

Castleshaw Roman Fort: Archaeological Excavations within the eastern annexe

2025



View looking west across the annexe excavations in August 2025 (photo credit: Joolze Dymond)

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Friends of Castleshaw Roman Forts

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Summary

As part of the Castleshaw Roman Forts Hinterland Survey, the Friends of Castleshaw Roman Forts (FoCRF) carried out an archaeological excavation of an area of land east of the defences at Castleshaw Roman Fort (Heritage Asset No. 1017837), centred on grid reference SD99830953. The land is owned by United Utilities and farmed by David Hirst.

In March 2025 Scheduled Monument Consent (Ref: S00246854) was granted to undertake excavations across land to the east of the Roman fort to target and better understand archaeological remains that had been partly revealed in previous investigations. The permission was granted on 4th March and allowed for investigations to be undertaken until the end of 2025.

Within the north half of the military annexe 11 trenches were excavated along with 4 test pits over 15 days in August and early September. Prior to that, 4 days in May and June saw 10 test pits and one trench reveal the terminus of the fort east ditch near the south east corner along with two ditches marking the north east corner of the annexe defences.

There was considerable evidence, in the form of post holes and foundation slots, for timber buildings. There is more work to do to further define the extent and form of the buildings, but a clearer picture is emerging of their layout and method of construction. The southern wall foundation slot for these buildings runs for at least 14 metres, with the eastern end yet to be found. The south wall was set against a stone platform which was accessed from the fort east gate via a gravel track. A substantial north wall foundation trench runs for over 10 metres with neither the east nor west ends yet defined. This gives a width of 9 metres for the timber buildings, with evidence for an internal east to west wall dividing the building in half and with several internal partition walls evident. The timber building foundations took the form of post-in-trench or sill beam construction. An unexpected bonus, given the acidic soils rarely preserve organic remains, was the discovery of preserved timbers in Trench 12, located on the west side of the building at a depth of 1.2 m and sealed under a dense clay deposit. The timbers were all laid horizontally and took the form of a cross beam with planks laid at right angles to it. These may be part of a partly revealed floor or, alternatively, a collapsed ceiling or wall. It is possible that this was a sunken storeroom, but further research needs to be undertaken on this.

The timber buildings belonged to a first phase of activity in the AD 70s. They appear to have been short lived before being dismantled and the area covered with clay and shale to create a level surface for intensive cooking activity. This took the form of clay ovens for roasting meat and stone ovens for baking bread. A second circular stone oven base was found to go with one discovered last year. These were dome shaped and flanked a stone walled, sunken grain drying kiln. In 2025 a second kiln was also discovered to the east. It was of similar construction ie. being a roughly rectangular subterranean structure with 3 walls which would have supported a floor where the grain was laid to dry. There was a bowl-shape open end where the furnace was set so that warm air could circulate under the raised floor.

From the base of the kiln within a sampled charcoal layer came a handful of spelt wheat and barley grains. Previous pollen analysis has demonstrated that spelt wheat was grown in the valley in Roman times and this would have required drying before being stored or ground into flour. Several hearths were revealed, one of which (F7 in Trench 16) had a charcoal rich layer which contained 184 charred barley grains and a further 32 with intact chaff. There were also 11 charred spelt wheat grains and 92 indeterminate grains. Analysis of charcoal samples showed that locally growing oak, hazel and willow/poplar were used as fuel. A dual role for the kilns is possible. They may have been used not just for drying grain for storage or consumption but also for malting barley for beer making – as beer was a popular drink for Roman soldiers.

The north east corner of the annexe defences was located through the discovery of 2 ditches just beyond the east/north side of Dirty Lane. It was thought that the eastern defences had been destroyed by Dirty Lane together with the current and former houses that occupied this area, but the ditch system is now known to exist further east so there is an opportunity to better define the extent of the annexe.

The terminus of the fort ditch was found only c 5 metres north of the south east corner of the fort. This contrasts with the longer, 22 m, section of ditch further north. Projection of the excavated sections of the southern annexe rampart indicate that the ditch terminates just beyond the junction with the rampart, reciprocating the arrangement further north. The length of rampart with no accompanying ditch on the east side of the fort can now be calculated as 67 m.

Several Roman pottery finds including two types of grey ware, a cream ware base, an orange-red mortarium base, and an amphora body sherd came from Trench 20, along with mysterious iron objects located at the base of two adjacent sill beam foundation slots. Elsewhere, occasional sherds of Roman pottery, lead, nails and tile fragments have been found. This is in keeping with previous seasons and supports the late 1st century AD date for both phases of the annexe. However, there were several later features/deposits evident in Trenches 17 and 22, alongside the stone platform, which might belong to the early 2nd century AD fortlet phase.

Our current interpretation is that in the second phase the annexe was the equivalent of a modern motorway service station. It provided food and drink for travellers using the busy highway linking the legionary fortresses at York and Chester. There is a steep climb up to Standedge immediately to the east of Castleshaw fort, so extra draft animals might have been hitched up to wagons in the annexe to help them with the ascent. The archaeology demonstrates intensive cooking activity in the north half of the annexe but there are very few archaeological remains in the southern half which is nearest to the highway – so was this area used as a wagon park and for keeping the animals/horses along with perhaps storage facilities?

The first phase now indicates an extensive range of timber buildings which appear to have been short-lived. It is possible that at least one of these buildings was a granary which supports a theory that these were storage buildings forming a depot to support military campaigning further north. Unusually, there was no defensive ditch between the annexe and the fort which indicates that the function of the annexe was military and controlled by the fort's commander.

Our understanding of the site is evolving with each season of excavation. The annexe has provided remarkable archaeology given that it was not even known about until 5 years ago.

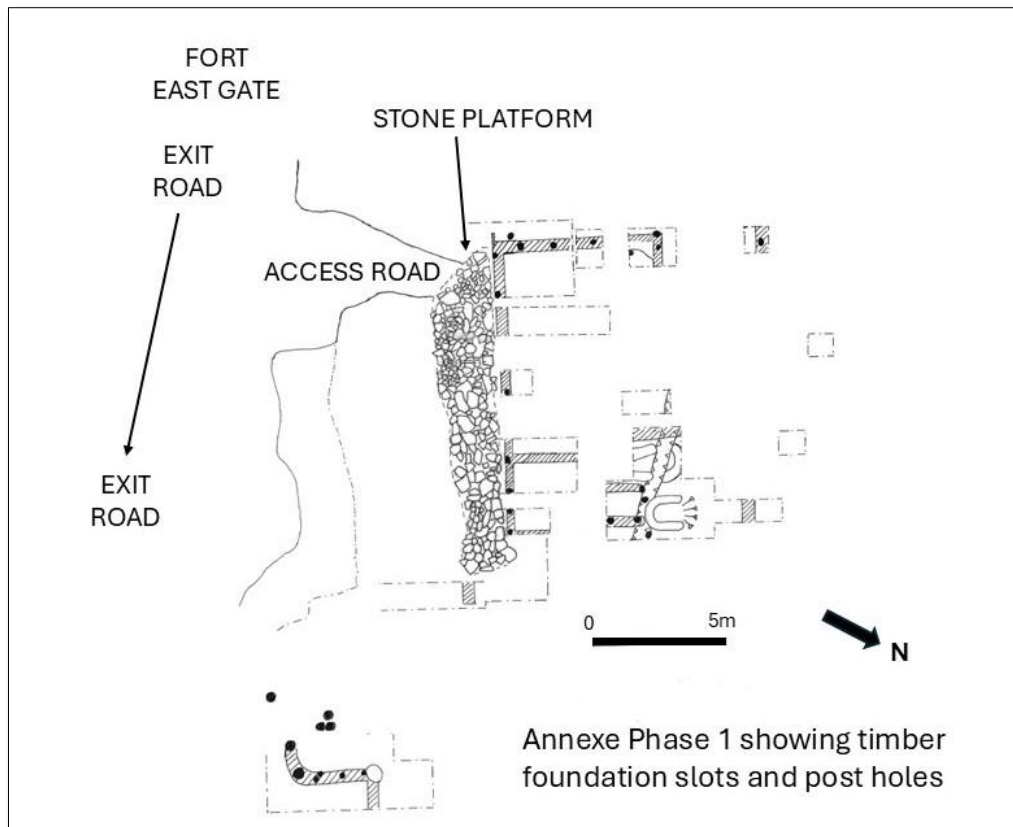
Background

In 2021 the Friends volunteers undertook exploratory excavation on flat ground to the east of the late 1st century AD Roman Fort. This formed part of their Castleshaw Roman Forts Hinterland Survey which followed a successful national lottery funded community archaeology project in 2014/5 (Nash et al 2014). For the first time evidence was found for the presence of an annexe, a form of defensive military enclosure protected by a rampart and ditch (Redhead 2022). Since then the Friends have undertaken seasonal investigations to gain an understanding of the layout and character of the annexe. A range of features have been found in the northern half including: a service road leading from the fort's east gate to a stone platform which gave access to timber buildings represented by a series of post holes and foundation slots, clay-built roasting ovens, hearths, a stone oven for baking bread, and a stone-built kiln for grain drying. Pollen analysis has shown that the Romans were growing spelt wheat in the valley which would need to be dried before it could be ground into flour and baked. A 1.2 kg lead weight was discovered in 2024 having been placed carefully on a ledge beside the kiln before it was demolished and we think this weight was used for measuring out dried grain.

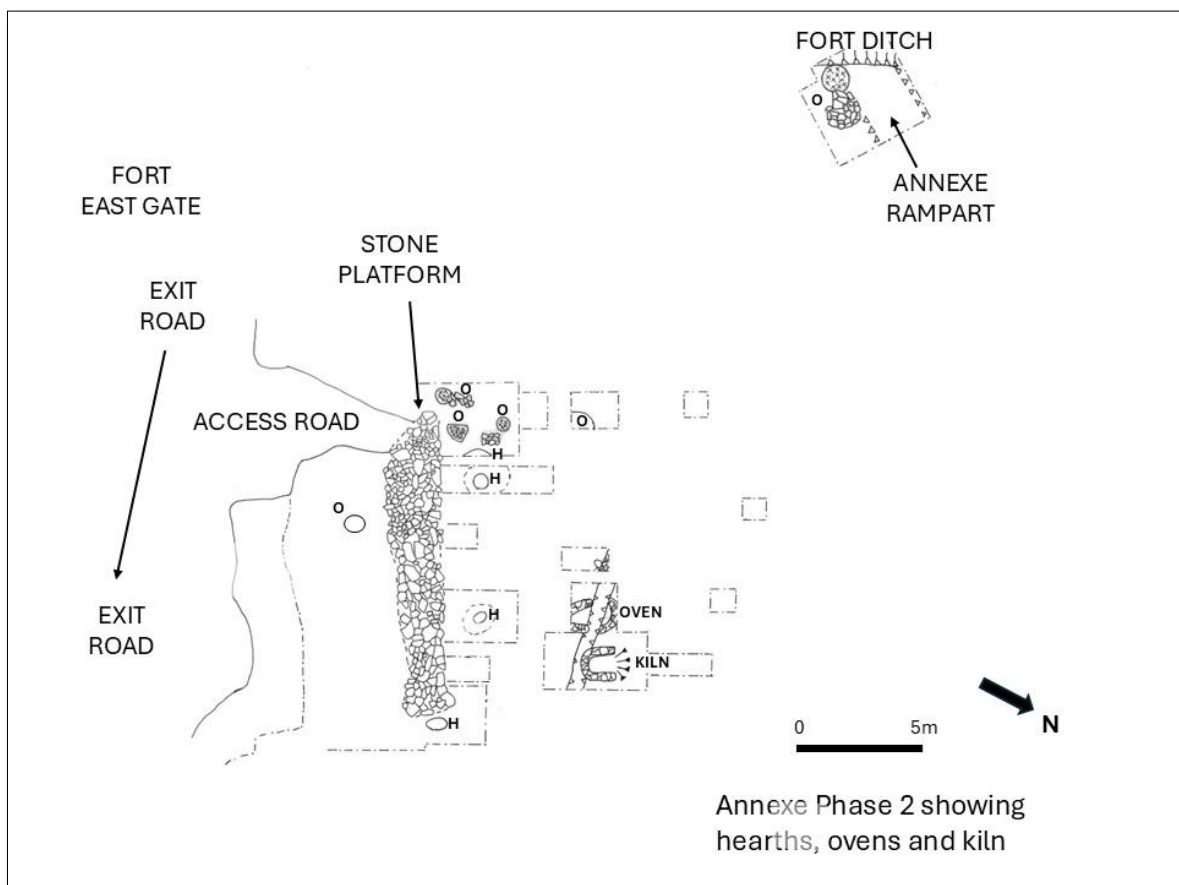
In contrast to the north half, the southern part of the annexe is almost devoid of Roman features and may have been used as a wagon park, for storage, and perhaps to corral animals.

Two main phases of activity have therefore been identified: a short-lived first phase comprising timber buildings, which were then dismantled and the area capped with clay and compacted shale before being used for intensive food preparation and cooking. The annexe was contemporary with the Roman fort which was in use for 2 decades from the AD 70s to the mid AD 90s.

Further details can be found in the 2024 excavation report (Redhead 2025).



End of the 2024 excavation plan showing excavated post holes and timber building foundations in relation to the stone platform which was accessed from the fort east gate via a cobbled track shown as 'Access Road'.



End of 2024 excavation plan showing excavated hearths, ovens and the kiln in northern half of the annexe.

Methodology

The 2024 excavation identified several key areas for understanding the character and extent of the site and these became the focus of the 2025 investigations. They are shown edged in red on the plan below and comprised:

- 1) A large area designed to allow targeted excavations within the northern half of the annexe to build on previous trenching/test pits to: define the plan form of the first phase timber buildings and establish the extent and character of oven/kiln/hearth activity within the northern half of the annexe including the linear arrangement of stone-built ovens and kiln partly revealed in 2024. The excavations took the form of test pits and trenches.
- 2) To define the line of the annexe defences on the north side. A section through the rampart was recorded in Trench 3 in 2023 but the form of the ditch and the line of the northern defences required further investigation.
- 3) Determine the line of the eastern annexe defences. It had been thought that Dirty Lane and the now demolished Husted's Farm/Cottage had removed traces of the rampart/ditch along most of the likely location of the eastern defences. However, in 2019 three test pits (31, 32 and 33), located on a narrow strip of flat ground against the stone wall on the opposite (north side) of Dirty Lane, exposed Roman deposits cut by a ditch. This might be the annexe ditch and if so then this area could potentially reveal the north east annexe corner, allowing a projection of the eastern defensive alignment.
- 4) Investigate the relationship/terminus of the fort ditch where it meets the annexe south rampart. The last two seasons of excavation identified the terminus of the fort's eastern ditch to the north where it runs a little way past its junction with the annexe north rampart. But is this arrangement replicated to the south? The alignment of the now established line of the south annexe rampart intercepts the fort ditch much closer to the corner of the fort than in the north. The ditch was not present in the old excavation trench which was re-dug as Trench 7 in 2014 by Salford Archaeology (Nash et al 2014). This was about 20 metres from the south east corner of the fort therefore the fort ditch must terminate somewhere within that 20 metre strip.



