

## **Fort Stanwix National Monument**

### **Mitigation Report for 2013 Monitoring and Excavations Related to the Fire Suppression and Parade Ground Replacement Projects (PEPC Project #29475), Fort Stanwix National Monument, Rome, NY**



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Feb. 2014**

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## **I. Introduction**

During the spring and summer of 2012 and 2013, Fort Stanwix National Monument (FOST) conducted archeological excavations and monitoring of construction related ground disturbance in compliance with the National Historic Preservation Act. Several individuals helped to support these excavations, including FOST Superintendent Deborah Conway, FOST Facility Manager Todd Gerrard, Northeast Regional Archeologist William Griswold, and Northeast Regional Section 106 Coordinator Dave Uschold. The field work and laboratory work was supervised by FOST Chief of Cultural Resources, Keith Routley, and directed by FOST Museum Specialist Amy Roache-Fedchenko.

In compliance with NHPA Section 106 for PEPC project #29475, a total of nine test units were excavated within the parade ground and walkway areas of the reconstructed fortification. These excavations took place between May 26 and Aug 3, 2012. Additional excavations included a test trench measuring two meters (north-south) by three meters (east-west) was excavated outside the reconstructed fortification at the park in the area proposed for the site of installing a post indicator valve and subsequent pipes for the fire suppression system. These excavations took place between August 6 and September 21, 2012.

Following these excavations, the objective of determining the impact on archeological resources that PEPC project # 29475 was completed and it was determined that that project would have no significant effect on the archeological resources within the designated project locations and that construction should be monitored by a qualified archeologist. The New York State Historic Preservation Office provided a letter of support stating their concurrence with the finding of No Adverse Effect (Herter letter, Feb. 11, 2013). The final report from the 2012 excavations included a recommendation that additional test units be excavated in the parade ground to better qualify data collected during the 2012 field season that indicated a possible 18<sup>th</sup> century in-situ parade ground deposit (Roache-Fedchenko 2012a).

Additionally, during construction near the trench area, an inadvertent discovery was made when an 18<sup>th</sup> century feature was exposed by construction related excavations. This feature was documented and partially excavated within the Area of Potential Effect (APE) of the construction. This report details the monitoring activities and archeological excavations that took place during the 2013 field season.

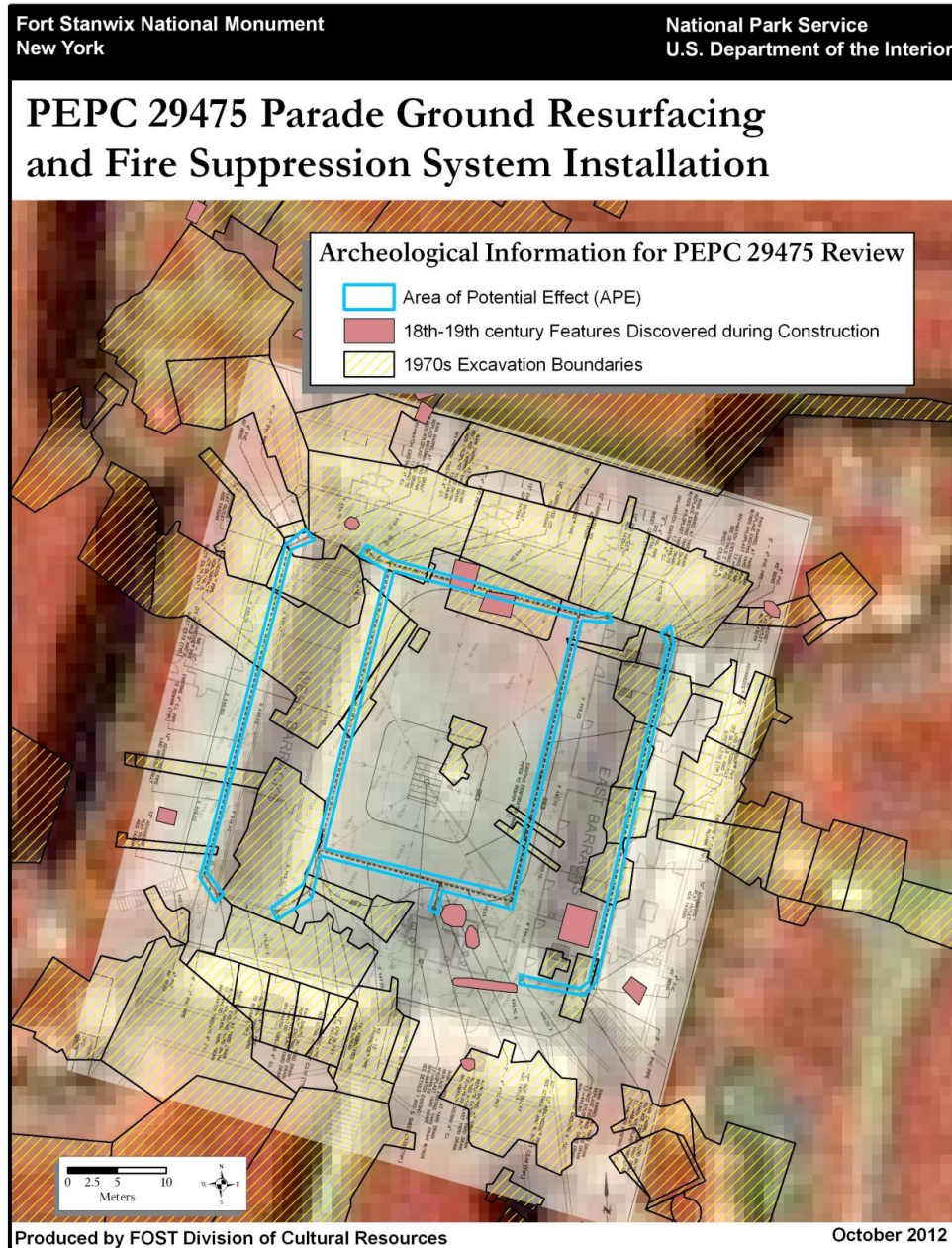
### **Archeological Background**

Fort Stanwix National Monument is an archeological site that includes the remnants of Fort Stanwix (1756-1784) and the City of Rome, NY (1796-1972).<sup>1</sup> During the archeological excavations of the site in 1965, 1972-74, 1997, 2002-03, 2011, and 2012 numerous 18<sup>th</sup> and 19<sup>th</sup> century archeological artifacts and features were discovered (Campbell 1965; Hsu and Hanson 1975; Griswold 1997; Hartgen 2003 & 2005; Roache-Fedchenko 2011, 2012a, 2012b). Approximately 33% of the original fort was excavated between 1972 and 1974 by Hsu and Hanson (Hsu and Hanson 1975: 1). There were several features of the fort that were not

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<sup>1</sup> The date range for the city of Rome relates to the cultural resources, not the date for the actual city.

excavated during this time and likely remain in-situ within the park. Of relevance to the Parade Ground Replacement project and the installation of piping to connect the fire suppression system are several areas of potential effect (APE) inside the parade ground and within limited areas of the walkways between the reconstructed buildings (Figure 1). Within the APE, previous archeological excavations have not taken place prior to the 2012 field season, which consisted of several test units within the APE to determine the probability of damaging in-situ archeological resources.



**Figure 1: Area of Potential Effect inside Reconstructed Fort**

Based on two plans of Fort Stanwix showing work anticipated and then completed between July and December of 1758, the eastern half of the parade ground had at one time been occupied with

buildings (Crown Collection No. CXXI, 99; Crown Collection No. CXXI, 101). These are identified as “Huts for Officers” on one of these plans (Crown Collection No. CXXI, 99). These plans depict about 20 buildings of varying sizes, three of which appear to be attached or very close to each other and may have been a row house. By 1764 these buildings had been taken down and barracks were constructed on the east and west side of the parade ground (see Plan of Fort Stanwix 1764, Crown Collection No. CXXI, 102). It appears that the east barracks may have been constructed on top of some, but not all of the previous buildings’ footprints. The majority of the parade ground was not excavated during the 1970s. A small portion of the parade ground was excavated in unit 5E, located just north of the southeastern casemate, from which approximately 1,000 18<sup>th</sup> century artifacts were recovered.



**Figure 2: Expansion of Test Unit 12**



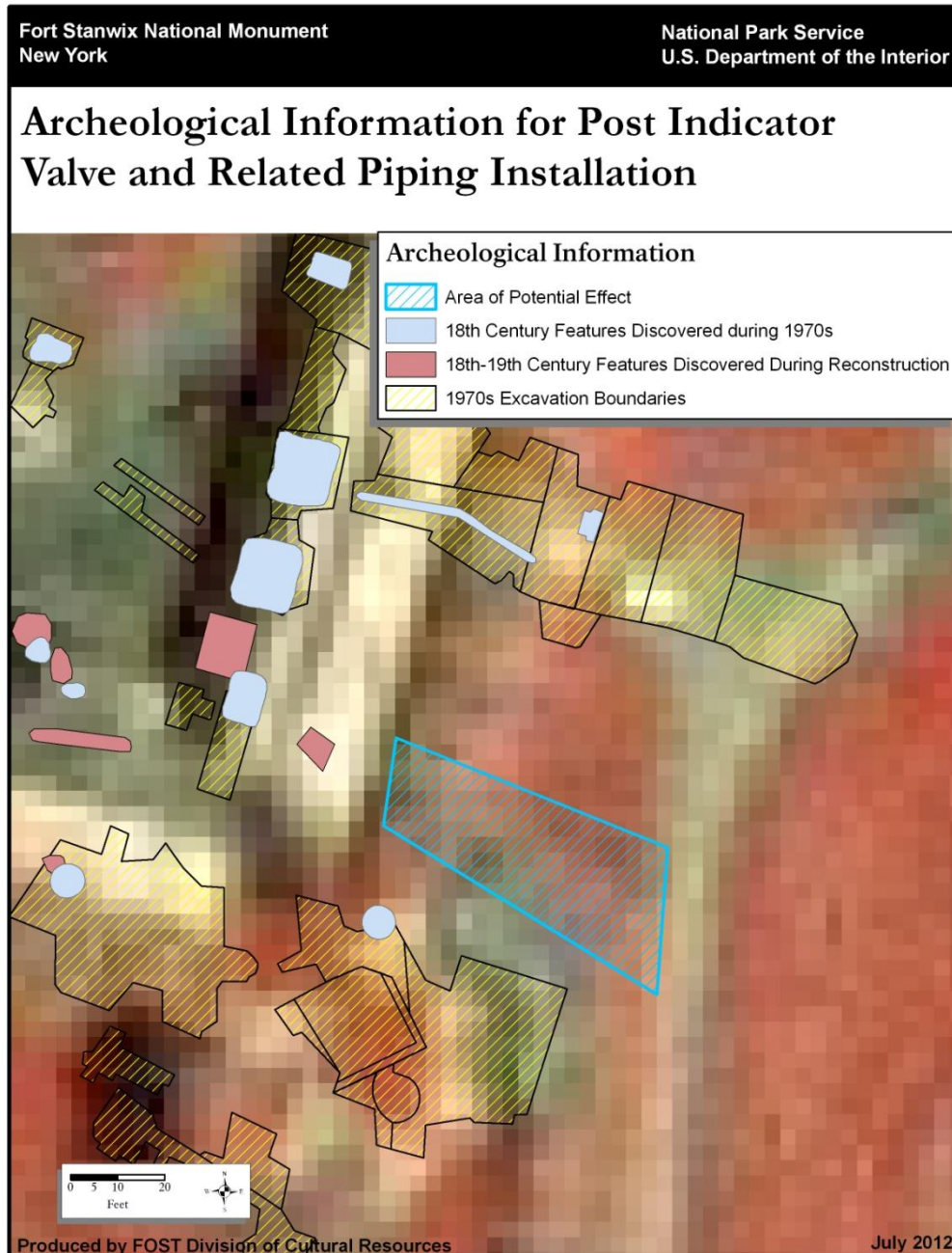
During the 1974-76 reconstruction of the fort, several 18<sup>th</sup> and 19<sup>th</sup> century features were discovered during bulldozing activities. Lee Hanson and NPS Archeological Technicians recorded these features and conducted reconnaissance excavations. In 1974, the top of Feature 82, a wood lined cellar, was found at 450 feet above sea level and the bottom of the cellar was recorded at 447.62 feet above sea level. This feature was located near/underneath the former Headquarters Building, which was located near the center of the southern parade ground and main gate area. The contracted construction crew was attempting to grade the area for reconstruction to a depth of 450 feet above sea level. The ground level prior to archeological excavations was recorded by Dick Ping Hsu in multiple locations and ranged between 453.18 feet and 454.91 feet according to his field notes (Hsu field notes, 1971). The majority of the remnants from above ground buildings were found at elevations between 450 feet and 451 feet with the floors of structural remnants found on average between 446 feet and 447 feet (or approximately 4-5 feet below surface) (Hsu field notes, 1972). Subterranean or partially subterranean structures like the powder magazine or sally port were excavated to a depth between 441 and 443 feet.

