

2022 Investigations to Locate Camp Security,  
a Revolutionary War Prison Camp  
in Springettsbury Township, York  
County, Pennsylvania



Prepared for:  
Friends of Camp Security  
PO Box 20008  
York, PA 17402

Prepared by:  
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Goldfinch Archaeology  
Cultural Resource Management Study No. 2

February 2023

36Yo46



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Finally, we thank Springettsbury Township for permitting this research to be conducted in the Camp Security Preservation Area and backfilling excavated trenches at the close of the project. We also acknowledge Township Supervisors for agreeing to submit the present artifact collection and associated field records to The State Museum of Pennsylvania for long-term curation. All collections from previous investigations in the Preservation Area are housed at the museum, where they are available to qualified researchers upon approved written request.

Though many have contributed to the project's success, we assume full responsibility for any errors which may appear in graphics, text, or interpretations offered herein.

John T. Crawmer  
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February 25, 2023

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## Introduction

The 2022 season marked the seventh effort to uncover the site of Camp Security, a Revolutionary War era prison camp in Springettsbury Township, York County, Pennsylvania. The Camp Security Preservation Area (530 Locust Grove Rd, York, PA) is located at the southwest corner of Camp Security Park and Locust Grove Road (Figure 1). The area is owned by Springettsbury Township and maintained by a tenant farmer. It consists of 160 acres of farmland divided into four fields. The Shultz House, constructed from 1752 to 1754 (York History Center 2010), is the only historic structure in the Preservation Area and is privately owned.

Archaeological excavations were undertaken by Goldfinch Archaeology in partnership with the Friends of Camp Security (FOCS) from September 6 through October 28, 2022. The investigations were prompted by Springettsbury Township's

desire to define the boundaries of cultural resources and better facilitate public use of the property. Volunteers worked across a 1.3 acre area to gather artifact spatial data and test promising locations.

The purpose of this report is to review site history and previous archaeological research; define research questions; examine the rationale for project area selection; discuss investigation strategies, methods, and findings; and provide interpretations and recommendations based on collected information. With only minor changes, the review of site history is adapted from the 2016 project report (Warfel 2016). This information is included in every report so each can be read and appreciated independently. An inventory of artifacts recovered and submitted to The State Museum of Pennsylvania for curation is provided in Appendix 3.

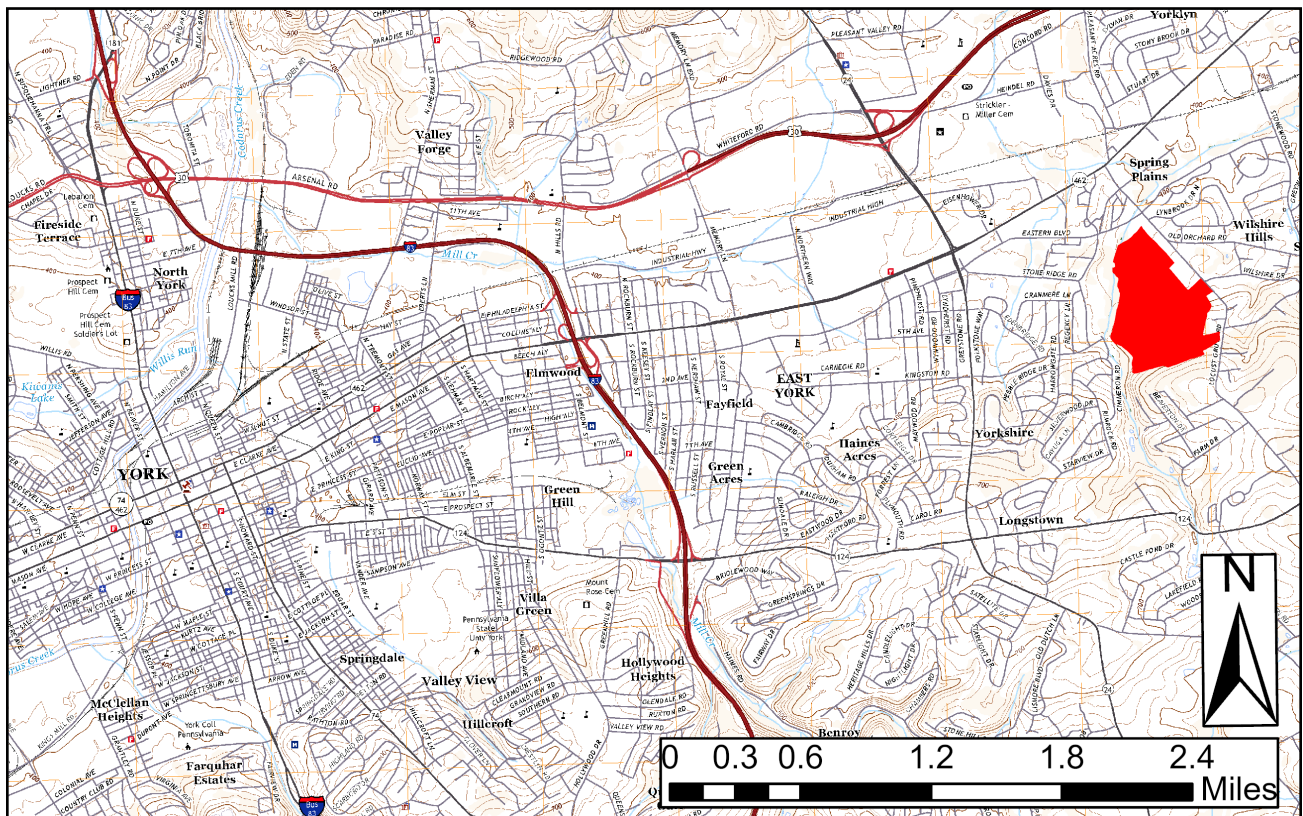


Figure 1: USGS map showing location of the Camp Security Preservation Area (marked in red)

## Background

### *Environmental Context*

The Camp Security Preservation Area consists of 160 acres of farmland on a sloping plain from Camp Security Park to the north and a small forest of oak, walnut, and pine trees to the south. Stony Brook, a small stream running south to north, bounds the western edge of the parcel with Locust Grove Road bounding its eastern limits. A dense tree line of oak, walnut, and pine trees segment the property into four fields. These are the Rowe Lower Field in the northeast, the Rowe Upper Field in the southeast, the Wiest Lower Field in the northwest, and Wiest Upper Field in the southwest. A large spring is situated at the intersection of these fields with spring run-off flowing north along the boundary

between the Wiest and Rowe Lower Fields. This run-off flows into 2 acres of wetland situated in the northwest of the property, immediately north of the Wiest Lower Field (Figure 2).

The region is characterized by a mosaic of rolling hills and valleys that are bisected to the east by the Susquehanna River. Hills between 500 ft. and 800 ft. in elevation are the primary landform to the south and Mount Zion, with an elevation of 800 ft., is located to the north. York City is tucked in the valley between these landforms. Vegetation in the valley is dominated by temperate oak and pine forest.

Soils along Stony Brook consist of Lindside silt loam (0% to 3% slopes). The Lindside series is characterized by silt loam (0 to 10 in.) over silty clay loam (10 to 50

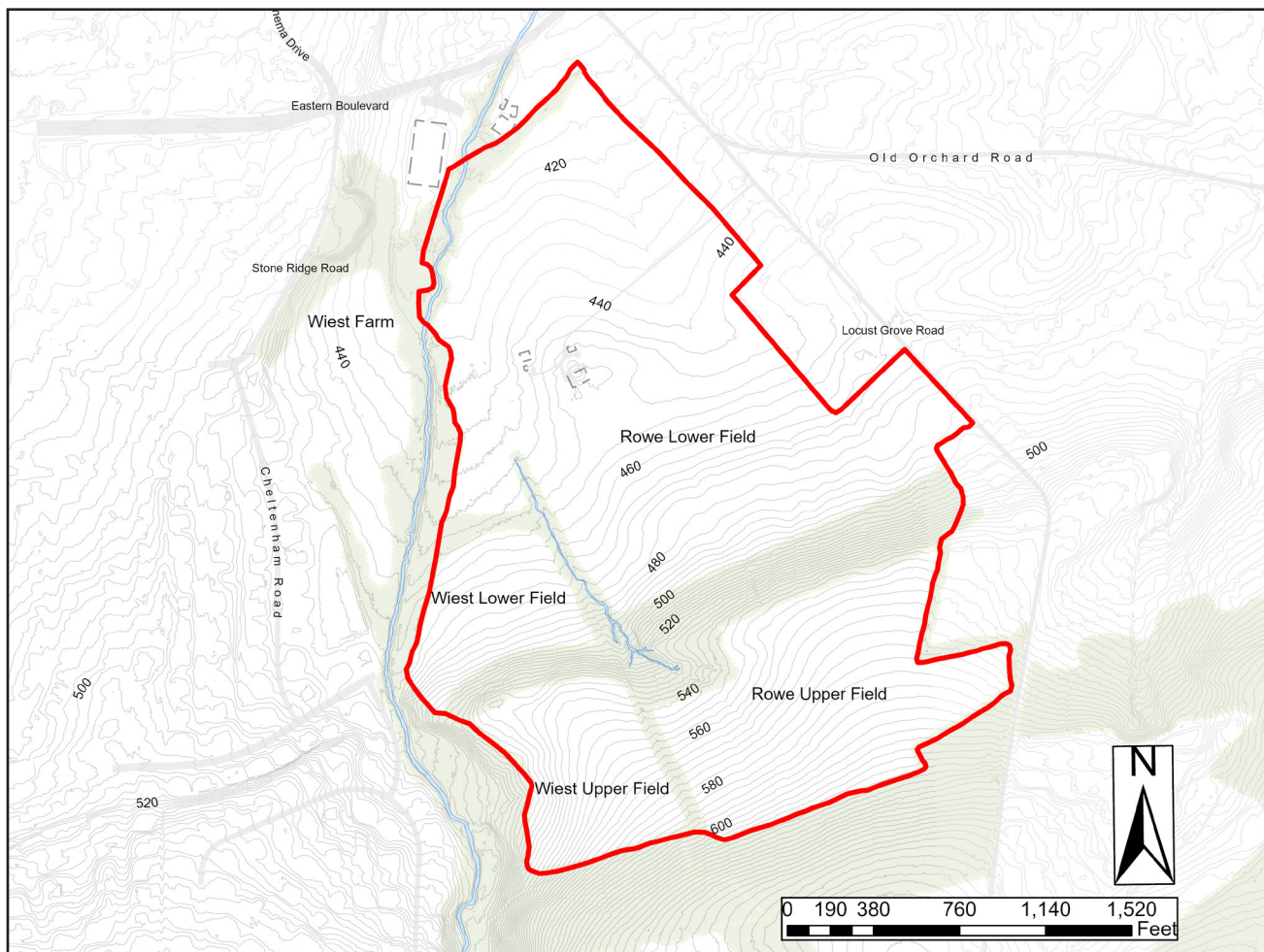


Figure 2: Map of Camp Security Preservation Area (site boundaries marked in red)



in.) over a stratified gravelly sandy loam to silt clay loam (50 to 60 in.). This occurs along footslope and toeslope terrain. Such soils are over 6 ft. deep and are moderately well drained, occurring on flood plains, valleys, and drainageways (NRCS 2022). The Wiest and Rowe Lower Fields consist of Conestoga silt loam with 3% to 8% slopes. This soil features silt loam (0 to 10 in.) over silty clay loam (10 to 38 in.) over channery loam (38 to 75 in.). The Conestoga series occurs along the shoulder of hillsides, are over 6 ft. in depth, and are well drained (NRCS 2022). The Wiest and Rowe Upper Fields consist of Mt. Airy and Manor silt loam with 8% to 15% slopes. This soil is characterized as channery silt loam (0 to 8 in.) over very channery silt loam (8 to 32 in.). The Mt. Airy and Manor series occur along the shoulder of hillslopes, are over 3 ft. in depth, and are somewhat excessively drained (NRCS 2022).

***Pre-contact Context***

Numerous finds of pre-contact cultural materials have been made by local collectors and archaeologists throughout York County. Four pre-contact archaeological sites are within a 1 mi. radius of the Preservation Area (Table 1). These sites are north of the Preservation Area, along the tributaries of Kreutz Creek. Most lithic materials are quartz with some chert flakes identified at 36Yo355. Diagnostic artifacts include a Late Archaic Period (ca. 4,300 to 6,000 years

ago) Koens Crispin/Savannah River quartz point from 36Yo375 and a Late Woodland to Mississippian Period (ca. 300 to 1,100 years ago) Madison point at 36Yo471.

Previous investigations in the Camp Security Preservation Area (36Yo46 and 36Yo415) identified Native American occupation as early as the Late Archaic Period (ca. 4,300 to 6,000 years ago) continuing into the Woodland Period (ca. 1,000 to 2,000 years ago) (Warfel 2015:23–27). Artifact types include points, scrapers, hammerstones, drills, celts, net weights, and chipping debris. Spear points dating to the Late Archaic Period are more numerous than other types, therefore it is believed the area was used intensively during that time. Local quartz was favored for the manufacture of stone tools. This is consistent with other Late Archaic Period sites in the Lower Susquehanna Valley where local mineral sources were commonly used for knapping (Carr and Moeller 2015:73). During this period, Native peoples lived in small groups of 15 to 20 individuals (Carr and Moeller 2015:87). These groups moved seasonally to take advantage of food resources. They were nomadic and well-adapted to a wooded environment. The types of artifacts found in the region suggest they produced and sharpened tools, hunted, processed hides, crafted wood, and fished in the area. Natural water sources were attractive to the wild game that Native American hunters followed. Consequently, pre-contact

Site Number	Site Type	Description	NRHP Status
36Yo286	Open Pre-Contact Site, Unknown Function	Lithic scatter	N/A
36Yo335	Historic and Pre-Contact	Lithic scatter and historic foundation	Listed
36Yo375	Open Pre-Contact Site, Unknown Function	Lithic scatter	Not Eligible
36Yo471	Open Pre-Contact Site, Unknown Function	Lithic scatter	N/A

Table 1: Summary of pre-contact sites within 1 mi. radius of the Preservation Area

artifacts are localized to the Wiest Lower Field (36Yo46) with some additional scatter in the Rowe Lower Field (36Yo415) (Crawmer 2019:35).