Location of areas of proposed investigation for 2025

The 2025 excavations took place over 19 days:

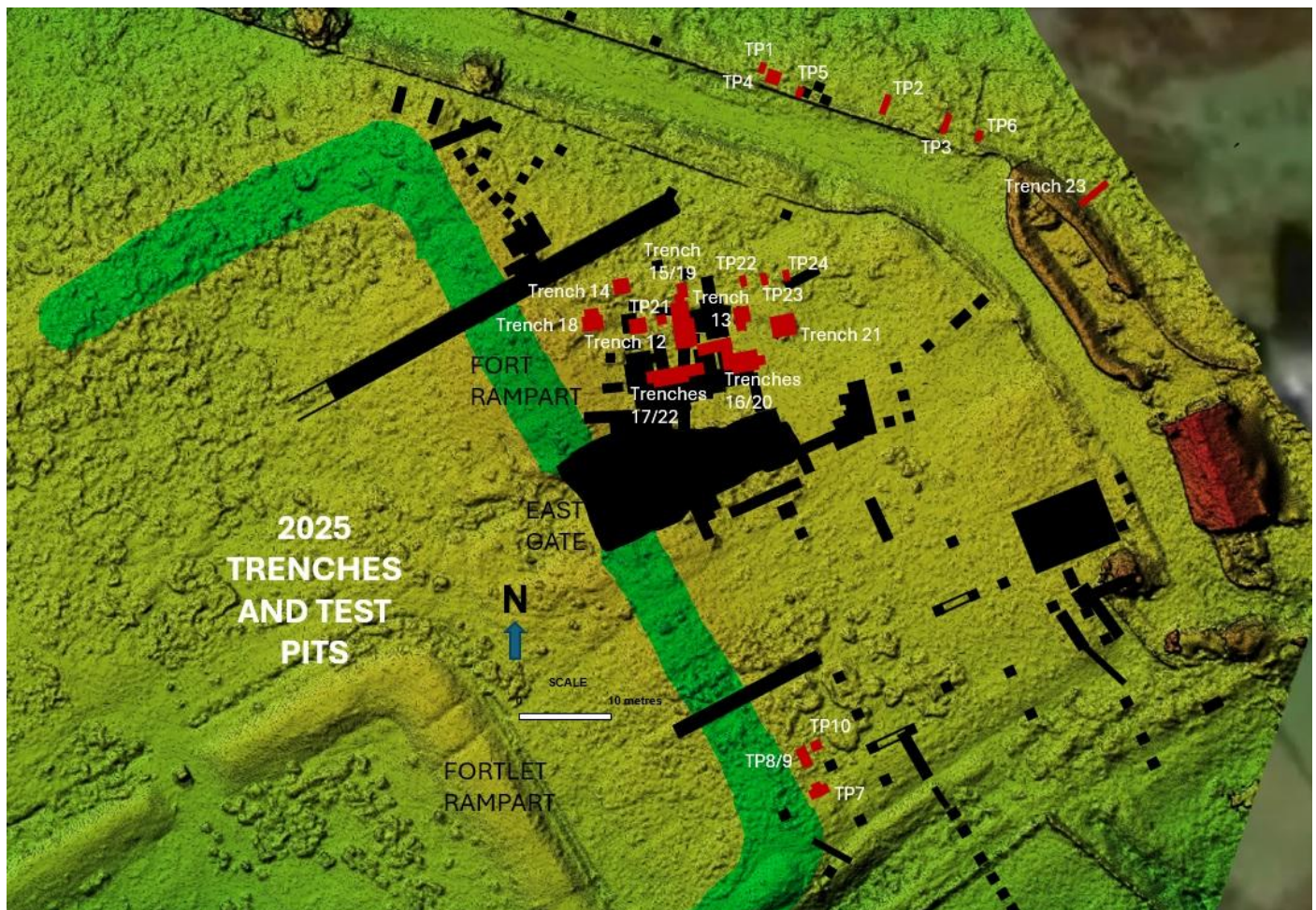
Sat 3rd May, Sun 4th May, Sat 31st May, Sun 1st June, Fri 1st Aug, Sat 2nd Aug, Mon 3rd Aug, Fri 8th Aug, Sat 9th Aug and Sun 10th Aug, Mon 11th Aug, Sat 23rd Aug, Sun 24th Aug, Mon 25th Aug, Sat 30th Aug, Sun 31st Aug, Mon 1st Sept, Fri 5th Sept, and Sat 6th Sept.

Norman Redhead, former Greater Manchester County Archaeologist, led the excavations which were undertaken by a total of 37 volunteers belonging to the Friends of Castleshaw Roman Forts. The investigations were undertaken in relation to research strategies 8, 9 and 10 in the 'Excavation Strategy', which also contains the excavation methodology (Redhead, 2013).

The weather was generally cool, overcast and damp – but only one day and a few hours here and there were lost to rain. When conditions were suitable for excavation, the ground conditions were perfect as the ground was softened and showed the soil colours well, as opposed to hot and dry conditions when the high clay content soil bakes hard and loses its colours. The volunteer team did an excellent job of persevering in sometimes challenging weather.

The excavation team were fortunate to have the services of two drone photographers and the overhead photos within this report were taken either by Joolze Dymond or Nat Townsend. In May 2021 Chris Wild and Steve Tamburello of Salford Archaeology created contour mapping from their drone photography, which is an invaluable backdrop for trench plans produced in this report.

As the investigations progressed, trenches and test pits were targeted to maximise information and understanding. In total 12 trenches of varying sizes and 14 one metre square test pits were excavated in the annexe or across its defences. A few of the test pits were extended to better understand potential features. The location of the trenches and test pits is shown on the plan below. There was not enough time for the Area 2 proposed investigations, the annexe north defences, which will be undertaken in 2026.



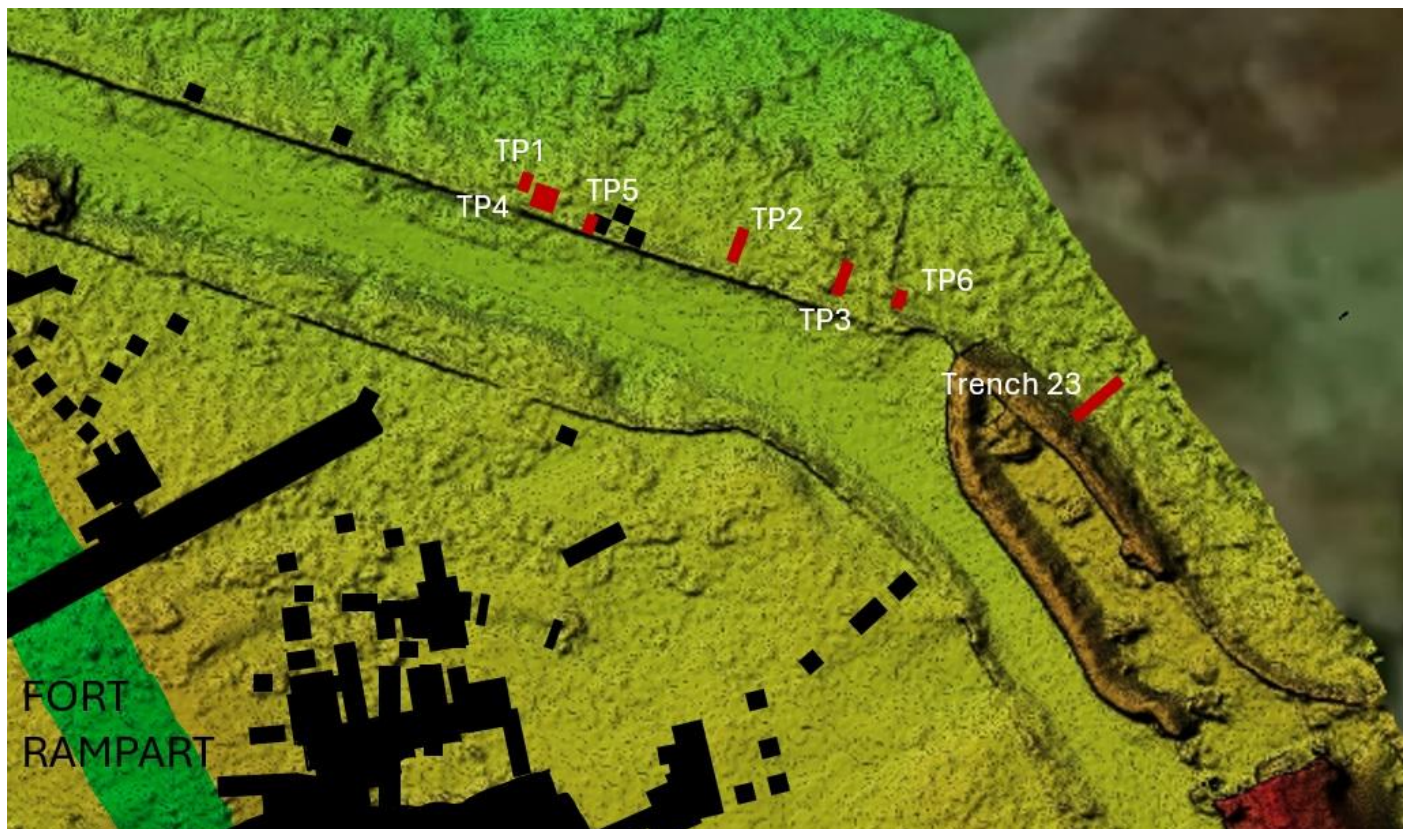
Location of trenches and test pits excavated in 2025.

RESULTS

Test Pits 1-6 and Trench 23 north east of Dirty Lane (Excavation Area 3 – eastern annexe defences)

In May 2025 a small team excavated several test pits along the north side of Dirty Lane to look for the north east corner of the annexe defences. Alongside the wall flanking Dirty Lane is a flat narrow area before the land drops steeply away. In 2019 three test pits were dug here (TP 31,32 and 33) and found partial evidence for a ditch which cut into a deposit yielding Roman burnt daub and waste lead pieces (Redhead 2020, p 28-33) At that time the annexe was not known about so the objective was to return to this area to get a better understanding of the ditch and determine if formed part of the annexe's defences.

Six test pits (1-6) were dug and their locations are shown on the plan below. This was followed up in late August with the excavation of Trench 23 across the potential eastern defences further to the south east and against the eastern garden wall of Thurstage Barn.



The six test pits and trench are shown in red, previously excavated trenches/test pits are in black.

Test Pits 1-6 were dug on a narrow spit of flat land adjacent to a drystone wall of late 19th century construction which marked the north side of Dirty Lane. The ground falls steeply away to the north from the test pitting area.



Looking west across the area of test pitting and, right, looking east towards Thurstage Barn.



Looking east from the fort's eastern rampart along the line of the projected annexe north defence to the test pits on the opposite side of Dirty Lane.

Test Pit 1

This was located 4 m west of Test Pit 33 from 2019, where a ditch had been partially revealed. TP 1 was 1 m by 0.5 m and came down through a mixed soil to a line of partially exposed capping stones for a drain. This ran south to north at an angle, presumably taking surface water away from Dirty Lane. It cut through what looked to be yellow clay natural. The clay occupied about half of the test pit and there did not appear evidence for a Roman ditch. It was interesting to note that the capping stones were of re-used building material. This included a fragment of mullion window stone with its triangular profile suggesting a possible 17th century origin, perhaps from the demolished Husteds Farm site nearby. The top of the drain was at 274.06 m Above Ordnance Datum (AOD) at the south side of the test pit and fell gently away to 274.01 m AOD at the north end. The clay surface was at 274.11 m AOD and the turf level at 274.76 at the mid-point on the east side of the test pit.



Left: Nick and Gill excavate Test Pit 1, with the fort east rampart at top of photo beyond the fence. Right: capping stones for the drain.



The fragment of mullion window and, right, the only pottery find was a sherd of post medieval yellow ware.

Test Pit 2

This was also initially 1 m by 0.5 m and located 4 m to the east of the cluster of 2019 test pits. It picked up the continuation of the inner edge of the ditch found in Test Pit 31 in 2019. This was evident as an edge between a light to mid brown silty clay loam 002 and sub natural light brown yellow silty clay loam 006. Both lay under a thin topsoil 001. The test pit was extended northwards by 1 m and excavated down to confirm that it was a continuation of the ditch F1. There was not time to bottom it or locate the outer (north) edge, however there was clear evidence for it being a cut, deep feature.



Left: TP2 looking west showing the inner edge of the ditch against the yellow clay natural. Right: looking east after extension.

002 was found to be 45 cm deep and made up of frequent dark grey silty clay loam lenses within the light to mid brown silty clay loam (50%). It is speculated that the ditch was filled in with upcast from the construction of the adjacent lane or/and its drainage ditches, or perhaps the foundation trench for the stone wall. This effectively levelled the ditch depression making it invisible in the landscape. Under 002 was a thin layer 003 of very dark grey decayed turf which indicated the original ground surface before infill and levelling.

The west facing section through the ditch was recorded. The ditch base was slightly over-dug to confirm its function and base. Under around 40 cm depth of the sub-natural 006 was a dark yellow natural clay layer 007 which contained frequent small gritstones. The ditch had a c 45% slope on its south side, which became very gentle for c 50 cm then dropped more steeply again. There was not enough time to expose the northern edge which lay beyond the test pit edge. Under the old turf line was a 10 cm deep layer 004 of light to mid brown silty clay loam with 20% small gritstones. Beneath this was a layer of mid to dark grey silty clay with occasional small gritstones. This was only partially excavated to a depth of 20 cm and a width of 55 cm but could be seen to come off onto natural 007. The turf level was at 275.28 m AOD and the excavation of 005 stopped at 274.38 m AOD. The top of 006 was 275.18 m AOD and the thin decayed turf line 003 was at 274.70 m AOD.



Detail of the west facing section.

Finds comprised a variety of post medieval glazed wares and one piece of Roman daub.



Test Pit 2 finds

Contexts

F1 Possible annexe outer defensive ditch. Only southern part exposed.

001 Turf and topsoil.

002 Mixed deposit of 50% light to mid brown silty clay loam and mid to dark grey silty clay loam. Possibly upcast from roadside ditch or wall foundation.