The current elevation of the reconstructed parade ground ranges between 448 to 449 feet. Based on the test pits dug by the contractor hired to design the plans, EYP Architecture and Engineering, in October 2010, the gravel fill appears to extend approximately 8 inches below the current surface in nearly all areas of the parade ground (approximately 448-447 feet above sea level).

Based on the construction plans to install new drainage and pipes related to the Parade Ground Replacement and Fire Suppression projects, ground disturbance to a depth of 15 inches below the surface must take place within areas of the parade ground and walkways. Other pipes located near the corners of the current buildings will have to be installed at a depth of 3 to 4 feet deep below the current ground surface (EYP, 2012). Within these areas, small-scale archeological surveying within areas of high potential for in-situ archeological remains were conducted during the 2012 field season. Following these excavations, it was recommended that further test units be excavated to investigate potential in-situ 18<sup>th</sup> century deposits near Test Unit 12 (see Figure 2) and that archeological monitoring of all construction related ground disturbance take place.

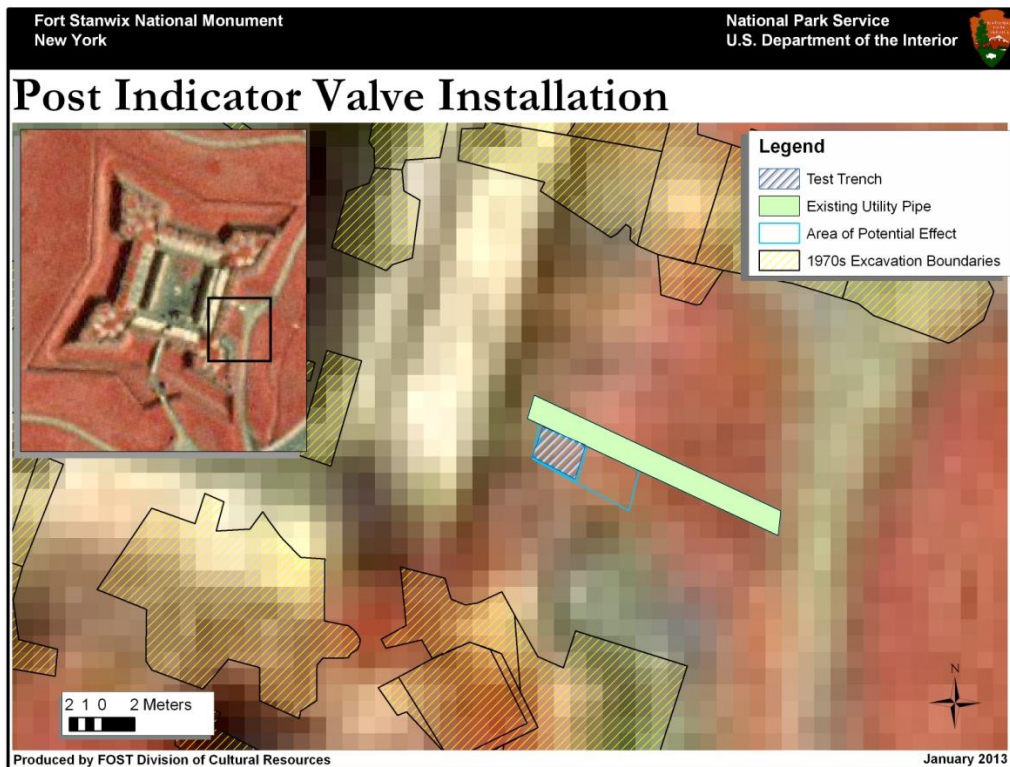
In addition to the 18<sup>th</sup> century resources, several 19<sup>th</sup> century archeological sites sit within the park boundaries and are of particular relevance to these construction projects. The 2012 excavations outside the reconstructed sally port investigated the area of potential effect (APE) of the Fire Suppression System. It is possible that the APE contains remains of the first house built

on the site in 1796 by Dominick Lynch, founder of the city and the first to own property in this area of the site (see Figure 3). The SE bastion of the fort was the first to be leveled and “a large square frame dwelling” was constructed as the home of Dominick Lynch (Waite 1972: 39). The home burned during the summer of 1825 and was sold to Virgil Draper the following spring (Waite 1972: 39). Draper constructed a different house on the lot. In 1842, on the same lot, Draper had constructed another dwelling which faced Spring Street and later was sold to Julia Kinney, a widow, in 1868 (Waite 1972: 39-40). Both Dominick Lynch and Virgil Draper were significant to the foundation and economic development of the modern day city of Rome.



**Figure 3: Area of Potential Effect outside Sally Port**

Also of significance to the history of Fort Stanwix NM, but which has not been archeologically documented within the park boundaries, is the Oneida Carry. The Oneida Carry facilitated trade between Native American tribes, and later, Europeans. While it is historically documented that Fort Stanwix was constructed on the site of the Oneida Carry, few in-situ precontact features have been discovered to identify the material remains and location of these activities. Two hearth features and several precontact artifacts, including projectile points, ground stones, mortar and pestles, and other stone tools, have been found during previous excavations and range in date from Archaic to Middle Woodland (Hsu and Hanson 1975: 152-153, 165-167; Hartgen 2005: 3.26-3.27; Funk, n.d., personal communication with Hanson and Hsu; ICMS database, accessed January 2014). Analysis of these features and artifacts has remained limited to basic documentation and cataloging. Approximately 14% of all the precontact artifacts documented in the archeological collection at FOST were discovered within units and features north and south of the APE outside the reconstructed sally port.



**Figure 4: Location of APE and 2012 Test Trench**

Installation of the post-indicator valve and the subsequent piping for the fire suppression system took place outside the sally port entrance, within and adjacent to the earthworks outlining the extent of the southeast bastion and the east wall of the reconstructed fort (see Figure 4). This area contains a five foot wide utility tunnel that was installed during the reconstruction of the fort and contains pipes and drains for the water and sewage system. Installation of the post indicator valve will require excavations next to this tunnel so that it can be tapped and connections to the water sources inside the tunnel can be connected with the exterior valve. Following the 2012 excavations, it was determined that excavations for the exterior valve would likely take place partially in the footprint of the builder's trench for this utility tunnel.

## **Field Methods**

All excavations and archeological monitoring was conducted under the direction of Amy Roache-Fedchenko, Ph.D. (FOST Museum Specialist, 36 CFR 61 qualified archeologist) and supervised by Keith Routley, Chief of the Division of Cultural Resources at FOST. Each part of the report details the field methods as appropriate to the specific task of monitoring or excavation and location within the park.

## **Safety**

The Safety Officer for FOST, Todd Gerrard, was consulted throughout the planning and execution of the archeological excavation in order to ensure the safety of FOST staff and visitors. Work areas inside the fort were clearly marked and barricaded from the public with caution tape and cones. The trench and nearby work areas outside the fort were barricaded with neon orange snow fencing in order to prevent any accidental injuries or disturbance to the excavations. With assistance from the Division of Maintenance, shoring was constructed in the trench to stabilize the walls of the embankment following OSHA (Standard 29 CFR 1926 Safety and Health Regulations for Construction, Subpart P, Excavations). The Division of Maintenance also provided a large tarp to protect the site from the weather, which also shaded the excavation area.

## **Expenditures**

Three GS-5 Archeological Technicians were hired specifically for this project and worked a combined total of 22 pay periods related to this project. The three GS-5 positions were funded by project money allocated for Section 106 compliance purposes. Supplies related to terracing and shoring needs, along with archeological field equipment, laboratory and collection management supplies were provided by FOST and through project related funds.

## **Collection Strategy**

Artifacts were processed in the FOST field laboratory located within the east casemate of the reconstructed fort. All diagnostic artifacts were collected and cataloged. All materials were counted, weighed, and documented but artifacts that were of clear modern origin (i.e. styrofoam, soda cans, McDonald's toys, etc.), were not cataloged. These objects were still documented but were discarded in the field. Samples of wood, charred wood, and bricks were kept from significant archeological contexts, such as that of the feature documented during the Inadvertent Discovery Mitigation.

## II. Archeological Excavations and Monitoring of Construction Activities Related to the Parade Ground Resurfacing Component of PEPC Project # 29475

Following the Section 106 compliance field work completed during the summer of 2012, several test units were excavated within the parade ground and walkway areas in the reconstructed fort at Fort Stanwix National Monument. Test unit #12 contained in-situ 18<sup>th</sup> century cultural material but no associated features were found to indicate the depositional context. In the final report following the 2012 excavations, it was recommended that further archeological excavations be conducted to expand the test unit in the direction of the in-situ deposits in order to better understand the context and nature of the 18<sup>th</sup> century deposits (Roache-Fedchenko 2012a). Two test units were excavated between April 23, 2013 and June 22, 2013 by archeologists Amy Roache-Fedchenko, Ph.D., Charlene Keck, and Paul Noe with assistance from volunteer George Walters.