### *Historic Context*

“Camp Security” refers to a complex of two Revolutionary War prison camps, known to those who were incarcerated there as Camps Security and Indulgence (Houlding and Yates 1990:34–35). The camps were built approximately 4.5 mi. east of York on land owned by Lancaster County resident David Brubaker. A portion of Brubaker’s 280 acre tract was farmed by a tenant and included 100 acres of cleared land and structures. Significant acreage was in woodlot. Brubaker made claims for the losses he incurred due to the camp’s construction. The claims demonstrate that the camps were located on the Brubaker tract and provide some clues as to the camp’s structure. In his 1781 claim he states:

*“That above 100 Acres thereof being already cleared, the persons employed constructing the Stockade & Huts for the Prisoners & Guards have made use of large quantities of wood growing on the said Plantation, & have already cleared 30 Acres of wood land thereon, so that the Plantation aforesaid is considerably impaired in value. That the Guards have used & destroyed almost all the Rails on the Plantation, utterly depriving the Tenant of the Indian Corn thereon, & the benefit of the Pasturage of his Meadow”* (Brubaker 1896).

The initial camp, built and opened in July 1781, housed a portion of the nearly five thousand British and German troops captured at the Battle of Saratoga in 1777. This Convention Army – so-named for the surrender agreement which was called the

Convention of Saratoga – was previously interned in Cambridge (MA), Rutland (MA), and Charlottesville (VA) (Hagist 2004:vii–ix, 55–57; Miller 2014:156–158). When the British Army made significant advances in Virginia in 1781, detainees were moved north to Winchester (VA), Frederick (MD), and eventually Lancaster (PA) to prevent their release and reintegration into the main army. Upon arrival in Pennsylvania, the Convention Army was divided. British commissioned officers were incarcerated in Lancaster, regular soldiers and noncommissioned officers were sent to York, and German soldiers were sent to Reading. Historian Jonathan Stayer estimates that the York contingent numbered approximately 800 to 1,000 men, women, and children (Jonathan Stayer, personal communication 2014).

Pension records of the York County militia who guarded prisoners at Camp Security indicate that not all Convention Army prisoners lived inside the stockade. John Stewart, a guard in 1781, notes:

*“They kept the single men in a stockade under guard and the married men, after they had been there awhile, were permitted to remain outside the stockade. A great sickness set among the prisoners and the married were then permitted to build huts on the hill outside of the stockade...”* (Lloyd 2014).

More than 6,000 British and German troops were captured following the Battle of Yorktown in October 1781. The new prisoners were placed in established detention camps in Virginia and Maryland (Miller 2014:158), but were eventually moved to York and Lancaster, Pennsylvania (Miller 2014:159). Approximately 800 British soldiers, women, and children, swelled the population of the York camp in January 1782 (Jonathan Stayer, personal

communication 2014).

More hostile and a greater escape risk, these Yorktown troops were placed in the stockaded compound originally constructed for Convention Army prisoners. Captain Samuel Graham, a member of the Yorktown army, noted that they were kept in huts “newly constructed ... surrounded by a high stockade and ... strictly guarded” (Graham 1862:73). Presumably, the Convention Army detainees were moved out of the stockade. Sergeant Roger Lamb was captured at the Battle of Saratoga but escaped on his way to Charlottesville and returned to British military service. He was recaptured at the Battle of Yorktown and entered the York camp in January 1782 (Hagist 2004:100). He was permitted to stay with his former comrades and clearly notes the primary difference between the two camps when he writes: “... a small village had been built by the remains of General Burgoyne’s army, who were allowed very great privileges with respect to their liberty in the country...while the soldiers of Lord Cornwallis’s army were closely confined in their pen” (Hagist 2004:100).

According to Lamb, the space enclosed by the stockade was, “a little more limited” than the two to three acre enclosure in which he and Convention Army prisoners were confined during their stay in Rutland, Massachusetts (Hagist 2004:57, 100). “About two hundred yards” separated Camps Security and Indulgence (Hagist 2004:100). Graham further notes that Camp Indulgence was located “upon a rising ground” (Graham 1862:73).

It is likely that defined areas near one or both camps were set aside for kitchens and latrines. The nature of camp industry was described by Lamb, “Men, women, and even the children were employed making lace, buckles, spoons and exercising other mechanical trades which they had learned during their captivity” (Hagist 2004:100).

The detention complex was composed of more than just Camps Security and Indulgence. In 1781 construction of a hospital began. However, Benjamin Shield, a Surgeon’s Mate in Burgoyne’s Canada Army, reported it was not completed due to an outbreak of disease and death that affected camp inhabitants.

*“...they having in about five weeks Buried upwards of forty Men, women, and children ... having no hospital ... is an unusual trouble ... the Men had laid the foundation for an Hospital but falling Sick so fast there was not Men enough to attend the Sick ...”* (Sellers 1895).

A cemetery was required for burial of the dead. In 1781 Corporal James Fox, a Convention Army prisoner, noted that “after the huts were builded we sunk wells and made a graveyard [a quarter-mile] from the camp...” (Houlding and Yates 1990:34–35). Anecdotal evidence places the camp cemetery in a residential neighborhood outside of the Camp Security Preservation Area (160 acres of the Brubaker tract preserved and administered by Spriggstonsbury Township). It is uncertain if this unmarked hallowed ground survived land modification associated with subdivision development.

Although the Treaty of Paris, the agreement ending the Revolutionary War, was not signed until September 1783, the Continental Congress declared a formal cessation of hostilities on April 11, 1783 (Miller 2014:181). Historian Ken Miller notes that General George Washington, Commander of the Continental Army, instructed prisoners of war to be “conducted from their places of detention ... in incremental detachments of five hundred” (Miller 2014:181). Camps Security and Indulgence were vacated by early May 1783 (Jonathan Stayer, personal communication 2014).

In summary, the Camp Security complex consisted of two residential camps, huts for guards, activity areas, a cemetery located about one-quarter mile from the camps, and possibly a hospital. Camp Security was enclosed by a closely guarded stockade; whereas Camp Indulgence was a village of huts located on “rising ground” about two hundred yards from the stockade. It was neither guarded nor enclosed. Built in July 1781, the detention facility was inhabited for twenty-two months. Prisoners were released and returned to England in May 1783. No contemporary documents have been found which pinpoint camp locations on the Brubaker tract.

### *Previous Excavations*

Limited archaeological excavations were conducted in the Wiest Upper Field in 1979 by the Pennsylvania Historical and Museum Commission (PHMC) in partnership with Springettsbury Township and Historic York, Inc. (Figure 3). The project uncovered several refuse-filled pits dating to the camp-period (Hunter 1979). Although investigators interpreted the area to be the site of Camp Security, re-examination of artifacts and the lack of below-ground structural evidence suggest the site is affiliated with Camp Indulgence. A large quantity of brass straight pins and bone button blanks suggest the location was a work area affiliated with the residential compound (Baumgardt [2000]:6–7).

In May 2000, an archaeological survey evaluated the Wiest Upper and Lower fields to assess the impacts of a proposed housing subdivision on cultural resources associated with Camp Security (Catts and Roberts 2000). Surface collection and shovel test pits found additional camp-period artifacts and identified features with potential association to camp activities. Although not explicitly stated, Catts and Roberts (2000:14–15) suggest Camp Indulgence

lies in the Wiest Upper Field, while Camp Security is located immediately to the north. Investigators also noted a series of man-made terraces within the tree line separating the Wiest Upper and Lower fields. Catts and Roberts (2000:10) observed four separate terraces extending 200 to 250 ft. parallel to the face of the slope. Portions of the terraces appear to have been stone-faced or lined. They likened these features to a British military hut camp at the Dyckman Farm in Manhattan, NY.

Historic York, Inc. sponsored an excavation around the Schultz House from August to September 2009 (Warfel 2010). The mid-18th-century structure was the principal house on the Brubaker tract when the camps were built. Oral tradition and local histories have long held that the building was used as a headquarters for camp guards, despite Brubaker’s 1781 claim that huts were built for guards near the camp (Stayer 1981:22). Seventy-nine close-interval shovel test pits discovered only a handful of 18th-century artifacts, none of which are associated with military activity. Hence, investigations were unable to verify that the house was used by camp guards.

The Friends of Camp Security (FOCS) sponsored an investigation in the Rowe Upper Field from August to October 2014. Excavation was informed by a gradiometer survey that located promising anomalies in the area (Quick 2013). One hundred and sixty-six circular test pits were excavated, but only an erosion gully filled with 1930s glass bottles was found (Warfel 2014).

A buried pipeline was installed along the northern edge of the Rowe Lower Field in 2015. The pipeline disturbance is approximately 4,550 linear ft. and 30 ft. wide. It extends from the northeastern corner of Camp Security Park, runs south-southwest along the northern edge of the Rowe Lower Field, and follows Stony Brook south to the Beaverson Pumping Station. A survey was

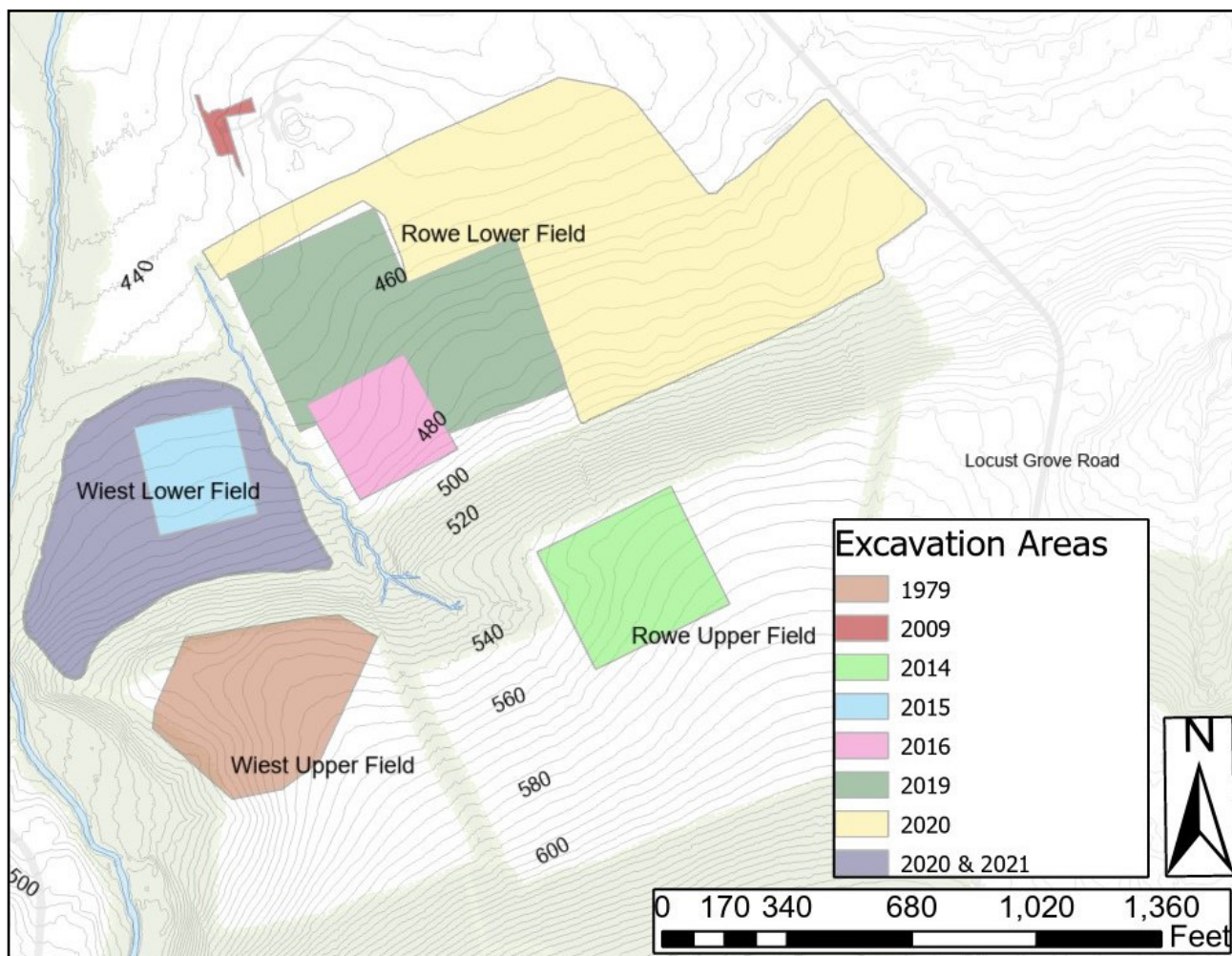


Figure 3: Map of previous excavation areas

conducted in the pipeline’s area of disturbance from September to October 2014. One hundred thirty-three shovel test pits were excavated recovering one redware, four whiteware, and two brick fragments. All artifacts were recovered from plowzone contexts and date from the late-19th to early-20th centuries. No pre-contact artifacts were identified by the 2014 survey (Kodlick 2014).

Between May and July 2015, the FOCS continued their efforts to find the stockaded camp. A 2 acre plot in the eastern half of the Wiest Lower Field was selected because it satisfied documentary, geographic, and remote sensing criteria (Warfel 2015). Surface collection, metal detecting, and excavation produced nine camp-period objects, but

no subsurface features could be assigned to the camp. The most significant finding was a concentration of pre-contact artifacts dating from the Late Archaic Period (ca. 4,300 to 6,000 years ago) to the Woodland Period (ca. 1,000 to 2,000 years ago) (Warfel 2015:23–27). The FOCS also investigated the southwestern corner of the Rowe Lower Field from May to June 2016. Surface collection, metal detecting, and excavation produced 58 camp-period objects, but no camp features were identified (Warfel 2016).

The FOCS partnered with Shippensburg University for a ground penetrating radar (GPR) survey in 2018 (Cornell et al. 2018). Several unusual disturbances with a high potential of being a structural feature, such as a stockade trench, were located.

Subsequent excavations in 2019 produced 53 camp-period objects but found the GPR anomalies to be geologic (Crawmer 2019).

Research continued in 2020 to identify high probability areas based on artifact distributions. Surface collection, metal detecting, and excavation over 27.4 acres yielded 69 camp-period artifacts including a button foil stamped with a “33” (Figure 4). This object is attributed to the British 33<sup>rd</sup> Regiment who were captured at Yorktown and detained at Camp Security. Limited excavation uncovered a historic post hole and large hand-dug pit in the Wiest Lower Field. This field was determined to present the highest probability of containing camp features, such as a stockade (Crawmer et al. 2021:34).