003 Thin sealed very dark grey decayed turf layer. Only c 2 cm deep. Overlies 004 and 007, under 002.

004 Light to mid brown silty clay loam with 20% small sandstones. Overlies another decayed turf layer.

005 Mid to dark grey silty clay loam with occasional small sandstones. Overlies natural clay and stone.

006 Firm light brown silty clay loam cut by F1. Sub-natural.

007 Mid yellow clay cut by F1. Natural.

Test Pit 3

This was located 6 m east of Test Pit 2. It was 1.5 m long and 0.5 m wide and on a south to north axis, as with the other test pits. The objective was to confirm the alignment of the outer ditch. This was soon apparent, being similar to TP 2. An inner edge to the ditch was indicated by a line in the middle part of the test pit between the sub-natural light brown silty clay loam and the darker ditch fill equivalent to 002 in TP 2. The ditch fill was excavated to a depth of 10 cm to confirm its character. The only find was a post medieval dark glazed earthen ware base sherd. The turf level at the southern end of the test pit was 275.57 m AOD, dropping gently to 275.41 m AOD at the northern end. Top of sub natural was 275.27 m AOD and the ditch fill was excavated to a depth of 275.41 m AOD.



Left: TP 3 looking east. Right: the post medieval base sherd.

Test Pit 4

This was dug just to the east of TP 1 to avoid the disturbance of the post medieval drain. It measured 1.25 m square and revealed the curving inner edge of the outer ditch. Here the sub natural was a mid to dark silty clay yellow with the fill of the ditch comprised of mid brown silty clay loam with frequent patches of dark grey decayed turf. The curve of the ditch edge suggested it was turning to proceed south towards the junction with the fort rampart. TP 4 had a wedge shape overburden sloping from east to west, and being very shallow at the south west corner. The ditch fill was only partially excavated to suggest a similar profile to that seen in TP 2. Finds consisted of 3 post medieval pottery sherds and one possible Roman amphora body sherd coloured orange externally and buff internally. In the south east corner the turf was 274.95 m AOD with the top of sub natural being 274.56. Top of the ditch fill was 274.54 m AOD.



The southern edge of the ditch can be seen as a dark fill against the yellow natural clay. The ditch is curving to run west towards the fort rampart which is at the top of the photo.



Left: The ditch partly excavated. Right: the finds from TP 4 with the amphora sherd on the right.

Test Pit 5

This was located 2.5 m east of TP 4 and only 0.5 m from the wall flanking Dirty Lane. It partly overlapped TP 33 from 2019, the backfill of which was visible on the north side. TP 5 revealed the outer cut of a previously unsuspected inner ditch. This had a 45 degree slope and it was apparent that the drystone wall runs along the middle of the ditch, which makes excavation of a full section impossible at this location. Under the turf 001 in the southern part of test pit was an older decayed very dark grey turf line representing a former ground surface. Under this was a light to mid brown silty clay loam 002, with a maximum depth of 40 cm. This appears to be upcast from works associated with the road ditch or wall foundation. It overlay 004 which comprised mid brown grey silty clay loam and was the main ditch fill. This was at least 35 cm deep but could not be bottomed due to the stone wall foundation obstructing further excavation. On the north side of the ditch was a thin deposit 003 of light yellow brown silty clay loam c 6 cm deep which overlay sub natural and partly overlapped 004. At the south side of the test pit the turf level was 274.93 m AOD, whilst the lowest extent of fill 004 was 274.12 m AOD. Sub natural under 003 at the north edge of the test pit had a surface level of 274.57 m AOD. There were no finds.

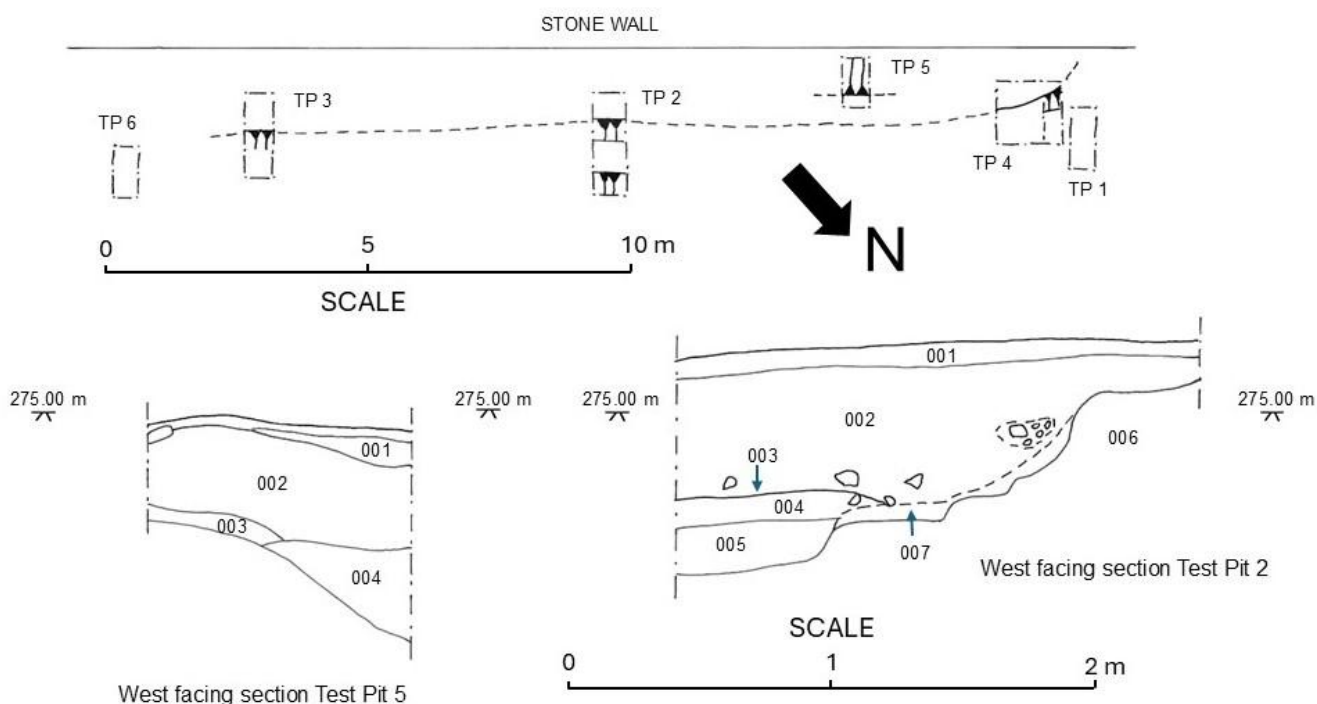


Test Pit 5 was dug as a 50 cm wide slot against the late 19th century wall flanking Dirty Lane.



Left: looking east showing the cut of the ditch. Right: detail of the lowest part of the ditch cut adjacent to the stone wall.

It will be useful in the future to excavate the southern half of the ditch on the opposite side of the stone wall and to see if anything of the rampart survives or whether it has been removed by Dirty Lane.



Plan of test pit locations and sections.

Contexts

F1 Annexe defensive ditch. Only the north side cut was exposed as the ditch continues under late 19th century wall and was not bottomed.

001 Topsoil including a decayed dark grey turf line under recent spoil in south corner.

002 Light to mid brown silty clay loam with occasional small to medium sandstones. Seals F1/004.

003 Thin layer of light yellow brown silty clay loam overlying natural.

004 Mid brown grey silty clay loam. Fill of ditch F1.

Test Pit 6

This was only partly excavated to confirm the line of the ditch which was evident as the dark brown grey silty clay loam seen in the other test pits. TP 6 was located 2 m to the east of TP 8 and was 90 cm long by 50 cm wide. The turf level was 275.55 m AOD on the south side dropping to 275.40 m AOD on the north. The top of the dark deposit was 275.14 m AOD.



Left: Test Pit 6 showing the dark layer representing the top fill of the outer ditch. Right: finds from Test Pit 6 topsoil comprised post medieval glazed sherds.

Test Pits 1 to 6 were extremely useful in demonstrating the presence of not one but two defensive ditches for the annexe. Although the ditches were only partially excavated it was enough to demonstrate that the north east corner of the annex lies in this area, with two ditches protecting the rampart. The latter has not yet been revealed here and its base may survive beside Dirty Lane.

In projecting the line of the ditches exposed in TPs 1-6 it could be seen that potentially their course ran to the north of the wall bounding the garden of Thurstage Barn. Indeed, a raised grassy area might be the remnants of the annexe rampart.



The green swathe continues the potential line of the defences beside the garden wall, looking west (left) and east (right).

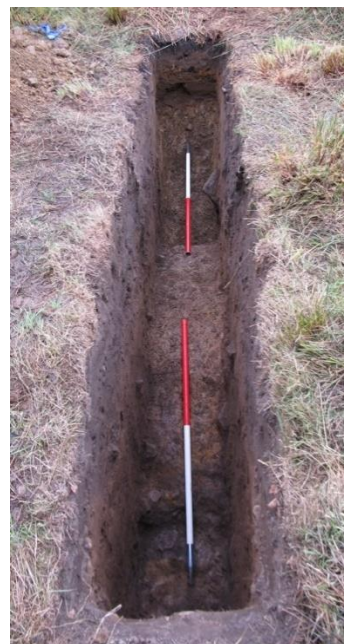
Trench 23

This was a 3.5 m long and 0.5 wide trench cut at right angles to the garden wall to investigate the raised grassy area to see if it was the remnant of the annexe rampart.



The trench can be seen on the near left side of this landscape drone photo, below the cabin. The annexe excavations can be seen in the middle of the photo, with the fort and fortlet beyond.

Excavation showed that the grassy bank was not Roman and was made up of soil probably derived from digging foundations for the garden wall. However, it was found to seal the annexe defensive ditches. Topsoil was 20 cm depth and was formed of mid to dark grey silty clay loam topsoil. Under this was a lens of similar material 002, but with moderate small to medium gritstones and small pieces of decayed dark yellow decayed sandstone. Under 001/002 was a homogenous deposit 004 comprising mid to dark brown silty clay loam. This was up to 1.1 m deep and thickened southwards towards the wall. It tapered off at 2.6 m to the north and overlay and partly filled the two annexe ditches F1 and F2. The gently sloping northern side of the inner ditch F1 was exposed for 0.8 m length. A lower fill 004 was 12 cm deep and comprised light grey silt with 20% small gritstones and moderate flecks of charcoal. This came off onto natural yellow clay and stones.



Nick and Gill excavating Trench 23 with the outer ditch under Nick's feet. Right: looking north after excavation confirmed the two ditches.

The deepest point of the ditch, at the southern trench edge, was at 274.15 m AOD. Here the turf level was 275.56 m AOD. As with the inner ditch revealed in TP 5, the inner ditch here is also overlain by a stone wall, in this case the garden wall, so potential future investigation is hampered at this location.

The outer ditch F2 was separated from the inner one by a 1.5 m wide strip of natural 008 which was formed of light yellow/cream clay loam. This formed a cambered berm with a top height of 274.69 m AOD and dropping to 274.50 m AOD. 002 ran into the inner side of F2, which was also sealed by a deposit for dark grey silty clay loam with moderate small gritstones and frequent linear patches of yellow silty clay 003, along with another deposit 006, 40 cm deep, of mid to grey silty clay loam mixed with 40% dark yellow silty clay loam. 003 overlay both 002 and 006, forming a wedge-shaped deposit with a maximum depth of 25 cm. Under 006 was another ditch fill which was light grey silty clay loam with 40% patches of light yellow/cream silty clay and frequent flecks of charcoal. Time constraints meant that 007 wasn't fully excavated, being excavated to 10 cm depth and going down to 274.27 m AOD. Above F2 the turf level was 274.94 m AOD. F2 went beyond the northern side of the trench so it was not possible to determine its outer edge. The inner edge was steeply cut and 1.2 m of the ditch width was exposed.



Left: the lower photo scale can be seen sloping down towards the garden wall. Right: detail of light grey silty clay deposit towards the base of the ditch.



Left: the berm separating the inner ditch (left) and the outer (right). Right: the outer ditch with fill 007 partly excavated.

Finds came from the topsoil, 003 and 004 and comprised post medieval post medieval earthenware pottery sherds plus a white glazed base and piece of molten glass. There was a larger dark glazed earthenware rim sherd which could be of late 17th or 18th century origin.



Left: the annexe ditches looking south towards the garden wall. Right: the figures stand at the location of the ditches which mark the break in slope.

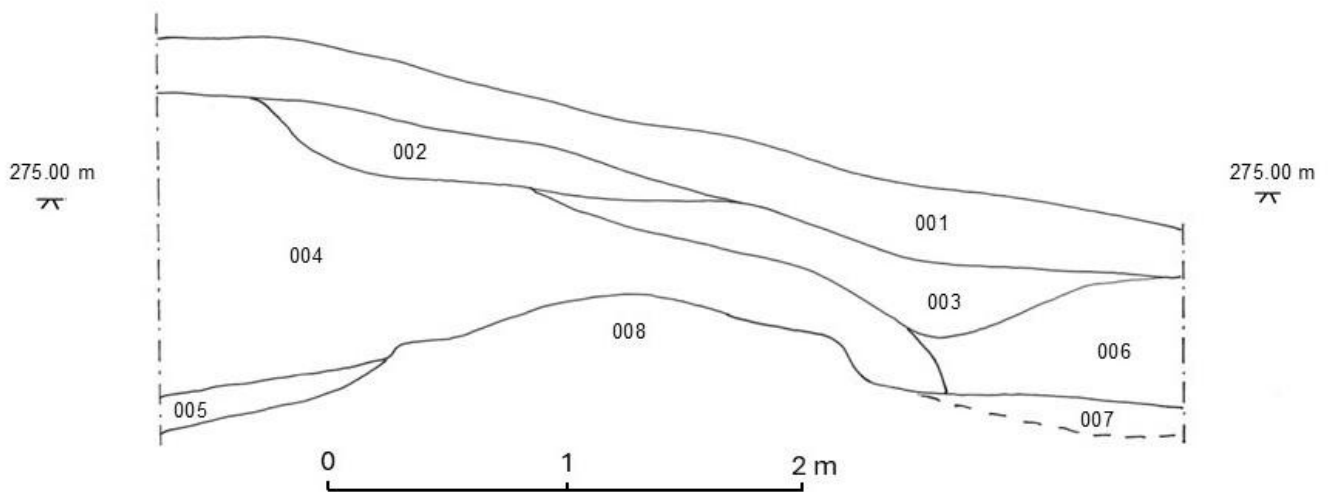
It has been so useful to find the outer defences of the annexe as it was previously thought that Dirty Lane, Thurstage Barn and the former Husted's Farm had removed any possible traces. Further work is required to obtain a full profile of the two ditches, if possible, and to see if any traces remain of the associated rampart, to accurately map the line of defences. But the size of the annexe has been shown to be larger than previously envisaged.



Revised plot of the annexe defences based on TPs 1-6 and Trench 23



Finds from Trench 23.



West facing section of Trench 23.

Contexts

F1 Partly dug inner ditch of annexe eastern defences. Filled with 002 and 004.

F2 Partly dug outer ditch of annexe eastern defences. Filled with 002, 006 and 007.

001 Mid to dark grey silty clay loam topsoil.

002 Mid to dark grey silty clay loam with moderate small to medium gritstones and small pieces of decayed dark yellow decayed sandstone

003 Dark grey silty clay loam with moderate small gritstones and frequent linear patches of yellow silty clay.

004 Homogenous mid to dark brown silty clay loam with occasional small gritstones. Overlies and fills upper part of F1. Under 001 and 002, over 005.

