# Report of findings from archaeological investigation at RAF Wartling World War II domestic camp site within the Herstmonceux Castle Estate, East Sussex, BN27 1RN

Central National Grid Reference: TQ 65399 10710 Site Code: HCRAF-22

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#### **1.0 Introduction**

This excavation took place as part of an archaeology field school for undergraduate students hosted by Bader College (formerly the Bader International Study Centre), part of Queen's University in Canada. The field school extended over four weeks from May 9, 2022 – June 2, 2022 with class sessions held from Monday through Thursday. The first week of the field school focused on an introduction to the discipline of archaeology, basic techniques and methodologies, recording practices, and plan and section drawing. Students also learned about the fundamentals of object processing and curation in order to design their own display of finds from the field season, which are currently on view in the Visitor Center at Herstmonceux Castle.

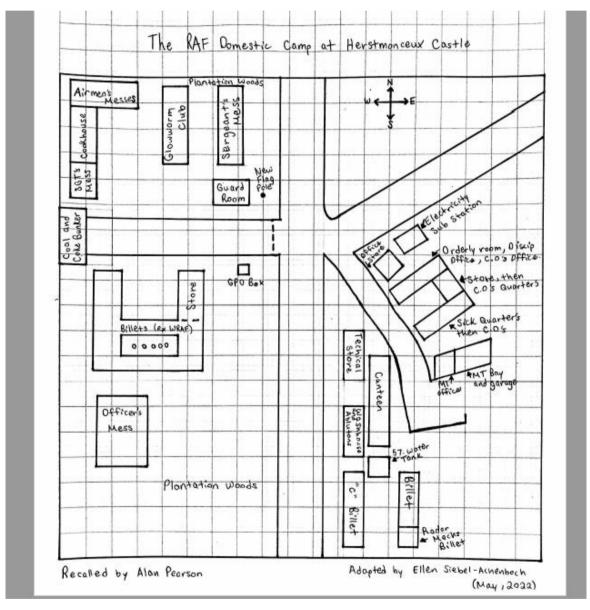
Initially, the field season was going to focus on excavation of a potential "gamekeepers' lodge" (National Grid Reference: TQ 64504 10389) as requested in a WSI approved by the East Sussex County Council in 2020. However, after a brief investigation in the summer of 2021 (without students due to the COVID-19 pandemic), completion of a LiDAR survey in April 2022, and consultation with County Archaeologist, Neil Griffin, it was determined that this location did not contain any archaeology and was likely the remnants of a pond or water reservoir. With the approval of the County Archaeologist, focus for the 2022 field school then shifted to an area of woodland adjacent to the intersection of a bridle path, Wartling Road and Wood Lane (TQ 65399 10710). This was known to have been the location of a domestic camp for RAF Wartling during World War II that extended across both sides of Wartling Road (Figure 1). The section to the east of Wartling Road has now been bulldozed and redeveloped. The section to the west, which is part of the Castle estate, was also surveyed with LiDAR in April 2022 and returned a number of potential points of interest (Appendix 1). This roughly corresponded to an area where remnants of RAF crockery and other World War II related objects had been found on the surface and collected (some of these are now stored at Herstmonceux Castle and were conserved in May 2022).

During two full weeks of excavation from May 16 - 26, 2022, the archaeology students conducted a surface survey in the area of woodland west of Wartling Road (Plantation Woods on the map) and sunk six test pits in the approximate locations of Point 3 (test pits 2, 3, 4, 5), which roughly corresponds to the locations of the guard room and a sergeant's mess to the north of the bridle path and a WRAF billets and store to the south of the bridle path; Point 4

(test pit 1), which is also in the area of the WRAF billets; and Point 9 (test pit 6), which does not correspond to any structures provided on the map of the domestic camp (Appendix 1).

The goals of the archaeology field school were:

- 1) to ground truth the LiDAR findings
- 2) determine the presence of any extent remains from the RAF domestic camp
- 3) determine if future investigation in this area would be warranted



*Figure 1 - Plan of RAF domestic camp structures across Wartling Road (in the center). Field school test excavations focused on the west side of Wartling Road in the Plantation Woods.* 

#### 2.0 Methodology

Due to dense undergrowth and the presence of many object fragments sitting on the surface, all clearance was done by hand with trowels. All 1 m x 1 m test pits were cleared, examined, and recorded in plan and section. All structural remains were left *in situ* and significant surface finds were brought back to the lab for cleaning, analysis, recording, and storage. A curated selection of finds was chosen for display in the Visitor Centre at the Castle. All test pits were backfilled at the end of the season.