A shovel test pit survey was completed in 2021 within the tree line between the Wiest Upper and Lower fields. The terraces, first observed by Catts and Roberts (2000:10), contained a mix of 18th-century and modern artifacts. The terraces are visible in a 1947 aerial photograph but are not seen in a similar 1937 photograph. Paired with the archaeological results, these images prove the terraces were constructed sometime between 1937 and 1947 (Crawmer et al. 2022:13–17). Nine exploratory trenches

in the Wiest Lower Field found nine post holes, two wells, and a burnt trash pit. Objects in the trash pit date to the early-20th century and the wells and post holes were devoid of artifacts. The post hole distribution was random, so structures in the Wiest Lower Field could not be recognized at the conclusion of the 2021 season (Crawmer et al. 2022:17–22).

Previous archaeological investigations discovered camp-period artifacts and below-ground features in the Wiest Upper Field in 1979. Insufficient evidence exists to clearly define camp locations or positively attribute artifacts and features to either camp. Archaeological testing around the Schultz House, the Rowe Upper Field, and the Wiest and Rowe Lower fields found relatively few artifacts and no below-ground soil disturbances that can be directly attributed to camp activities. Pre-contact artifacts primarily reside in the Wiest Lower Field and date from the Late Archaic Period (ca. 4,300 to 6,000 years ago) through the Woodland Period (ca. 1,000 to 2,000 years ago).

## Research and Field Methodology

The investigation sought to answer specific questions about the nature, extent,



Figure 4: Button foil stamped with “33”, catalog number 36Yo46/396.3 (Photo number 2020\_E\_402)

and significance of archaeological deposits in the project area.

Our research questions include:

1. Are there other post holes in clear association with those found in the Wiest Lower Field?
2. Do post holes in the Wiest Lower Field relate to historic structures?
3. Are features associated with Camp Security, such as post holes, trash pits, privies, or a stockade trench, within the project area?

The scope of the project was designed to locate areas with high archaeological potential, determine the archaeological integrity of features, and assess the time periods and activities represented. All field and laboratory components were conducted by local volunteers in partnership with the Friends of Camp Security (FOCS). Community archaeology has been a feature of FOCS excavations since 2014. York County residents are major stakeholders in the historic site, as many are descendants of Camp Security guards. This project continued the FOCS tradition of providing individuals an opportunity to connect with their personal histories through direct participation in the archaeological process. All volunteer work was supervised by professional archaeologists to ensure data integrity.

Eyewitness accounts place Camp Security at a lower elevation than Camp Indulgence, which was built “upon a rising ground” and “on the hill outside of the stockade” (Hagist 2004:100; Graham 1862:73). In relation to the 1979 excavation site, the southern portions of the Wiest and Rowe Lower fields meet this criterion. Given the importance of water for prisoners and guards, it is reasonable to assume that Camp Security was situated near a natural water source (Warfel 2016:11). The Wiest Lower Field sits between a spring and a stream and is immediately downhill from

the Camp Indulgence site.

Most 18th-century adornment objects, including a stamped button foil attributable to the British 33<sup>rd</sup> Regiment, reside in the Wiest Lower Field. These objects were lost in place and may indicate locations where people lived or frequently traveled. Eleven post holes and two hand-dug wells were discovered in this field (Crawmer et al. 2022). Although these features cannot be positively associated with Camp Security, they remain extremely promising. Based on this evidence, the Wiest Lower Field presents the highest probability of containing Camp Security features, such as a stockade (Crawmer et al. 2021:34).

A small portion of the Wiest Lower Field (1.3 acres) was selected for investigation (Figure 5). This project area is centered on the largest post hole (Feature 53) discovered in 2021. An area of 1.3 acres was selected because historic accounts describe the stockade as, “a little more limited” than the two-to-three-acre enclosure at Rutland, Massachusetts (Hagist 2004:57, 100). If the post (Feature 53) is associated with a stockade, then a significant portion of the stockade is expected to be within the project area. A block excavation strategy was adopted in place of the previously used trench method to test areas surrounding known post hole locations more thoroughly. The 2022 project area was chosen to examine spaces that agree with historic accounts, are within an appropriate distance to nearby water sources, and is appropriately sized for excavation blocks.

Project design included two photogrammetry surveys, a systematic surface survey, a systematic metal detector survey, and block excavation. A Carlson BRx7 GPS was used to achieve spatial control of artifact and excavation locations. Photogrammetry provided additional control, recording the ground surface within a 2 in. resolution. Measurements below ground surface were

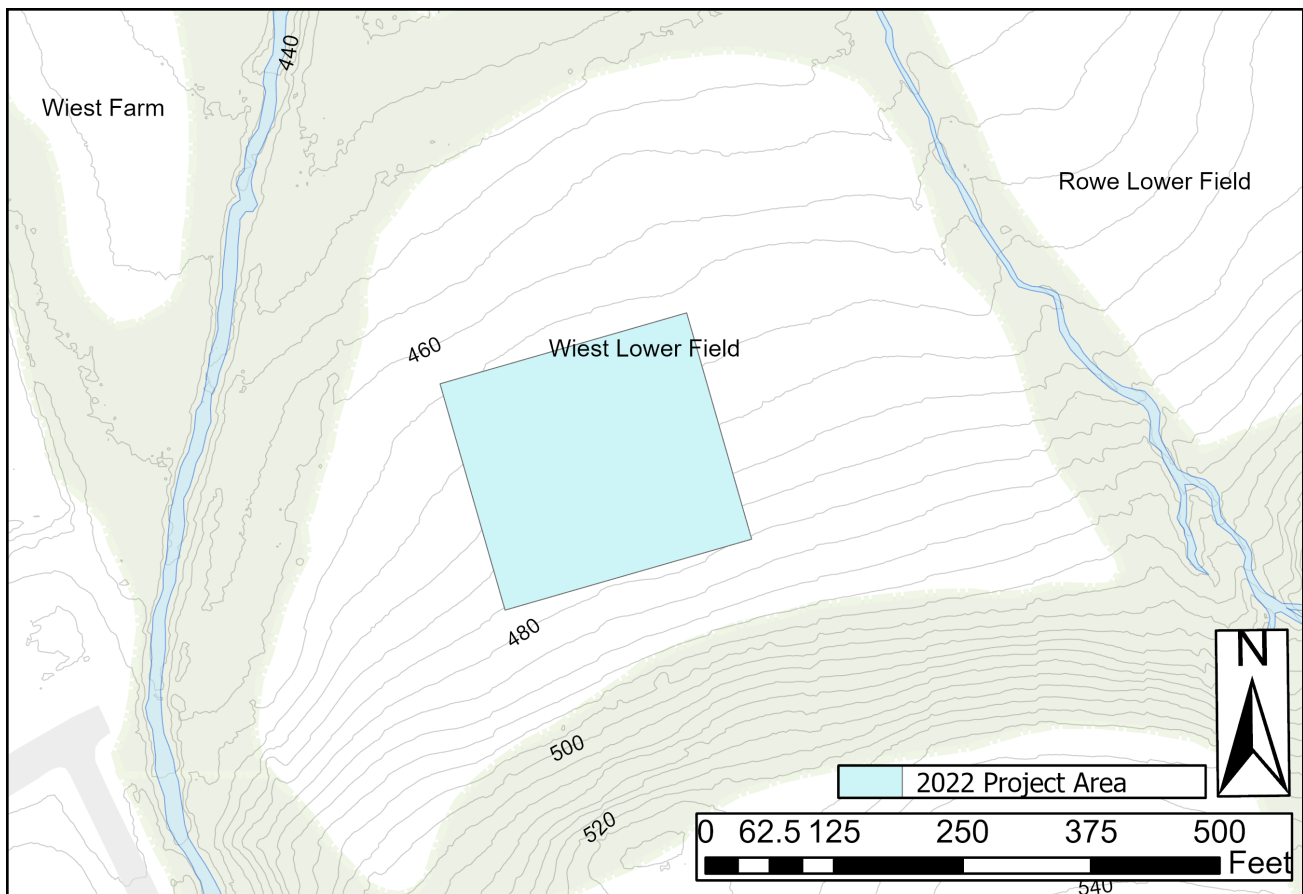


Figure 5: Map of 2022 investigation area

taken by hand and noted on field forms.

The ground surface was plowed prior to the study because the area is currently under cultivation. A moldboard plow turned soil from the bottom of the plowzone to the surface, so artifacts situated within the plowzone were also turned. Plowing not only improves visibility of artifact distributions, but also yields a more productive surface collection than alternative methods. The moldboard reached a depth of 6 to 8 in. This disturbed the plowzone and clipped the underlying subsoil in some areas but was not deep enough to disturb features, such as post holes, trenches, pits, or privies.

Aerial surveys were conducted on September 5 and October 27 to document excavation locations and field conditions before and after the excavation. Ground control points, marked with orange painted bio-degradable paper plates, were placed

around the Wiest Lower Field, and measured with a Carlson BRx7 GPS to sub-inch horizontal and vertical accuracy. A DJI Mavic 2 Pro drone was used to photograph the area. These photographs were analyzed by Agisoft Metashape software to produce spatially accurate orthophotos and digital elevation models.

The Wiest Lower Field was systematically surface collected following the same methodology used in previous seasons to derive comparable data. Volunteer crew members started the surface collection spaced arm's length apart and walking on a north-south axis. Sweeps began in the southern limit and continued until the entire project area was covered (Figure 6). This was repeated along an east-west axis starting in the eastern limit. Discovered artifacts were marked with orange pin flags and immediately mapped with a GPS to



sub-inch accuracy.

The systematic metal detector survey was conducted in a similar manner. Volunteers, using their own equipment, spaced themselves at an appropriate distance from one another to avoid inaccurate readings. The survey followed a north-south axis starting at the southern limit and continued until the entire project area was surveyed (Figure 7). Volunteers then reoriented along an east-west axis starting at the eastern limit. Target objects were unearthed, pin-flagged, and left in place at their discovery locations. In instances of objects deeper than 1 ft., the location was marked with a pin flag for later excavation by project archaeologists. This was to prevent potential intrusions into underlying features. All artifacts were immediately recorded with a GPS.

Fifty-six test units (TUs 23, 27 to 81) were positioned to examine the areas surrounding post holes. These units were connected to form large excavation blocks. Excavation involved cutting unit edges with sod shovels and removing the plowzone. These soils were discarded without sifting to quickly expose the subsoil and examine potential features. This presents a risk of losing artifacts that could otherwise be collected by sifting, but the loss was mitigated by the 2015,

2020, 2021, and 2022 surface collection and metal detecting surveys (Crawmer et al. 2021:36). While plowzone soils were not screened, all observed artifacts were collected. Excavated soils were removed from the area with wheelbarrows into large back dirt piles. Test unit excavation was complete when the subsoil surface was scraped clean with shovels and sharpened mason's trowels. Features, defined by dark soil stains, were photographed, and drawn before and after their excavation. All feature soils were sifted through ¼ in. hardware mesh. Artifacts were placed in labeled bags bearing the site number, unit number, soil layer, and feature number from which they were recovered. Each test unit was photographed, and plan-view drawn. The soil layer elevations of each test unit corner were recorded in project field notes. The entire ground surface was recorded by photogrammetry, so this data, paired with the field measurements, can be used to reconstruct accurate profiles. Soil coloration of the plowzone (Level 1A and 1B), subsoil (Level 2), and features were determined by comparison of samples with a Munsell Soil Color Chart (2009 revision). Soil texture determinations were made by project archaeologists, relying on prior training and experience. All test units were backfilled by Springettsbury Township at



Figure 6: Volunteers surface collecting in the Wiest Lower Field (Photo number 2022\_A\_0018)



Figure 7: Volunteers metal detecting in the Wiest Lower Field (Photo number 2022\_A\_0044)

the conclusion of fieldwork.

Once excavations were complete, artifacts were processed by a group of volunteers supervised by a project archaeologist. Glass, ceramic, lithics, and stable bone artifacts were washed; fragile bone and metals were dry brushed. Artifacts were then cataloged into a Microsoft Access database and curated per the State Museum of Pennsylvania's guidelines by the lead archaeologist.

## Excavation Results

The results of photogrammetry, surface collection, metal detecting, and block excavation highlight three major occupation periods of the Wiest Lower Field. These include a pre-contact occupation from the Late Archaic to Late Woodland periods, an 18th-century military encampment, and 19th-to-20th-century farming. The reliability of data generated from the project is high. In some cases, time and weather constraints hindered the complete excavation of exposed features.

### *Photogrammetry*

The 2022 investigation was the fourth year a drone photographed the Preservation Area. A DJI Mavic 2 Pro controlled by a smart controller and operated by Jane C. Skinner, FAA Small UAS Registration Number FA3KHLWCKC, was used for the aerial survey. Photographs were manipulated with software to create 3D models, so accurate elevation data could be derived.

Two models were created in 2022 (see Crawmer et al. 2021:14 for description of Agisoft Metashape process). One in September and another in October (Figure 8). The pre-season model was taken after Labor Day weekend after the area was plowed. It was created using 175 photos taken at around 370 ft. above the ground and rectified using the drone's internal GPS. The purpose of this model was to

survey the intended excavation area before the season began and to examine changes to the fields before the seasons started to change. We were particularly interested in the marshy area north of the excavation field, which was drier and more cleared than it had been in previous seasons. The second model was taken at the end of the excavation season on October 27. This model used 153 photos also collected about 370 ft. above the ground surface. The goal of this model was to take accurate heights of the excavated area. This model was rectified using ground control points in the NAD 2011 Pennsylvania South State Plane coordinate system and has an error of less than 1 in.

### *Surface Collection and Metal Detecting*

Surface collection and metal detecting recovered 137 artifacts. Twenty-one percent are redware fragments. Red earthenware pottery is not dateable because its form, composition, and glaze remain consistent from the 17th century to present day. However, redware is frequently identified at colonial period sites and was the dominant pottery type found during the 1979 excavation of Camp Indulgence (Hunter 1979).

Three camp-period artifacts were found including two buttons and one fragment of red transfer-print decorated creamware. Most artifacts date to the 19th and 20th centuries. These include cut nails, plain and decorated pearlware, American stoneware, a coin, and a toy lead soldier (Figure 9). Coal fragments are ubiquitous throughout the survey area but were not collected or counted. Nineteenth-and-twentieth-century artifacts in the Wiest Lower Field represent field trash dispersed by farmers who routinely disposed of household refuse in the fields (Warfel 2016:15).

Our investigation did not yield any noticeable artifact clusters (Figure 10). This is not surprising since the selection of the



Figure 8: September (top) and October (bottom) orthophotos (Photo numbers 2022\_A\_1472 & 2022\_A\_1473)

project area was influenced by the location of known post holes, not by the concentration of artifacts. Previous surveys found 18th-century artifacts clustered to the western third of the Wiest Lower Field (Warfel 2016:10; Crawmer et al. 2022:16-17). The thinner plowzone in that area could allow for more artifacts to be distributed from features, resulting in the higher density of artifacts observed (Crawmer et al. 2022:27).