005 Light grey forming lower fill of inner ditch F1. Contains 20% small gritstones and moderate flecks of charcoal. Under 004.

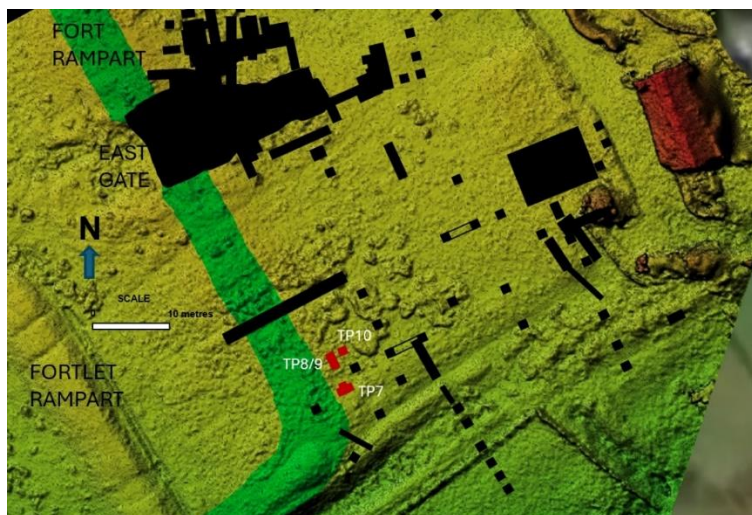
006 Mid grey silty clay loam with 40% dark yellow silty clay. Upper fill of F2. Over 007, under 003.

007 Light to mid grey silty clay with 40% patches of light yellow/cream silty clay and frequent flecks of charcoal. Not fully excavated. Lower fill of outer ditch F2. Under 006 and 004.

008 Mixed light yellow/cream clay loam. Sub-natural forming raised area between ditch cuts. Cut by F1 and F2, under 004 and 007.

Test Pits 7-10 (the fort ditch terminus)

A small team of five volunteers excavated 4 test pits over a weekend in June targeting the fort's east ditch terminus as it comes around the south east corner. Previous excavators had been puzzled at the lack of a defensive ditch along the east side of the fort. In 2024 the Friends confirmed the reason for this was that the east ditch finished just past its junction with the northern defences of an annexe attached to the east side of the fort. The ditch ran for 22 metres from the north east corner of the fort before terminating. This demonstrated that the annexe was integral to the original layout of the fort. It is very rare not to have a ditch separating fort and annexe. In 2021 and 2024 the alignment of the annexe southern rampart was determined, giving a good indication of where the fort ditch terminus would be located if it followed a similar pattern as that to the north.



Left: the location of the 4 test pits, shown in red. Right: Commencing Test Pit 7 on the left and Test Pit 8 to the right.

Test Pit 7

This started as a 1 m square test pit but was expanded to reveal more of the archaeology, with a 2 m x 1 m east to west aligned extension being added to the south. This straddled the original square and was offset by 0.5 metres.

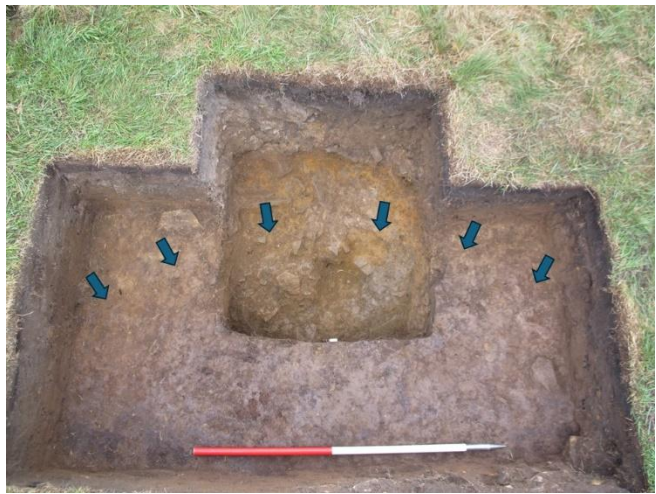


Test Pit 7 revealed a linear feature running left to right which has been partly dug in this photo. Looking south (left photo) and looking north (right photo).

The expanded excavation area allowed the linear feature to be better defined and interpreted. Dark grey silty clay loam topsoil 001 lay over mid brown silty clay loam plough soil 002, with a combined depth of 43 cm near the south west corner of the extended test pit, with the turf level at 277.60 m AOD and the top of Roman archaeology being 277.17 m AOD. This took the form of a layer of mid purple grey loam 003 evidencing a previous turf and topsoil horizon and varying in depth to a maximum of 20 cm. 003 formed a

curving east to west running edge against yellow silty clay This is similar to material seen in other parts of the annexe and fort where ditches have been revealed. Sure enough, this was the case here. For under 003 was a fill 004, made up of mid yellow brown silty clay loam with frequent small patches of light yellow silty clay, moderate small gritstones and occasional flecks of charcoal. 004 was partly excavated to reveal the edge of a ditch F1 with excavation stopping at a depth of 276.75 m AOD. The ditch was apparent as a curving cut into natural clay on the north side of the test pit, being the linear feature partly exposed in the original 1 m square test pit.

The ditch formed a 45% degree angle and was cut into an upper deposit of natural 005 of light to mid yellow brown silty clay loam, and a lower natural deposit 006 of mid yellow clay with 30% small to medium gritstones. F1 was excavated just enough to show that it was the terminus of the fort ditch which is only c 5 metres north of the south east corner of the fort. This contrasts with the longer, 22 m, section of ditch further north. Projection of the excavated sections of the southern annexe rampart indicate that the ditch terminates just beyond the junction with the rampart, reciprocating the arrangement further north. The length of rampart with no accompanying ditch on the east side of the fort can now be calculated as 67 m.



Left: TP7 looking south. Right: looking north with arrows indicating the terminus of the ditch.



Left: looking east. Right: looking south at 001 and 003 revealed in north facing within ditch F1.



Looking east at the ditch terminus in relation to the line of the annexe south rampart (indicated by arrows).

From the topsoil came post medieval glazed sherds, a clay pipe stem, inscribed torpedo bottle fragment (late 18th/early 19th century) and an iron spike. The underlying plough soil yielded 4 sherds of dark glazed earthenware, including a handle, of probable 18th century date. There were no finds from the ditch fills.



Test Pit 7 finds: topsoil left and plough soil right.

Contexts

F1 Roman fort ditch cutting 005 and 006, under 002.

001 Topsoil.

002 Ploughsoil.

003 Mid purple grey loam. Decayed turf layer sealing Roman ditch fills. Under 002, over 004.

004 Mid yellow brown silty clay loam with frequent small patches of light yellow silty clay, moderate small gritstones and occasional flecks of charcoal. Under 003, over 006.

005 Light to mid yellow brown silty clay loam. Sub-natural. Cut by F1, over 006, under 002 and 003.

006 Mid yellow clay with 30% small to medium gritstones. Natural. Cut by F1, under 005.

Test Pits 8 and 9

This commenced as a 1 m square test pit (8) to look for the fort ditch. Under a thin 10cm layer of turf and topsoil and mid brown 15cm deep plough soil was a rubble deposit 003 which was revealed on the west side. This comprised mid yellow brown silty clay loam with 40% small to medium gritstones, mostly flat. The eastern two thirds had a very different material of light to mid grey silty clay with 30% patches of light yellow or cream silty clay and frequent flecks of charcoal 004. This had the potential to be ditch fill so a new 1 m square test pit, TP 9, was dug to the north and then joined to TP8 to further explore these deposits.



Left: Test Pit 8 revealing 003 (top) and 004 (bottom). Right: looking north after excavation of TP9.

The rubble layer 003 was seen to run across the whole of the north side of TP 9 and most of the west side of the combined test pits. Just to the west lies the eastern rampart of the fort so it is possible the rubble derives from the slighted rampart. 004 occupied the rest of the excavated area and was found to run under 003. The rubble layer was only shallow, being around 12 cm deep. The top of 003 was 277.37 m AOD and the top of 004 was 277.25 m AOD. There were no finds.

Further excavation demonstrated that 004 was not a ditch fill but a layer associated with feature F1 in the south west corner of TP 8 which was sealed under rubble 003. In the south corner of the trench and only partly revealed, F1 was a burnt red clay area indicating the site of a hearth. It was made up of 006 dark orange red silty clay loam with frequent small patches dark purple brown silty clay loam and frequent flecks of charcoal. 004 became firmer close to F1 due to the heat from the hearth. Further north away from the hearth, 004 changed to a light grey silty clay with one small charcoal rich patch 005. A sondage was dug through the east side of the hearth to reveal its depth and character. It was found to be shallow with 006 being 7 cm deep and coming off onto a hard mid grey silty clay 007. This appeared to be sub-natural clay which was reduced by the heat of F1. This was not unlike hearth F2 in Trench 6 last year. The top level of F1 was 277.24 m AOD and 007 was 277.17 m AOD.

It was surprising to find a hearth in the southern half of the annexe - the first one. Perhaps it has survived because it was located tight up against the fort rampart and also protected by the rubble deposit. There is very little Roman archaeology present in the rest of the southern half of the annexe, a great contrast to the northern half.



Left: Test Pits 8 (left) and 9 (right) after removal of rubble deposit 003. Right: detailed view of hearth F1.

Contexts

F1 Hearth or oven, contains 006 and sealed under rubble 003. Over 007.

001 Topsoil.

002 Ploughsoil.

003 Mid yellow brown silty clay loam with 40% small to medium gritstones, mostly flat.

004 Light to mid grey silty clay with 30% patches of light yellow or cream silty clay and frequent flecks of charcoal. Adjacent to and contemporary with F1. Hard baked from close proximity to hearth F1.

005 Light grey silty clay with one small charcoal rich patch. Merges into 004 to south.

006 Dark orange red silty clay loam with frequent small patches dark purple brown silty clay loam and frequent flecks of charcoal. Fill of F1.

007 Hard mid grey silty clay. Under 006 and 004. Natural.

Test Pit 10

The final test pit in this area, TP 10, was dug 0.5 metres south of Test Pit 9 to follow the silt and rubble deposits. Dark grey silty clay loam topsoil was a maximum of 15 cm deep, overlying plough soil of mid to dark brown silty clay loam with moderate small to medium gritstones at maximum 20 cm deep. Rubble 003 was not present but the silty layer 004 was encountered across the test pit. Half the test pit was further excavated to reveal natural mid to dark yellow silty clay at 277.10 m AOD and a depth of 12 cm for 004. The top of 004 was 277.22 m AOD. The turf level at the north west corner of the test pit was 277.59 m AOD, dropping to 277.54 m AOD at the north east corner. Unlike TP8/9 there were a few sherds of post medieval glazed pottery from the top and plough soils.

The two day evaluation successfully located the terminus of the fort ditch in TP 7, whereas TP8/9 revealed deposits and a feature adjacent to the fort east rampart in an area where there would normally be a defensive ditch. It was interesting to find a hearth in TP 8 which suggests a similar use of this part of the annexe to that seen in the north half. However, TP10 revealed no Roman features, although only a small area was exposed, and was similar in character to several other test pits in the southern half of the annexe where very little Roman activity has come to light. The hearth appears to be an anomaly which might reflect its preservation close to the rampart and protected by a deposit of rubble, whereas the rest of the southern half of the annexe has been exposed to truncation by post medieval land use. Further investigation would throw more light on the annexe function at this part of the site.



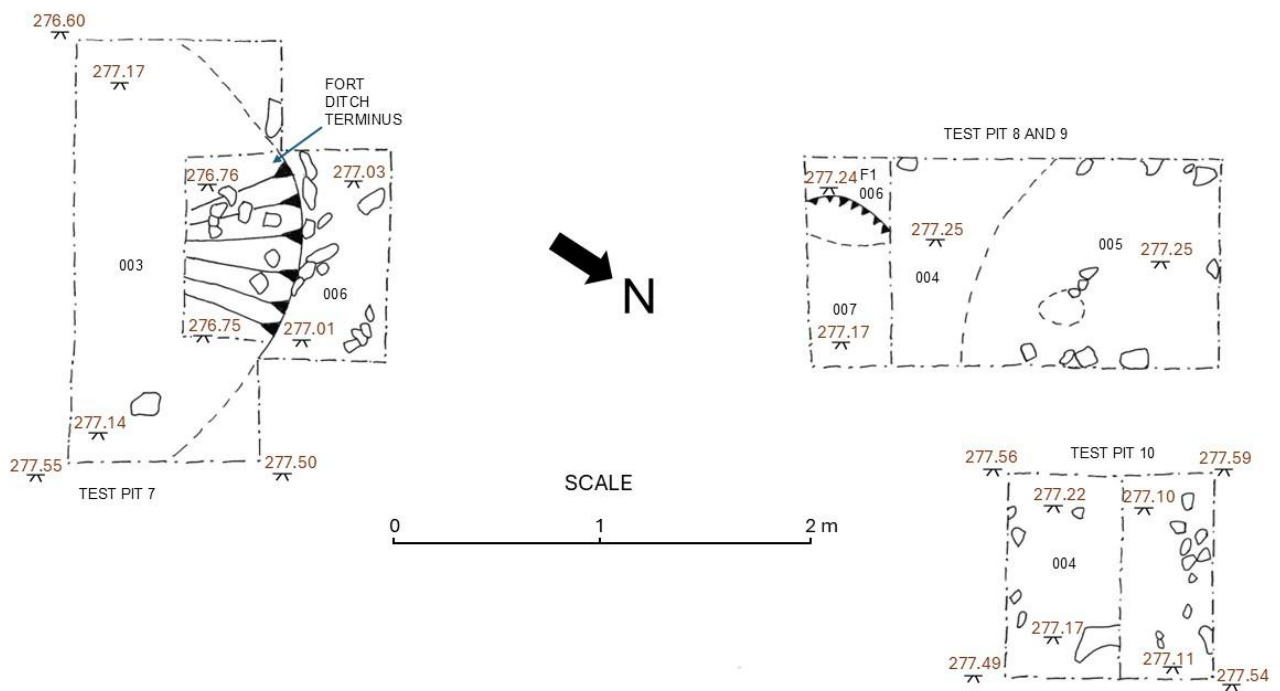
Test Pit 10 is on the left side of the photo, with TP8/9 to the right and TP7 beyond.



Test Pit 10 from above and, right, the south facing section.