#### **3.0 Results**

#### 3.1 Test Pit 1

Archaeology students: Morgan Berg, Meave Mooney, Hannah Clark, John Loudfoot, Carley Marentette

This test pit excavation began with the clearing of the underbrush, bramble, and excess vegetation covering the site on May 16, 2022. The location for test pit 1 centred around an exposed, upturned metal pot and part of a brickwork enclosure which were visible on the surface. Clearance of the pit initially began in 2 cm increments but then increased when it was evident that the pit was filled with churned up dirt and debris that had likely been washed in or inadvertently tossed into the brick lined pit; no stratigraphy was identified.

#### Summary of excavation findings:

Levels 1-3 (0-6 cm): Consisted of small, 2 cm at-a-time increments of digging, yielding only small fragments of brick and mortar. Greater exposure of the brick structure (Context 1001) continued in these levels, namely along the North, East, and West walls of the structure.

Level 4 (6-10 cm) - Level 5 (10-15 cm): An extension of the brick structure (Context 1001) along the Southern border was uncovered. It was thus established that the brick structure was completely enclosed, comprising four walls rather than a three-walled enclosure. Excavation on the fill of the pit (Context 1002) began at Level 5 (Figure 2).

Level 6 (15-55 cm): Excavations at this level required an accelerated rate of digging to maximize remaining time in the field. Here, the metal pot (small find 1002-1) was removed from the fill, along with an intact, amber bottle found directly under the pot (small find 1002-2) and small shards of clear glass (small find 1002-3). A large piece of metal grate with a

waffle-like texture, positioned vertically on the southern wall of the structure, was also identified and extracted (small find 1002-4). Further into Level 6, two more pieces of grate were found positioned horizontally within the fill (small finds 1002-5 and 1002-6). Amongst these artifacts, brick fragments of varying sizes were uncovered and removed.

Level 7 (55-68cm): In this level, the fourth and final piece of the metal grate (small find 1002-7) was unearthed. In addition, the bottom of the brick structure was reached - unveiling sloped, concrete walls and a salt-glazed ceramic channel (Context 1003) running through the centre of the brick-lined pit. The channel stretched from the southernmost corner of the east wall, arching to flow directly into the centre of the north wall (Figure 3). Backfilled on May 26, 2022.



*Figure 2 - Photo of test pit 1 at Level 4 with upturned cooking pot* in situ (Photo: Meave Mooney)



*Figure 3 - Bottom of test pit 1 with ceramic-lined channel visible* (Photo: Meave Mooney)

## 3.2 Test Pit 2

Archaeology students: Ethan Chilcott, William Clarke Robinson, Amadea Fata-Gallucci, Stephanie Hintermeister, John Tsafaridis

Work began on test pit 2 on Wednesday May 18th, 2022. The location for this pit was chosen because of the presence of two intact bricks and a large chunk of concrete on the surface, which might have formed part of a structure. The area surrounding test pit 2, immediately to the north of the bridle path and west of the gate onto Wartling Road, was littered with remains of architectural debris and was the location of a guard's room (see fig. 1). Excavation of test pit 2 was meant to investigate if any sections of the hut, or other unknown structures, remained intact. Clearance of the pit initially began in 5 cm increments but then increased when it was evident that the pit was filled with churned up dirt and building debris; no stratigraphy was identified.

Summary of excavation findings:

Level 1 (0 – 5 cm): Small brick fragments, glass shards, and a few ceramic fragments, including salt-glazed pipe were found. The dirt was very loose and filled with roots from

woodland undergrowth. Two bricks and concrete chunk still embedded in soil, no traces of connection to other bricks or structure.

Level 2 (5 - 10 cm): Pieces of nails, screws, and metal rods, as well as pebbles. Two bricks and concrete chunk still embedded in soil, no traces of connection to other bricks or structure.

Level 3 (10 - 18 cm): Two intact bricks and concrete were extracted with no traces of connection to a structure. No finds throughout this layer and clean soil underneath bricks and concrete. Backfilled on May 24, 2022.

#### 3.3 Test Pit 3

Archaeology students: Sam Darou, Clare McMullen, Caitlyn Nichols

This test pit was opened on May 24, 2022. It was discovered that morning, after the Herstmonceux Castle's landscaping team had cleared the area of underbrush and brambles. It is located south of the bridle path, and just west of the walking path that runs along Wartling Road. It is the easternmost test pit of the grouping of test pits 3, 4, and 5. The location of test pit 3 was chosen because of an area of exposed brickwork on the surface, which surrounded a visible shaft cut into the ground. When clearance began, the pit was filled in with soil and brick fragments. In order to leave the brickwork intact, only the shaft was excavated (Context 3001). Surface dirt and plant material was cleared to define the brickwork for photos and drawing (Figure 4).