Following the 2012 excavation of test units within the parade ground of the reconstructed fort, monitoring during construction activities related to the parade ground resurfacing component of PEPC Project #29475 was recommended. An archeological monitor was on hand during the parade ground resurfacing, which included the removal of the current parade ground soil matrix and installation of new drainage components in the parade ground at the corner of several reconstructed buildings. Archeologists Amy Roache-Fedchenko and Charlene Keck monitored the construction activities that involved ground disturbance.

### Field Methods – Test Unit Expansion

#### *Test Unit Expansion*

Two 1 meter by 1 meter test units were excavated adjacent to the 2012 excavated Test Unit 12 (see Figure 5). Excavations were conducted under the direction of Amy Roache-Fedchenko, Ph.D. (FOST Museum Specialist, 36 CFR 61 qualified archeologist) and supervised by Keith Routley, Chief of the Division of Cultural Resources at FOST. Units were excavated using a combination of stratigraphic and arbitrary (5 cm) levels in order to provide vertical control and documentation of the site. Soil was sifted through ¼ inch screen and each level was described in terms of soil type, mapped, and photographed upon reaching the top of the subsequent level. Each unit was excavated to sterile soil.

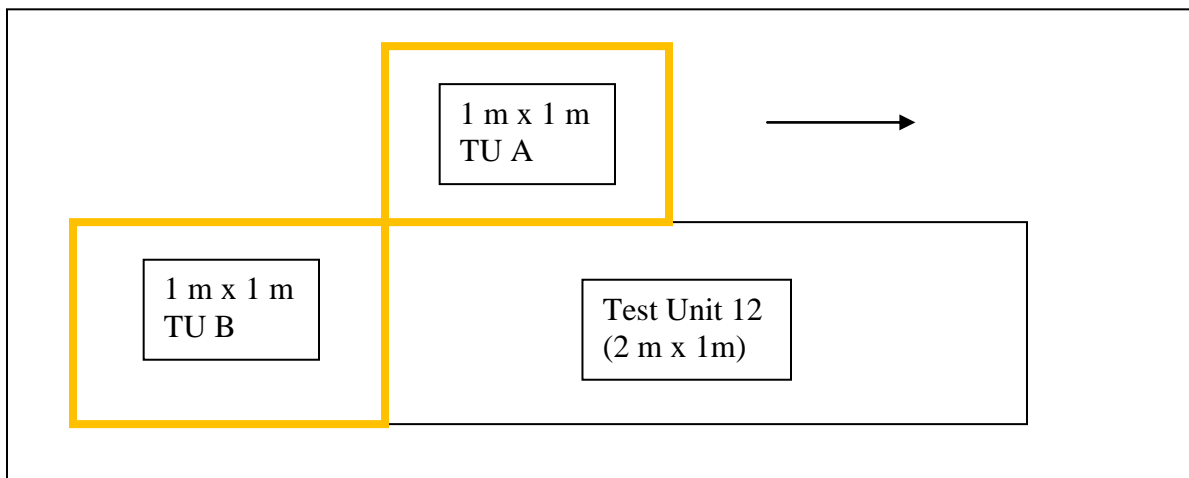


Figure 5: Plan of TU A & B in Relation to TU 12

## Results

Despite what appeared to be an in-situ 18<sup>th</sup> century parade ground deposit uncovered during the 2012 field season, no corroborating evidence was discovered during the 2013 excavation of Test Units A & B. Rain was a factor and delayed excavations several times throughout the excavation. This also resulted in significant wash-in and slump of the walls by the end of the excavation. The slump was cleaned each time and kept separate in order to try and maintain the integrity of the levels as they were excavated.

## Test Unit A

Test Unit A, a 1 meter by 1 meter unit, was located following the south west portion of the wall of TU 12 (see Figure 5). A backhoe was used to excavate the parade ground matrix (compacted sandy clay with rocks, pebbles, and pea gravel) to a depth of approximately 49 cm below surface. In 2012, a tarp was used to line the wall of TU 12; this tarp was exposed along the east wall of TU A. While levels were excavated in 5 cm increments, strata were recorded based on natural stratigraphic characteristics. Within TU A, six stratigraphic layers were excavated as seen in Figure 6.

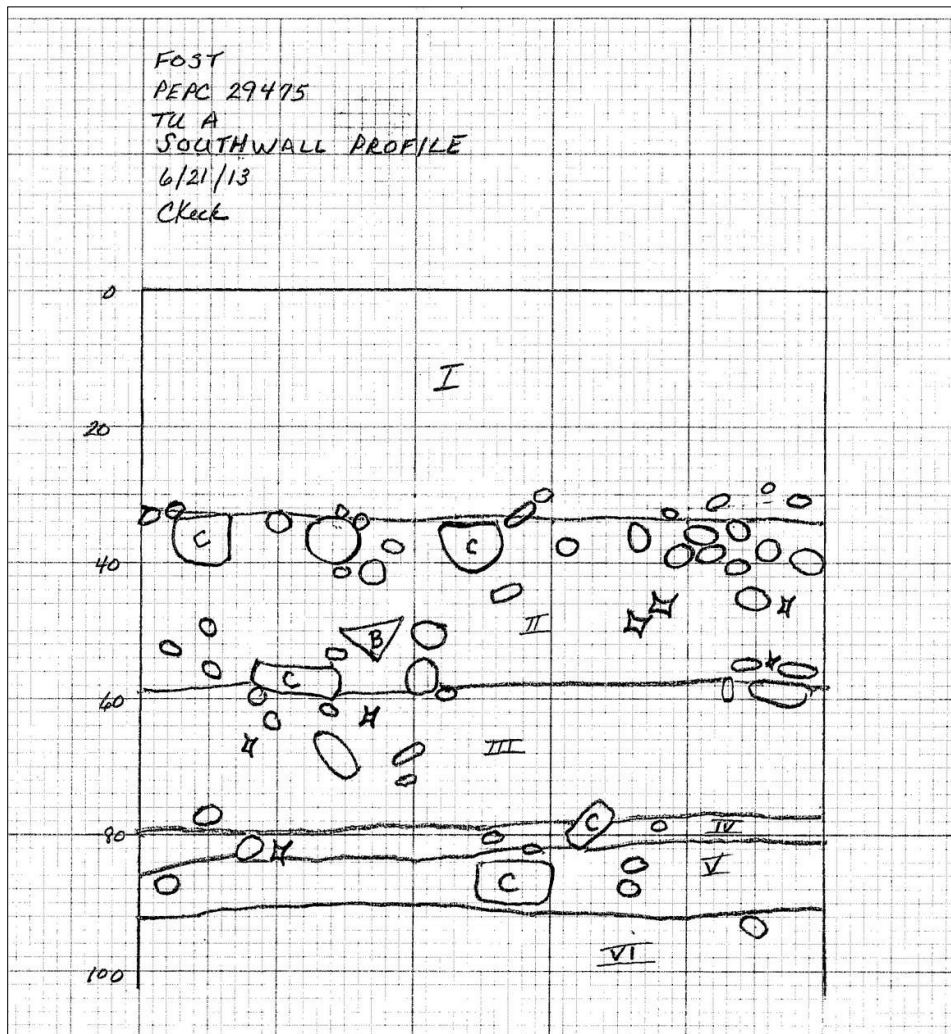


Figure 6: TU A South Wall Profile Drawing

<b>STRATUM</b>	<b>DESCRIPTION</b>	<b>CULTURAL INCLUSIONS</b>	<b>AVG. DEPTH CM BS</b>
Stratum 1	10YR4/3 brown compacted clayey sand with pebbles, and pea gravel	Artifacts, surface material (modern), few brick fragments	0-45
Stratum 2	10YR3/1-3/2 very dark grayish brown compacted sand with cobbles and pea gravel	Artifacts, some brick fragments	45-50
Stratum 3	10YR3/3 dark brown sandy gravel with medium to small cobbles	Artifacts, many brick fragments	50-73
Stratum 4	10YR4/6 dark yellow brown, coarse sand, friable, with small cobbles and pea gravel	Artifacts, many brick fragments	73-78
Stratum 5	10YR3/2 very dark brown sand with dense pea gravel, occasional cobbles and small stones	Fewer artifacts, some brick fragments	78-80
Stratum 6	10YR4/6Dark yellowish brown coarse sand, loosely compacted with medium to small cobbles	Artifacts, very few brick fragments	80-90
Stratum 7		Sterile	85-100

Stratum 1 comprised of the compacted parade ground matrix and contained a variety of material culture, including modern material. Much of this material was not kept, but was noted. Among these included asphalt, concrete, brick fragments and styrofoam.

Stratum 2 contained several types of brick fragments (type 002, 003, 004, 007, 017 and 018),<sup>2</sup> along with natural chert, unidentifiable ferrous fragments, coal and clinkers. A piece of hand painted pearlware and a couple kaolin pipe fragments, including one with a fragment of a maker's mark which is indiscernible comprised the types of ceramics recovered from this stratum. A couple pieces of flat glass and a small fragment of press molded glass were also recovered. Hand wrought nails and wire nails, which date to c. 1880 (Wells 1998: 86), along with animal bones were also found.

<sup>2</sup> See FOST Brick Typology for complete description of each brick type (Roache-Fedchenko 2009).



**Figure 7: Plan View of TU A at 65 cm below surface, Stratum 3**

Stratum 3 contained the largest amount of material culture recovered from TU A. Numerous animal bone included specimens that had been hacked, were calcined, or exhibited signs of weathering. Ceramics recovered from this stratum were tin-glazed delftware, white salt-glazed stoneware, a piece of creamware, and kaolin pipe fragments. A couple dark olive green wine bottle fragments were found along with several pieces of colorless or slightly green tinted flat glass pieces. The post mold spike found in the west wall of TU 12 during the 2012 field season was also recovered from the east wall. Several chert flakes were also found during excavations. Mortar, slag, unidentifiable ferrous fragments, clinkers, and several types of brick fragments (types 001, 002, 003, 004, 010 and 016) were also documented. As compared to other strata in TU A, stratum 3 contained a large amount of 18<sup>th</sup> century material culture with no clearly identifiable 19<sup>th</sup> or 20<sup>th</sup> century artifacts.

Stratum 4 was fairly thin but contained a variety of artifacts. Among the most interesting are fragments from brass spectacles. Brass was most commonly used for eyeglasses during the 18<sup>th</sup> century. Within this stratum, animal bone, brick fragments (type 001, and 010), slag and burned wood were found. A piece of olive amber glass was also found, and while color should not be a primary indicator for age in regard to glass, olive amber vessels and bottles were typically popular during the mid-19<sup>th</sup> century (Lindsey 2010).

Stratum 5 was also a thin layer but contained a number of animal bones, a bivalve shell fragment, glass including press molded fragments, coal, and a piece of blue transfer printed



pearlware. A couple chert flakes, brick fragments (type 003), and unburned wood were also found.