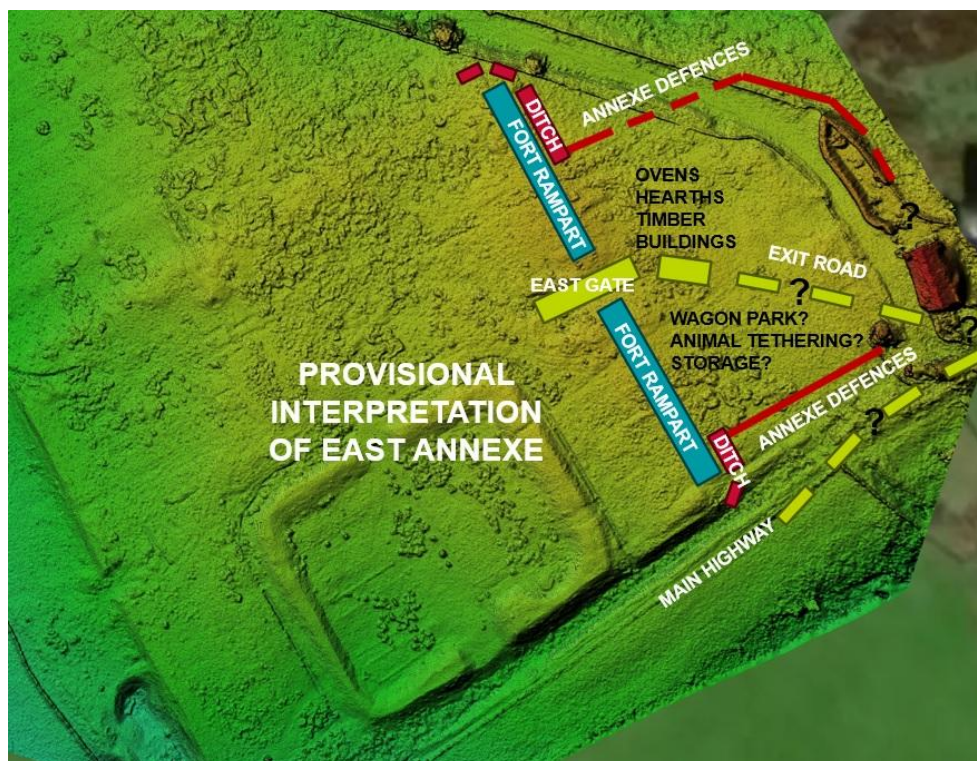


Test Pit 10 finds comprised post medieval dark glazed earthenware body sherds and a small sherd of white glaze, together with a possible burnt upper tibia bone fragment (right).



Plans of Test Pits 7, 8 & 9, and 10.

Castleshaw is a rare example of a Roman fort where one of the defensive ditches is not continuous. Whilst nearly all known annexes are separated by a ditch from the fort, this is not the case at Castleshaw and provides an intriguing aspect of the site.



Interpretation of the annexe based on recent excavations. The location of the southern terminus of the east ditch matches previous suggestions.

Investigations in the north half of the annexe

The main excavation in 2025 focused on the northern half of the annexe. The intention was to expand on the knowledge of this area gained during the 2024 excavations which revealed a first phase of timber buildings and a second phase of extensive oven, hearth and kiln activity. In particular, research aims for 2025 were to define the plan form and character of timber buildings and to determine the extent and character of oven activity.



Aerial photo showing the location of trenches and Test Pit 21.

Trench 12 and Test Pit 21

Trench 12

This ended up as a 2 x 1.8 m square trench located to the east of and partly overlapping Test Pit 14 from 2024. This had revealed a dense concentration of stones and much burning which indicated a possible oven structure. This was set tight up against a timber building foundation slot with an associated post hole. In 2025 the intention was to expand the excavation from TP 14 to expose the full extent of the possible feature. In the north west quarter of Trench 12, 1 m south to north and 85 cm east to west of old TP 14 was re-excavated to reveal the top of the Roman archaeology previously revealed and to inform the proposed extension as Trench 12 in 2025.

Topsoil 001 of dark grey silty clay loam was relatively deep at up to 30 cm and overlay c 25 cm deep plough soil 002 which comprised light brown silty clay loam with moderate small gritstones. The top of 001 was at 276.73 m AOD and that of the plough soil was 276.43 m AOD. Under this was a series of clayey layers which sealed deposits of charcoal, stones and red clay, as well as post holes and building slots representing a Roman timber structure. In the western side of the trench the uppermost layer under plough soil was 003 light yellow brown silty clay loam with frequent patches of dark orange silty clay and yellow/orange/cream coloured clay, with frequent flecks of charcoal. This was the same as 003 in TP 14 (2024).

In the western half of the trench the full extent of the stone and burnt red clay deposit 004 (011 in TP 14 in 2024) was revealed. In 2024 this was given a feature number F6 as it was interpreted as the upper back fill of a potential stone oven or kiln, similar to those excavated elsewhere within the northern half of the annexe. Further excavation showed that 004 formed a spread roughly 50 cm by 40 cm with a top height of 275.94 m AOD. There was a concentration of flat medium sized gritstones in the middle, thinning out at the sides, but with at least 2 courses visible. To the east 004 was bounded by dense charcoal deposit 005 and on the south side by a deposit of white/cream clay with frequent flecks/pieces of charcoal 006. Given the

intensity of the charcoal and presence of so much burnt red clay there was a good prospect for this to resolve itself into an oven or kiln and associated flue. However, excavation showed that that this wasn't the case and that 004 was part of the material used to infill the depression created by a Roman sunken room.



Left: After removal of top and plough soil and 003 to reveal burning deposits and the old TP14 edge indicated by the blue polythene. Right: expanded trench showing the top of the burnt deposit 005 and the spread of stones 004 and burnt red clay. The green dashes show the edge of TP 14 from 2024.

The only possible feature was on the surface of 004 manifesting as a circular surface of small to medium flat-laid gritstones which may have been deliberately laid on top of demolition rubble. This feature, F6, is not entirely convincing but may have formed a later phase post pad. 004 was found to be 20 cm deep and over 013 which was a deposit of sticky and dense light yellow and white clay forming an irregular patch in the middle of the trench. In the southern part of Trench 12 were three more deposits. 007 comprised a line of 3 large flat gritstones associated with large patches of charcoal and red clay lying to the east of 006. The stones in 007 proved not be structural but rather part of the dumping of materials to fill in this area. 009 was a mid grey silty clay loam with 50% charcoal pieces/patches towards the south east trench corner. A linear band of light yellow/white clay 008 ran along south side of trench and was probably sub-natural as it overlay natural clay 017 and was cut by slot F1. The top of 008 was 276.05 m AOD and 006 276.08 m AOD.

These deposits were all part of materials used to back fill this area and, with 006, they obscured the building slot F1. This was cut into natural 017 on the south side and clay deposit 013 on the north. It was 13 cm wide and ran west to east, with a base at 275.82 m AOD. The depth of its near vertical cut against natural clay 017 was 30 cm whereas its northern edge cut at a steep angle through 013 was only 15 cm. It was filled with 012 a mid to dark grey silty clay loam with 25% patches of orange silty clay and frequent charcoal and 10% shale. F1's eastern terminus was not apparent as it was obscured by stone deposit 026 and probably ran under the east trench edge. However, the terminus to the west was clearly defined as it ran up to and stopped where it met another building slot F2 and a post hole F4. The post hole appeared as a void and appeared to be rectangular at surface level but lower down was square in shape, being 15 cm in diameter at the top tapering to 8 cm diameter. It was 65 cm deep being 275.39 m AOD at the base and 276.04 m AOD at the top.



Post hole F4 from above.

Post hole F4 also marked the terminus of the south to north building foundation slot F2. This ran to the north side of the trench where it met post hole F3. Similar to F1 it appeared as a vertical cut into natural (formed of orange/light grey clay) which ran in a straight line 11 cm in from the west trench edge. Over natural and defined by the edge of F2 was 011 comprising dark yellow silty clay loam with 25% flecks/pieces of charcoal. The cut for F2 was not as deep as that of F1 being only up to 5 cm. However, this area was not fully excavated and, based on what was found at the east side of the trench there will be further dumped material to excavate to get to the base of the slot. Circular post hole F3 was previously excavated in TP 14 in 2024. At that time it was found to lie against the outside edge of a what was thought to be a west to east building foundation slot (F4 in TP 14). The edge of this slot ran along the north edge of



Left: the trench south edge is at the top with charcoal deposits 005/009 on the left and post hole F4 emerging top right. The right hand photo shows 004 part excavated revealing further charcoal deposits underneath. Post hole F4 is in the bottom left corner and post hole F3 in the top left corner.

Trench 12 and it was not possible to explore this further within the confines of the trench. A deposit lay just to the east of F3 which may obscure the evidence for a slot. This was 016 formed of dark brown silty clay loam with 15% patches of light red clay.

At the east side of the trench the stratigraphy was a little more complicated and is shown in the section below. Here the uppermost layer under 002 was 021 a compact light grey silty clay with 25% patches of mid orange/yellow silty clay and occasional flecks of charcoal. This was at the equivalent level of 003 which was further west. 021 was up to 17 cm deep and overlay 018 a compact light grey yellow silty clay with occasional flecks of charcoal that was 8 cm deep. Near the northern side of the trench 021 partly abutted and partly overlay 010 which was a maximum 20 cm deep light yellow grey silty clay with frequent charcoal and occasional lumps of burnt daub. 010 ran beyond the trench edge as did the layer under it, 020, dense charcoal mixed with burnt red clay 5 cm deep and exposed for a length of 25 cm in the north east corner of trench.

In the south east corner, around 30 cm into the trench, there was a break in stratigraphy caused by a later post medieval intrusion F8 which cuts ploughsoil 002. F8 is defined by a c 7 cm wide and 25 cm deep vertical column of loose light to mid brown silty clay loam with 30% small stones 022, which might represent a post hole fill or animal/root disturbance. To the south of this, the other fills of F8 are made up of mid brown silty clay loam 024, mid to light brown silty clay 023, and at the base a light orange grey silty clay 008. The latter lay over natural mixed orange and cream clay 017 and ran along the southern side of the trench and appeared to be a sub-natural layer. 023 is above it and is possible the clay packing for a post pit with 024 being the central fill of the pit. However, only part of F8 was exposed and within the limits of the trench this was a difficult area to interpret and would benefit from more extensive investigation in the future.

021 and 018 where the uppermost of a series of layers filling a depression. Under 018 was a thin maximum 4cm deep layer 025 of sticky light grey silty clay. This sealed a layer of dense charcoal with frequent small patches of yellow and red clay 005 which was thicker to the south at 10 cm and tapering to only 3 cm to the north. It lay above 015 which comprised mixed lenses of light grey silty clay with some dark orange staining and frequent charcoal flecks. 015 contained several sherds of Roman red ware pottery. Another layer of dense charcoal, with patches of light grey clay and occasional medium gritstones 014 lay under 015. This charcoal layer was quite deep being 30 cm at its south end and tapering to 2 cm to the north. It in turn overlay another clay layer 019 which occurred for a 40 cm length before going under the north trench edge. 019 was 9 cm deep and the same as 015 in character.



Left: after removal of 004 and 006, showing cut of slot F1 on left side of photo, with post hole F4 top left and the edge of slot F2 running from there to post hole F3 top right. Yellow clay 013 is visible in the centre. Right: one of several fragile sherds of Roman red ware pottery emerging from charcoal rich deposit 015.



Left: the shape of the sunken room is evident by the cuts of F2 and F3 with post hole F4 marking the corner. Right: detail of F1 profile showing fill 012.



West facing section in Trench 12.

The final day of excavation within Trench 12, on 1st September 2025, focused on the eastern half. The remnants of charcoal and light grey deposits 014 and 019 were removed against the east trench edge to reveal a layer 026 of thin flat, mainly medium size gritstones of up to 12 cm length. The stones formed an uneven surface ranging from 275.46 m AOD and 275.37 m AOD, with some overlapping. 026 appeared to extend across the area defined by the two wall foundation slots and was sealed by clay deposit 013 which was seen to be 30 cm deep, having a top height of 275.75 m AOD and a base at 274.46 m AOD.

Immediately under 026 were a set of preserved Roman timbers F7. Due to time constraints and the challenging practicalities of excavating deeply buried timbers under stone and clay, they were only partially revealed. Despite this enough was exposed to show that there were two elements to what was structurally intact timber work. The main timber component 028 took the form of a possible beam approx. 75 mm deep and 100 mm wide. A 50 cm length of it was exposed against the north side of the trench, and another part seen emerging 35 cm further south under clay 013 showing that it probably ran all the way to slot F1. It was clearly running under the north trench edge so its length cannot be determined at this time. The top level of 028 was 275.33 m AOD. The bulk of the wood, 029, comprised thin, 15 mm deep, strips of wood up to 120 mm wide running parallel with each other in a west to east orientation up to 028 but not connecting with 028. A substantial 500 cm long section of one of these strips was exposed near the north edge of the trench. Others were more fragmentary due to being sealed under the stones of 026. Despite this, it was possible to identify 2 strips on the east side of the central beam 028 and 4 on the west. They appeared to be positioned to run over the top of the beam. The top levels ranged from 275.41 m AOD to 275.37 m AOD.

There were gaps between the strips of wood and the main cross piece. Was this due to partial decay or some other reason? The fact the wood has survived at all is remarkable given the acidic soils at Castleshaw which mean that normally organic material such as wood and bone does not survive. In Trench 12 anaerobic conditions were created by the wood being sealed under the thick clay deposit 013. Given that only a portion of the wooden structure has been revealed it is not possible to be certain of F7's function at this stage. Current interpretations are a floor or perhaps a collapsed wall or ceiling, part of sunken room the function of which is also a mystery at this time. Before backfilling Trench 12, the timbers were packed with clay to help preserve them for future investigation. It is interesting to note that the wall foundation F1 cut into the yellow clay 013 that sealed the timbers. This suggests that the original wall foundation slot is at a lower level which provides potential for the preservation of wall foundation timbers and posts, and also indicates a second phase for the building with the yellow clay perhaps sealing the first phase timber

structure and forming a new floor level which in turn was sealed by the dumped materials including stones, burnt red clay and charcoal rich deposits. It is tempting to see these infill materials coming from a demolished kiln or oven nearby, perhaps as part of the slighting process when the fort was abandoned in the late 1st century AD. Given that there are two phases of fort within its c 20 year occupation and that it is separated by only around 10 years from the re-occupation of the site by the fortlet, which also had two phases within its c 20 year occupation, the possibility of acquiring dendrochronology dates to tie down the period of use for this part of the annexe is exciting. Trench 12 is clearly a priority for future further excavation and expansion to determine the character, function and date of the wooden structure.



Looking east showing pieces of wood emerging from under stones 026.



And looking west showing the thick yellow clay deposit 013 sealing the timbers.



Detailed photos of the timbers. Left: beam 028 is to the right of the small scale. Right: there was evidence for charring and perhaps the timber top right has a curved edge. There were no obvious signs of fixing such as joints or pegs or nails. If this is an *in situ* floor then it is likely that timber wall bases will survive as well which would provide a unique insight into construction techniques for the annexe buildings.



The site director recording the timbers before they were packed round with yellow clay to preserve them before backfilling the trench. The timbers are quite deep within the trench and clearly extend beyond the trench edges.