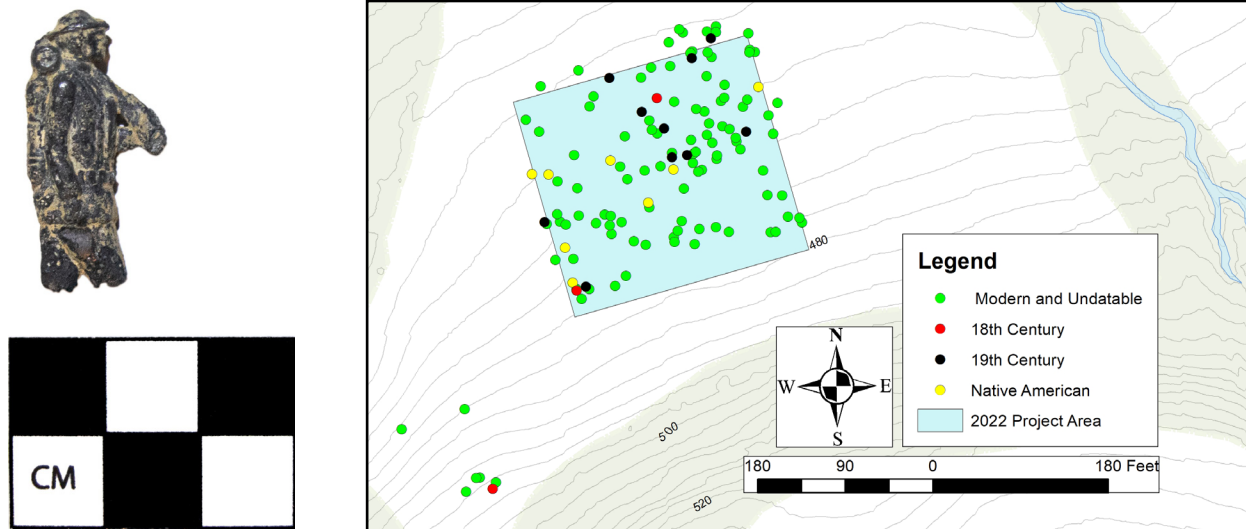
Unusually dry conditions in the wetland north of the Wiest Lower Field allowed for a brief metal detecting survey in the southern quarter of the area. Surveyors found metallic refuse related to 20th-century farming including plow fragments and modern bullets. A 2.5 ft. diameter circular depression was identified and mapped with the GPS, but no test units were excavated in the area.

### Excavation

Fifty-six test units (TUs 23, 27 to 81) were placed to investigate areas immediately surrounding post holes from September 12 to October 27 (Figure 11). Areas with unknown feature density were explored using 10x10 ft. units (TUs 23, 27 to 29, 31 to 33, 36, 41, and 70). Adjoining 5x5 ft. units

(TUs 34, 35, 37 to 40, 42 to 66, 68, 69, 72, 74 to 76, 78, and 81) were used to elaborate on findings and odd-shaped 2.5x10 ft. (TU 30), 5x10 ft. (TUs 67, 77, 79, 80), and 5x15 ft. (TUs 71, 73) units examined spaces between test units (see Appendix 1 for summary of test units). Increased spatial control from our GPS and photogrammetry models facilitated variation in unit sizes.

Stratigraphy was consistent across test units with a loose dark yellowish brown (10YR 4/4) silt loam with grass clump inclusions (Level 1A), a compacted dark yellowish brown (10YR 4/6) silt loam (Level 1B), and a yellowish brown (10YR 5/8) or brownish yellow (10YR 6/6) silt clay loam subsoil (Level 2). Rodent disturbances and plowscars are common, with thin triangular grooves from chisel plowing forming continuous east-west-oriented scars between adjoining test units. Some areas are disturbed by 1 ft. wide flat moldboard plowscars (Figure 12). A moldboard plow was used just before the investigation, but the wide plowscars sit beneath this recent plowing. The scars measure 3 in. from their base to the surrounding sub-surface, suggesting they were created at a time when the plowzone was much thinner.



Figures 9 & 10: Lead toy soldier, catalog number 36Yo46/440.7 (Photo number 2022\_A\_1471) (left) and map of 2022 surface collection (right)

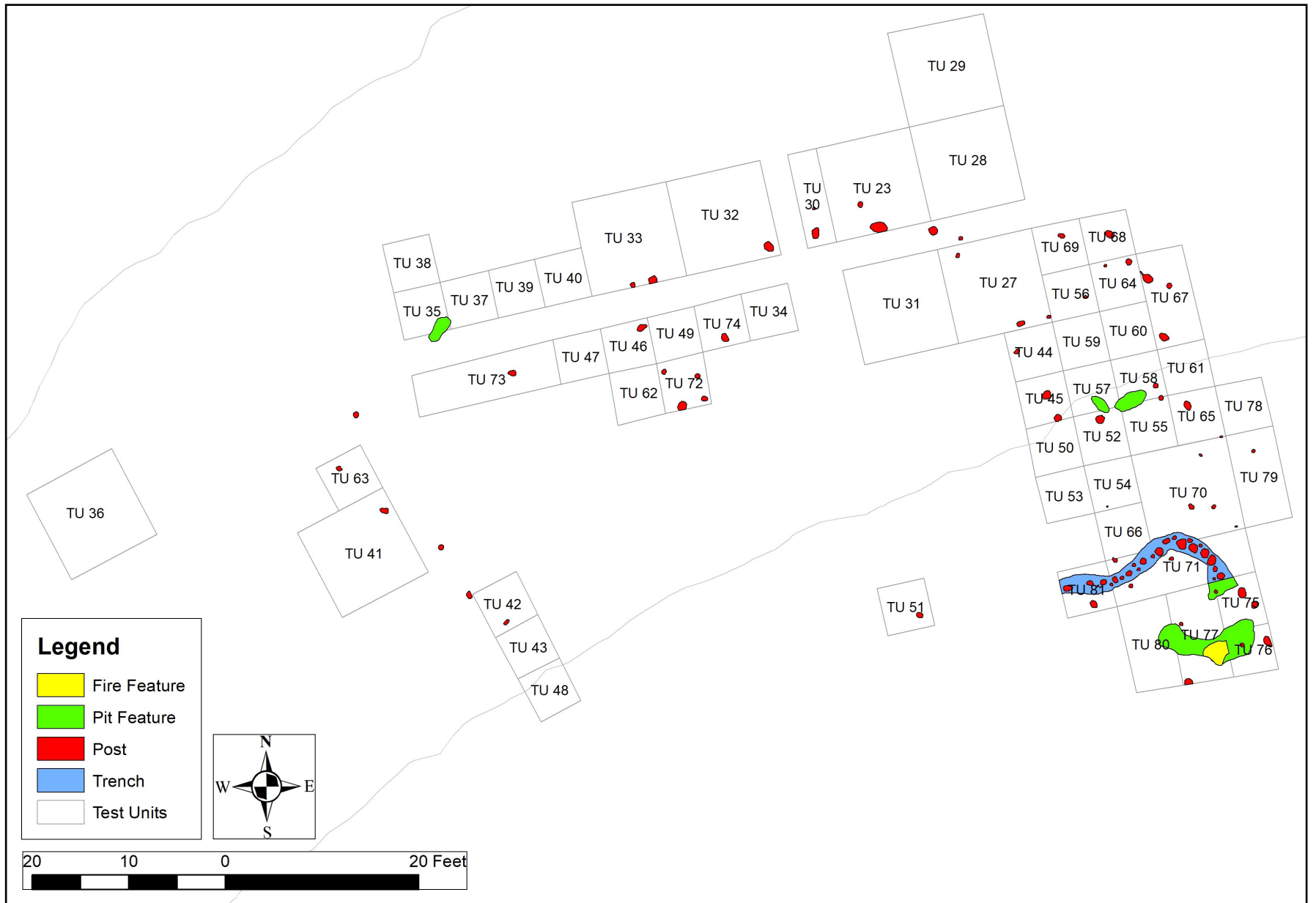


Figure 11: Map of 2022 test units



Figure 12: Photo of wide historic plowscars (Photo number 2022\_A\_1106)

The historic plowzone could have been as thin as 3 in., since recent plowing reached a depth of 6 in. Accurate dating of the plowscars is impossible given that no diagnostic artifacts are associated with them.

Although plowzone soils were not screened, hand excavation still allowed for artifacts to be observed and collected. Thirty-four artifacts were recovered from test units including eleven redware fragments, five quartz flakes, four brick fragments, two mammal bone fragments, two quartz side scrapers, a glass marble, a blue hand-painted whiteware rim sherd, a plain pearlware body sherd, a green sponge decorated whiteware body sherd, and a Popular Island point. Artifact locations are random, consistent with the patterns observed in the surface collection and metal detecting surveys.

One hundred forty-one features were identified in 2022. Fifty-seven (40.4%) were non-cultural, a result of rodent disturbances or a plow that uprooted stones. Seventy-eight (55.3%) are post holes, four (2.8%) are pits, one (0.7%) is a trench, and one (0.7%) is a fire feature (see Appendix 2 for summary of features). Feature contexts yielded one small fragment of green glass, in Feature 134, that could not be dated.

Post holes are circular stains of yellowish brown (10YR 5/6) silt loam with charcoal flecking contrasted by the

yellowish brown (10YR 5/8) silt clay loam subsoil. This is a very subtle color difference. No “post molds” are apparent which suggests that the posts were in place for a short period. Some are disturbed along their northern edge, possibly due to post removal. It is believed that the wood used in the construction of Camp Security was salvaged and reused shortly after the camp’s closure in 1783. However, structures related to farming, such as barns, lean-tos, fence lines, and corrals, could have been constructed and dismantled in the Wiest Lower Field. Therefore, the mere presence of post holes cannot conclusively prove the existence of the historic camp.

Post bases vary with forty-one (52.6%) conical points, thirty (38.5%) rounded bases, five (6.4%) flat, and two (2.6%) wedged. Feature 56 is the largest post hole, measuring 1.8 ft. wide and 1.83 ft. deep, and is roughly equivalent to a modern telephone pole. There is no way to determine the exact height of a historic post, but generally, the deeper the post was set, the higher it could have stood.

Feature 56 sits within an east-west running row of four large posts spaced 5 ft. apart, all measuring over 1 ft. in diameter and 1.5 ft. deep (Figure 13). Two 6 in. wide posts run parallel and are angled towards the larger posts. They serve as supports for a substantial 17 ft. long post-in-ground wall that likely featured horizontal backer boards or clapboards across its face. Perpendicular walls of the same type are positioned 12 ft. to the east and west. Four posts spanning 21 ft. construct the eastern-most wall, with four 6 in. wide posts bracing the structure from both sides. The western wall spans 14 ft. and is made up of four posts, with a group of three small posts located near its eastern face. The extent of the western wall is unknown due to fewer test units being opened in this area.

A rough 15x15 ft. square abuts the

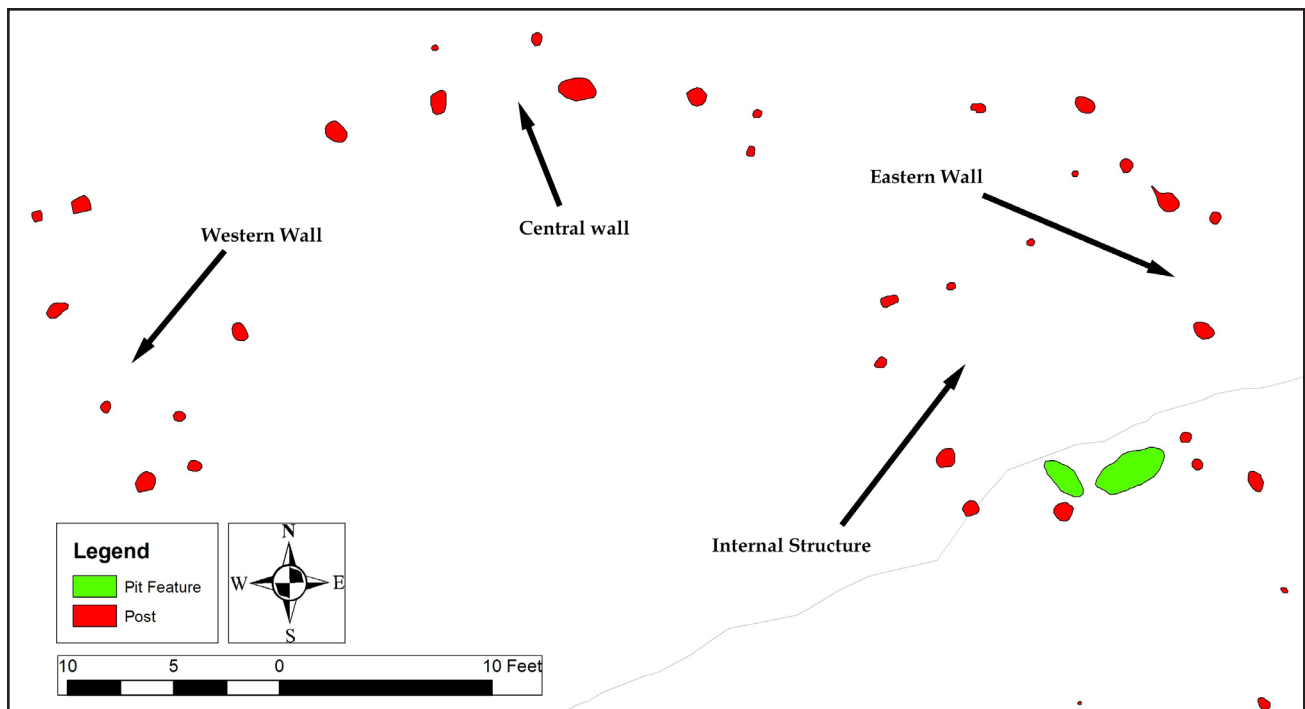


Figure 13: Map of post hole structures

western face of the eastern wall formation. It is made up of a series of 9 posts, spaced 2 ft. apart and ranging between 3 in. to 1 ft. wide. This “internal structure” is situated within the boundaries created by the larger wall formations. Two small pits (Features 108 and 109), measuring 1.5x2 ft. and 1.5x3 ft., were found inside the “internal structure”. They contained charcoal and angular stones, but no artifacts were recovered. It is plausible that the pits were used as temporary in-ground storage spaces that were emptied before being filled in. The lack of artifacts complicates the interpretation of whether the “internal structure” functioned as a short-term dwelling. Future excavation could lead to the discovery of additional structures with similar pits that could provide further insight.