Strat 6 contained few artifacts, but the most distinctive material, a large piece of concrete, was found at a depth of 85 cm below surface. A wire nail, a hand wrought rose head nail, bone fragments, a pipe stem (bore diameter 4/64), coal, a piece of burned glass, and brick fragments (type 001 & 002) were also recovered within this stratum.<sup>3</sup>

### ***Test Unit B***

Test Unit B, a 1 meter by 1 meter unit, was located following the south wall of TU 12 (see Figure 5). A backhoe was also used in this unit to remove the parade ground matrix to a depth of approximately 45 cm below surface. This test unit was also excavated in 5 cm increments in order to better control for stratigraphic changes.

Test unit B contained 5 distinct soil layers (see Figure 9). In stratum 4 an anomaly that appeared at the time to be a post hole feature was uncovered. This anomaly was designated Feature 1 in the field and to maintain consistency between field notes and this report, will be referred to as such (see Figure 8). Feature 1 was exposed in the northwest quadrant of TU B, next to the west wall at a depth of 80 cm below surface. The distinct, soil was round in plan view and was much darker than the surrounding Strat 4, and had a slightly finer grain texture. In profile, Feature 1 had a rounded bottom. Following excavations, there was no definitive evidence that this was actually a post hole feature. The regularity in the shape of the feature was unique and more data is required to further identify this anomaly as a cultural feature. Following excavation, it is not clear that this was a post hole feature, especially given the size (approx. 16 cm diameter, and 7 cm long). Anomalies like this were also recorded in TU 11 during the 2012 field season. These dark circular anomalies appeared to be post hole features in plan view, but were too shallow (2-3 cm deep) to definitively state that they were actual post hole features. The lack of material culture may indicate that they are cultural features of some sort, but further spatial and comparative data is needed to determine a specific cultural function.

Area 1 surrounded Feature 1 and exhibited a higher concentration of charcoal, or burned wood fragments, and brick fragments. It was excavated separately and contained material culture that included clinkers, or reused coal fragments, a very small colorless glass fragment (weighing less than 0.1 g), a wire nail, a hand wrought nail, type 002 brick fragments, and mortar fragments. Since coal and clinker refuse are typically found on 19<sup>th</sup> century archeological sites, it is likely that this strata dates generally to this time period or later. Since Area 1 appears to surround Feature 1, it may be possible that Feature 1 is also associated with this time period.

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<sup>3</sup> While it is recognized that the bore diameters of kaolin pipe stems is a useful tool for dating (see Harrington 1954; Binford 1962; Deetz 1987), there are too few pipe stems recovered during this field season to use as an accurate dating tool and in-depth analysis and data correlations have not yet been conducted for this site or nearby sites (see Monroe and Mallios (2004:79) for a nuanced discussion of this dating technique.



**Figure 8: Profile of Feature1/Area 1**

Stratum 2 contained a mixture of artifacts dating to the 18<sup>th</sup> and 19<sup>th</sup> centuries. Several pieces of ceramics were found, including copper oxide glazed redware, hand painted and blue transfer printed pearlware, green salt-glazed grey bodied stoneware, and a few kaolin pipe stems with bore diameters 4/64 and 5/64. A plain, one-piece cast pewter button (Hanson and Hsu 1975, type A1a), along with a couple glass fragments were recovered, including flat glass, olive green wine bottle fragment, and colorless vessel glass. Animal bones, including calcined fragments, a shell fragment, brick fragments (types 001, 004, 010 and 016), wood (burned and unburned), and a couple chert flakes, including one possible gunflint flake were also recovered in stratum 2.

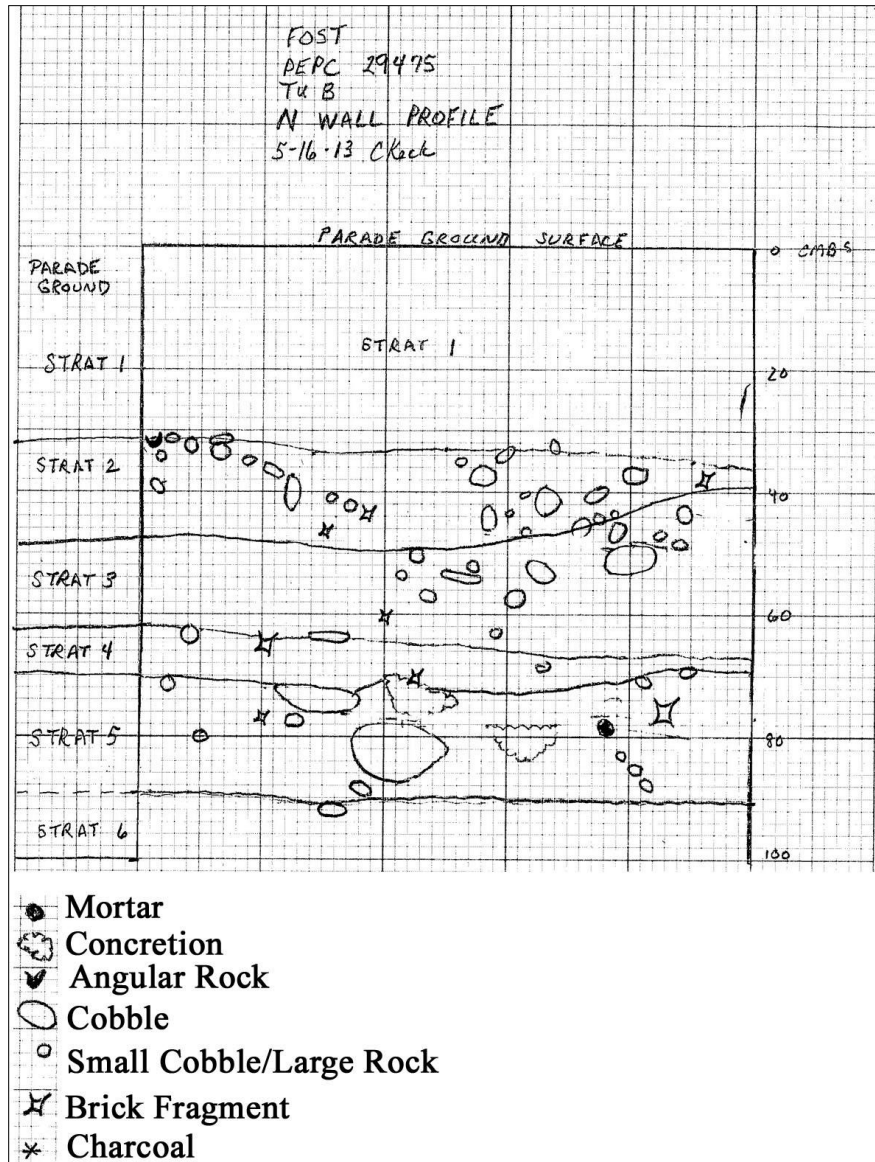
Stratum 3 contained the largest amount of material culture found in TU B. A mixture of artifacts dating to the 18<sup>th</sup> and 19<sup>th</sup> centuries, in general, were recovered. Among these included ceramics, consisting of white salt-glazed stoneware with a barley pattern, hand painted porcelain, blue transfer printed pearlware and whiteware, lead glazed redware, and kaolin pipe bowl and stem (bore diameters of 4/64 and 5/64) fragments. Glass artifacts included dark olive green bottle glass, including a case bottle fragment, pattern pressed glass, flat glass and colorless bottle glass fragments. Several nails (wire, hand wrought rosehead and hand wrought t-head), a piece of lead sprue with attached shot, and a few unidentifiable ferrous fragments were also recovered. Brick fragments that were found and recorded included types 001, 02, 003, 007 and 015. Animal bone, shell, mortar and wood were also recovered throughout stratum 3.

Stratum 4 contained a variety of artifacts. Animal bone, mainly mammal with a few specimen that had been sawed, oyster and quahog shell fragments, press molded glass, clinkers, kaolin pipe

stems with bore diameters of 5/64, a fragment of flow blue transfer printed pearlware, a piece of scratch blue salt-glazed stoneware, mortar, wood fragments (burned and unburned) and nails, including hand wrought and a wire nail. The presence of the flow blue pearlware and sawed animal bone indicate that these materials date to the 19<sup>th</sup> century. No distinct 18<sup>th</sup> century artifacts were found in this stratum.

Stratum 5 contained few artifacts, mostly consisting of brick fragments (types 001, 002, 003, 004, and 011), a two bivalve shell fragments (one oyster and one quahag), mortar, clinkers, nail fragments (wire and hand wrought), and two glass fragments, including one olive green bottle glass fragment.

<b>STRATUM</b>	<b>DESCRIPTION</b>	<b>CULTURAL INCLUSIONS</b>	<b>AVG. DEPTH CM BS</b>
Stratum 1	10YR4/3 brown compacted clayey sand with pebbles, and pea gravel	Artifacts, surface material (modern), few brick fragments	0-45
Stratum 2	10YR2/2 very dark brown compacted sand with cobbles	Artifacts, many brick fragments	45-50
Stratum 3	10YR3/3 dark brown sandy gravel with medium to small cobbles	Artifacts, many brick fragments	50-75
Stratum 4	10YR3/6 dark yellowish brown, coarse sand, friable, compacted with small cobbles	Artifacts, many brick fragments	75-85
Feature 1	10YR3/2 very dark grayish brown sand, fine	Sterile	80-91
Area 1	10YR3/2 very dark grayish brown sand mottled with concentration of charcoal flecks and brick fragments	Artifacts, high concentration of charcoal flecks, brick fragments	85-87
Stratum 5	10YR3/6 dark yellowish brown coarse sand, non-compacted, friable, occasional cobbles and small stones	Fewer artifacts, some brick fragments	85-90
Stratum 6		Sterile	90-95



**Figure 9: TU B North Wall Profile**

### ***Conclusion Regarding Test Units***

As can be clearly seen in the tables describing the various strata uncovered in TU A & B, the soil characteristics are largely similar, but it is interesting to note that there are variances in consistency and inclusions in a fairly small area of the parade ground.

The majority of strata excavated in TU A contained 19<sup>th</sup> century material culture, with the exception of the largest and most dense stratum, stratum 3. This level contained a large number of 18<sup>th</sup> century artifacts in comparison with other stratigraphic layers excavated in this unit. It is highly unlikely that this layer was excavated in-situ given the presence of concrete, clinkers, and wire nails, which are clearly 19<sup>th</sup> century types of material culture.

All strata excavated in TU B contained 19<sup>th</sup> century material culture. The most material culture was recovered from stratum 3, which contained a mixture of artifacts that generally dated to the 18<sup>th</sup> and 19<sup>th</sup> centuries. Without definitive cultural features to associate the recovered material culture, it is difficult to state that these materials were found in their original depositional context. Yet, given the lack of modern material culture (i.e. plastics, or even glass/ceramics that definitively date to the early 20<sup>th</sup> century) found in other areas of the park, it is most likely that any disturbance to these contexts took place during construction efforts related to the 19<sup>th</sup> century development of the City of Rome. No definitive in-situ 18<sup>th</sup> contexts were found.

