.

"The Mill Creek Site: A Multicomponent Woodland Site in Northeastern Maryland." Middle Atlantic Archaeological Conference, Rehoboth, Delaware, 1988.

"Subsistence-Settlement Among Pelican Lake and Besant Groups in the Power River Basin, Wyoming." 41st Annual Plains Conference, Rapid City, South Dakota, 1983.

"The Williams Site (13HN10): A Multicomponent Village in Southeastern Iowa, South Dakota Archaeology, Vol. 5:59-84.

"The Southeast Iowa Lake Calvin Paleo-Indian Survey." 38th Annual Plains Conference, Iowa City, Iowa, 1980.

"The Osteoarchaeology of the McKinney Oneota Village." Research Papers of the Office of the State Archaeologist, Iowa City, Iowa, Vol. 2, No. 7, 1980..

"A Model for the Transition from Food Collecting to Food Producing Societies in Northern Italy (12,000 to 5,000 BP)." Master's thesis, University of Iowa, 1979.

"Environmental Change in Africa and Its Effect on the Extinction of Australopithecus Robustus." Senior honor's thesis, University of Colorado, 1975.

STEVENJS/007/0296#

Biographical Data

CARTER W. SHIELDS

Laboratory Supervisor

EXPERIENCE SUMMARY

More than eight years of experience in archaeological field and laboratory work on both prehistoric and historical sites in compliance with Section 106 of the National Historic Preservation Act as well as other federal, state, and local legislation. Project locations include the Mid-Atlantic and Southeastern regions of the United States and the Caribbean. Six years of experience in archaeological laboratory supervision.

EXPERIENCE RECORD

August 1988 Date

Parsons Engineering Science. Laboratory Supervisor (February 1991-Date). Responsibilities include analyzing and cataloguing prehistoric and historical artifacts and training and supervising staff in artifact processing, cataloguing, and curation. Manages computerized database systems including the use of the Automated National Catalog System (ANCS).

Projects conducted in compliance with Federal Energy Regulatory Commission (FERC) regulations include: artifact analysis for five Phase III prehistoric sites along a natural gas pipeline corridor in Prince William and Loudoun Counties, Virginia; analysis of archaeological finds along a 51-mile natural gas pipeline in western Pennsylvania; analysis of artifacts from excavations of a cemetery site in South Hill, Virginia; and archaeological investigations of Civil War earthworks in Orange County, Virginia for the Colonial Pipeline Company.

Projects for the General Services Administration (GSA) include: a cultural resource survey of 50 blocks in downtown Washington, D.C., archaeological field and laboratory work for the Southern Maryland Courthouse project in Prince Georges County, Maryland, and laboratory analysis for the Southeast Federal Center investigations in Washington, D.C.

Projects performed in compliance with the Alexandria, Virginia City Ordinance include: analysis of archaeological finds from the Alfred Street Baptist Church excavation, the Alexandria Federal Courthouse site and the Shuter's Hill Brewery site.

Projects on National Park Service lands include artifact analysis for the Mumma Farmhouse site, Antietam Battlefield National Park, six sites in Anacostia National Park near Barney Circle in Washington, D.C., and sites in the C&O and Rock Creek Parks in the Georgetown and Foggy Bottom areas of Washington, D.C.

Other recent experience includes laboratory analysis of prehistoric artifacts recovered from the Phase II investigation of the Iron Hill East site and Phase II and III excavations at the Lums Pond site performed for the Delaware Department of Transportation (DelDOT); artifact analysis for Phase Ib surveys for the Maryland State Highway Administration in Washington and Anne Arundel Counties, and the Wesminster Bypass in Caroll County; laboratory analysis of eighteenth and nineteenth century finds from archaeological investigations of the South River Colony development near Annapolis, Maryland, conducted in compliance with Anne Arundel County Subdivision Regulations; and analysis of nineteenth century artifacts from Phase I-III excavations of Square 455 in Washington, D.C.