The top and plough soils contained several clay pipe stem fragments together with several glazed earthenware sherds and a white glazed and yellow glazed sherd. The charcoal rich layer 005 produced 15 red ware colour coated body sherds from 1 thin bodied vessel. There was also a small, degraded body sherd of Samian ware. Layer 015, which was also charcoal rich and immediately under 005, produced another 3 sherds of the red ware which were clearly part of the same vessel. Other Roman finds from 005 comprised 5 pieces of daub, 1 large burnt red daub piece, a fragment of red tile and 2 nails.

Soil samples were submitted for specialist analysis from layers 005 and 014. Charcoal was identifiable with oak dominating in both samples and with hazel present in 014 and willow/poplar in 005. These appear to have been used for fuel so may derive from a nearby grain drying kiln or oven. 014 also produced 4 charred grains of barley which accords with this theory (see Appendix).



Trench 12 finds from the topsoil and plough soil.



Roman red ware pottery sherds from 015 showing exterior (left) and interior (right).



Roman pottery and daub from layer 005.



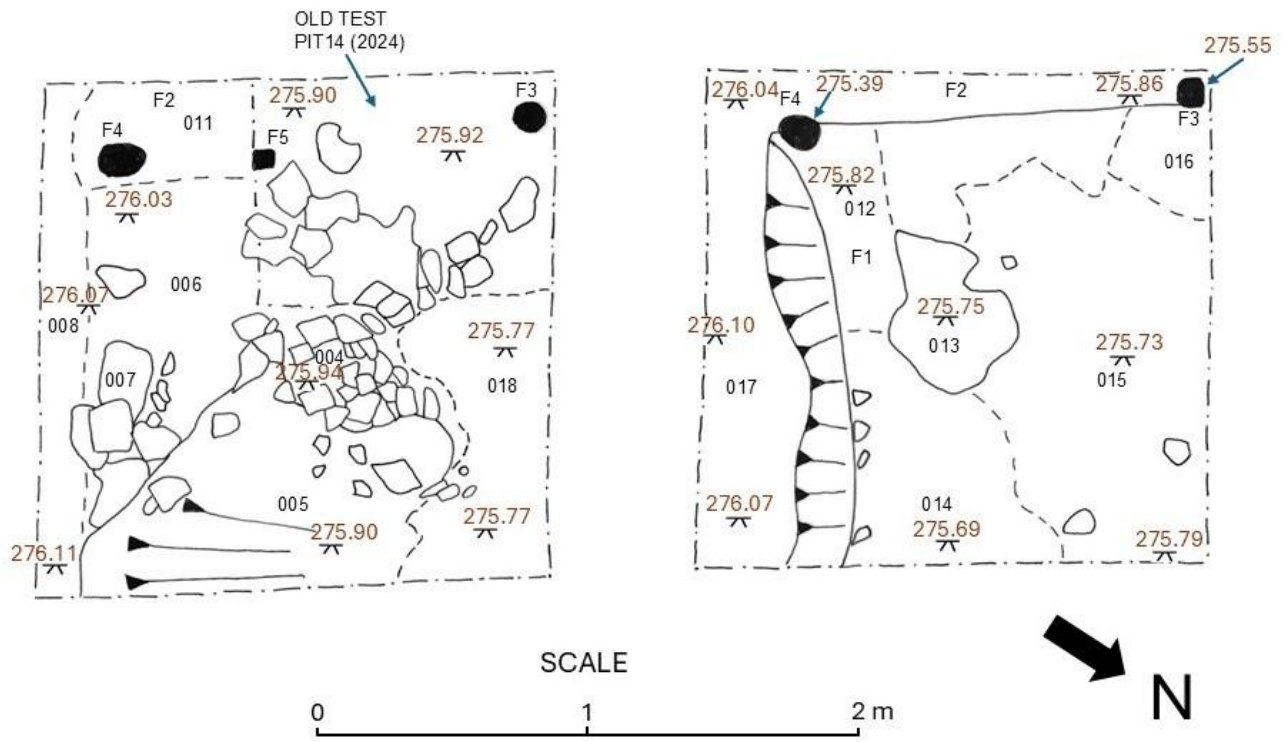
Detail of Roman red ware from 005: interior (left) and exterior (right).



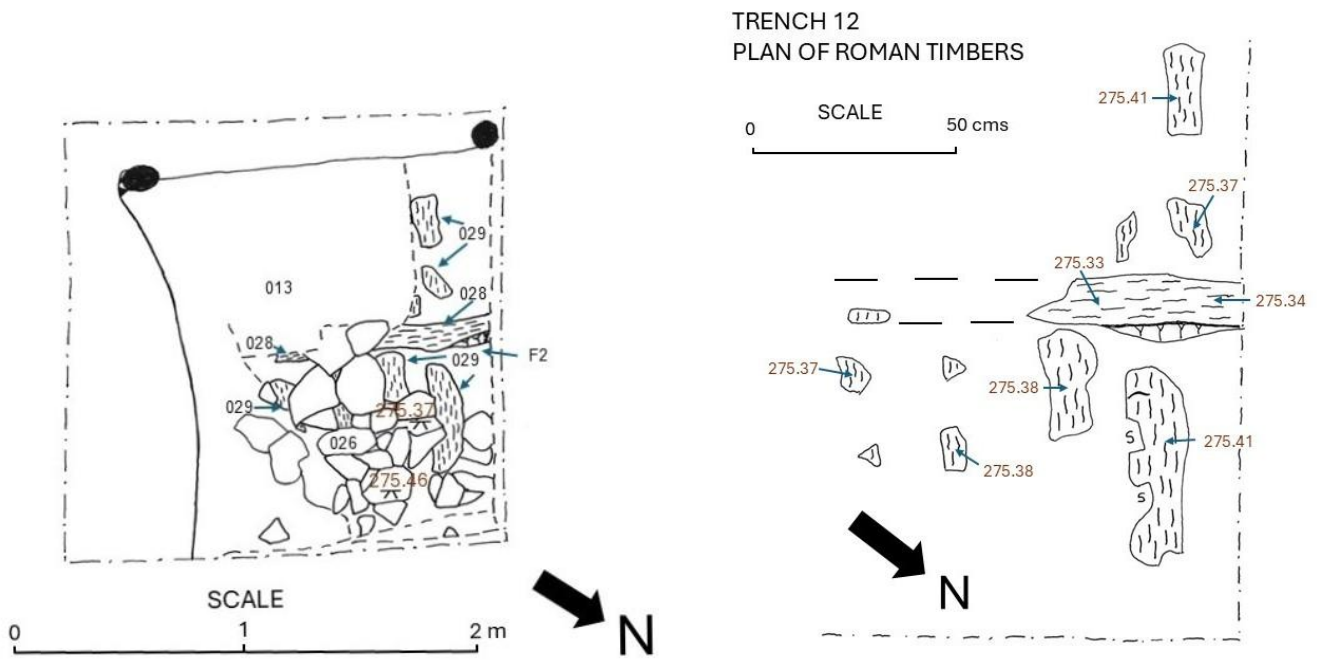
Tile fragment from 005 (left) and large piece of burnt daub (right).



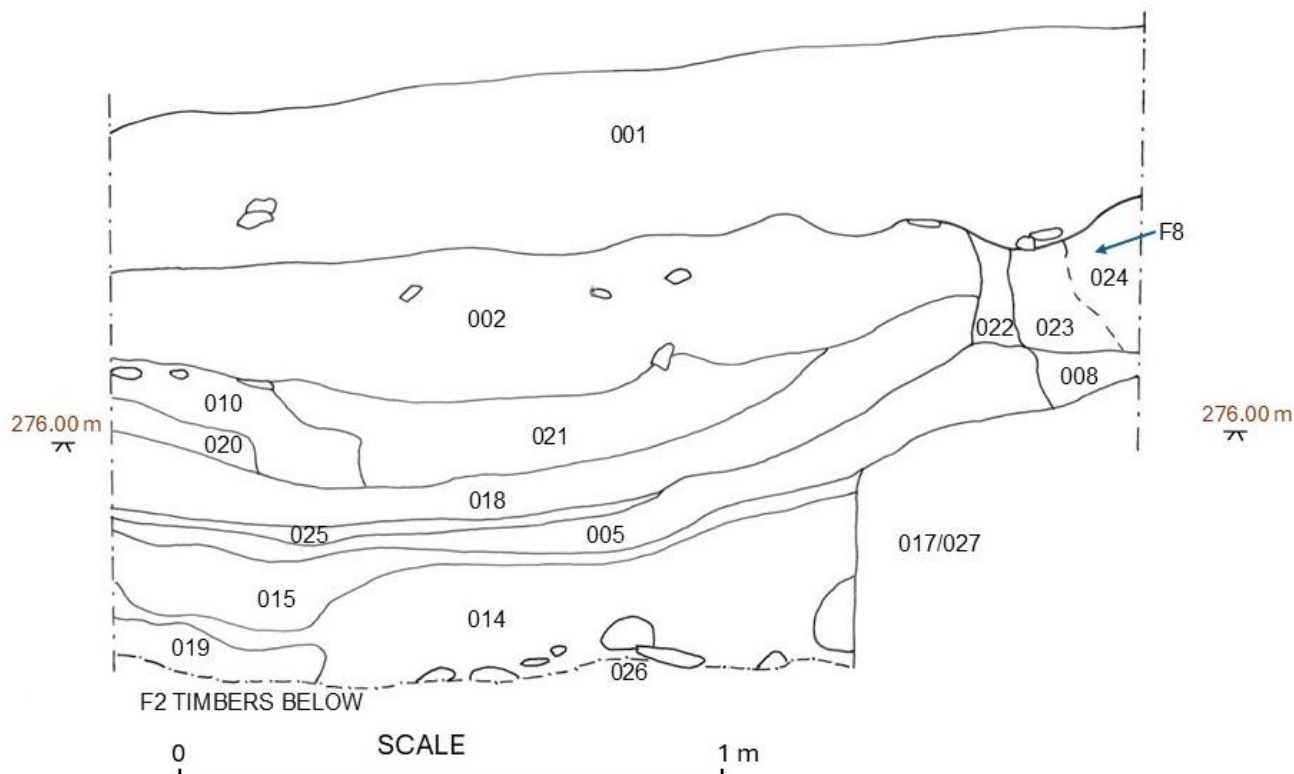
Nails from 005.



Trench 12 plan during excavation.



Trench 12 final plan and (right) detailed plan of the timbers.



West facing section in Trench 12.

Contexts

- F1 Linear feature running east to west alongside south side of trench and connected to post holes F4 . Under 006, 007, 009. Filled with 012. Building foundation slot.*
- F2 Linear feature running south to north alongside west side of trench. Connects between post holes F4 and F3. Filled with 011. Building foundation slot.*
- F3 Post hole in north west corner of trench, circular in shape and linked to post hole F5 via slot F2. Recorded in Test Pit 14 in 2024.*
- F4 Post hole in south west corner of trench. Deep circular post hole in recessed corner of room and links to slots F1 and F2. Revealed as void under 011 and set in clay 008.*
- F5 Post hole set in edge of slot F2 and between post holes F3 and F4. Square in shape and charcoal-rich fill and recorded in Test Pit 14 in 2024.*
- F6 Platform of small to medium sandstones formed of 004. Part of deposit of burnt red clay and gritstones. Revealed and recorded in 2024 within Test Pit 14. Possible post pad but unconvincing and seems to be part of a dumped deposit. Under 015.*
- F7 Timbers forming Roman structure, possibly a floor, wall or ceiling. Comprising a south to north aligned beam with, at a slightly higher level, several fragments of planks. Only partially revealed and sealed by stone deposit 026 and thick yellow clay 013. Comprised of 028 and 029.*
- F8 Possible post pit and post hole in south west corner of Trench 12. Contains 022, 023 and 024.*
- 001 Topsoil. Dark grey silty clay loam.*
- 002 Ploughsoil. Light brown silty clay loam with moderate small gritstones. Over 003.*
- 003 Light yellow brown silty clay loam with frequent patches of dark orange silty clay and yellow/orange/cream coloured clay, with frequent flecks of charcoal. Same as 003 in TP14 (2024).*
- 004 Flat medium sized gritstones in matrix of burnt red clay. Same as 011 in TP4 (2024).*
- 005 Layer of dense charcoal with frequent small patches of yellow and red clay. Over 015, under, 005, 018*
- 006 Deposit of white/cream clay with frequent flecks/pieces of charcoal. Under 003, over F1 and 013.*
- 007 Line of 3 large gritstones associated with large patches of charcoal and red clay. Under 003, over F1 and 008.*
- 008 Light yellow/white clay along south side of trench. Cut by F1. Sub-natural clay under 007 and 023.*
- 009 Mid grey silty clay loam with 50% charcoal pieces/patches. Over F1, under 018.*
- 010 Deposit of light yellow silty clay loam with frequent flecks/pieces of charcoal. Over 018, under 003, 021.*

- 011 Dark yellow silty clay loam with 25% flecks/pieces of charcoal. Under 003, over natural.
- 012 Mid to dark grey silty clay loam with 25% patches of orange silty clay and frequent charcoal and 10% shale. Fill of F1.
- 013 Deposit forming irregular patch in the middle of the trench, of mainly sticky, thick yellow clay. Cut by F1, over 026 and F7, under 004.
- 014 Dense deposit of charcoal with patches of light grey clay and occasional medium gritstones. Over 026 and 019, under 015.
- 015 Deposit formed of mixed lenses of light grey silty clay and charcoal. Contains red ware pottery sherds. Under 005, over 014.
- 016 Deposit in north west corner of trench formed of dark brown silty clay loam with 15% patches of light red clay. Under 018.
- 017 Deposit of mixed mid orange and cream/white clay cut by F1. Under 008 and probable natural.
- 018 Compact light grey yellow silty clay with occasional flecks of charcoal. Under 021, 010, 020, over 005 and 025.
- 019 Mixed lenses of light grey silty clay with some dark orange staining and frequent charcoal flecks. Over 026, under 014.
- 020 Dense charcoal mixed with burnt red clay in thin, partially revealed deposit in north east corner of trench. Under 002, over 018.
- 021 Compact light grey silty clay with 25% patches of mid orange/yellow silty clay and occasional flecks of charcoal. Over 018 and under 002.
- 022 Vertical column of loose light to mid brown silty clay loam with 30% small stones. Part of F8. Over 005.
- 023 Mid to light brown silty clay. Fill of F8. Over 008, under 024.
- 024 Mid brown silty clay loam. Fill of F8. Over 008, under 002.
- 025 Sticky light grey silty clay. Under 018, over 005.
- 026 Deposit of medium thin gritstones forming shallow layer across the trench and sealing timbers F7. Under 014 and 019.
- 027 Natural yellow clay with 25% patches of white clay. Under 005, over 022. Cut by F1.
- 028 Length of preserved wood on a south to north alignment being a key part of structural timber work forming F7. Associated with 029. Under 026 and 013.
- 029 6 strips of thin flat wood running parallel with each other and on a west to east alignment towards. Part of F7 and associated with 028. Under 026 and 013.