Five posts are positioned 30 ft. west of the western wall formation in a north-west-southeast running line. Unlike the posts seen further east, the formation lacks bracing posts and consists of smaller (6 in. wide) and shallower (0.6 ft. deep) posts. It

bears similarities to a common fence line, but limited excavation in the area makes it uncertain whether this interpretation is correct. A 1x3 ft. pit (Feature 56) is situated between the western wall and possible fence line. It contains more charcoal than the pits found inside the internal structure, however, no artifacts were discovered in the pit.

A substantial pit feature is located 25 ft. to the south of the “internal structure.” Feature 130 is a stain of yellowish-brown (10YR 5/8) silt loam that has a dark yellowish-brown (10YR 4/6) streak along its eastern edge. Its eastern third was sectioned to reveal a series of distinct filling events (Figure 14). The top layer is redeposited subsoil, described as a yellowish brown (10YR 5/8) silt loam. Underneath it lies a dark yellowish brown (10YR 4/6) layer containing large charcoal fragments. This was revealed to be a fire feature (Feature 130.1), consisting of a light red (2.5Y 6/6) mottled with yellowish brown (10YR 4/6) silt loam. Six soil samples, weighing a total of 66 lbs.,

were collected from Feature 130.1 in the hope of identifying charred plant remains or seeds. Analysis of these samples will be included in a forthcoming report. It's likely that Feature 130.1 is a fire pit or burnt post. A definitive interpretation cannot be given since Features 130 and 130.1 were not fully excavated in 2022.



Figure 14: Bisection of Feature 130 (Photo number 2022\_B\_0040)

A sizeable trench (Feature 143) sits 9.5 ft. north of the fire feature (Feature 130.1). It spans 20 ft. in length, 2 ft. in width, and has a depth of 6 in. It primarily follows an east-west direction but takes a turn to the southeast. A closely spaced arrangement of twenty-four posts, ranging from 3 in. to 1 ft. in width, are set within the trench (Figure 15). The trench is filled with a yellowish brown (10YR 5/8) silt loam with charcoal flecking contrasted by the brownish yellow (10YR 6/6) silt clay loam subsoil. Post hole fills include brownish yellow (10YR 6/6) or yellowish brown (10YR 5/6 and 10YR 5/8) clay loam with charcoal flecking. The color of the trench fill, post holes, and surrounding natural subsoil are very similar, so soil texture and the presence of charcoal were relied upon to guide excavation. The natural subsoil layer is dense, while the feature

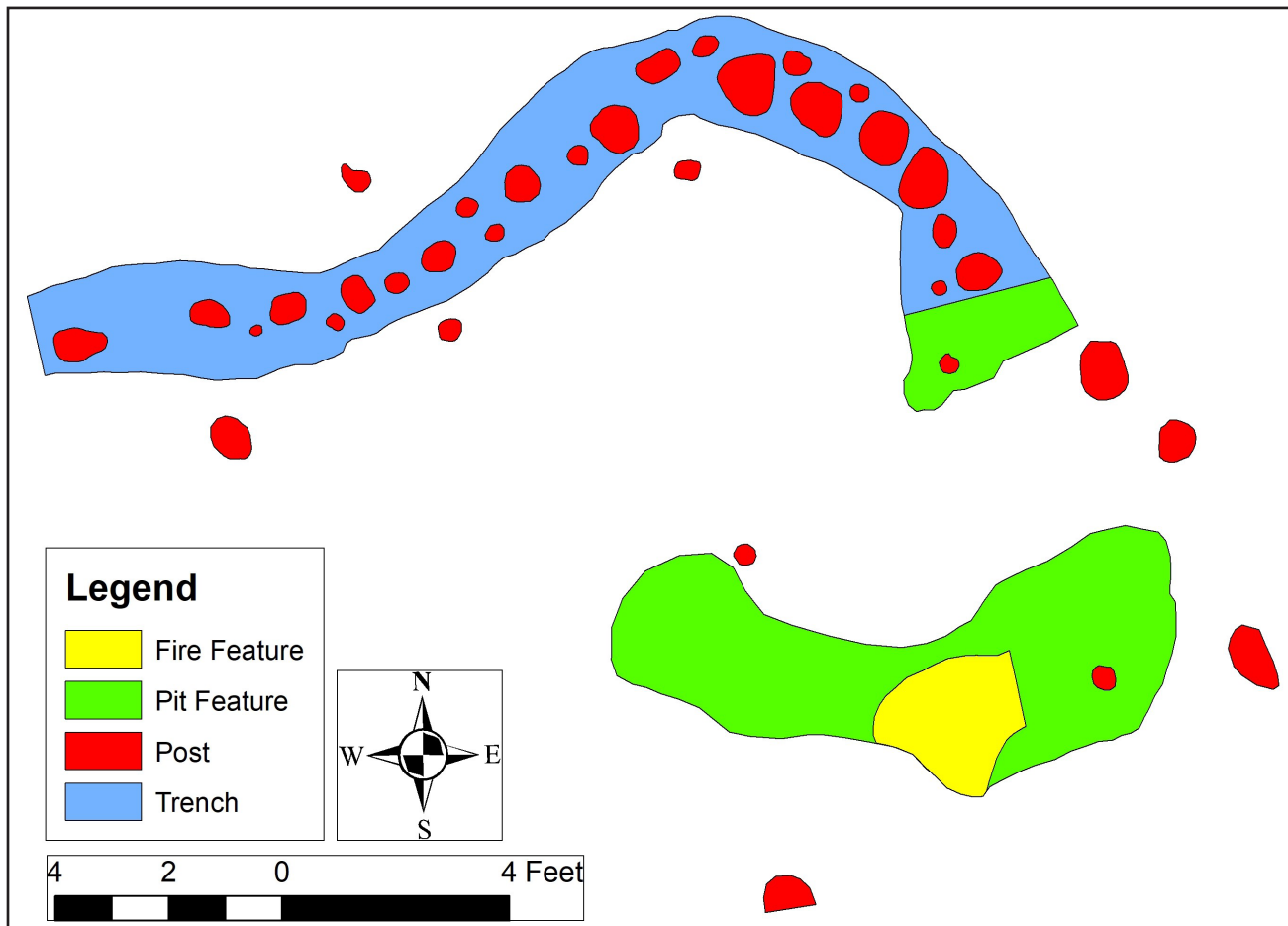


Figure 15: Map of trench (Feature 143), pit (Feature 130), fire feature (Feature 130.1) and post holes.



fill is significantly looser and was excavated with a tablespoon in some instances. Circular stains of “soft” soil were revealed at the base of the trench after excavation and indicated the presence of post holes.

The trench was identified in two instances as Features 142 and 143. Feature 142 was first observed as a medium sized pit and was partially excavated to reveal a post hole at its base. Feature 143 was detected as a linear stain of yellowish brown (10YR 5/8) silt loam along the southern wall of TU 70. Its full extent was not immediately evident due to the subtle color difference between the subsoil and feature fill. Feature 143 initially followed an east-west orientation but turned to the southeast, joining with the excavated half of Feature 142 (Figure 16). This confirms that Features 142 and 143 are components of the same trench feature. Excavation concluded at this location in 2022, but charcoal flecking was observed to continue southeast. Three post holes were excavated along this continuation before the shape of the trench was understood. These post holes’ depth

and the charcoal flecking that encircle them indicate that they were likely anchored in trench fill.

Feature 143 was built by excavating a trench, placing posts within it, and then refilling it to keep the posts upright. Comparable structures have been found at French and Indian War sites in Pennsylvania, including Fort Loudoun, Fort Halifax, Fort Augusta, Fort Necessity, and Fort Ligonier (Figure 17). According to Roger Lamb (Hagist 2004:100), the construction of Camp Security’s stockade required “a great number of trees” to be felled, “sharpened at each end, and driven firmly into the earth very close together, enclosing a space of about two or three acres.” This is congruent with our observations of Feature 143’s construction. Roger Lamb also estimated that Camp Security was situated “about two hundred yards” below Camp Indulgence (Hagist 2004:100). Feature 143 sits 175 yards downhill from the 1979 excavation area. Based on the physical and historical evidence, alongside comparisons with other 18th-century military encampments, it can



Figure 16: Photo of stockade trench, facing southeast (Photo number 2022\_A\_1462)



Figure 17: Comparison of Camp Security stockade (left) with Ft. Loudon stockade (right)

be inferred that Feature 143 represents a stockade associated with Camp Security. This is despite a lack of 18th-century artifacts. The stockade itself is a distinguishing element of historic military sites and it is not typically associated with farming or domestic settings. Since Camp Security is the only known stockaded encampment in the area, it follows that Feature 143 is associated with camp.

The discovery of Feature 143 marks a major milestone in the extensive archaeological work conducted at Camp Security. Six investigations sought to locate the stockade. Distinguishing between the subsoil and trench fill compounded the difficulty in recognizing it. Their resemblance in color but difference in compaction can be attributed to the trench being filled with redeposited subsoil. To account for this, the historic A-horizon must have been naturally thin or was stripped from the Wiest Lower Field prior to the stockade's construction. While David Brubaker's 1781 letter mentions the clearing of "30 Acres of wood land", no historic record describes land stripping or grading in preparation for the construction of the stockade and huts (Brubaker 1896). Extensive leveling was probably too time-consuming to meet the camp's short construction schedule in July 1781. Natural factors are more likely to have contributed to the thin A-horizon of the property during the 18th century. Based on the depth of historic plowscars, the A-horizon may have been as thin as 3 in. Over two centuries of regular plowing and erosion has since culminated in the 1 ft. thick plowzone seen today (Schiffer 1996).

## Material Culture

Two hundred eleven artifacts, ranging from Late Archaic lithics to modern framing equipment, were collected from the investigation area. One hundred forty-two objects (67.3%) could not be accurately

dated. These include bone fragments, corroded nails, and redware fragments. Twenty-two artifacts (10.4%) are modern, including a plastic button, window glass, and wire nails. Twenty-eight artifacts (13.3%) are pre-contact, including projectile points, chipping debris, and scrapers. Three artifacts (8.1%) date to the 18th century and include creamware and buttons.

### *Pre-contact Material*

Fifteen quartz and jasper flakes were collected in the project area with the majority being secondary flakes. This is consistent with the theory that the area was used for lithic reduction (Warfel 2015:23–27). Flakes are the byproduct of shaping, thinning, or sharpening stone tools. They are commonly considered waste material but can be repurposed as tools themselves. Eleven large quartz fragments have evidence of pressure flaking along their edge and were likely utilized as scrapers. These objects were classified as side or end scrapers in the project catalog.

Stanley and Popular Island projectile points were also recovered in the Wiest Lower Field and suggest when Native Americans inhabited the site (Figure 18). Dating is based on similar style points having been found at other sites in southcentral Pennsylvania and the Mid-Atlantic Region. Because similar points were discovered in



Figure 18: Stanley (left) and Popular Island (right) points, catalog numbers 36Yo46/416.16 & 549 (Photo number 2022\_A\_1470)

association with carbonized plant or animal remains, radiocarbon dates derived from the remains are used to estimate when the points were in use (Carr and Moeller 2015:9-13).

The Stanley point (36Yo46/416.16) dates to the Early Archaic Period (ca. 6,000 to 7,800 years ago) and features a bifurcated base with a missing tip. Stanley points are found throughout the east coast from South Carolina into New England and have been seen as far north as Ontario. The Popular Island point (36Yo46/549) dates to the Late Archaic Period (ca. 4,300 to 6,000 years ago) and typically has a contracting stem with a rounded base. This point is found from New York to Virginia and is most common in eastern Pennsylvania.

Seventeen diagnostic projectile points have been recovered from the Wiest Lower Field over the course of the 2015, 2020, 2021, and 2022 excavations. Ten are within the Archaic period and seven date to the Woodland period. This reinforces pre-contact occupation ranging from the Archaic to the Woodland period but suggests that the area was more consistently used between periods than previously thought (Warfel 2015:23-27).

### *Historic Material*

Three diagnostic historic artifacts date to the 18th century. They include two buttons and a fragment of transfer-printed creamware. Most of the Wiest Lower Field collection can be described as artifacts of personal adornment or objects worn by former site residents (White 2005:1). These small items could be easily lost throughout the course of daily life. Creamware vessels, like olive green glass, stoneware, and redware, are associated with storing and consuming food. Unlike personal adornment objects, these objects may relate to specific spaces such as kitchens or refuse pits.

A single small fragment of red transfer-print decorated creamware was found by surface collection. Unfortunately, the piece is too small to confidently determine its decorative motif. The earliest prints on creamware were produced during the 1760s to 1780s in a partnership between Josiah Wedgwood, who popularized creamware in England, and a printing company called Sadler & Green. These overglaze transfer-prints were typically in black or red and were made for the American market between 1790 and 1825. Most motifs commemorated national heroes, sailing vessels and battles (Nelson 1980). The fragment found in the Wiest Lower Field likely dates

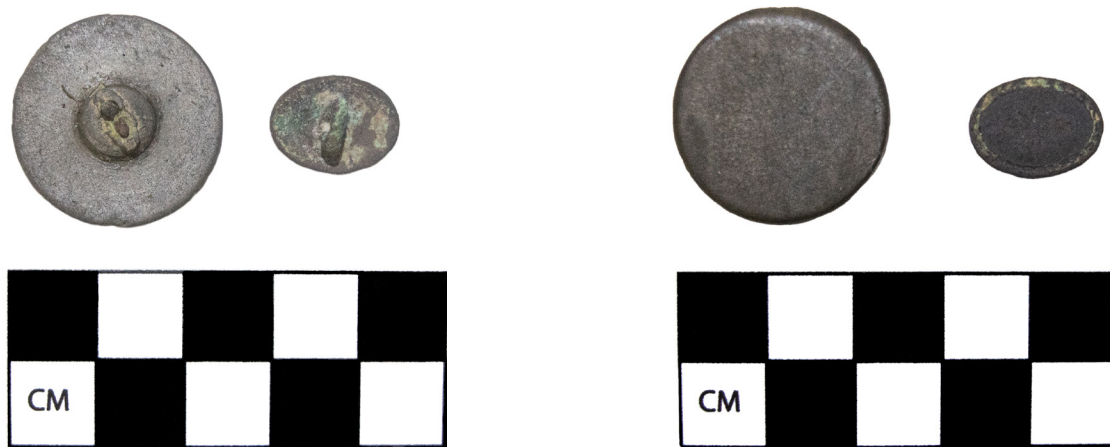


Figure 19: 18th-century buttons showing shanks (left) and faces (right), catalog numbers 36Yo46/381.12 & 407.31 (Photo numbers 2022\_A\_1468 & 2022\_A\_1469)

sometime soon after the camp-period.