## **Field Methods – Construction Monitoring**

### ***Monitoring***

At least one 36 CFR 61 qualified archeologist observed ground disturbing activities during construction projects within the parade ground and reconstructed fort areas throughout the summer of 2013. Field work was directed by Amy Roache-Fedchenko, Ph.D., RPA (FOST Museum Specialist, 36 CFR 61 qualified archeologist) with project supervision by Keith Routley, Chief of the Division of Cultural Resources at FOST. Archeologists Charlene Keck and Amy Roache-Fedchenko observed, recorded, and collected material culture that fit within the previously described collection strategy during archeological monitoring of construction related ground disturbance activities related to the resurfacing of the parade ground.

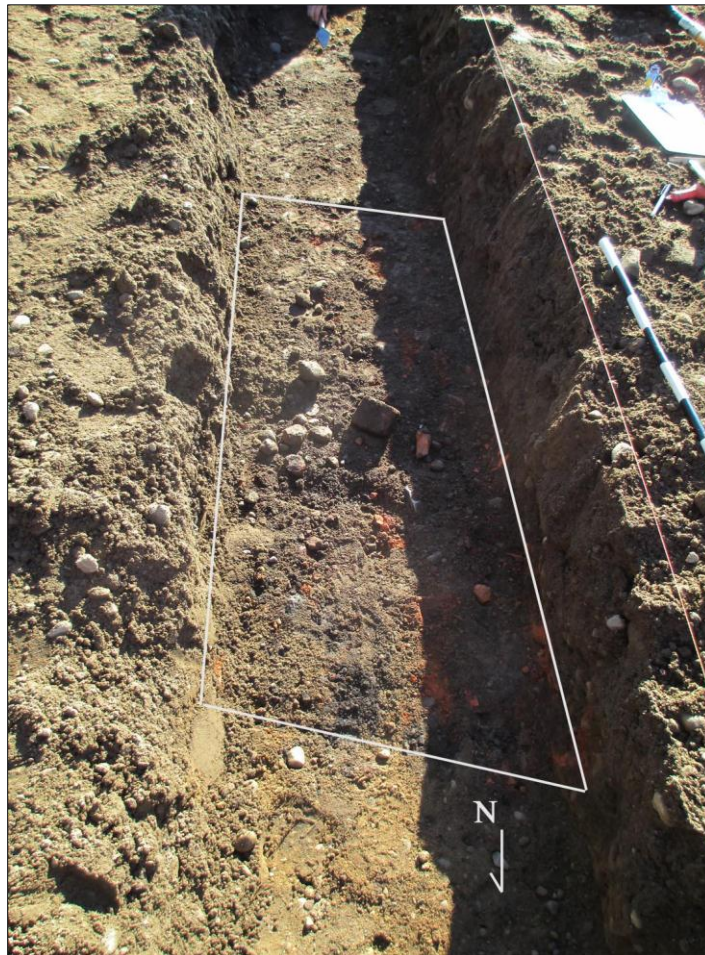
### ***Results***

There was a significant amount of material culture mixed into the parade ground matrix that was removed from the park during this construction project, including 18<sup>th</sup> and 19<sup>th</sup> century ceramic fragments, glass vessel and window fragments, animal bones, bricks, and modern materials like styrofoam cups and plastic candy wrappers. Several objects were collected and given a general provenience since the use of large equipment (i.e. backhoe, bulldozer, and dump trucks) skewed the exact location of the deposited artifacts. Among these included several animal bones, kaolin pipe fragments, glass beads, porcelain, pearlware, whiteware, ironstone, and a ferrous hand wrought pintle.

During the excavation of a trench to install a drain along the east side of the parade ground near the northwestern corner of the East Barracks building, a potential feature was exposed (see Figure 10). This feature is probably remnants of a brick and cobble road system and would likely have been a portion of East Willett Street given the location of the feature relative to the fire hydrant which was in place prior to the fort reconstruction and continues to be used within the reconstructed fort (Sanborn, Sheet 4, July 1930). The potential feature was photographed, mapped, and documented (see Figure 11). The soil lens of which this feature consisted was clearly delineated by 10YR3/1 very dark brown sandy loam cutting through 7/5YR4/6 strong brown coarse sand. A few artifacts were recovered from this area, which included hand wrought rose head nails, brick fragments (types 001 & 003), a hand wrought ferrous door latch, and a piece of black transfer printed whiteware with a floral motif, popular during the mid-1800s (Miller 1991: 8; Majewski and O'Brien 1987: 141-145; Lofstrom et al. 1982: 9).



**Figure 10: Location of Potential Building Feature in Trench next to East Barracks Building**



**Figure 11: Potential Building Feature in Trench**

### **Recommendations Regarding Future Ground Disturbance in the Parade Ground**

While much of the parade ground has not been previously excavated archeologically, based on the findings from the 2012 test units and the monitoring activities during the 2013 construction activities, there remains a high potential to recover 18<sup>th</sup> century material culture related to the occupation of Fort Stanwix and in-situ remains of 18<sup>th</sup> and 19<sup>th</sup> century features not discovered during these field seasons.

During monitoring of the Parade Ground Replacement a possible 19<sup>th</sup> century feature was located and numerous artifacts were recovered dating to the 19<sup>th</sup> century. The archeological record and material culture related to the development of the City of Rome are significant and, given the location of the park in regards to its proximity to the Erie Canal, the buildings and people who lived within the area that is now owned by the NPS, may be potentially eligible for listing on the National Register. Furthermore, a large amount of 18<sup>th</sup> and 19<sup>th</sup> century material culture was found during monitoring activities. Even if these artifacts do not lie within their original contexts, information can be discerned from general presence/absence and spatial analyses regarding the location of these objects to provide further information about the history of the formation of the park and the overall history of the archeological site. If ground disturbing activities are to take place in the future within the parade ground, it is recommended that archeological monitoring take place.

### **III. Archeological Monitoring of Construction Activities Related to the Fire Suppression System Component of PEPC Project #29475**

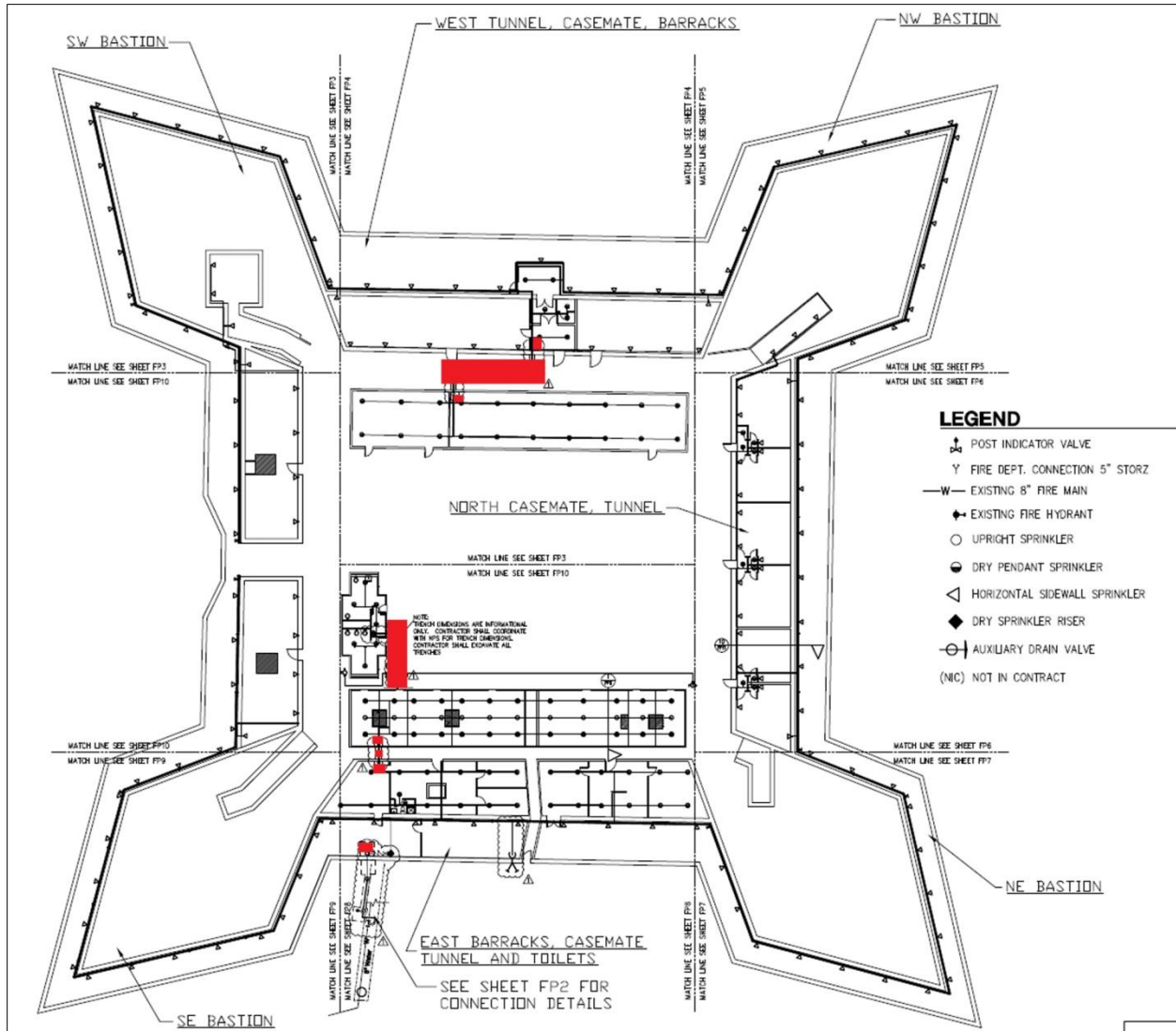
Archeological testing conducted during the summer of 2012 led to the recommendation that archeological monitoring take place for ground disturbing activities related to the installation of the fire suppression system inside the reconstructed fort. Several test units were excavated in the Area of Potential Effect and while no archeological features were uncovered, numerous pieces of material culture dating to the 18<sup>th</sup> century, and likely, the occupation of Fort Stanwix were documented and collected. An archeological monitor was on hand during the fire suppression related ground disturbance, which included the excavation of several pits and trenches for the installation of piping and connections between buildings. Archeologists Amy Roache-Fedchenko, Ph.D., Charlene Keck, Paul Noe, and Jessica Bowes monitored the construction activities that involved ground disturbance. Construction related excavation outside the reconstructed fort resulted in the inadvertent discovery of an 18<sup>th</sup> century archeological feature, which is further discussed in the next section. Monitoring of the construction related excavations that took place inside the reconstructed fort are described here.

#### **Field Methods – Monitoring**

##### ***Monitoring***

At least one 36 CFR 61 qualified archeologist observed ground disturbing activities during construction projects within the parade ground and reconstructed fort areas throughout the

summer of 2013. Field work was directed by Amy Roache-Fedchenko, Ph.D. (FOST Museum Specialist, 36 CFR 61 qualified archeologist) with project supervision by Keith Routley, Chief of the Division of Cultural Resources at FOST. The archeologists observed, recorded, and collected any material culture that fit within the previously described collection strategy.