Test Pit 21

This 1 m square test pit was positioned between Trenches 12 and 15, being 1.5 m east of Trench 12. Under 25 cm deep turf and dark grey silty clay loam topsoil was a 17 cm deep mid to dark grey brown plough soil. Under this was a 50 cm deep deposit of mainly mid grey brown clay mixed with dark yellow clay and occasional small to medium gritstones and charcoal flecks. Initially this was thought to be natural, but a sondage showed it was infill as it capped a linear cut feature which ran along the east side of the trench. Excavation revealed a shallow cut on its western side and small circular post hole 6 cm in diameter which appeared as a void. The fill was light to mid grey silty clay with moderate flecks of charcoal. The fill was 15 cm deep. The eastern edge of the feature was hidden beyond the test pit edge and it seemed to be wider at the south side of the test pit compared with the north. This deeply sealed feature appeared to be another timber wall foundation trench. The turf level was at 276.72 m AOD with the bottom of the feature beside the post hole being 275.80 m AOD. There were no finds in TP 21.

The character of this test pit is quite different to the east section deposits only 1.5 m away in Trench 12, but the building slot could well be part of the same structure indicated in Trench 12. The top of the fill in the slot was at 275.92 m AOD. This compares with 276.04 m AOD for the top of post hole F4 in Trench 12. The dense charcoal infill deposits seen in the east side of Trench 12 must die out in the 1.5 m before Test Pit 21, but the deep clay infill in TP 21 supports the view that this area was levelled after the demolition of the timber building evidenced by the slot. It is worth noting that an east to west slot was identified in Trench 15 a little to the east and this slot may be part of the same timber structure indicated by slots in TP 21 and Trench 12. Further excavation of the area between Trenches 12 and 15 and incorporating TP 21 is recommended.



Left: Test Pit 21 looking south with the linear feature visible on left side. Right: sondage through clay infill with feature showing top right against east side of the test pit.



Left: looking towards the south east corner of the test pit at the excavated slot. Right: overhead view showing the small post hole against the west edge of the slot.

Trench 13

In 2018 a 2 m x 0.5 test pit (11) was dug at right angles across an old, unrecorded excavation trench just to the east of the stone grain drying kiln found in 2024. The old trench is thought to have been dug by Bruton in 1907/8. On the edge of Bruton's trench, TP 11 encountered evidence of considerable burning in the form of burnt clay, daub and charcoal. Therefore in 2025 the opportunity was taken to revisit this area with a larger trench (13). Initially the trench was 3 x 1 metre but was soon expanded to fully encompass the feature that was revealed to become 2.5 m square with a 1 m square offshoot on the south west end.



Left: early stages of excavation with the spoil heap to the right overlying the kiln found last year. Right: looking south with a feature starting to emerge in the foreground and the dark fill of Bruton's old trench behind.

Bruton's trench F1 was revealed and its backfill of loose dark grey silty clay loam 008 was removed. F1 had a maximum width of 90 cm and a maximum depth of 25 cm, with the base being at 276.04 m AOD. To the south it cut a deposit of light yellow silty clay loam 003 which had the appearance of sub-natural and a height of 276.25 m AOD, although it was not excavated. To the north of Bruton's trench the archaeology was very different.

The topsoil 001 of 20 cm depth and brown plough soil 002 of 10 cm depth came off to reveal a circular arrangement of flat stones F2. This comprised 005, predominantly medium to large flat gritstones forming an arc with the largest stone being 42 x 27 cm. Several stones were heat reddened and interleaved with burnt clay 004, a concentration of compact pieces of reddened burnt daub and 10% small to medium gritstones which also occupied the space within the arc. F2 had an internal dimension of 76 cm and around 1.3 m to the outer edge of the stone arc, but this varied as the edge was not uniform. Beyond the feature was a layer of mixed light yellow and cream coloured silty clay, similar to 003 and probably sub natural. Beside the north west corner of the trench the turf height was 276.61 m AOD, the top of 009 was 276.29 m AOD, and the top of stones 005 276.28 m AOD. The arc of stones left a gap 90 cm at the south side which was filled with a spread of densely packed red-orange daub pieces 006 running south east from F2. This area was cut and disturbed by the old excavation trench F1. It was clear that F2 was another stone oven base being similar in shape to the one revealed last year in Trench 11 on the opposite, west side of the grain drying kiln.



Oven F2 after surface cleaning, with the flue and Bruton's trench at the top of the photo.

A section was excavated south to north across F2. The oven proved to be quite shallow. The upper fill 004 was found to have a maximum depth of 16 cm and to overlie a lower fill 007, 10 cm deep, which comprised a compact layer of orange red heat-baked daub overlying an even harder baked surface of orange red clay with at 276.02 m AOD. There was a slight depression in the centre of the kiln where the clay was a hard reduced grey colour. The stones 005 for the kiln wall were only one course deep. It is likely that this area of the annexe suffered from post medieval disturbance such as ploughing or recycling of the stones. As with the other stone oven it was apparent that the flue was positioned on the south side.



Overhead showing the circular shape of the oven interior, with Bruton's trench just clipping its edge to the left.

A variety of 18th and 19th century glazed pottery sherds came from the top and plough soils, and from the backfill of Bruton's old trench, together with two small body sherds of earlier trail slip ware. There was also some post medieval glass from 002 together with 4 small pieces of heat reddened daub. They only finds from a Roman context were in 004, the top kiln fill, which produced a small piece of daub and a much larger shaped fire heat reddened piece of daub which may have been used to line the oven.



Excavating the half section through the oven, with the results on the right.

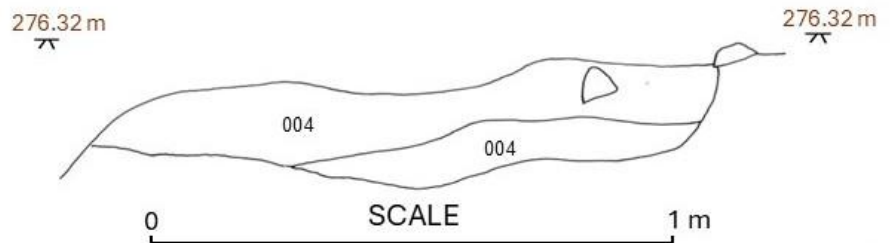
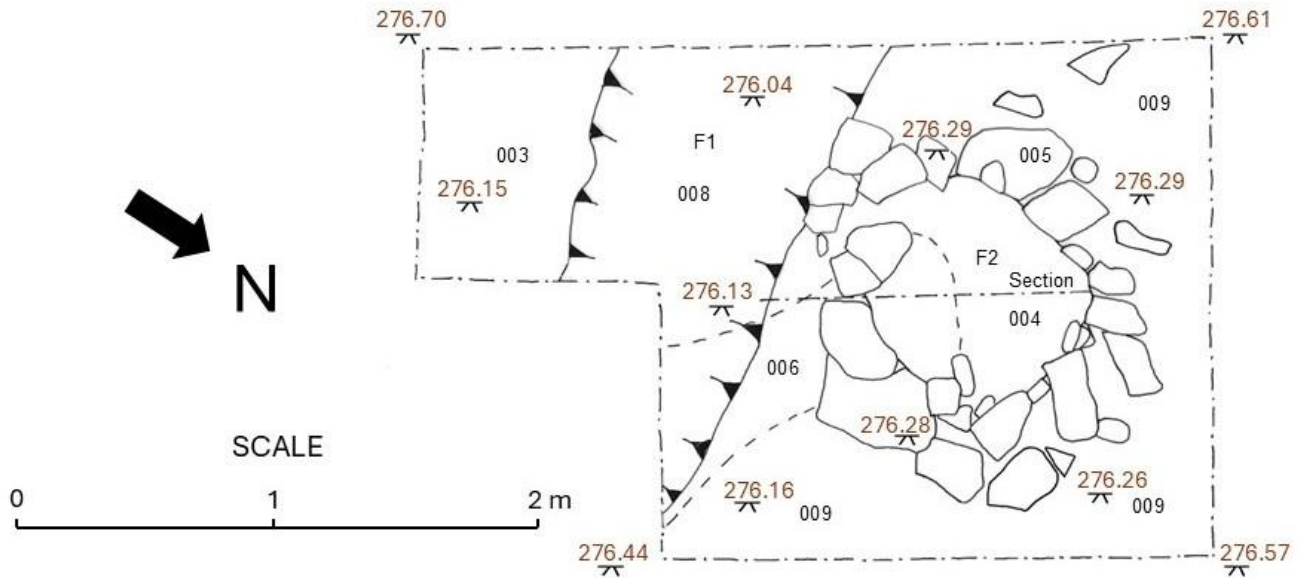


Finds from the topsoil (left) and the old excavation trench backfill 008 (right)



Finds from plough soil 002 and daub from the oven upper fill 004 (right)

Trench 13 has shown that Bruton's unrecorded trench of 1907/8 clipped another Roman stone structure, in this case an oven. Unlike the other stone oven to the west, F2 in Trench 13 had no remains of the flue/oven front probably due to disturbance from the old excavation trench. The two stone ovens straddled the grain drying kiln, each being separated from the kiln by a space of 0.5 m. This suggests a regular, planned layout in this part of the annexe rather than a haphazard approach to operations.



Plan of Trench 13 and east facing section through oven.

Contexts

F1 Cut of Bruton trench which clips the south side of F2.

F2 Stone oven base.

001 Topsoil.

002 Brown plough soil.

003 Deposit of light yellow silty clay loam forming ledge on south side of F1 cut. Natural subsoil?

004 Concentrated compact pieces of reddened burnt daub and 10% small to medium gritstones. Fill of oven F2. Under 002.

005 Flat gritstones forming sides/wall of F2. Several stones are heat reddened and interleaved with burnt clay.

006 Spread of densely packed red-orange daub pieces running south east from oven F2.

007 Compact mid to dark orange baked lumps of clay/daub. Base fill of oven F2.

Trench 14



Trench 14 being excavated at the beginning of August on the left side of the photo

In 2024 Test Pit 19 an assortment of different shapes suggestive of post holes was revealed in the north west part of the northern half of the annexe. A clear division between two contexts was seen running west to east and in one side of the test pit were several sub-circular shapes suggestive of post holes. This was exposed on the last day of the 2024 excavation. In 2025 this test pit was re-excavated and extended as Trench 14 (1.5 x 1.3 m) to enable these features to be understood as there was potential for evidence of a timber building.

6 possible post holes were revealed once the old backfill had been removed along with 25 cm of topsoil and 15 cm of plough soil over the extended part of the trench. The post holes were given the same feature number F1 as they all contained the same fill 003 which consisted of mid grey silty clay loam with 40% small patches dark orange brown silty clay loam and occasional flecks of charcoal. The 6 shapes were tightly clustered on an east to west alignment. They varied in shape, ranging from a conjoining sub-circular pair towards the east middle part of the trench, with more irregular rectangles to the west. On excavation these all turned out to be very shallow being 2 to 4 cm deep. The base of the largest, sub-circular feature was at 275.87 m AOD. These were clearly not substantial post holes but could represent settings for posts to support an adjacent wall.



Trench 14 after initial clearing looking south and showing the potential post holes and, right, after half-sectioning.



Detail of two of the features half-sectioned and, right, after full excavation.

The holes F1 were cut/set into a firm deposit 005 comprising mixed patches of light orange and cream silty clay loam and being 9 cm deep. There was a clear edge running through the trench, on a west to east alignment, between this and adjacent deposit 004 which was made up of mid grey silty clay loam with 40% small patches cream coloured silty clay and moderate flecks of charcoal, and was 21 cm deep at this point. The top of 005 was 275.95 m AOD and 004 was 275.99 m AOD. Excavating a sondage through 004 in the south west corner of the trench revealed another deposit to the south that it partly overlay. This was 012 which comprised mid brown grey silty clay loam with frequent small pieces of decayed orange sandstone.

Both 004 and 012 overlay 006 a thin dark grey silty clay loam with 25% small to medium patches of light yellow silty clay and frequent flecks of charcoal. This looked like it might be the fill of a building foundation slot. A 0.5 m wide section was dug against the west side of the trench to provide an east facing section through the deposits. It was found that 006 was very shallow, only 4 cm deep and was not in a cut feature. It had a surface height of 275.80 m AOD. Under it was a deposit of dark grey yellow silty clay with frequent small gritstones 010. This turned out to be 15 cm deep and overlaid 011 comprising light cream/yellow clay with occasional flecks of charcoal. 011 had a surface height of 275.55 m AOD. It was not excavated but might be sub-natural. In the middle of the trench 011 also lay under 004 which at this point was 38 cm deep. 012, 006 and 010 went under the south edge of the trench but their northern edges were angled at roughly 45% against 004 which overlay them.

In the northern half of the trench were several more layers and a possible post hole feature F2. This was cut on its south side by F1 and only became visible in the east facing section. It was a shallow depression with a curved base 8 cm deep and 20 cm across and cut into 004 and 005 at their junction. Its fill 007 was a dark brown grey silty clay loam with a steeply angled medium sized gritstone. F2 had a gentle southern face and much steeper northern side. The base was at 275.86 m AOD. The pitched stone may have acted as a packing for a small post c 5 cm in diameter. Against the northern edge of 004 were 2 further layers under 005. These were 008 which was 12 cm deep and comprised mixed dark orange and mid yellow silty clay loam, overlying 009 a light yellow grey silty clay with 30% small to large patches of mid orange silty clay and frequent small to medium patches light grey silty and moderate flecks of charcoal. 009 had a top height of 275.74 m AOD and was 14 cm deep, but not fully excavated. 005, 008 and 009 all ran into the northern trench edge.

The edge between 004 and 008/009 was under the small post hole F2 and was difficult to define but there did appear to be a steeply angled dividing line with 004 therefore being later than 008/009, as well as 012/006/010 to the south. It is possible that 004 fills in a pit with a gentle southern edge and steep northern edge.



F1 holes after excavation and sondage in the left hand corner showing 006.