Two buttons with intact shanks were able to be dated (Figure 19). One is plain with a flat circular face and shank “cast in boss”. The other is oblong with an “alpha” shank and features a wreath pattern around its edge with a central floral motif. Both were made sometime between 1760 and the early 1800s based on the construction of their respective shanks (White 2005:50–52). Buttons previously found in the Wiest Lower Field are diverse in their shape, size, and construction. Most date to the 18th century and feature an “alpha” shank. This is a piece of wire affixed to the back of the button that is formed into a loop, creating a shape akin to the Greek letter alpha. Other buttons have a cone-shaped shank or a drilled-eye shank (Crawmer et al. 2022:24).

## Discussion

### *Addressing Project Research Questions*

1. Are there other post holes in clear association with those found in the Wiest Lower Field?

Seventy-eight post holes were identified during the 2022 excavation. Six are in clear association with two of the post holes (Features 52 and 53) found in 2021. These posts form a substantial wall measuring 17 ft. long with bracing posts. Another three posts are associated with Features 58, 59, and 60 found in 2021. These are tentatively interpreted as a fence line due to their small size, but this interpretation may be disproven with future excavation.

A lack of wood decomposition suggests that posts were in place for a short time and some show clear evidence of removal. These aspects agree with historic accounts of Camp Security. However, farming-related structures, such as barns, lean-tos, fence lines, or corrals, cannot be ruled out in the Wiest Lower Field. The mere presence of post holes is not sufficient to confirm the presence of the historic camp.

2. Do post holes in the Wiest Lower Field relate to historic structures?

Four historic structures, a large multi-walled structure, a smaller “internal structure”, a fence line, and a stockade, were identified by the post hole patterns. The stockade’s design resembles those of other 18th-century military encampments in Pennsylvania and its location, 175 yards downhill from the Camp Indulgence site, agrees with historic accounts. Although the stockade appears to turn towards the southeast, its true shape is not yet fully understood.

3. Are features associated with Camp Security, such as post holes, trash pits, privies, or a stockade trench, within the project area?

The culmination of physical and historical evidence, coupled with comparisons to other 18th-century military encampments, have led us to the conclusion that Feature 143 served as the stockade of Camp Security. Some post holes exhibit a clear association with this stockade trench. A quartet of posts, set in even intervals of 5 ft., conform to its southern edge. The structures further north also seem related and appear to have a similar orientation to the stockade, but additional evidence is required to confirm this. The presence of pits or privies containing camp-period artifacts would provide substantial support for a potential relationship.

Assuming the structures are related, and the corner of the stockade is correct, they may have been a transitional space between the fields north of Camp Security and its stockaded portion. This would also imply that the area located southwest from the corner falls within the boundaries of the stockaded camp. While these assumptions seem plausible, they remain purely speculative until further excavations can verify their accuracy.

### ***National Register Considerations***

The Camp Security Preservation Area is within the historic limits of the 1781 property of David Brubaker. Brubaker made claims for the losses he incurred due to the construction of Camps Security and Indulgence. The claims demonstrate that the camps were located on the Brubaker tract and provide some clues as to initial camp structure. In his 1781 claim he states:

*“That above 100 Acres thereof being already cleared, the persons employed constructing the Stockade & Huts for the Prisoners & Guards have made use of large quantities of wood growing on the said Plantation, & have already cleared 30 Acres of wood land thereon, so that the Plantation aforesaid is considerably impaired in value. That the Guards have used & destroyed almost all the Rails on the Plantation, utterly depriving the Tenant of the Indian Corn thereon, & the benefit of the Pasturage of his Meadow”* (Brubaker 1896).

The presence of a stockade in the Wiest Lower Field confirms the exact location of Camp Security, but its layout remains a mystery. Important questions related to the structure and daily life of Revolutionary War prison camps can be addressed with future archaeological research. These include potential studies of vernacular architecture and material culture. Specifically, does the camp structure reflect a unique local identity or are standard military construction practices being used? To what extent are prisoners producing goods? What freedoms were afforded to prisoners and how does this relate to other prison camps?

The area meets the qualifications of

National Register Criteria A and D. The site is the location of a significant event in the history of the United States, and thus is significant to the study of the American War for Independence and the history and development of York County. The site retains several of the aspects or qualities of integrity crucial in determining National Register eligibility, including location, setting, association, workmanship, design, and materials, and has yielded data important in American history (Catts and Roberts 2000:15). National Register Criteria A and D are satisfied by the 1979 PHMC archaeological excavations, historic documents placing the camps within the Brubaker tract, and the discovery of a stockade feature. The results of the 2022 investigation have strongly supported the Camp Security Preservation Area’s National Register qualifications by locating a principal feature of the historic camp’s structure. Further excavation is likely to add to these qualifications.

### **Conclusion and Recommendations**

The primary objective of the 2022 archaeological investigation was to identify post holes related to those found in 2021 and determine if these features are associated with Camp Security. Surface collection, metal detecting, and excavation over 1.3 acres yielded 211 artifacts. Three (8.1%) date to the 18th century and include creamware and buttons. Fifty-six test units tested the space surrounding known post hole locations and uncovered seventy-eight historic post holes, four pits, a fire feature, and a stockade trench. Post hole patterns highlight four historic structures including a large wall formation made up of eastern, western, and central walls, an “internal structure” set within these walls, a possible fence line, and a stockade.

The investigation provided concrete physical evidence of Camp Security’s location by finding a portion of the camp

stockade. This discovery is perhaps the most significant in the long history of archaeology at the site and has several major implications for future research. First, the subtle difference in soil color between the stockade, post holes, and the surrounding subsoil can be hard to discern without adequate lighting. The trenching technique employed between 2015 and 2021 did not provide an optimal shading solution for excavators, so a potential interception of the stockade could have gone unnoticed. Future excavation at Camp Security must prioritize good lighting conditions to minimize the risk of missed or misinterpreted features.

Second, the presence of a major structure in an area of low artifact density implies a divergence between the distribution of artifacts and underlying features. Areas with higher artifact densities, like the western third of the Wiest Lower Field, are more likely related to organized refuse disposal rather than habitation areas. Based on 18th-century military camp design conventions or “Castramentation” practices, it is probable that Camps Security and Indulgence organized their refuse by assigning specific areas for disposal (Baumgardt [2000]). Therefore, spatial analysis based solely on artifact distributions may not fully capture major areas of habitation at Camp Security, rendering it incomplete and potentially misleading. Caution must be exercised when assessing the likelihood of archaeological discoveries using such an analysis (Crawmer et al. 2021:32-34).

Future research should prioritize following the stockade (Feature 143) in the Wiest Lower Field to better grasp Camp Security’s layout. Although mechanical stripping is more efficient, the sensitivity of the area necessitates the systematic removal of the plowzone by hand. It is also advisable to avoid sifting the plowzone soil since it has been thoroughly sampled in previous

surface collections and metal detecting surveys. The stockade’s footprint presents a promising opportunity to not only gain insight to the structure of Camp Security, but to locate artifact rich features such as privies or trash pits.

## Bibliography

- Baumgardt, Kenneth  
2000 "Castramentation" and the Discovery of the Layout of Camp Security. Unpublished manuscript, The State Museum of Pennsylvania, Harrisburg, PA.
- Brubaker, David  
1896 British Prisoners at York, 1781. In *Notes and Queries: Historical and Genealogical Chiefly Relating to Interior Pennsylvania*, Vol. 1, edited by William H. Egle, pp. 132-133. Harrisburg Publishing Company, Harrisburg.
- Carr, Kurt W., and Roger W. Moeller  
2015 *First Pennsylvanians: The Archaeology of Native Americans in Pennsylvania*. The Pennsylvania State University Press, Harrisburg, Pennsylvania.
- Catts, Wade P. and Daniel G. Roberts  
2000 A Phase I Archaeological Survey of the Proposed Hunters Crossing Development: The Site of Camp Security/Indulgence (36YO46), Springettsbury Township, York County, Pennsylvania. John Milner Associates. Submitted to The State Museum of Pennsylvania, Harrisburg.
- Cornell, Sean, Paul Marr, and Joseph Zume  
2018 Camp Security Geophysical Survey 2018: A Report For The Friends of Camp Security (FOCS). Shippensburg University. Report to Friends of Camp Security, York.
- Crawmer, John T., with contributions by Jane C. Skinner  
2019 2019 Investigations to Locate Camp Security, a Revolutionary War Prison Camp in Springettsbury Township, York County, Pennsylvania. John T. Crawmer. Report to Friends of Camp Security, York.
- Crawmer, John T., Jane Skinner, and Nicholas Zeitlin  
2021 2020 Investigations to Locate Camp Security, a Revolutionary War Prison Camp in Springettsbury Township, York County, Pennsylvania. John T. Crawmer. Report to Friends of Camp Security, York.
- 2022 2021 Investigations to Locate Camp Security, a Revolutionary War Prison Camp in Springettsbury Township, York County, Pennsylvania. Goldfinch Archaeology. Report to Friends of Camp Security, York.
- Graham, John James (editor)  
1862 *Memoir of General [Samuel] Graham [1756-1831]*. R. & R. Clark, Edinburgh.
- Hagist, Don N. (editor)  
2004 *A British Soldier's Story: Roger Lamb's Narrative of the American Revolution*. Ballindalloch Press, Baraboo, Wisconsin.
- Houlding, J.A. and G. Kenneth Yates  
1990 Corporal Fox's Memoir of Service, 1766-1783: Quebec, Saratoga, and the Convention Army. *Journal of the Society of Army Historical Research* 58(275):1-37.
- Hunter, Charles, E.  
1979 Excavations at the Wiest Site 36YO46: Prepared for Springettsbury Township, York County, Pennsylvania. The State Museum of Pennsylvania. Report to Springettsbury Township, York.



- Kodlick, Marcia M.  
2014 Negative Survey Form. Report to The State Museum of Pennsylvania, Harrisburg, from K2 Consulting Services, LLC, Mechanicsburg. ER Number 2014-1586-133-F.
- Lloyd, June  
2014 Guards of Camp Security 8: John Stewart. *York Blog*. <http://www.yorkblog.com/universal/2014/08/31/guards-of-camp-security-8-john-stewart/>, accessed 17 November 2014 (site now discontinued).
- Miller, Ken  
2014 *Dangerous Guests: Enemy Captives and Revolutionary Communities During the War for Independence*. Cornell University Press, Ithaca.
- Nelson, Christina H.  
1980 Transfer-Printed Creamware and Pearlware for the American Market. *Winterthur Portfolio* Volume 15, No. 2:93-115.
- Natural Resources Conservation Service  
2022 Web Soil Survey. United States Department of Agriculture. <http://websoilsurvey.sc.egov.usda.gov/>, accessed 10 February 2021.
- Quick, Russell S.  
2013 Geophysical Survey of the Possible Location of Camp Security on the Walters Property in Springettsbury Township, York, Pennsylvania. Cultural Resource Analysts, Inc. Report to Friends of Camp Security, York.
- Schiffer, Michael  
1996 *Formation Processes of the Archaeological Record*. University of Utah Press, Salt Lake City, Utah.
- Sellers, Horace W. (editor)  
1895 Letter of Surgeon's Mate Benjamin Shield to Brigadier-General James Hamilton, 1781. *Pennsylvania Magazine of History and Biography* 19:116-118.
- Stayer, Jonathan R.  
1981 Camp Security: Prisoners of War in York County, 1781-83. Honors Thesis, History and Political Science Department, Messiah College, Mechanicsburg, PA.
- Warfel, Stephen G.  
2010 Archaeological Testing at the Schultz House (36YO415), Springettsbury Township, York County, Pennsylvania. Stephen G. Warfel. Report to Historic York Inc.
- 2014 Investigations to Locate Camp Security, a Revolutionary War Prison Camp in Springettsbury Township, York County, Pennsylvania. Stephen G. Warfel. Report to The Friends of Camp Security.
- 2015 Investigations to Locate Camp Security, a Revolutionary War Prison Camp in Springettsbury Township, York County, Pennsylvania. Stephen G. Warfel. Report to The Friends of Camp Security.
- 2016 Investigations to Locate Camp Security, a Revolutionary War Prison Camp in Springettsbury Township, York County, Pennsylvania. Stephen G. Warfel. Report to The Friends of Camp Security.

White, Carolyn L.

2005 *American Artifact of Personal Adornment 1680-1820: A guide to Identification and Interpretation*. AltaMira Press, Lanham, Maryland.

York History Center

2010 Schultz House History. Unpublished manuscript on file, York History Center, York.



## Appendix 1: Summary of Excavation Test Units

Coordinates represent the southwest corner of the test unit and are in the NAD 2011 Pennsylvania South State Plane in feet.