	Field and Laboratory Archaeologist (August 1988-February 1991). Assisted in excavation of prehistoric and historical sites in the Mid-Atlantic region of the United States. Laboratory work included artifact analysis and curation as well as assistance in computer data management.
	Representative projects included: Phase I archaeological investigations for the Southeast Federal Center project at the Navy Yard Annex in southeast Washington, D.C. and excavation of prehistoric and historical sites at Baltimore Washington Airport in Maryland, Martin State Airport in Baltimore County, Maryland, and Dulles International Airport in Fairfax County, Virginia; and the Russett Center project near Laurel, Maryland.
July 1988 August 1988	Island Field Archaeological Museum, South Bowers, Delaware. Archaeologist. Assisted Delaware State Archaeologists as a full-time volunteer in excavation and laboratory work, including soil flotation, artifact processing, and preliminary analysis.
June 1988 July 1988	Tulane University Field School, Antigua, West Indies. Archaeologist. Studied Caribbean prehistory, site surveying and mapping, excavation techniques and artifact processing while working on prehistoric sites.
Sept. 1984 June 1986 and Sept. 1987 June 1988	Southeastern Architectural Archives, New Orleans, Louisiana. Archives Assistant. Curated architectural drawings and documents and prepared public exhibits.

EDUCATION

Diploma (3ème Degré) in French Studies, June 1987, Université de Strasbourg, France B.A., Anthropology, June 1988, Newcomb College, Tulane University, New Orleans, Louisiana

SPECIAL TRAINING

OSHA 40-hour health and safety training for work at hazardous materials sites

PROFESSIONAL AFFILIATIONS

Society for American Archaeology Archaeological Society of Virginia Society for Historical Archaeology

PAPERS AND TECHNICAL REPORTS

Twin Lakes Park: Phase II Archaeological Testing of the Taylor Site (44FX1988), Fairfax, Virginia, submitted to the Fairfax County Park Authority, May 1996 (coauthors Elizabeth A. Crowell, Sulah Lee, and John Rutherford).

"The Early Federal City: Archaeological Data Recovery at Square 455 (51NW115) in Washington, D.C.," presented at the Mid-Atlantic Archaeological Conference, March 1996 (coauthor Petar Glumac).

Phase I and II Archaeological Investigation for the Washington, D.C. Arena, submitted to Edaw, Inc., Alexandria, Virginia, June 1995 (coauthors Petar Glumac, Elizabeth Crowell, Brian Crane, John Rutherford, and Victoria Robertson).

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Phase II Evaluation of the Kingsview Development, Sites 18CH34 and 18CH420, Charles County, Maryland, submitted to Miller and Smith Homes, McLean, Virginia, September 1995 (coauthors J. Sanderson Stevens, Julie Abell, and Janice Artemel).

"Excavations at 36AR410, A Nineteenth-Century Domestic Site in Armstrong County, Pennsylvania," presented at the Mid-Atlantic Archaeological Conference, 1994 (coauthor John Bedell).

Whitehurst Freeway Archaeological Testing at 51NW103 and 51NW104, submitted to Delon Hampton and the D.C. Department of Public Works, October 1993 (coauthors Petar Glumac, Elizabeth Crowell, Madeleine Pappas, Christopher Martin, Heidy Fogel, and John Rutherford).

Phase IA Archaeological Investigation, Washington Metropolitan Field Office, Federal Bureau of Investigation, Washington, D.C., submitted to Leo A. Daly for the General Services Administration, National Capital Region, 1992 (coauthors Madeleine Pappas, Elizabeth A. Crowell, and Janice G. Artemel).

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Biographical Data

JULIE D. ABELL

Archaeologist and Historian

EXPERIENCE SUMMARY

More than eight years experience as an archaeologist and historian related to cultural resources studies in the Mid-Atlantic, Western and Northeastern United States. Responsibilities as an archaeologist have included project direction, field and laboratory supervision, artifact analysis, archival research and report writing. Responsibilities as a historian have included background research, the development of historic contexts, oral history, architectural and historic structures survey and evaluation, and preparation of reports.