The interior of the concrete-lined shaft was filled with loose topsoil that appears to have been naturally deposited; no stratigraphy was identified. Fragments of brick, as well as blue-painted wall debris were mixed throughout the fill. At approximately 10 cm depth, the first of a series of pipes (Contexts 3002 - 3006) were identified in the east wall of the shaft. Between 10 - 15 cm depth, two more pipe-lined channels were found emerging from the northeast and southeast corners of the shaft, as well as a darker brown pipe-lined channel emerging from the south side of the shaft (Figure 5). Finally, a central pipe was uncovered, at 23 cm depth, running from the east to the west side of the shaft, and to which the other three pipe-lined channels connected. In between all of the pipes and pipe-lined channels were mounds of concrete. The central pipe was the lowest and we concluded that this shaft contained a junction for pipes that flow westward. The pipes seem to be made of salt-glazed ceramic and

match the pipes found in test pits 4 and 5, as well as other pipe fragments found around the site. Backfilled on May 25, 2022.



Figure 4 - Overview of test pit 3 with surrounding brick on surface (Photo: Clare McMullen)



*Figure 5 - Looking east at series of pipes and ceramic-lined channels in test pit 3* (Photo: Clare McMullen)

## 3.4 Test Pit 4

Archaeology students: Ethan Chilcott, William Clarke Robinson, Amadea Fata-Gallucci, Stephanie Hintermeister, John Tsafaridis

Test pit 4 was opened on May 24, 2022 in the hopes of finding a connecting pipe between test pits 3 and 5. Heavy rain late in the day delayed majority of excavation until May 25<sup>th</sup>.

Digging was done in 10 cm layers as any connecting pipe would likely be at least 23 cm deep based on the final depth of test pit 3. The first two layers (0 - 20 cm) were composed of loose top soil and many tree roots. Soil changed to silty clay at approximately 20 cm depth. An intact, salt-glazed ceramic pipe (Context 4001) was uncovered at 38 cm depth running through the center of the test pit from east to west. The pipe was set into a bed of concrete (Context 4002), which could only be cleared on the north side of the pipe due to a thick mass of tree roots on the south side (Figure 6). Backfilled on May 26, 2022.



*Figure 6 - Salt-glazed ceramic pipe in test pit 4 that likely connects test pits 3 and 5* (Photo: John Tsafaridis)

## 3.5 Test Pit 5

Archaeology students: Martin Hayes and Ella McCrimmon

This test pit was opened on May 18, 2022. It had previously been identified during a fieldwalk in the woodland south of the bridle path but was too overgrown with brambles and undergrowth to access. The landscaping crew was able to remove the majority of this material and cleared a path allowing access to test pit 5 from the walking path along Wartling Road. This clearance also exposed the location of test pit 3 approximately 5 m to the east of test pit 5; test pit 4 was placed between these two.

Test pit 5 is comprised of an approximate 1m x 1m pit, which was man-made and marked with a metal frame around the opening (Context 5001). The southwest corner was partially

overgrown and obstructed by a tree and its root structure. Many pieces of brick and metal debris were found scattered on the surface around the pit, including parts of a metal grate that was presumably used to cover the pit. Brick fragments with green, yellow, and blue paint were also found in the area.

The interior of the concrete-lined shaft was filled with loose topsoil that appears to have been naturally deposited; no stratigraphy was identified. Fragments of painted and unpainted brick, concrete, and metal debris were mixed into the fill. Tree roots made clearance difficult and obscured much of the southern edge of the pit.

After removal of the majority of fill, the pit reached a depth of approx. 45 cm with concrete walls leading to a concave, sloped concrete floor. A semi-circular orange ceramic-lined channel (Context 5002) ran through the center of the bottom of the pit from east to west. The channel continued into a pipe extending away from the west wall. It seems likely that this channel connects with similar orange ceramic piping in test pit 3 and test pit 4. A piece of metal grate (5002-1) was found fused to the concrete floor at the base of the test pit and could not be removed. Backfilled on May 25, 2022.

#### 3.6 Test Pit 6

Archaeology students: Julia Atteck, Alexandra Freitas, Victoria Henhoeffer, Michèle Siebel-Achenbach, Ellen Siebel-Achenbach

Clearance of test pit 6 began on May 24, 2022. The pit was placed in the interior northeast of a cinder block foundation located in a cleared area north of the bridle path. The purpose of this structure was unclear but two smaller pits (1 to the south and 1 off the northeast corner of the foundation) were found nearby with visible pipe openings inside. It was thought that putting a test pit into the northeast corner of the foundation would help determine if the piping connected the larger structure to one of the smaller pits and would clarify the depth, and perhaps purpose, of the foundation.