TU No.	Features	Dimensions (ft.)	Longitude (X)	Latitude (Y)
23	54, 56, 63, 64, 65, 66, 67, 68	10 x 10	2277749.184	235130.303
27	69, 70, 71, 72	10 x 10	2277761.818	235119.812
28		10 x 10	2277758.942	235132.477
29		10 x 10	2277756.680	235142.204
30	73, 74, 75, 76, 77	2.5 x 10	2277746.180	235129.646
31	78, 79	10 x 10	2277752.073	235117.586
32	80	10 x 10	2277733.641	235126.803
33	81, 82, 83, 84, 85	10 x 10	2277723.846	235124.666
34		5 x 5	2277740.267	235120.079
35	57, 86	5 x 5	2277704.378	235120.138
36	87	10 x 10	2277669.982	235095.342
37	57	5 x 5	2277709.230	235121.259
38	86	5 x 5	2277703.306	235125.041
39		5 x 5	2277714.168	235122.440
40		5 x 5	2277719.019	235123.534
41	88, 89, 90, 91	10 x 10	2277698.009	235091.406
42	97	5 x 5	2277713.852	235089.336
43	98, 99, 100	5 x 5	2277716.158	235085.059
44	92	5 x 5	2277767.698	235115.812
45	93, 94, 95, 96	5 x 5	2277768.788	235110.902
46	102	5 x 5	2277725.577	235116.692
47		5 x 5	2277720.622	235115.578
48	101	5 x 5	2277718.596	235080.595
49	102	5 x 5	2277730.522	235117.689
50	107	5 x 5	2277769.751	235105.908
51	103	5 x 5	2277754.463	235089.519
52	104	5 x 5	2277774.759	235107.120
53		5 x 5	2277770.949	235101.134
54	105, 106	5 x 5	2277775.863	235102.243
55	108	5 x 5	2277779.650	235108.159
56	72, 116, 124	5 x 5	2277771.510	235121.986

TU No.	Features	Dimensions (ft.)	Longitude (X)	Latitude (Y)
57	108, 109, 110	5 x 5	2277773.683	235112.188
58	108, 111, 112	5 x 5	2277778.561	235113.303
59	114	5 x 5	2277772.631	235116.974
60	113	5 x 5	2277777.514	235118.051
61	115	5 x 5	2277783.435	235114.410
62	126, 127	5 x 5	2277726.516	235111.320
63	128	5 x 5	2277697.628	235102.447
64	122, 123	5 x 5	2277776.390	235123.075
65	117	5 x 5	2277784.539	235109.194
66	118, 143	5 x 5	2277776.986	235097.279
67	119, 120, 121	5 x 10	2277782.357	235119.152
68	125	5 x 5	2277775.300	235127.955
69	129	5 x 5	2277770.420	235126.865
70	131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 143, 143.15, 143.16, 143.23	10 x 10	2277781.856	235098.423
71	142, 143, 143.1 to 143.9, 143.15 to 143.22, 143.24, 144, 145, 146, 164	5 x 15	2277778.218	235092.521
72	147, 148, 149, 150, 151	5 x 5	2277731.454	235112.531
73	152, 153, 154, 155	5 x 15	2277705.989	235112.142
74	163	5 x 5	2277735.344	235118.897
75	130, 142, 143, 156, 157, 158, 159	5 x 5	2277789.332	235089.821
76	130, 160, 161, 162, 179	5 x 5	2277790.314	235085.248
77	130, 130.1, 142, 143, 156, 165, 166, 167, 168, 169, 170	5 x 10	2277785.056	235084.406
78	175	5 x 5	2277789.430	235110.229
79	174, 176, 177, 178	5 x 10	2277791.452	235100.676
80	130, 172, 173	5 x 10	2277780.200	235083.616
81	143, 143.9 to 143.13, 171	5 x 5	2277773.083	235091.344

## Appendix 2: Summary of Excavated Features

Feature No.	TU No.	Type	Comments
54	23	Rock pull	partially excavated in 2021
56	23	Posthole	partially excavated in 2021, very large posthole
57	35, 37	Pit	partially excavated in 2021, contained charcoal chunks, no artifacts recovered
63	23	Posthole	rectangular post with pointed conical base, partially cut by bioturbation
64	23	Rodent burrow	
65	23	Rock pull	
66	23	Rock pull	
67	23	Rodent burrow	
68	23	Rodent burrow	
69	27	Posthole	rectangular post with pointed conical base
70	27	Rock pull	
71	27	Posthole	
72	27, 56	Posthole	small with pointed conical base
73	30	Posthole	pointed conical base
74	30	Rodent burrow	
75	30	Rodent burrow	
76	30	Rodent burrow	
77	30	Posthole	pointed conical base
78	31	Rodent burrow	
79	31	Rodent burrow	
80	32	Posthole	pointed conical base, partially cut by plowscar
81	33	Rodent burrow	
82	33	Rodent burrow	
83	33	Rodent burrow	
84	33	Posthole	
85	33	Posthole	
86	35, 38		cancelled, determined to be slight dip in subsoil (Level 2)
87	36	Rodent burrow	
88	41	Posthole	
89	41	Rodent burrow	
90	41	Rodent burrow	
91	41	Plowscar	
92	44	Posthole	rounded base, flooded mid-excavation

Feature No.	TU No.	Type	Comments
93	45	Rodent burrow	
94	45	Posthole	flat base, flooded mid-excavation
95	45	Rodent burrow	
96	45	Posthole	
97	42	Posthole	pointed base
98	43	Rodent burrow	
99	43	Rodent burrow	
100	43	Rodent burrow	
101	48	Rodent burrow	
102	46, 49	Posthole	pointed conical base
103	51	Posthole	small rectangular post with wedged base
104	52	Posthole	
105	54	Posthole	
106	54	Rodent burrow	
107	50	Rodent burrow	
108	55, 57, 58	Pit	
109	57	Pit	contains small stones
110	57	Rodent burrow	
111	58	Posthole	small circular post
112	58	Posthole	small circular post
113	60	Rodent burrow	
114	59	Rodent burrow	
115	61	Rodent burrow	
116	56	Posthole	pointed conical base
117	56, 65	Posthole	pointed base
118	66	Rodent burrow	
119	67	Posthole	pointed base
120	67	Posthole	
121	67	Posthole	pointed conical base
122	64	Posthole	pointed conical base
123	64	Posthole	pointed conical base
124	56	Rock pull	
125	68	Posthole	pointed conical base
126	62	Rodent burrow	
127	62	Rodent burrow	
128	63	Posthole	pointed conical base

Feature No.	TU No.	Type	Comments
129	69	Posthole	
130	75, 76, 77, 80	Pit	large pit feature with fire feature (130.1) in it's second level, partially excavated in 2022
130.1	77	Fire	fire feature within Feature 130, Level 2, partially excavated in 2022
131	70	Rodent burrow	
132	70	Rock pull	
133	70	Posthole	pointed base
134	70	Posthole	pointed conical base
135	70	Rock pull	
136	70	Rock pull	
137	70	Rodent burrow	
138	70	Rodent burrow	
139	70	Posthole	pointed conical base
140	70	Posthole	pointed conical base
141	70	Posthole	pointed conical base
142	71, 75, 77	Pit/Trench	portion of Feature 143 (stockade trench), first identified as a separate pit
143	66, 70, 71, 75, 77, 81	Trench	stockade trench
143.1	71	Posthole	post set within Feature 143 (stockade trench)
143.10	81	Posthole	post set within Feature 143 (stockade trench)
143.11	81	Posthole	post set within Feature 143 (stockade trench)
143.12	81	Posthole	post set within Feature 143 (stockade trench)
143.13	81	Posthole	post set within Feature 143 (stockade trench)
143.14	70	Posthole	post set within Feature 143 (stockade trench)
143.15	70, 71	Posthole	post set within Feature 143 (stockade trench)
143.16	70, 71	Posthole	post set within Feature 143 (stockade trench)
143.17	71	Posthole	post set within Feature 143 (stockade trench)
143.18	71	Posthole	post set within Feature 143 (stockade trench)
143.19	71	Posthole	post set within Feature 143 (stockade trench)
143.2	71	Posthole	post set within Feature 143 (stockade trench)
143.20	71	Posthole	post set within Feature 143 (stockade trench)
143.21	71	Posthole	post set within Feature 143 (stockade trench)
143.22	71	Posthole	post set within Feature 143 (stockade trench)
143.23	70	Posthole	post set within Feature 143 (stockade trench)
143.24	71	Posthole	post set within Feature 143 (stockade trench)



Feature No.	TU No.	Type	Comments
143.3	71	Posthole	post set within Feature 143 (stockade trench)
143.4	71	Posthole	post set within Feature 143 (stockade trench)
143.5	71	Posthole	post set within Feature 143 (stockade trench)
143.6	71	Posthole	post set within Feature 143 (stockade trench)
143.7	71	Posthole	post set within Feature 143 (stockade trench)
143.8	71	Posthole	post set within Feature 143 (stockade trench)
143.9	71, 81	Posthole	post set within Feature 143 (stockade trench)
144	71	Posthole	pointed conical base
145	71	Posthole	pointed conical base
146	71	Rodent burrow	
147	72	Posthole	rounded base
148	72	Posthole	pointed conical base
149	72	Posthole	pointed conical base
150	72	Rodent burrow	
151	72	Posthole	
152	73	Rock pull	
153	73	Posthole	
154	73	Rock pull	
155	73	Rodent burrow	
156	75, 77	Posthole	likely part of Feature 142 (pit)
157	75	Posthole	
158	75	Posthole	
159	75	Rodent burrow	
160	76		small ovate stain, unexcavated in 2022
161	76	Posthole	
162	76	Rodent burrow	
163	74	Posthole	
164	71	Posthole	rounded base
165	77	Rodent burrow	
166	77	Posthole	the southern half, visible prior to excavation, is part of Feature 130
167	77		cancelled, determined to be the western extent of Feature 130 in TU 77
168	77	Rodent burrow	
169	77	Rodent burrow	
170	77	Posthole	
171	81	Posthole	

Feature No.	TU No.	Type	Comments
172	80	Rodent burrow	
173	80	Rodent burrow	
174	79	Rodent burrow	
175	78	Rodent burrow	
176	79	Posthole	pointed conical base
177	79	Rodent burrow	
178	79	Rock pull	
179	76	Posthole	small post within Feature 130 (pit)
145			

### Appendix 3: Inventory of Artifacts Submitted for Curation

County	Site No.	Cat. No.	Spec. No.	Excavation Unit	Site Level	Feat. No.	Artifact Description	Traits	Quantity	Quantity Discarded	Comments
Yo	46	74			general surface		Annular-style pearlware	rim sherd	1	0	light blue factory slip decoration
Yo	46	74			general surface		Brick	fragment	1	1	
Yo	46	74			general surface		Cut nails	ferrous metal	1	0	shank fragment
Yo	46	74			general surface		Farm equipment/machinery	ferrous metal and plastic	1	1	heavily corroded button/switch
Yo	46	74			general surface		Historic animal bone	mammal fragments	2	0	tooth and bone fragments
Yo	46	74			general surface		Jasper chipping debris	jasper	1	0	secondary flake
Yo	46	74			general surface		Other bottle (misc.)	fragments	2	0	colorless
Yo	46	74			general surface		Other wire (springs, etc.)	ferrous metal	1	1	bent wire fragment, possible hook
Yo	46	74			general surface		Plain hardwhite earthenware	body sherd	1	0	
Yo	46	74			general surface		Plain pearlware	body sherds	3	0	
Yo	46	74			general surface		Plain/glazed redware	base and body sherds	8	0	black, brown, and dark brown glaze
Yo	46	74			general surface		Quartz chipping debris	quartz	6	0	secondary flakes
Yo	46	74			general surface		Side Scraper	quartz	5	0	biface and uniface fragments
Yo	46	74			general surface		Slag	fragment	1	0	
Yo	46	74			general surface		Unidentifiable nails	ferrous metal	6	6	heavily corroded fragments
Yo	46	75	4		surface/ plowzone		Window glass	fragment	1	0	colorless
Yo	46	76	4		surface/ plowzone		Plain/glazed redware	body and base sherds	2	0	unglazed
Yo	46	80	5		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded fragment

County	Site No.	Cat. No.	Spec. No.	Excavation Unit	Site Level	Feat. No.	Artifact Description	Traits	Quantity	Quantity Discarded	Comments
Yo	46	80	6		surface/ plowzone		Miscellaneous metal	ferrous metal	1	1	heavily corroded, possible plow fragment
Yo	46	80	7		surface/ plowzone		Coins	copper alloy	1	0	roman numeral three on reverse, possible three cent piece
Yo	46	80	8		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded fragment
Yo	46	80	9		surface/ plowzone		Other vessel glass (dish, cruet, vial, etc.)	rim fragment	1	0	colorless
Yo	46	80	10		surface/ plowzone		Milk glass	fragment	1	1	object missing
Yo	46	80	11		surface/ plowzone		Slag	fragment	1	0	ferrous metal
Yo	46	80	12		surface/ plowzone		Plain/glazed redware	body sherd	1	0	brown glaze
Yo	46	80	13		surface/ plowzone		Plain/glazed redware	body sherd	1	0	black glaze
Yo	46	80	14		surface/ plowzone		Plain/glazed redware	body sherd	1	0	red glaze
Yo	46	80	15		surface/ plowzone		Plain/glazed redware	body sherd	1	0	brown glaze
Yo	46	80	16		surface/ plowzone		Plain/glazed redware	body sherd	1	0	unglazed
Yo	46	81	8		surface/ plowzone		Plain/glazed redware	body sherd	1	0	black glaze
Yo	46	81	9		surface/ plowzone		Bolts, nuts, washers	ferrous metal	1	1	complete heavily corroded bolt
Yo	46	81	10		surface/ plowzone		Slag	fragment	1	0	stone with glass slag on one side
Yo	46	81	11		surface/ plowzone		Historic animal bone	mammal fragment	1	1	unmodified long bone
Yo	46	87	6		surface/ plowzone		Modern ammunition	copper alloy	1	1	bullet casing fragment
Yo	46	87	7		surface/ plowzone		Plain/glazed redware	body sherd	1	0	light brown glaze
Yo	46	87	8		surface/ plowzone		Other vessel glass (dish, cruet, vial, etc.)	fragment	1	0	colorless
Yo	46	87	9		surface/ plowzone		Brick	fragment	1	1	

County	Site No.	Cat. No.	Spec. No.	Excavation Unit	Site Level	Feat. No.	Artifact Description	Traits	Quantity	Quantity Discarded	Comments
Yo	46	88	2		surface/ plowzone		Quartz chipping debris	quartz	1	0	secondary flake
Yo	46	88	3		surface/ plowzone		Brick	fragment	1	1	
Yo	46	88	4		surface/ plowzone		Brick	fragment	1	1	
Yo	46	88	5		surface/ plowzone		Buttons (glass, bone, metal, plastic, shell)	plastic	1	0	white with four holes
Yo	46	94	5		surface/ plowzone		Cut nails	ferrous metal	1	0	fragment
Yo	46	94	6		surface/ plowzone		Spoons	copper alloy	1	0	bent fragment
Yo	46	94	7		surface/ plowzone		Miscellaneous metal	aluminum	1	1	encased screw fragment
Yo	46	94	8		surface/ plowzone		Miscellaneous metal	copper alloy	1	1	complete bent slotted bracket
Yo	46	94	9		surface/ plowzone		Bolts, nuts, washers	ferrous metal	1	1	heavily corroded nut
Yo	46	94	10		surface/ plowzone		Cut nails	ferrous metal	1	0	corroded fragment
Yo	46	94	11		surface/ plowzone		Plain/glazed redware	body	1	0	dark brown glaze with gray exterior glaze, mends with 94.12
Yo	46	94	12		surface/ plowzone		Plain/glazed redware	body	1	0	dark brown glaze with gray exterior glaze, mends with 94.11
Yo	46	94	13		surface/ plowzone		Plain/glazed redware	body	1	0	dark brown glaze
Yo	46	94	14		surface/ plowzone		Plain/glazed redware	body	1	0	brown glaze with gray exterior glaze
Yo	46	94	15		surface/ plowzone		Slag	fragment	1	0	green glass slag fragment
Yo	46	96	5		surface/ plowzone		Window glass	fragment	1	0	frosted
Yo	46	380	8		surface/ plowzone		Miscellaneous metal	ferrous metal	1	1	heavily corroded fragment
Yo	46	380	9		surface/ plowzone		Other wire (springs, etc.)	ferrous metal	1	1	bent wire fragment
Yo	46	380	10		surface/ plowzone		Wire nails	ferrous metal	1	1	heavily corroded fragment