EXPERIENCE RECORD

- May 1994 Parsons Engineering Science. Archaeologist. Responsible for field direction and Date supervision, archival research and research design, artifact analysis and report writing for Phase I, II and III projects in compliance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA). These projects have included both historic and prehistoric sites, in urban and rural areas, and deeply buried sites along riverbanks and under twentieth-century urban fill. Representative projects include:
 - Phase III archaeological data recovery at Square 455, the site of the MCI Arena in downtown Washington, D.C., and for the proposed Whitehurst Freeway modification project along the Georgetown waterfront in Washington, D.C.
 - Phase II evaluation of the Kingsview development property in Charles County, Maryland.
 - Phase I and II investigations on six blocks in downtown Washington, D.C. for the proposed Washington Convention Center, and at the Southeast Federal Center in Washington, D.C.
 - Phase I survey for the York Oil project in Franklin County, New York; for the Beltsville Agricultural Research Center in Prince George's County, Maryland; for the Waverley Farms and Squire Tract, the Weisiko Parcel of the Willow Glen development property, and the Russell Road Landfill on Quantico Marine Base in Prince William County, Virginia; the Richard Jones Park in Fairfax County, Virginia, the Route 340 corridor in Warren and Page Counties, Virginia; and two bridge replacement projects in Mercer and Ocean Counties, New Jersey.

Historian. Responsible for archival research, development of historic contexts, oral history, architectural and historic structures survey and evaluation, and preparation of reports. Representative projects include:

- Background research, oral history and architectural survey at the Lexington Army Depot in Lexington, Kentucky.
- Background research and historic structures survey and evaluation for 47 historic bridges in Maryland.
- Architectural survey of the Route 340 corridor in Warren and Page Counties, Virginia.

JULIE D. ABELL Archaeologist and Historian Page 2

•	Archival research and development of historic contexts for numerous archaeological sites, including the MCI Arena site (Square 455), the proposed Convention Center site, and the Whitehurst Freeway modification project in Washington, D.C., and the Roseberry arm site in Prince William County, Virginia.
Dec. 1989 June 1993	Archeo-Tec, Inc., Oakland, California. Laboratory Director, Field Supervisor and Research Assistant. Participation in over seventy-five prehistoric, protohistoric and historic period archaeological projects, with duties encompassing field surveys, excavations and monitoring; laboratory cleaning, cataloguing, curation and analysis of recovered materials; archival research; report writing, editing and compilation. Contributing author for several scholarly monographs currently in preparation.
July 1989 Nov. 1989	John Milner Associates, Alexandria, Virginia. Archaeological Field and Laboratory Technician. Participation in prehistoric and historic period investigations in Washington, D.C., Maryland, and Virginia.
Jan. 1989 June 1989	Archeo-Tec, Inc., Oakland, California. Archaeological Field and Laboratory Technician. Work performed at prehistoric and historic period archaeological sites.

SPECIAL TRAINING

OSHA 40 Hour Hazardous Materials Training

EDUCATION

B.A., Anthropology, December 1988, University of California, Berkeley, California M.A., Candidate, Applied History, George Mason University, Fairfax, Virginia

PAPERS AND PUBLICATIONS

"What Archaeology at the MCI Arena Site Unearthed About the History of Washington, D.C.'s Water Supply" (working title). <u>Washington History</u>, Volume 9, Number 1, Spring/Summer 1997.

"One Thousand Years of Change: A Look at the Cultural Landscape at the Confluence of the Potomac River and Rock Creek", March 1997, (coauthor Elizabeth Crowell). Paper presented at the Middle Atlantic Archaeological Conference, Ocean City, Maryland.