**Figure 12: Areas of Construction Related Ground Disturbance inside Reconstructed Fort**

### Results

Six different areas required construction related excavation within the reconstructed fort. These areas are highlighted in Figure 12. Each of these areas were monitored for a qualified archeologist and produced a combination of modern material remains, mostly from the reconstruction activities that took place during the 1970s, along with 18<sup>th</sup> through 19<sup>th</sup> century artifacts, such as olive green case bottle fragments, tin-glazed delft ware, creamware, scalloped edge pearlware, and transfer printed whiteware. Several different types of nails were documented, including hand-wrought rose head and t-head nails, wire, cut and machine manufactured nails. Numerous animal bones, mostly cow bone, were collected. Brick fragments, window glass, ceramic tiles, mortar, styrofoam cups, asphalt and linoleum were also



noted, but were not collected for curation. See Figure 13 for an example of artifacts found during monitoring.



**Figure 13: Sample of Artifacts Found during Monitoring inside the South Room of the East Barracks Building**

### **Recommendations**

While many areas within the bounds of the reconstructed fort have been previously excavated archeologically, based on the findings from the 2012 test units and the monitoring activities during the 2013 construction activities, there remains a high potential to recover 18<sup>th</sup> century material culture related to the occupation of Fort Stanwix and in-situ remains of 18<sup>th</sup> and 19<sup>th</sup> century features. It is recommended that archeological monitoring take place during any future construction projects that require ground disturbance.

## **IV. Archeological Excavation of Inadvertent Discovery**

During the summer of 2012, archeological excavations took place outside the sally port of the reconstructed fort at Fort Stanwix National Monument in order to gain information regarding the Area of Potential Effect related to PEPC Project #29475: Post Indicator Valve and Related Piping Installation (Roache-Fedchenko 2012b). During these excavations archeologists uncovered a grey clay lens that contained numerous animal bones and 18<sup>th</sup> century material culture. At the time, this soil lens was identified as a refuse lens likely related to the 1796 Lynch/Draper house. The boundary of the soil lens was ambiguous, mottled, and extended beneath the earthworks of the reconstructed fort. The mottling of this stratum was interpreted to be a result of disturbance caused by the installation of the adjacent concrete utility tunnel. This lens was exposed during construction related excavations on Tuesday, July 16<sup>th</sup>, 2013 by contractors using a backhoe to excavate a pipe trench leading from the fort out towards the location of the soon-to-be installed post indicator valve. Upon exposure, it was clear that this stratum was in-situ, not disturbed, and indicative of a feature given the characteristics of the soil in comparison with nearby deposits.

Several 18<sup>th</sup> century artifacts were recovered during reconnaissance in the field at the time of disturbance, including an brown bess trigger guard typical of the long land pattern 1756 muskets (Neumann 2001: 50), animal bones that exhibit hacking, a musket ball, and ceramics which consisted of creamware (1750-1785) and white salt-glazed stoneware (1720-1780) (Hume 1969: 114-116, 123-126). Given the artifact assemblage and the fact that the soil lens extended several feet in the construction trench, archeological monitor, Amy Roache-Fedchenko, Ph.D., in consultation with Keith Routley, Division Chief of Cultural Resources, and Todd Gerrard, Division Chief of Maintenance, stopped construction work so that this feature could be further investigated archeologically following NHPA Section 106 guidelines. Concurrence was also obtained from the New York State Historic Preservation Office, Nancy Herter, Ph.D., and the National Park Service Northeast Regional Archeologist, William Griswold, Ph.D., RPA, regarding the planned archeological excavations for mitigation efforts after the exposure of an 18<sup>th</sup> century feature by construction related backhoe excavations.

### **2012 Findings**

During the 2012 sally port trench excavation, a lens of dark gray clay that contained animal bones and a number of 18<sup>th</sup> and early 19<sup>th</sup> century artifacts was discovered along the westernmost edge of the trench in Test Unit 1. This lens was identified as soil stratum 4 along the western 0.25-0.5 meters of Test Unit 1 (Roache-Fedchenko 2012). The lens was thin and as it expanded westward became increasingly mottled with 19<sup>th</sup> and 20<sup>th</sup> century soils, which likely occurred during 1970s construction. While this soil lens was of interest, it appeared to have limited archaeological value due to the amount of disturbance and location near modern structural features, including the buried 5 foot wide utility tunnel, reconstructed embankment leading up to the fort walls, and the close proximity of the concrete fort walls (approximately 5 meters west of the edge of the 2012 trench). Two possible explanations were given for the presence of this deposit. It appeared to be a refuse deposit related to either 1) the occupation of the home of Dominick Lynch and later, Virgil Draper or 2) more broadly to the early town of Rome. Wager described of the area near the Stryker house (lots 8-11), constructed in 1835, as "...a mound and

there were ditches and trenches, and the grounds were used to deposit dead dogs, hogs, cats, horses and all the rubbish of the town” (Wager 1896: 115). Given the amount of disturbance and the mixture of 18<sup>th</sup>, 19<sup>th</sup> and 20<sup>th</sup> century material culture along with the close proximity of 20<sup>th</sup> century structures related to the reconstruction of the fort, it was determined that the planned construction activities would have no adverse effect (Roache-Fedchenko 2012).

During archeological monitoring of construction related excavation in 2013, which extended from the reconstructed fort wall toward the 2012 archeology trench, an 18<sup>th</sup> century refuse pit was inadvertently discovered. Construction related excavation stopped and archeological excavations took place to document the feature and recover the data and artifacts from within the planned construction footprint.



**Figure 14: Location of Test Units A, B, & C in Footprint of Construction Trench**

### **2013 Field Methods**

Three 1 meter by 2 meter units were excavated were excavated by archeologists Amy Roache-Fedchenko, Charlene Keck, Paul Noe, and Jessica Bowes, with assistance from FOST Volunteer George Walters, between Monday, July 29 and Friday, August 30th. These test units extended from the 2012 excavation trench westward. The placement of these units resulted in expanding the construction trench approximately 0.5 meters north-south in two of the test unit areas (Figure 14). This expansion allowed archeologists to encounter the feature (Feature 96)<sup>4</sup> vertically from the embankment surface which provided information about the integrity, size, shape, and depositional conditions of the feature. Test units A and B measured 1 meter east-west by 2 meters north-south. Test unit C measured 1 meter north-south by 2 meters east-west. Arbitrary

<sup>4</sup> During field documentation, this feature was recorded and referred to as Feature 1 (dark grey clay) and Feature 2 or Area 1 (grayish brown sandy clay). Field notes reflect these designations, but following the excavations and upon analysis, the two strata were referred to as Feature 96. This designation follows the 1970s excavation feature designation format and numbering system.

levels were recorded in 10 cm increments. Photographs and field drawings were completed at the top of each level. Soil samples for water screening and floatation were also collected from each level.

Field work was difficult at times due to the density of the clay feature. Screening became slow but this was resolved by using water to ¼ inch screen the excavated material. This process allowed for a more efficient and thorough screening method. Artifacts covered in clay were easier to see on the screen and this method also made lab work, namely washing, easier.

In order to excavate continuously and document the site as efficiently and thoroughly as possible, the Division of Maintenance at FOST provided shade and shelter over the site by securing a tarp from the wall of the reconstructed fort over the excavation area. Pop-up tents were also used to provide shade and shelter. This allowed archeologists to work in high temperatures with high humidity (several days had a heat index over 100 degrees Fahrenheit) and rainy conditions. The tents and tarp protected the site from weather related erosion and flooding. This makeshift open-air structure, along with snow-fencing, provided a measure of site protection from the exposure to potential looters and curious visitors within the City of Rome.



**Figure 15: Sample of Ceramics Recovered During Trench Excavations**

### ***Test Unit A***

Test Unit A was located closest to the 2012 trench that was excavated archeologically. This test unit slightly overlapped with the 2012 test trench in order to maintain consistency in the recovery of stratigraphic information. It ran 2 meters north-south and 1 meter east-west (see Figure 14). A significant portion of this test unit was impacted by the backhoe during construction activities.

Nevertheless, this test unit provided important information in regards to the eastward extent of the feature.

Based on the 2012 and 2013 excavations, the dark grey clay lens that is the signature soil type of Feature 96, does not have an abrupt border, but rather seems to thin and dissipate as it reaches eastward toward the 2012 trench. In TU A this soil lens thinned along the eastern portion of the unit and the amount of material culture found in TU A reflects this phenomena (see Appendices). Mottles of the grey clay and some remnants of material culture likely from the feature context were visible in TU 1 from the 2012 excavations. The eastern extent of the feature in TU 1 was clearly disturbed during reconstruction efforts in the 1970s. The presence of 19<sup>th</sup> century artifacts and mottling with clear 19<sup>th</sup>/20<sup>th</sup> century soils in TU 1 from the 2012 excavations provides clear evidence of this disturbance occurring.

A variety of artifacts were recovered from TU A during the 2013 excavations and primarily consisted of brick and animal bone. Other types of material culture included ceramic sherds (creamware and pearlware), olive green bottle glass, a musket ball, a belt ax, hand wrought nails, and chert flakes. Some 19<sup>th</sup> and 20<sup>th</sup> century artifacts were also recovered from within this unit, but were found within disturbed strata.



**Figure 16: North Wall Profile of TU B (left) and TU A (right)**



**Figure 17: Belt Ax from TU A**

***Test Unit B***

Test Unit B ran 2 meters north-south and 1 meter east-west (see Figure 14). This unit was also significantly impacted by the backhoe during construction activities and a measurable footprint of this disturbance, approximately 1 meter wide through the center of the unit, was noted on the plan maps (Figure 17). The dark grey clay lens of Feature 96 would have run the entire length of the unit at approximately 75 cm b.d. since it was found within in-situ deposits on the north and south ends of the unit and is clearly visible in profile in the north and west wall profiles (Figure 18).



**Figure 18: TU B Showing Cleaned Out Depression from Backhoe Disturbance**

Test unit B contained numerous animal bone, and several significant 18<sup>th</sup> century objects, one of the most interesting of which is a fragment of an exploded mortar bomb (Figure 19). Several small ceramic sherds (Figure 20 shows examples of white salt-glazed stoneware, creamware, delft, and lead glazed redware), chert flakes, a gunflint, a case bottle fragment, and hand wrought nails are among the 18<sup>th</sup> century material recovered from this test unit. A few 19<sup>th</sup> and 20<sup>th</sup> century objects were also recovered from disturbed contexts.