County	Site No.	Cat. No.	Spec. No.	Excavation Unit	Site Level	Feat. No.	Artifact Description	Traits	Quantity	Quantity Discarded	Comments
Yo	46	381	11		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded fragment
Yo	46	381	12		surface/ plowzone		Buttons (glass, bone, metal, plastic, shell)	copper alloy	1	0	flat circular face, shank cast in boss, 1760-1800
Yo	46	390	10		surface/ plowzone		Other wire (springs, etc.)	ferrous metal	1	1	wire ring fragment
Yo	46	391	6		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded fragment
Yo	46	407	31		surface/ plowzone		Buttons (glass, bone, metal, plastic, shell)	copper alloy	1	0	ovate face with floral decoration and alpha shank, date range is 1770s to early 1800s
Yo	46	407	32		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded fragment
Yo	46	407	33		surface/ plowzone		Bolts, nuts, washers	ferrous metal	1	1	heavily corroded bolt
Yo	46	408	9		surface/ plowzone		Other wire (springs, etc.)	ferrous metal	1	1	complete wire ring
Yo	46	408	10		surface/ plowzone		Plain/glazed redware	body sherd	1	0	unglazed
Yo	46	416	12		surface/ plowzone		Cut nails	ferrous metal	1	0	bent and burnt fragment
Yo	46	416	13		surface/ plowzone		Other wire (springs, etc.)	ferrous metal	1	1	long corroded wire fragment
Yo	46	416	14		surface/ plowzone		Plain/glazed redware	rim sherd	1	0	unglazed
Yo	46	416	15		surface/ plowzone		Jasper chipping debris	jasper	1	0	secondary flake
Yo	46	416	16		surface/ plowzone		Bifurcated point	jasper	1	0	Tip is broken
Yo	46	417	3		surface/ plowzone		Miscellaneous metal	ferrous metal	1	1	possible hook fragment
Yo	46	417	5		surface/ plowzone		Plain/glazed redware	body sherd	1	0	unglazed
Yo	46	418	4		surface/ plowzone		Miscellaneous metal	ferrous metal	1	1	burnt fragment
Yo	46	418	5		surface/ plowzone		Bolts, nuts, washers	ferrous metal	1	1	complete corroded bolt

County	Site No.	Cat. No.	Spec. No.	Excavation Unit	Site Level	Feat. No.	Artifact Description	Traits	Quantity	Quantity Discarded	Comments
Yo	46	418	6		surface/ plowzone		Plain/glazed redware	body sherd	1	0	brown glaze with gray exterior glaze
Yo	46	418	7		surface/ plowzone		Miscellaneous metal	ferrous metal	1	1	fragment
Yo	46	419	4		surface/ plowzone		Modern ammunition	lead	1	1	.22 caliber bullet
Yo	46	419	5		surface/ plowzone		Miscellaneous metal	ferrous metal	1	1	heavily corroded fragment
Yo	46	419	6		surface/ plowzone		Floor, wall, & ceiling tiles, etc.	fragment	1	0	whiteware with grooved backing
Yo	46	419	7		surface/ plowzone		Brick	fragment	1	1	
Yo	46	419	8		surface/ plowzone		Plain/glazed redware	body sherd	1	0	unglazed
Yo	46	420	4		surface/ plowzone		Hooks, eyes; other fasteners	copper alloy rivet	1	0	complete with attached leather fragment
Yo	46	420	5		surface/ plowzone		Historic animal bone	mammal fragment	1	0	unmodified long bone fragment
Yo	46	427	7		surface/ plowzone		American (domestic) stoneware	rim sherd	1	0	gray salt glaze with black interior glaze, possible Albany slip
Yo	46	427	8		surface/ plowzone		Slag	fragment	1	0	vitrified earth with some brown glaze
Yo	46	427	9		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded fragment
Yo	46	427	10		surface/ plowzone		Wire nails	ferrous metal	1	1	complete, heavily corroded
Yo	46	427	11		surface/ plowzone		Locks, latches, keys, hasps, hooks, eyes	ferrous metal	1	1	heavily corroded spring latch/hook fragment
Yo	46	428	4		surface/ plowzone		Brick	fragment	1	1	
Yo	46	428	5		surface/ plowzone		Miscellaneous metal	ferrous metal	1	1	heavily corroded fragment
Yo	46	428	6		surface/ plowzone		Plain/glazed redware	body sherd	1	0	unglazed
Yo	46	428	7		surface/ plowzone		Brick	fragment	1	1	
Yo	46	428	8		surface/ plowzone		Hooks, eyes; other fasteners	copper alloy rivet	1	0	complete with attached leather fragment

County	Site No.	Cat. No.	Spec. No.	Excavation Unit	Site Level	Feat. No.	Artifact Description	Traits	Quantity	Quantity Discarded	Comments
Yo	46	428	9		surface/ plowzone		Window glass	fragment	1	0	frosted
Yo	46	429	7		surface/ plowzone		Plain/glazed redware	body sherd	1	0	brown glaze
Yo	46	429	8		surface/ plowzone		Slag	fragment	1	0	
Yo	46	429	9		surface/ plowzone		Side Scraper	quartz	1	0	biface fragment
Yo	46	430	6		surface/ plowzone		Plain/glazed redware	body sherd	1	0	dark brown glaze
Yo	46	430	7		surface/ plowzone		Other wire (springs, etc.)	ferrous metal	1	1	heavily corroded wire fragment
Yo	46	430	8		surface/ plowzone		End Scraper	quartz	1	0	uniface
Yo	46	430	9		surface/ plowzone		Window glass	fragment	1	0	colorless
Yo	46	430	10		surface/ plowzone		Other bottle (misc.)	fragment	1	0	colorless
Yo	46	433	8		surface/ plowzone		Plain/glazed redware	body sherd	1	0	light red glaze
Yo	46	433	9		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded
Yo	46	434	6		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded
Yo	46	434	7		surface/ plowzone		Wire nails	ferrous metal	1	1	heavily corroded bent fragment
Yo	46	434	8		surface/ plowzone		Quartz chipping debris	quartz	1	0	secondary flake
Yo	46	434	9		surface/ plowzone		Brick	fragment	1	1	
Yo	46	435	6		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded
Yo	46	435	7		surface/ plowzone		Cut nails	ferrous metal	1	0	burnt and slightly bent fragment, missing head
Yo	46	435	8		surface/ plowzone		Cut nails	ferrous metal	1	0	heavily corroded fragment
Yo	46	435	9		surface/ plowzone		Unidentifiable nails		1	1	object missing



County	Site No.	Cat. No.	Spec. No.	Excavation Unit	Site Level	Feat. No.	Artifact Description	Traits	Quantity	Quantity Discarded	Comments
Yo	46	435	10		surface/ plowzone		Miscellaneous metal	ferrous metal	1	1	heavily corroded fragment
Yo	46	435	11		surface/ plowzone		Modern ammunition	lead	1	1	.22 caliber bullet
Yo	46	435	12		surface/ plowzone		Brick	fragment	1	1	
Yo	46	435	13		surface/ plowzone		Modern ammunition	plastic	1	1	shotgun shell
Yo	46	435	14		surface/ plowzone		Cut nails	ferrous metal	1	0	heavily corroded fragment
Yo	46	435	15		surface/ plowzone		Brick	fragment	1	1	
Yo	46	437	7		surface/ plowzone		Plain/glazed redware	body sherd	1	0	unglazed
Yo	46	437	8		surface/ plowzone		Plain/glazed redware	body sherd	1	0	red glaze
Yo	46	438	3		surface/ plowzone		Plain/glazed redware	rim sherd	1	0	brown glaze
Yo	46	438	4		surface/ plowzone		Miscellaneous metal	ferrous metal	1	1	heavily corroded fragment
Yo	46	439	6		surface/ plowzone		Shell-edged pearlware (blue, green, red)	rim sherd	1	0	blue shell-edged decoration
Yo	46	439	7		surface/ plowzone		Roofing materials (clay tiles, asphalt shingles, slate, etc.)	slate	1	0	roofing slate fragment with nail hole
Yo	46	440	7		surface/ plowzone		Other toys (dolls, etc.)	lead	1	0	toy soldier stylized as WWI infan- tryman
Yo	46	440	8		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded
Yo	46	440	9		surface/ plowzone		Plain/glazed redware	body sherd	1	0	brown glaze
Yo	46	440	10		surface/ plowzone		Transfer printed cream- ware	body sherd	1	0	red transfer print decoration
Yo	46	442	6		surface/ plowzone		Brick	fragment	1	1	
Yo	46	443	4		surface/ plowzone		Unidentifiable nails	ferrous metal	1	1	heavily corroded

County	Site No.	Cat. No.	Spec. No.	Excavation Unit	Site Level	Feat. No.	Artifact Description	Traits	Quantity	Quantity Discarded	Comments
Yo	46	444	3		surface/ plowzone		Plain pearlware	body sherd	1	0	
Yo	46	445	6		surface/ plowzone		Plain/glazed redware	body sherd	1	0	light brown glaze
Yo	46	445	7		surface/ plowzone		Plain/glazed redware	body sherd	1	0	dark brown glaze
Yo	46	445	8		surface/ plowzone		Plain/glazed redware	body sherd	1	0	dark brown glaze
Yo	46	518	2		surface/ plowzone		Brick	fragment	1	1	
Yo	46	518	3		surface/ plowzone		Miscellaneous ceramics (unidentifiable)	fragment	1	0	black disc fragment with random circular grooves, possible ceramic brake
Yo	46	518	4		surface/ plowzone		Hinges, pintles	ferrous metal	1	1	heavily corroded pintal
Yo	46	518	5		surface/ plowzone		Brick	fragment	1	1	
Yo	46	518	6		surface/ plowzone		Animal tack	ferrous metal	1	1	horse shoe fragment
Yo	46	518	7		surface/ plowzone		Brick	fragment	1	1	
Yo	46	523	8		surface/ plowzone		End Scraper	quartz	1	0	uniface fragment
Yo	46	523	9		surface/ plowzone		Side Scraper	quartz	1	0	uniface fragment
Yo	46	523	10		surface/ plowzone		Other wire (springs, etc.)	ferrous metal	1	0	bent wire fragment, possible buckle
Yo	46	540	1		surface/ plowzone		Farm equipment/machin- ery	ferrous metal	1	1	plow fragment
Yo	46	540	2		surface/ plowzone		Other wire (springs, etc.)	ferrous metal	1	1	complete wire ring
Yo	46	541	1		surface/ plowzone		Modern ammunition	lead	1	1	.22 caliber bullet
Yo	46	542	1		surface/ plowzone		Modern ammunition	lead	1	1	impacted bullet
Yo	46	542	2		surface/ plowzone		Farm equipment/machin- ery	ferrous metal	1	1	plow fragment

County	Site No.	Cat. No.	Spec. No.	Excavation Unit	Site Level	Feat. No.	Artifact Description	Traits	Quantity	Quantity Discarded	Comments
Yo	46	542	3		surface/ plowzone		Wire nails	ferrous metal	1	1	shank fragment
Yo	46	543	1		surface/ plowzone		Farm equipment/machinery	ferrous metal	1	1	plow fragment
Yo	46	544	1		surface/ plowzone		Modern ammunition	brass	1	1	flattened bullet casing
Yo	46	545		TU 23	1A		Historic animal bone	mammal fragment	1	0	unmodified long bone fragment
Yo	46	545		TU 23	1A		Quartz chipping debris	quartz	1	0	secondary flake
Yo	46	546		TU 27	1B		Side Scraper	argillite	1	0	
Yo	46	547		TU 28	1A		Side Scraper	quartz	1	0	
Yo	46	548		TU 29	1A		Plain/glazed redware	body sherd	1	0	brown glaze
Yo	46	549		TU 29	1B		Contracting stem point	rhyolite	1	0	complete base, missing tip
Yo	46	549		TU 29	1B		Other decorated hard-white earthenwares (hand-painted)	rim sherd	1	0	blue hand-painted decoration
Yo	46	549		TU 29	1B		Plain/glazed redware	body sherds	2	0	brown and black glaze
Yo	46	549		TU 29	1B		Quartz chipping debris	quartz	1	0	secondary flake
Yo	46	550		TU 31	1B		Brick	fragment	1	1	
Yo	46	550		TU 31	1B		Plain/glazed redware	body sherds	2	0	black glaze
Yo	46	550		TU 31	1B		Quartz chipping debris	quartz	1	0	secondary flake
Yo	46	551		TU 32	1B		Historic animal bone	mammal fragment	1	0	unmodified long bone fragment
Yo	46	551		TU 32	1B		Marbles (clay, glass)	glass	1	0	complete, white and green
Yo	46	551		TU 32	1B		Plain pearlware	body sherd	1	0	
Yo	46	551		TU 32	1B		Plain/glazed redware	base and body sherd	2	0	brown glaze
Yo	46	551		TU 32	1B		Window glass	fragment	1	0	smokey
Yo	46	552		TU 33	1B		Quartz chipping debris	quartz	1	0	secondary flake
Yo	46	553		TU 34	1A		Quartz chipping debris	quartz	1	0	secondary flake
Yo	46	554		TU 36	1A		Modern ammunition	brass	1	1	shotgun shell primer fragment
Yo	46	554		TU 36	1A		Sponge or spatter decorated hardwhite earthenware	body sherd	1	0	green sponge decoration
Yo	46	555		TU 36	1B		Brick	fragment	1	1	
Yo	46	555		TU 36	1B		Plain/glazed redware	body sherd	1	0	brown glaze
Yo	46	556		TU 41	1A		Brick	fragment	1	1	

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Yo	46	556		TU 41	1A		Other vessel glass (dish, cruet, vial, etc.)	fragment	1	0	colorless
Yo	46	557		TU 50	1B		Plain/glazed redware	body sherds	3	0	unglazed and black glaze
Yo	46	558		TU 67	1A		Brick	fragment	1	1	
Yo	46	559		TU 70	2	134	Miscellaneous glass	fragment	1	0	very small olive green fragment
Yo	46	560		TU 71	2	143	Other stone objects	quartz	1	0	complete quartz crystal