"Back Yard Water Works: An analysis of the role five privately-owned, nineteenth-century wells and cisterns played in the development of public water systems in Washington, D.C.", March 1996, (coauthor Diane Halsall). Paper presented at the Middle Atlantic Archaeological Conference, Ocean City, Maryland.

SELECTED TECHNICAL REPORTS

Draft Report, Square 455 (51NW115) Archaeological Data Recovery, April 1997, (coauthors Petar Glumac, Brian Crane, Dan Hayes and Marie-Lorraine Pipes). Prepared for EDAW, Alexandria, Virginia.

Section 106 Historic Resources Report for the Proposed Washington Convention Center, December 1996. Prepared by Parsons Engineering Science and the Washington Convention Center Authority for the National Capital Planning Commission, Washington, D.C.

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JULIE D. ABELL Archaeologist and Historian Page 3

Stage 1A Cultural Resources Survey for York Oil Superfund Site Operable Unit No. 1, October 1996. Prepared by Parsons Engineering Science for Alcoa.

Phase IA Archaeological Investigation of the Livestock and Poultry Sciences Institute, Beltsville Agricultural Research Center, Prince George's County, Maryland, July 1996, (coauthor J. Sanderson Stevens). Prepared for Bernard Johnson Young, Inc., Bethesda, Maryland.

Draft Phase I Archaeological Levels of Action Assessment (LOAA) Replacement of Route 206 Bridge Over Little Shabakunk Creek, Lawrence Township, Mercer County, New Jersey, July 1996, (coauthors Madeleine Pappas and Elizabeth Crowell). Prepared for New Jersey Department of Transportation, Trenton, New Jersey.

Draft Historic Architecture Levels of Action Assessment (LOAA) Replacement of Route 206 Bridge Over Little Shabakunk Creek, Lawrence Township, Mercer County, New Jersey, July 1996, (coauthors Madeleine Pappas and Alice Crampton). Prepared for New Jersey Department of Transportation, Trenton, New Jersey.

Revised Draft Phase I Archaeological Levels of Action Assessment (LOAA) Replacement of Route 9 Bridge Over North Branch Forked River, Lacey Township, Ocean County, New Jersey, July 1996 (coauthors Madeleine Pappas and Elizabeth Crowell). Prepared for New Jersey Department of Transportation, Trenton, New Jersey.

Revised Draft Historic Architectural Levels of Action Assessment (LOAA) Replacement of Route 9 Bridge Over North Branch Forked River, Lacey Township, Ocean County, New Jersey, July 1996 (coauthors Madeleine Pappas and Alice Crampton). Prepared for New Jersey Department of Transportation, Trenton, New Jersey.

Phase I and II Archaeological Investigations at the Southeast Federal Center, Washington, D.C., February 1996 (coauthors Brian Crane, John Rutherford, Sulah Lee, and Leo Hirrel). Prepared for General Services Administration, Washington, D.C.

Phase I Archaeological Survey, Wesiko Parcel, Willow Glen, Prince William County, Virginia, October 1995 (coauthors Janice Artemel and Petar Glumac). Prepared for Willow Glen L.C., Woodbridge, Virginia.

Phase I Archaeological Survey, Russell Road Landfill, Quantico Marine Base, Prince William County, Virginia, August 1995 (coauthors J. Sanderson Stevens and Janice Artemel). Prepared for OHM Remediation Services Corp., Glen Allen, Virginia.

Phase II Evaluation of the Kingsview Development, Sites 18CH34 and 18CH420, Charles County, Maryland, September 1995 (coauthors J. Sanderson Stevens, Carter Shields, and Janice Artemel). Prepared for Miller and Smith Homes, McLean, Virginia.

Historic Bridges of Maryland Survey and Evaluation, September 1995 (coauthor Alice Crampton). Prepared for Maryland State Highway Administration, Baltimore, Maryland.