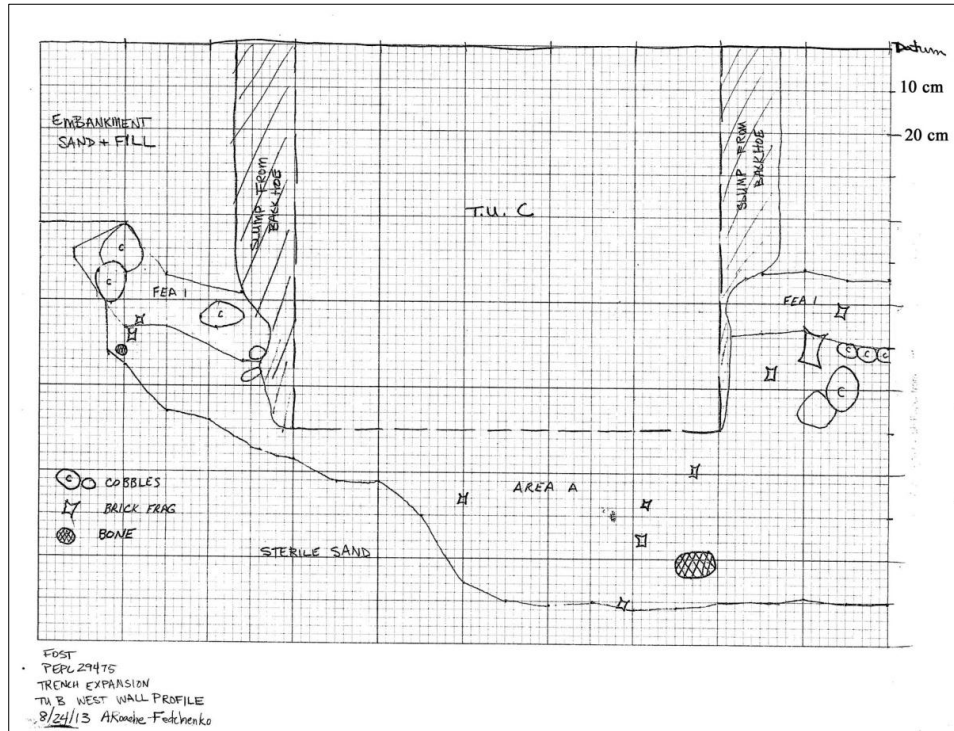


Figure 19: TU B West Wall Profile



Figure 20: Mortar Bomb Fragment from TU B showing Interior (left) and Exterior (right)

### ***Test Unit C***

Test Unit C had the highest amount of in-situ integrity as it was the least impacted by the backhoe construction activities. Test Unit C ran 1 meter north-south and 2 meters east-west, extending from the center of TU B, west toward the reconstructed fort foundation (see Figure 14). Since the backhoe had impacted some portion of TU C, the beginning elevations of the test unit ranged from 50 cm above datum along the west, sloping downward to approximately 95 cm below datum along the east portion of the unit (Figure 21).



**Figure 21: TU C, facing East, top at 10 cm above datum.**

The unit was excavated in 10 cm levels beginning at 30 cm above datum in order to gain information regarding the characteristics of the fill material used to create the earthwork



embankment and to better understand the depositional context of Feature 96. The embankment consisted of a layer of dark brown sandy loam (10YR3/2), approximately 1.5 to 2 meters thick from the highest ground surface of the embankment to the bottom of the stratum. This stratum contained some material culture likely related to the demolition and construction efforts of the 1970s given the presence of asphalt, plastic, stoneware, whiteware, animal bone, and brick fragments. Below this layer of fill, a sand (7.5 YR 3/2) layer, about 40-50 cm thick, was deposited and contained very few artifacts, mainly consisting of animal bone and brick fragments. The top of the feature was discovered between 74 and 78 cm below datum. Feature 96 was present in all of TU C and extended into the North, West, and South walls of the test unit.



**Figure 22: Artifacts from TU C, Feature 96 (top left-right: a gunflint pad, calcined bone, cow tooth; bottom left-right: canister shot, glass bottle base, and bone button blank)**

Numerous animal bones and brick fragments were recovered from TU C. Other types of material culture included ceramics (salt-glazed stoneware, creamware, delft, and lead glazed redware), several chert flakes, a gunflint, a glass bead, olive green bottle and some colorless flat glass, canister shot, a NY regimental button (Figure 23) with the joined “NY” on the face which dates to between 1776 and 1778 (Troiani 2001: 132-133). Also recovered from TU C was a brass button, scabbard tip, lead shot, fragments of a lead bale seal, a lead gunflint patch, several hand wrought rose head nails and tacks (Figure 22). During construction monitoring prior to the excavation of TU C, several 18<sup>th</sup> century artifacts were also recovered from the area that became TU C and included a brown bess trigger guard (Figure 26) typical of the long land pattern 1756 muskets (Neumann 2001: 50), several animal bones that exhibit hacking (Hanson and Hsu 1975: 164), a musket ball, and ceramics which consisted of creamware (1750-1785) and white salt-glazed stoneware (1720-1780) (Hume 1969: 114-116, 123-126).



**Figure 23: Close up of NY Regimental Button Found in TU C, Feature 96**

***Feature 96***

Feature 96 consisted of a dark grey clay lens (GLEY 3/1-4/1) deposited over a very dark grayish brown (10YR3/2) sandy clay. Both of these strata extended clearly through test units C, B, and dissipated into A. The top, dark clay was consistently 12-15 cm thick across all three units. The eastern edges of the clay tapered slightly and became mottled with some 19<sup>th</sup> century strata in Test Units A and Test Unit 1 from the 2012 field season. This mottling is likely due to 1970s construction related disturbance. The top, dark gray clay was most likely deposited to “cap” the refuse pit that consisted of the grayish brown sandy clay. This indicates that the feature was deposited during multiple phases as there is a clay cap/lens covering a dark gray brown stratum. Refuse was deposited continuously in both soil strata as is evidenced by the consistency of material culture found throughout these strata.



**Figure 24: Brass Trigger Guard**

Feature 96 was interesting in the way the clay lens was uniform at the top. This stratum of the feature was consistently between 12-14 cm thick, and thinned along the edges to between 4-8 cm thick. As seen in the profile map and pictures of the west walls of the feature (Figure 24 & 25), Feature 96 had a relatively flat bottom. Sterile subsoil below the feature appeared at approximately 65 cm below datum in the southernmost extent of TU A and B and sloped to a depth of 136 cm below datum on the northern extent of the test units. The slope appeared to be slightly stepped before evening out to a depth of 133 to 136 cm below datum. This can be seen in Figure 18, which shows the profile drawing of the west wall of TU B and is visible in the photos of the west wall profiles from TU A and B. Given the measurements of the depth of sterile subsoil, the angle of this slope appears to be approximately 37°, which is similar to the calculated slope (40°) for the scarp and counterscarp excavated by archeologists during the 1970s (Carroll 1976: 160). No wood pickets or pegs were found in place as was the case during the excavation of the other scarp and counterscarp areas in the 1970s, but ample wood and burned wood was recovered in Feature 96 during the 2013 excavations (Carroll 1976: 160). Furthermore, this feature was located outside the walls of the original fort given both the angle of the depositional context and the artifact assemblage of the feature.



**Figure 25: Profile of Feature 96 (West Wall of TU A, East Wall of TU B, Plan view of TU A End)**



**Figure 26: Bottom of TU B Plan View with Feature 96 in West and North Walls**

The artifact assemblage of Feature 96 consisted primarily of animal bone (n=2730 or 29% of the artifact assemblage) and brick fragments (40.17 kg or 70% of the artifact assemblage). There were very few ceramics and glass fragments recovered from this feature, which is interesting to note given the fact that most refuse pits contain a variety of material culture. The ceramics recovered included small fragments of white-salt glazed stoneware, creamware, lead glazed redware, and tin-glazed delft. Glass artifacts included a white glass trade/seed bead, olive green wine and case bottle fragments, and several pieces of flat glass. As previously described in association with the relevant test unit location, other artifacts included a mortar bomb fragment, canister shot, two bone button blanks, a NY regimental button dating from 1776 to 1778, a knife blade fragment, a belt ax, and several gun related objects (i.e. gunflints, gunflint patches, scabbard hook, trigger guard).

<b>Feature 96 Assemblage</b>		
<b>Artifact</b>	<b>Count</b>	<b>% of Assemblage</b>
Faunal Remains	2730	29
Brick	6652 (40.17 g)	70
Ceramic	34	
Metal (Identifiable)	53	
Metal (Unidentifiable)	17	
Chert	11	
Glass	24	
Fire-cracked Rock	16	

In terms of assemblage, the underlying dark grayish brown sandy clay contained a wider variety of artifacts, including more ceramics, glass, and metal artifacts (see Figures 27 & 28). Given the presence of the exploded mortar bomb and New York regimental button, this portion of the feature was likely deposited during/near the time of the 1777 Siege of Fort Stanwix.<sup>5</sup> The dense, dark gray clay lens was deposited after this time. Since the mortar bomb fragment was found at a depth of 116 cm below datum, the *terminus post quem* of the feature is generally the beginning of the American occupation of Fort Stanwix in 1776. Given a lack of 19<sup>th</sup> century material and the presence of burned wood, the *terminus ante quem* of Feature 96 is generally the end of the American military occupation of the fort in 1781.

Archeological testing resulted in the excavation of approximately 75% of the feature that was exposed. This was calculated based on the measurements of the feature within the excavation area and the estimated maximum extent of the feature based on the visible remnants of Feature 96 in the southwest wall profile of TU B and the presence of modern intrusions (i.e. the reconstructed fort foundation and the modern utilities tunnel) to the west and north of the trench. In other words, the easternmost extent of Feature 96 was excavated and portions of the feature along the north, west and south were left in-situ.

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<sup>5</sup> It is highly unlikely that the mortar bomb fragment was transplanted to this refuse area after the siege given the fact that it is the only mortar bomb fragment found within the area of the 2012 and 2013 trench excavations. If an effort had been made to collect and discard mortar bomb fragments, more of these fragments would appear together in the archeological record.