The topmost section of the pit, about 2cm deep, consisted primarily of brambles, pine needles, and rich damp loam (Context 6001). Beneath this initial section lay a thin layer of rotted and churned up wood about 1cm thick (Context 6002). The following layer featured a thick matrix of gravel and dark loam to a depth of approximately 20cm (Context 6003). The

next layer consisted of mainly haphazardly-laid medium-large stones greater than 30cm in length and air pockets lacking soil matrix (Context 6004). Many of these stone chunks appeared to be limestone, and the surrounding mixture featured loam, small stones, and a substance reminiscent of quick lime. After about 40cm, these chunks gradually gave way to larger stones with greater cavities (Context 6005). At the base of the pit, at approximately 50cm depth, lay a thin layer of loam about 5cm deep (Context 6006) as well as a salt-glazed red pipe in the corner of the wall, which held and was surrounded by wet reddish clay. It was confirmed that this pipe does connect to the small pit to the north of the foundation but the purpose for both the pit and the structure foundation remains unclear. Backfilled on May 26, 2022.

#### 4.0 Finds

A large number of surface finds were scattered throughout the woodland to the north and south of the bridle trail. The area immediately to the northwest of the gate at the intersection with Wartling Road produced the most objects. The soil in this area appears to be churned up and mounded and it is possible that portions of earth and debris were pushed into this area when ground was cleared across Wartling Road for development.

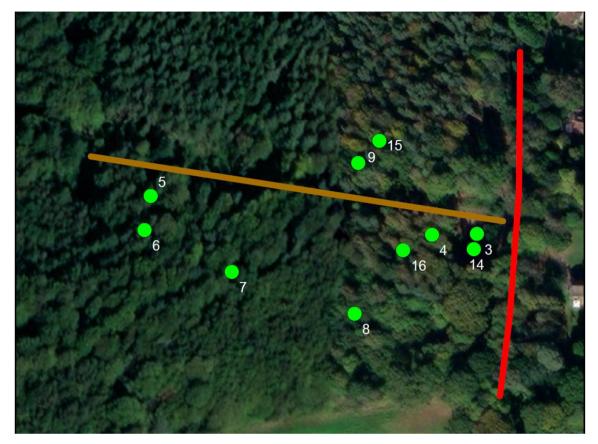
The range of objects found match with material that would have accumulated at a domestic camp: fragments of ceramic tableware, structural debris (brick, metal rods, chunks of mortar and concrete), metal fragments, light bulb bases, glass shards and remnants of bottles (Appendix 2). Some fragments of ceramic tableware were decorated with blue and gold painted designs that matched with objects already in the Castle archive, in addition to bearing RAF insignia. Additionally, a few glass bottles were found intact and some may have been used as apothecary bottles. This is fitting given that there was a medical facility on the east side of Wartling Road during World War II.

With the exception of a metal cooking pot found in test pit 1, no significant small finds were discovered in the test pits. Additionally, there was no evidence of stratigraphy in the test pits, with the exception of test pit 6. The piping and ceramic-lined troughs in test pits 3, 4, 5, and 1 do seem to indicate a water management system that ran through at least the section of woodland south of the bridle trail. This may be evidence of piping installed for the "washhouse and ablutions" area and a water tower on the east side of Wartling Road, which

then may have connected to the WRAF billets on the west side of the road before running off through the woodland (Figure 1).

### 5.0 Discussion

The test pits and surface survey in Plantation Woods does seem to confirm the existence of extent material related to RAF Wartling's World War II domestic camp. There are a few other points of interest detected on the LiDAR survey that may indicate the presence of extent architecture hidden beneath the underbrush or deeper into the woodland in regions that were not explored during this field season. Future archaeological exploration may be able to uncover structural remains and lead to a better understanding of the number and types of buildings in use by RAF Wartling. Excavating, recording, and preserving these areas could also provide an opportunity for the local community and visitors to Herstmonceux Castle to gain a better appreciation for the role that the Estate played during World War II. The Visitor Centre at the Castle could also be used to highlight the archaeological work done in this area. Consultation with World War II archives and experts would be able to better contextualize the finds from the field school(s), in addition to providing research opportunities for future archaeology students.



*Figure 7 - Area of LiDAR survey completed in April 2022. Red line indicates Wartling Rd. and tan line indicates bridle path. Green dots indicate points of interest.* 

FID	DDLat	DDLon
0	50.87175959N	000.33936906E
1	50.87320172N	000.34174702E
2	50.87303509N	000.34288177E
3	50.87219352N	000.34919278E
4	50.87219701N	000.34888942E
5	50.87239868N	000.34700220E
6	50.87225468N	000.34695430E
7	50.87206522N	000.34753060E
8	50.87187064N	000.34835124E
9	50.87251207N	000.34840832E
10	50.87306517N	000.34270972E
11	50.87302447N	000.34262150E
12	50.87232738N	000.34464026E
13	50.87136811N	000.34321437E
14	50.87212920N	000.34916775E
15	50.87260361N	000.34855425E

16	50.87213434N	000.34869334E
17	50.87250294N	000.33987036E
18	50.87238681N	000.33985335E
19	50.87222154N	000.34021139E
20	50.87214769N	000.33963653E

Appendix Two – Labels written by field school students for curated objects in Visitor Centre