Addendum To: Phase I Archaeological Survey at the Waverly Farms and Squire Tracts, Prince William County, Virginia, September 1994 (coauthor Brian Crane). Prepared for Disney Design and Development Company, Gainesville, Virginia.

Architectural Survey and Evaluation, Lexington Army Depot, Bourbon and Fayette Counties, Kentucky, August 1994 (coauthors Alice Crampton and Hal Sharp). Prepared for Army Corps of Engineers, Louisville District.

Canon Kip Community House Project, San Francisco, California: Pre-construction Archaeological Testing Program, June 1993.

JULIE D. ABELL Archaeologist and Historian Page 4

Archival Literature Search and On-site Archaeological Surface Reconnaissance of t Project, City of Danville, Contra Costa County, California, May 1993

A Literature Search and Archaeological Surface Reconnaissance of the Proposed Pr F .voir Diversion Channel, Tuolumne County, California, May 1993.

Archival Literature Review and On-site Surface Archaeological Reconnaissance of a Acre Parcel of the Trefethen Vineyards Property, Located Near the Intersection of Highway 2['] and Oak Knoll Avenue, Napa County, California, February 1993.

One Union Street Development Project, San Francisco, California: Archaeological Testing and Data Recovery Program, January 1993.

Archival Literature Search and On-site Archaeological Surface Reconnaissance of a 28 acre Parcel of Land, Located at the Intersection of Highway 4 and Laurel Road, Oakley, Contra Costa County, California, December 1992.

Initial Cultural Resources Study of the Proposed San Francisco Water Recycling Master Plan Project, September 1992.

Archaeological Investigations at 600 California Street, San Francisco, California, August 1992.

Cultural Resources Evaluation of the Proposed Delta Expressway, Contra Costa County, California, July 1992.

Cultural Resources Evaluation of the Proposed Boulder Ridge Golf Course Site, Almaden Valley, Santa Clara County, California, May 1992.

201 Turk Street, San Francisco, California: Pre-Construction Archaeological Testing Program, April 1992.

Archival Cultural Resources Evaluation and On-site Archaeological Surface Reconnaissance of the Recycling and Solid Waste Systems Plan, San Francisco and San Mateo Counties, January 1992.

An Archival Literature Search and On-site Surface Reconnaissance of the Proposed Turlock Area Drinking Water Supply Project, Stanislaus and Merced Counties, California, November 1991.

Archival Cultural Resources Evaluation of the Proposed Main Library Development Project and Two Affiliated Parcels in the Civic Center Plaza Area, San Francisco, California, September 1991.

222 Second Street, San Francisco, California: Archaeological Data Recovery Program, August 1991.

Literature Review, Surface Archaeological Reconnaissance and Subsurface Archaeological Evaluation of Site CA-Pla-215, Roseville, Placer County, California, June 1991.

Archaeological Testing Program of the Marble Valley Property, El Dorado County, California, April 1991.

Biographical Data

JOHN M. RUTHERFORD

Archaeologist

EXPERIENCE SUMMARY

Twelve years experience as an archaeologist. Areas of excavation are Southeast, Southwest, Northeast and Mid-Atlantic regions of the United States. Responsibilities have included project direction, design and implementation, field and laboratory supervision, research, excavation, laboratory work, artifact analysis, photography, cartography, development and implementing health and safety plans and report writing. Specialties are in prehistoric stone tool replication and refitting of lithic artifact assemblages. Also trained in 40 Hour OSHA Hazardous Material identification, 8-hour OSHA Hazardous Site Supervisor training.

EXPERIENCE RECORD

Nov. 1988 Date Parsons Engineering Science. Archaeologist. Responsible for project management, field supervision, research design, archival research, artifact analysis, special analysis including refitting of prehistoric artifacts, and report writing. Supervision of fieldwork conducted in the Mid-Atlantic, Northeastern, and Southeastern regions, including projects in urban and rural areas for private clients and public agencies.