<b>Feature 96 Clay Cap/Lens</b>		
<b>Artifact</b>	<b>Count</b>	<b>% of Assemblage</b>
<b>Faunal Remains</b>	846	42 (96% w/o brick)
<b>Aves</b>	1	
<b>Mammal</b>	845	
Artiodactyl	97	
Bos taurus	16	
Sus scrofa	20	
Hacked	114	
Weathered	4	
Water line etched	2	
Calcined	116	
Charred	14	
Sliced	5	
Cut	3	
<b>Brick</b>	1125 (5.71 kg)	56
<b>Ceramic</b>	3	
Kaolin Pipe Bowl Frg.	1	
White Salt-Glazed Stoneware	1	
Tin-Glazed, Delft	1	
<b>Chert</b>	1	
Flake	1	
<b>Glass</b>	8	
Bead	1	
Bottle (olive green)	6	
Flat	1	
<b>Metal</b>	22	
Button (pewter)	1	
Strap	1	
Knife blade tip	1	
Bale seal (lead)	1	
Scrap (lead)	1	
Nail (handwrought)	11	
Unidentifiable	6	
<b>Fire-cracked Rock</b>	5	

**Figure 27: Artifact Counts from Feature 96, Dark Grey Clay Lens**

<b>Feature 96 Refuse, Dark Grayish Brown Sandy Clay</b>		
<b>Artifact</b>	<b>Count</b>	<b>% of Assemblage</b>
<b>Faunal Remains</b>	1884	25 (94% w/o brick)
<b>Aves</b>	5	
<b>Mammal</b>	1635	
Artiodactyl	121	
Bos taurus	106	
Sus scrofa	16	
<b>Fish</b>	1	
Lepistopius gar, scale	1	
<b>Indeterminate</b>	243	
Hacked	95	
Weathered	20	
Water line etched	2	
Calcined	363	
Charred	31	
Sliced	9	
Cut	6	
<b>Brick</b>	5527 (34.46 kg)	73
<b>Ceramic</b>	31	
Creamware	3	
Pearlware (handpainted)	2	
Tin-glazed, Delft	3	
Porcelain	1	
Redware	8	
White Salt-glazed Stoneware	1	
Westerwalk Stoneware	1	
Unidentifiable Ceramics	6	
Kaolin Pipe Frg.	6	
<b>Chert</b>	10	
Flakes	9	
Gunflint (honey colored)	1	
<b>Glass</b>	16	
Bottle	11	
Flat	5	
<b>Metal</b>	48	
Scabbard Tip (brass)	1	
Canister Shot	2	
Strap	3	
Gunflint Patch (lead)	2	
Scrap (lead)	4	
Nail (handwrought)	23	
Cannon Primer	1	
Button (pewter)	1	
Unidentifiable	11	
<b>Fire-cracked Rock</b>	11	
<b>Slag</b>	3	

**Figure 28: Artifact Count from Feature 96, Dark Grayish Sandy Brown Clay Lens**

## **Results**

The 2013 excavation of this area resulted in the excavation of an inadvertently discovered 18<sup>th</sup> century refuse pit (Feature 96), dating to the American occupation of the fort (1776 to 1781) located outside the walls of the original fortification. Limited portions of this feature were also preserved in-situ. The archeological excavations of Test Units A, B, and C during the 2013 field season were excavated to mitigate construction related excavations for the installation of the fire suppression system and post indicator valve.

This feature consisted of two distinct soil lenses, including a clay stratum that capped the larger refuse pit. It is probable that the refuse pit was capped with clay to reduce the stench of rotting bones, as was common practice for the maintenance of refuse pits and outhouses during the 18<sup>th</sup> century. In a study conducted by the Department of the Interior, Halberg et al (1962: C-27) notes the presence of clay deposits within the Mohawk River flood plain and clay would have been readily available in the nearby watershed. During Phase IB testing in 2002 by Hartgen Archaeological Associates, Inc., a test trench (Trench 7) in the north east area of the park was excavated and revealed a significant clay deposit (Stull 2002: 4-5). Historic documents indicate that the general area eastward outside the fort was fairly wet most of the year and was sometimes described as swampy (Luzader 1976: 9, 14-15). Clearly defined water mark etching, coupled with evidence of weathering or exposure to the natural elements exhibited on 4 bones, indicates that these bones were discarded into a wet environment and were partially submerged following discard. Again, this is not surprising since multiple accounts from 18<sup>th</sup> century maps and orderly books note the presence of swamp conditions on this side of the fort (Luzader 1976: 14-15). It was unclear until this excavation how close to the fort the swampy areas may have extended from the nearby creek toward the fort during wet conditions.

The animal bones recovered in Feature 96 were significant not only in volume, but also exhibited a number of interesting modifications. The majority of the animal bones recovered were mammal and cow and pig were the most common mammals found. The modifications exhibited on these bones were also consistent with the findings from the 1976 report (Hanson and Hsu 1976: 164). Of the bones that showed evidence of food processing or modification, a significant number had been hacked (n=209) or showed cut marks (n=23). Hundreds of bones were calcined (fully and/or partially, n=479) and several showed evidence of charring or exposure to fire (n=45) without calcination.

Water screening methods proved useful in recovering bird, fish, and a few small mammal bones that would have otherwise not have been recovered via ¼ inch screening. Fish, birds, and small mammals are underrepresented in the FOST faunal collection and any future excavations, namely of features or in-situ 18<sup>th</sup> century deposits, should include water screening as a method of recovery.

## ***Future Research***

Feature 96 was the first 18<sup>th</sup> century feature uncovered since the 1970s excavations. Several potential avenues of research could be followed to draw more information from the data and



artifacts recovered during the 2012 and 2013 excavations. The following are a few recommended research questions that may be pursued in time.

- 1) Given the unique qualities of the clay from Feature 96, it would be useful to investigate the nature of clay deposits within the park in order to better understand the uses of such clay. In 2002, Hartgen Archeological Associates, Inc. documented a significant clay deposit in Trench 7 that should be compared with the clay deposit from Feature 96. Testing the chemical composition of the clay may help to determine whether the clay is local and provide baseline data for the analysis of other objects that could have been made from local clays, such as bricks or ceramics. Further research into 18<sup>th</sup> century brick making at or near the fort should also be conducted in order to not only assess the significance of nearby natural clay deposits, but also to determine the significance of the amount of bricks found across the site, and in particular, the number and types of bricks found within Feature 96.
- 2) Substantial evidence has been documented regarding general food processing techniques on cow and pig remains recovered at the site. Further inquiry of the faunal assemblage recovered at the site is also necessary. Given the number of bone recovered from Feature 96, the question arose in the field regarding the location of meat processing or butchering activities. Historic documents suggest that pigs, cows, and potentially other livestock, lived near the fort and at times, wandered into the ditch surrounding the fort (Col. Van Dyck, September 3, 1779). These animals may have been used to help feed the military personnel stationed at Fort Stanwix but it is unclear if these animals were butchered, and if so, by whom. A significant number of questions remain regarding the faunal assemblage recovered from Fort Stanwix.
- 3) While Feature 96 is clearly an area of refuse, nearby Feature 61 exhibits similar qualities in regards to the amount of animal bone recovered. Feature 61 has been associated with the Sally Port walkway. Given the similarities in characteristics between these two features, reevaluation of the identification of Feature 61 as that of the Sally Port walkway should take place. This reanalysis may better contextualize both features and provide more accurate information of structural elements of the fort. What is the extent of the discard and is it primarily composed of animal remains across the eastern side of the fort? Is there any evidence to indicate that this behavior was taking place during British occupation of the fort, or is this a unique attribute of the American occupation?
- 4) During archeological monitoring of construction excavation, several stone tools were discovered. No stone tools were found in-situ during archeological excavations. The depositional and cultural context of the stone tools recovered during the 1970s excavations remains fairly ambiguous. Hanson and Hsu (1975: 153) proposed that the precontact materials had been brought onto the site from another location during various landscaping efforts that took place in this area during the 19<sup>th</sup> century. While the context of the stone tools recovered during the 2013 field work remains indeterminate, the presence and variety of stone tools present is interesting to note and should be researched more in comparison with the precontact materials recovered during the 1970s (see Figure 29).



**Figure 29: Stone Tools Recovered During Construction Monitoring**

### ***Recommendations***

While a significant portion of Feature 96 was excavated, portions of the feature were left in-situ. The immediate Area of Potential Effect (APE) was defined when construction activities began during the summer of 2013. The trench in which the construction activities began contained Feature 96. This trench area was excavated archeologically to sterile subsoil. Approximately 1.5 meters extending east from the concrete wall of the reconstructed fort was not excavated archeologically (see Figure 30). It was determined that to do so would likely expose the builder's trench associated with the concrete wall and not provide significant archeological data. Therefore, archeological efforts focused on the test units that were excavated in order to document the feature from the easternmost extent located in TU A, toward in-situ contexts in TU B and TU C. In summary, Feature 96 continues west toward the wall of the reconstructed fort. The top of the feature is located approximately 2.7 meters below the reconstructed ground surface at the top of the embankment. Current construction plans indicate that any construction related excavation next to the reconstructed fort will be to a maximum depth of 4 feet below this ground surface, which will not disturb the remaining in-situ context of Feature 96.

Following the excavation of the Test Units during the summer of 2013, the FOST Maintenance team helped to stabilize the site by shoring the walls of the exposed feature with plywood (see Figure 32). The plywood was meant to be a temporary barrier between the work area and the exposed feature walls. The site remained covered with plastic tarps to keep the rainwater out to lessen the amount of fall-in, or slump, of the walls for approximately 10 weeks after archeological excavations had been complete. While the plywood was meant to be a temporary barrier to protect the site until construction could begin, it became evident that construction

would not resume until spring/summer of 2014. At the beginning of November, the tarps were removed and sterile sand was used to fill any spaces remaining between the plywood and feature walls. The plywood remained in place and was buried using the native soil that had been archeologically excavated from the site. Flagging tape was laid along the construction trench as warning tape for the underlying plywood. This plywood will help to maintain site integrity during construction and provide a barrier between construction activities and the in-situ remains of Feature 96. Archeological monitoring of construction related excavations within this area should continue to take place.



**Figure 30: Measurements of 2013 Trench Prior to Archeological Excavation**



**Figure 31: 2013 Trench End of Archeological Excavations**



**Figure 32: 2013 Trench Stabilized Prior to Backfill**

## **V. Recommendations**

The replacement of the parade ground, installation of new drainage, and construction of the fire suppression system successfully integrated cultural resource management preservation efforts in compliance with the National Historic Preservation Act, Section 106 and the National Environmental Protection Act. The archeological excavation of several test units within the parade ground and monitoring of construction related excavations within the reconstructed fort provided significant information related to the condition of the site, nature of stratigraphy, and presence of a variety of cultural material. This information is important to document in order to better understand site formation processes, the impacts of the reconstruction efforts on the site particularly within areas that have not been previously excavated archeologically, and provides useful presence/absence data in regard to the material culture of the site.

Despite mitigation efforts in 2012 to test the APE outside the sally port, an inadvertent discovery took place during construction related ground disturbance in 2013. Significant efforts were made by the park to quickly and efficiently mitigate the impact of the construction to a newly discovered 18<sup>th</sup> century feature. This was the first 18<sup>th</sup> century feature discovered since the large scale excavations of the 1970s. The feature was significant and unique in many ways as no other refuse pit with the stratigraphic attributes and artifact assemblage has been documented at Fort Stanwix National Monument. More information is now known about the behavioral patterns regarding the disposal of food waste from animals consumed at the site during the American occupation of the fort and further evidence regarding the structural history of the fort was documented. Archeological field methods have also changed since the 1970s and the implementation of water screening led to an increase in the recovery of small finds, such as glass beads, lead shot, and small animal bones like fish, bird, and small mammals. As with all archeological investigations, the data acquired during field work has led to further research questions that are important to the history of the site.

Archeological monitoring and the excavation of test units within project APE provided useful archeological information. As has been well documented throughout this report, adherence to NHPA Section 106 is of primary importance at Fort Stanwix National Monument in order to best preserve one of the park's primary resources, the buried cultural resources. Any future ground disturbing activities should include cultural resource management strategies.

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## **VII. Appendices**

### **Artifact Spreadsheets**

- A. 2013 Parade Ground Test Units
- B. 2013 Parade Ground Replacement Monitoring
- C. 2013 Fire Suppression Monitoring Inside Fort
- D. 2013 Trench Excavations Inadvertent Discovery

### **Field Profile and Plan Drawings**

- E. Parade Ground Test Units
- F. Trench Excavations Inadvertent Discovery