Field Supervisor (January 1989). Phase III mitigation of Late Archaic through Late Woodland sites near the West Branch of Susquehanna River in Clinton County, Pennsylvania, prior to construction of natural gas line. Phase I, II and III of historic and prehistoric sites in northwest Washington, D.C., prior to the modifications of the Whitehurst Freeway. Phase III excavations on a prehistoric site near Newark, Delaware, for the Department of Transportation. Phase I Survey of the perimeter of Congressional Cemetery in Southwest Washington D.C.; Phase II Testing and Phase III Mitigation of four Prehistoric Sites along the Anacostia River in Southwest Washington D.C.; Phase I Survey of the Property for the proposed Stafford County Regional Airport; and Phase II Testing of Prehistoric Sites along the Potomac River at its confluence with Goose Creek, in Loudoun County, Virginia.

Crew Chief (March 1989). Phase II testing of Prehistoric site near Newark, Delaware, for Delaware Department of Transportation; Phase III mitigation of a 19th-century Brewery and tavern in Alexandria, Virginia; Phase III mitigation of adverse effect of Late Archaic through Late Woodland period sites along Kettle Creek in Clinton County, Pennsylvania; survey of proposed renovation of Square 457-C, for Federal Agency in Downtown Washington, D.C.; survey and testing of historic and prehistoric sites in Washington, D.C., along proposed freeway expansion. survey, testing and excavation of deeply buried multicomponent (historic/prehistoric) site in Alexandria, Virginia; survey of historic and prehistoric sites along proposed highway re-route in Caroll County, Maryland; testing and excavation of historic and prehistoric sites along a 52-mile-long natural gas pipeline corridor in Beaver, Butler, and Armstrong Counties, Pennsylvania; survey and testing of historic and prehistoric sites along a 52-mile-long natural gas pipeline corridor in Beaver, Butler, and Armstrong Counties, Pennsylvania; survey and testing of prehistoric sites in Prince George County, Maryland; survey, testing, and excavation of historic and prehistoric sites along a 28-mile-long natural gas pipeline in Faquier, Prince William, and Loudoun Counties, Virginia; Phase III excavation of a late 19th-century African-American

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dwelling, Cloverleaf, Fairfax County, Virginia; Potomac Interceptor Extension, Loudoun County, Virginia; Phase I survey of prehistoric and historic sites; Potomac Interceptor Extension, Loudoun County, Virginia; Phase II testing of prehistoric and historic sites; Potomac Interceptor Extension, Loudoun County, Virginia; and Phase III data recovery operations on prehistoric and historic sites.

Field Crew (November 1988). Phase I subsurface survey of a prehistoric and historic urban site, Navy Yard Annex, Washington, D.C.; Phase I survey of both prehistoric and historic sites, Baltimore Washington International Airport, Anne Arundel County, Maryland; Phase III excavation of an 18th- and 19th-century waterfront, Ford Plant, Alexandria, Virginia; Archaeological investigation of 18th- and 19th-century historic and prehistoric sites, Greystone Estate, Washington, D.C.; Phase II testing of late 18th-century wharf; Archaeological investigation of prehistoric sites, Willow Springs Run, Virginia; archaeological investigation of prehistoric sites, Big Rocky Forest, Virginia; archaeological excavation of an 18th- and 19th-century manor house, Hazelwood, Maryland; archaeological investigation of a 19th-century house, Marietta, Maryland; Phase I survey of prehistoric and historic sites, Cabot Park, Maryland; archaeological excavation of an 18th-century manor house, Montpelier, Maryland.

Field Supervisor/Project Manager. Chestnut Hill, Maryland. Phase II testing of a prehistoric and historic site; Tanyard Cove, Maryland. Archaeological assessment of prehistoric and historic sites; Richmarr Site, Virginia. Archaeological investigation of prehistoric site in proposed housing development.

Field Supervisor. Russett Center, Anne Arundel County, Maryland. Data recovery of prehistoric site; Russett Center, Anne Arundel County, Maryland. Phase II survey of several prehistoric sites.

- August 1985Arizona State University, Graduate Training. Research and analysis of MesoamericanJan. 1987influence on Hohokam archaeological sites in Central and Southern Arizona.
- Nov. 1982 Virginia Archaeological Society. Crew Chief on excavation of a seasonally occupied multicomponent campsite along the New River near Radford, Virginia.
- August 1976 Arizona State University. Survey and excavation of Archaic through Hohokam period June 1981 sites in Arizona. Excavation of prehistoric villages and burial sites. Laboratory work included processing and cataloguing artifacts as well as iconographic analysis.
- May 1973 Virginia Archaeological Society. Excavation of 17th-century European Contact Period Indian Village (Triggs Site) in Radford, Virginia.

EDUCATION

B.A. Anthropology, Minor, Art History, June 1981, Arizona State University, Tempe, Arizona

TECHNICAL REPORTS

Phase I, II and III Excavations on Archaeological Sites in northwest Washington, D.C., report in preparation, 1997.

The Prehistory of Lums Pond, New Castle County, Delaware, prepared for Delaware Department of Transportation, 1997.

Archaeological investigations at the River Creek Club, Loudoun County, Virginia, prepared for River Creek Limited Partnership, Silver Spring, Maryland, 1995.

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JOHN M. RUTHERFORD Archaeologist Page 3

Phase I, II and III Excavations on Four Prehistoric Sites in Washington, D.C., prepared for DeLeuw for prep 1995.

Phase II Archaeological Testing at Sites 5 (18AN747), 6 and 7 (18AN748) and 9 (18AN750) Chestnut Hill Farm Parcel A, Anne Arundel County, Maryland, prepared for the KMS Group, Columbia, Maryland, 1990.

Phase II Testing and Phase III Excavation of Site 29 (18AN664), Russett Development, Anne Arundel County, Maryland, prepared for Russett Limited Partnership, 1989.

Phase II Archaeological Investigations at Site 17 (18AN687), Site 21 (18AN685), Site 6 (18AN686), and Site 9 (18AN688), Russett Phase Three of Development, Anne Arundel County, Maryland, prepared for the Russett Limited Partnership, 1989.

Russett Management Summary, Arundel County, Maryland, prepared for the Russett Limited Partnership, 1989.

Archaeological Investigation of 44PW179, Prince William County, Virginia, prepared for the Richmarr Construction Company, 1989.

Phase I Survey at the Russett Commercial District, prepared for the Russett Limited Partnership, 1990.

Tanyard Cove Management Summary, A Preliminary Assessment, prepared for Lovell America, Inc., 1989.

PAPERS AND PUBLICATIONS

Stone Artifact Refitting at the Lums Pond Site: "Interpreting the Stratigraphy Formation Processes", Middle Atlantic Archaeological Conference, Ocean City, Maryland, 1997.

"Kettle Creek and Transitional Period Settlement on the West Branch of the Susquehanna. Middle Atlantic Archaeological Conference, Ocean City, Maryland, March 1996.

"Approaches to Health and Safety Issues on Urban Archaeological Sites." Journal of Middle Atlantic Archaeology, (Volume in Prep), 1995.

"Naturally Deposited Fill: Reverse Stratigraphy on an Intact Surface." Middle Atlantic Archaeological Conference, Ocean City, Maryland, April 1995.

"Approaches to Health and Safety Issues on Urban Archaeological Sites." Middle Atlantic Archaeological Conference, Ocean City, Maryland, April 1994.
APPENDIX D CORRESPONDENCE

PARSONS ENGINEERING SCIENCE

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607-869-1251



DEPARTMENT OF THE ARMY SENECA ARMY DEPOT ACTIVITY 5786 STATE RTE 96 ROMULUS, NEW YORK 14541-5001



Environmental Division

Subject: Review of Draft Phase I Archaeological Surveys for SEAD-12 and SEAD-59/71 at Seneca Army Depot Activity, Romulus, New York

New York State Parks, Recreation, and Historic Preservation Historic Preservation Field Service Bureau ATTN: Mr. Robert Kuhn Peebles Island P.O. Box 189 Waterford, New York 12188-0189

Dear Mr. Kuhn:

As part of our responsibility to comply with the requirements of the National Historic Preservation Act (NHPA) of 1966 as Amended Through 1992 (P.L. 89-665 et seq.), specifically Section 106 of the Act, we are providing with this correspondence a copy of the Draft reports SEAD-12 Phase I Archaeological Survey Seneca Army Depot: Romulus, New York, and SEAD-59/71 Phase I Archaeological Survey Seneca Army Depot: Romulus, New York (Stevens et al. 1998). These surveys were initiated to document existing conditions at two environmental sites prior to the cultural resource investigation effort that would encompass the entire installation.

The Department of the Army has reviewed the enclosed reports. For the report entitled SEAD-59/71 Phase I Archaeological Survey, the Army agrees with the recommendation that no further work is recommended or warranted at this site. The report entitled SEAD-12 Phase I Archaeological Survey recommends that two sites in this area of the Depot are potentially eligible for the National Register of Historic Places. Although the Army does not disagree with the summary and recommendations for these sites, we request these sites not be considered potentially eligible at this time. A survey effort that will address all sites within the installation boundary is scheduled to begin this year. Once this major effort has been completed, other sites may be discovered that will yield a higher degree of significance and integrity. These two sites will then be reevaluated with other new sites to determine their potential eligibility. These two sites will not be impacted by any ground disturbing activities until a final evaluation and determination can be made.

Please provide your comments on the enclosed documents to this office within thirty (30) days of receipt of this letter. If we do not hear from you within 30 days, we will assume concurrence and proceed. If you have any questions regarding the conclusions and the determinations of the Army, please contact Mr. Steve Absolom at Seneca Army Depot Activity at 607/869-1309. Comments or questions regarding cultural resource technical issues may also be directed to the cultural resources technical support for the U.S. Army Materiel Command, Mr. Stephen P. Austin, at the U.S. Army Corps of Engineers, Fort Worth District, telephone 817/978-6385.

Sincerely,

DONALD C. OLSON

Enclosures

DONALD C. OLSON LTC, U.S. Army Commanding Officer

Copy Furnished without Enclosures:

Commander U.S. Army Corps of Engineers, Fort Worth District ATTN: CESWF-EV-EC (Mr. Stephen P. Austin) P.O. Box 17300 Fort Worth, Texas 76102-0300

Commander U.S. Army Corps of Engineers ATTN: CENAN-PP-M (Mr. Thomas Enroth) Building 115 5786 State Route 96 Seneca Army Depot Activity Romulus, New York 14541-5001

607-869-1251



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

518-237-8643

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Bernadette Castro Commissioner

May 14, 1998

Donald C. Olson LTC, U.S. Army Commanding Officer Department of the Army Seneca Army Depot Activity 5786 State Rte 96 Romulus, NY 14541-5001

Dear Lieutenant Colonel Olson:

RE: <u>ARMY</u> Seneca Army Depot Closure Varick/Romulus, Seneca County 95PR2176

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the recent submission in accordance with Section 106 of the National Historic Preservation Act of 1966.

We accept these reports and concur that no additional work is necessary at SEAD-59/71. We also agree that Phase II testing may be recommended at sites A09909.000003 and A09909.000009 (in SEAD-12). We will reserve recommendations for Phase II testing until after the major installation survey is completed.

If you have any questions, feel free to contact Ellen Cesarski at (518) 237-8643 ext. 281. Please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

D. Kerport

Ruth L. Pierpont Director, Historic Preservation Field Services Bureau

RLP:rma