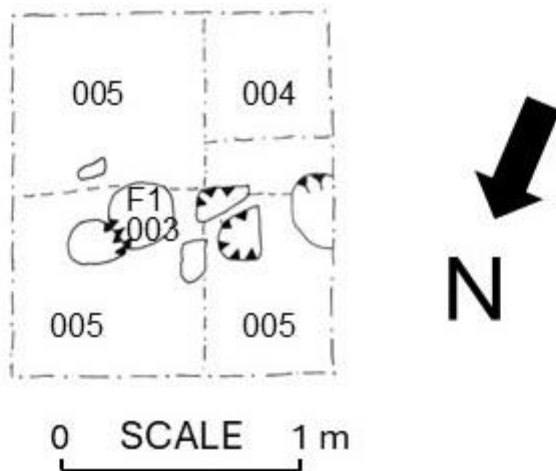
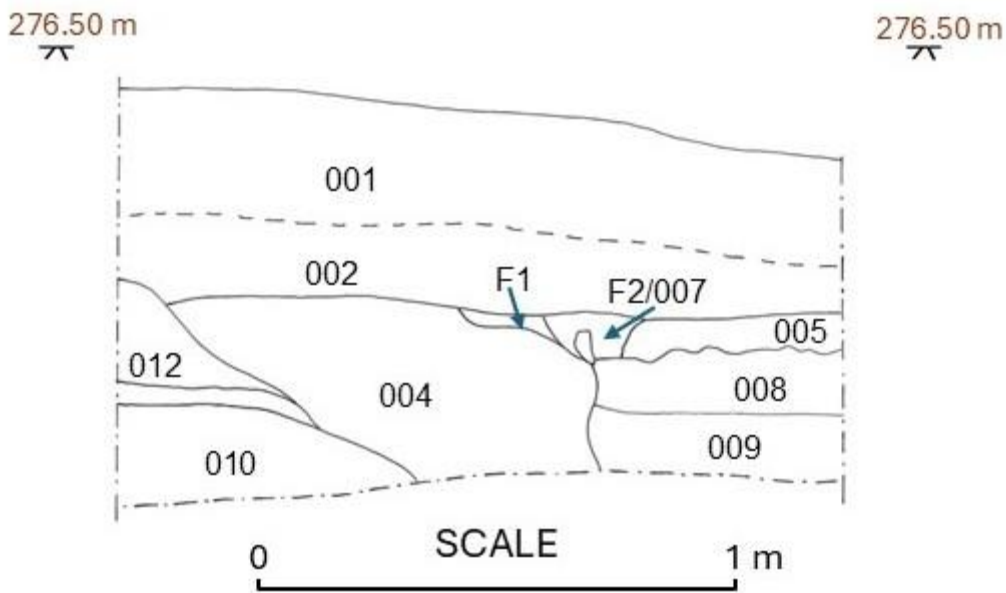
East facing section of Trench 12.

The excavation of Trench 12 demonstrated that there was no building foundation slot. Instead, there was evidence for some possible shallow post settings, a small post hole and possibly tipped in materials from the south against perhaps a shutter under F2 or, alternatively, the cut of a pit filled with 004.

Finds were limited to 001 and 002 and included 1 large and 1 small metal object, 3 nails of possible Roman date, a piece of calcined bone, together with assorted post medieval glazed pottery and small piece of glass waste.



Finds from Trench 14 topsoil and plough soil.



Plan of Trench 14 and east facing section.

Contexts

F1 Comprises several possible post holes. Very shallow being a maximum of 2 cm deep, roughly sub-circular in shape and aligned on a west to east axis. Seen in last year's Test Pit 19. Filled with 003. Cuts 005.

001 Topsoil.

002 Mid to dark brown plough soil.

003 Fill of F1 possible post holes comprising mid grey silty clay loam with 40% small patches dark orange brown silty clay loam and occasional flecks of charcoal.

004 Deposit of light to mid yellow grey silty clay loam with 40% small patches cream coloured silty clay and moderate flecks of charcoal. Under 002 and 007, over 006, 008 and 009.

005 Firm deposit of mixed patches of light orange and cream silty clay loam. Cut by F1. Over 008, under 002, 007.

006 Dark grey silty clay loam with 25% small to medium patches of light yellow silty clay and frequent flecks of charcoal. Over 010, under 004.

007 Dark brown grey silty clay loam with steeply angled medium sized gritstone. Fill of possible post hole F2. Over 004 and 005, under 002 and 003.

008 Deposit of mixed dark orange and mid yellow silty clay loam. Under 005, 007 and 004, over 009.

009 Light yellow grey silty clay with 30% small to large patches of mid orange silty clay and frequent small to medium patches light grey silty and moderate flecks of charcoal. Under 008, over 004.

010 Dark grey yellow silty clay with frequent small gritstones. Over 011, under 006.

011 Light cream/yellow clay with occasional flecks of charcoal. Under 010 and 004

012 mid brown grey silty clay loam with frequent small pieces of decayed orange sandstone. Over 006, under 004 and 002.

Trench 15/19 and Test Pits 22-24

Trench 15

In 2024 Test Pit 16, measuring 2 x 1 m square on a south to north long axis, was excavated 0.5 m to the west of Trench 11 which held remains of a stone oven. TP 6 was located partly across the old excavation trench probably dug by Bruton in 1908 with the objective of seeing if there was another oven. A concentration of stones was revealed, along with patches of charcoal and red clay. These were cut by the south side of Bruton's trench but there was not enough time to explore these remains in more detail. Therefore, in 2025 Trench 15 was designed to re-open and expand this area to better understand the partly exposed remains. Ultimately, the trench ended up being 5.5 m long by 2 m wide, with a reduction to 1.5 m width for the most northerly 2.5 m length. The trench was also joined up to Trench 15 to the north.



Left: Trench 15 is in the foreground with Trenches 12 beyond to the left and Trench 14 further away to the right. Right: view of the trench in early stages of excavation. Bruton's trench runs through the middle.

The northern edge of Bruton's old excavation trench F1 was exposed and its fill 012 of dark grey silty clay loam with moderate small to medium gritstones was removed. The base of F1 was at 275.98 m AOD and the turf level above F1 in the west trench edge was 276.69 m AOD. Clusters of stones were exposed in either side of the cut of F1. The 2024 TP 16 backfill was removed along with remnants of plough soil to reveal the extent of the stones which comprised a dense, linear spread of small to medium gritstones 005, some flat, some at an angle. These were given a feature number F2 in case they turned out to be another structure such as an oven. To the north of F1 the stones died out after a distance of 50 cm, where they met a light yellow silty clay 007. This was part excavated and appeared to be sub natural. In Trench 11 in 2024 the rear of the stone oven formed a clear curving back edge against the same clay material as 007, but this was not as convincing in Trench 15 as only 3 stones seemed to form part of a possible structure and the stones just petered out further north. It was hoped the other side of the Bruton cut would provide a clearer understanding of whether F2 was a structure.

The remains of F2/005 were more extensive on the south side of cut F1. Here the stones formed a spread 80 cm across and 1.2 m long and were covered and partly mixed in with a Mixed mid yellow brown silty clay loam with small patches of light yellow silty clay loam and moderate flecks of charcoal 010. The stones were at least 4 deep but did not form regular coursing with many stones being at an angle and jumbled together. Excavation through the stones failed to discern a surviving wall/floor and it must be concluded that this is a dump of stones, perhaps derived from a nearby demolished structure such as the stone oven revealed in Trench 11 last year, which is only 1 m to the east. The top of 005 was 276.12 m AOD on the north side of F1 and 276.28 m AOD on the south side. In 2024 a line of 3 flat stones was given a feature number F3 in anticipation of being a wall foundation. However, these were found to be isolated and did not extend any further and were just a single course deep so cannot be considered structural.



Aerial view of Trench 15 after initial expansion with stones F2/005 exposed on both side of old trench F1.

Immediately south of 005, against the west side of the trench, was 003 a sub-circular large patch of dense charcoal in a matrix of dark grey silty clay loam measuring 65 cm by 50 cm. This proved to be a shallow deposit of only 3 cm and came off on to 004, mid grey yellow silty clay with occasional flecks of charcoal and frequent small patches of orange yellow clay. This was sub-natural and was cut on its south side by a timber building foundation slot F4. On its north side it was overlain by the stone dump 005. The top of 004 was 276.30 m AOD.

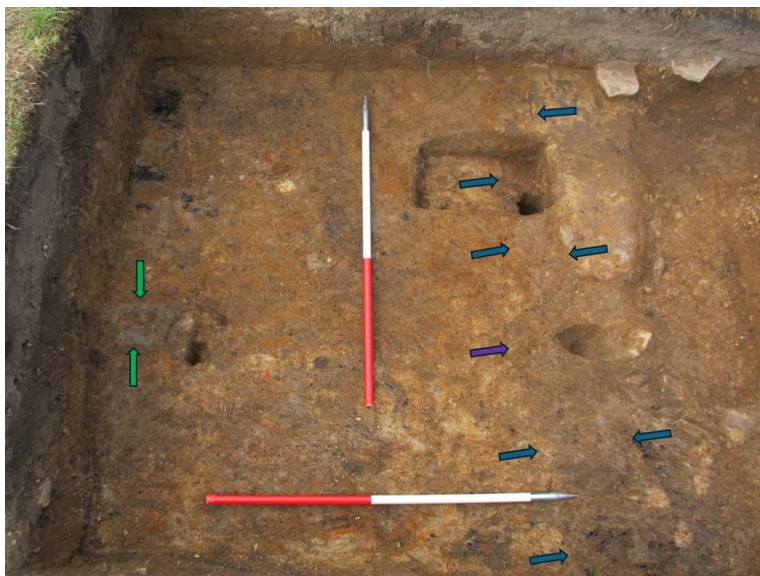


Left: looking east with 003 in the foreground and the stone dump 005 to the left. Right: looking west, after removal of 003, with the linear cut of F4 visible against yellow clay 004.

F4 ran west to east across most of the length of the southern edge of the trench across to the slot F3 revealed against the west edge of Trench 11 in 2024. Trench 15 was expanded to the east to overlap with Trench 11 and also 1.5 m to the south to fully reveal F4 and related features. F4 had 2 fills, the topmost being dark brown silty clay loam with frequent flecks of charcoal 006. The lower fill was 014 comprising compact light to mid grey silty clay with 25% mid orange silty clay patches and moderate flecks of charcoal. On its south side F4 cut 013 which was mid orange yellow silty clay, possibly sub natural. A small sondage was dug through F4 to determine its character. This sondage was well placed as it revealed a circular post hole void F5 under 014. F5 was 10 cm diameter and the slot F4 was 18 cm wide. The top of the slot and F5 was 276.09 m AOD and the post hole was 44 cm deep with a bottom at 275.65 m AOD.

Just 40 cm east of F5 and within F4 was another post setting. This one, F6, was quite different in that there was a shallow circular 40 cm diameter post pit with a central post hole 8 cm across. The fill of the post pit was mid orange grey silty clay loam with one medium angled gritstone 016, with the post hole filled with mid grey silty clay loam 015. The surface of the post pit fill was at 276.18 m AOD and the base of the shallow post hole 276.11 m AOD. The post pit of F5 cut into the east to west slot F4 and a sondage showed that at this point there was a right angled junction between F4 and another narrow building foundation slot F7 which ran for 1.4 m south towards and under the trench edge.

F7 was also 18 cm wide although it was poorly defined due to being partly covered by 013, but was very clear towards the south trench edge where its fill 017 of compact light to mid grey silty clay with 10% patches of mid orange silty clay and moderate flecks of charcoal were well defined. Set into F7 1.1 m to the south of F5 was another post hole F8. This had a shallow circular outer edge 20 cm diameter with gently sloping sides to a small 8 cm diameter post hole against the eastern edge. This was filled with dark grey silty clay loam 018 whilst the outer fill was a mixed light yellow silty clay and mid grey silty clay with occasional flecks of charcoal 019. The base was 276.09 m AOD and the top 276.23 m AOD.



Left: looking west across the extended southern end of Trench 15 with the green arrows indicating slot F7, the blue arrows F4 and the purple arrow post hole F6. Right: Sondages through F4 on the right showing void post hole F5 and F6 on the left showing the slot of F5 (blue arrow) and the junction with slot F7 (green arrow).

The archaeology was less clear near the east trench edge where slot F4 met with assumed slot F3 which was recorded in Trench 11 in 2024. This slot was filled with 009 a dark brown silty clay loam with 15% flecks and pieces of charcoal and was sealed by 008 a mid yellow silty clay with 25% small to medium patches of burnt red clay. This was a significant stratigraphic relationship as 008 was contemporary with the oven F2 and was therefore a later phase to the timber building slots represented by F3 and its fill 009. Further south, and detailed in the next section of this report, was a narrow slot F10 in Trench 20 which can be identified as the same slot as F3 but a little further south. There was not enough time at the end of the excavation to reveal the junction of the F4 with F3. It was evident that at the east edge of Trench 15 there was still some of the overlying deposit 008 to remove to get down to the building slot level. This should be a priority for next season's excavation. The top of 014 in F4 was at 276.51 m AOD whilst the top of 009 in F3 (2024) was 276.20 m AOD.

In the south east part of the southern trench extension was a spread of charcoal 011 which appeared to be rake-out material from the adjacent oven F2 in Trench 11 (2024). This material was also evident in the west end of Trench 20 (context 016) which adjoined Trench 15. 011 was only 2-3 cm deep and overlay 013 and had a surface height of 276.19 m AOD.



Left: Trench 11 in 2024 showing slot F3 under clay deposit 008. Trench 15 in 2025 did not quite reveal F3 with the blue arrow showing the polythene marking the 2024 trench edge, the orange arrows indicating the edge of building slot F4 and the green arrow shows oven rake-out charcoal deposit 011 visible in the section.



Aerial photo showing the building slots revealed in Trench 15 in relation to adjacent Trench 20 and building slot F3.



Left: charcoal spread 011 on right side of photo. Right: Trench 15 is top right and the charcoal spreads into Trench 20 to the left.

The final piece of excavation in Trench 15 was at its north end to see if slot F3 ran up to join the east to west building foundation slot F1 in Trench 19. Accordingly, the trench was linked up with Trench 19 (see further on in report) via a staggered 1 m square extension. Light yellow silty clay 007 was revealed under plough soil, as seen 1.5 m to the south in earlier excavations in the trench where it was found that there was an absence of Roman archaeology. 4 sondages were cut through 007 and encountered at 275.88 m AOD a layer of light to mid grey silty clay with occasional charcoal flecks overlying natural orange clay. It can be concluded that F3 does not extend into this area. The base of the sondages ranged from 275.65 m AOD to 275.75 m AOD. It was interesting to note that the natural at the base of the sondages changed from light cream/yellow clay to mixed orange and cream clay. The light yellow clay was similar to the likely sub-natural identified as 011 in Trench 14.



Sondages at the north end of Trench 15 showing the grey silty clay layer and the change in natural from yellow clay on the left to orange clay on the right.

From Bruton's trench backfill came a few small sherds of post medieval pottery, a lump of metal and a clay pipe stem, but there also two pieces of lead waste and a piece of orange daub. 001 and 002 yielded the usual assortment of dark glazed earthen wares, a piece of blue tinted glass, 3 iron pieces and a nail, a clay pipe stem fragment and 3 large pieces of daub. From the surface of 013 came 5 pieces of Roman fire reddened daub and a piece of waste lead, together with 4 post medieval earthenware sherds and a piece of molten glass. 004 yielded a piece of daub and 4 pieces of waste lead. 2 Roman nails came from 011, with another from 010 along with a small piece of daub.



Finds from the back fill 012 of Bruton trench and detail of two lead pieces (right).



Finds from top and plough soil.



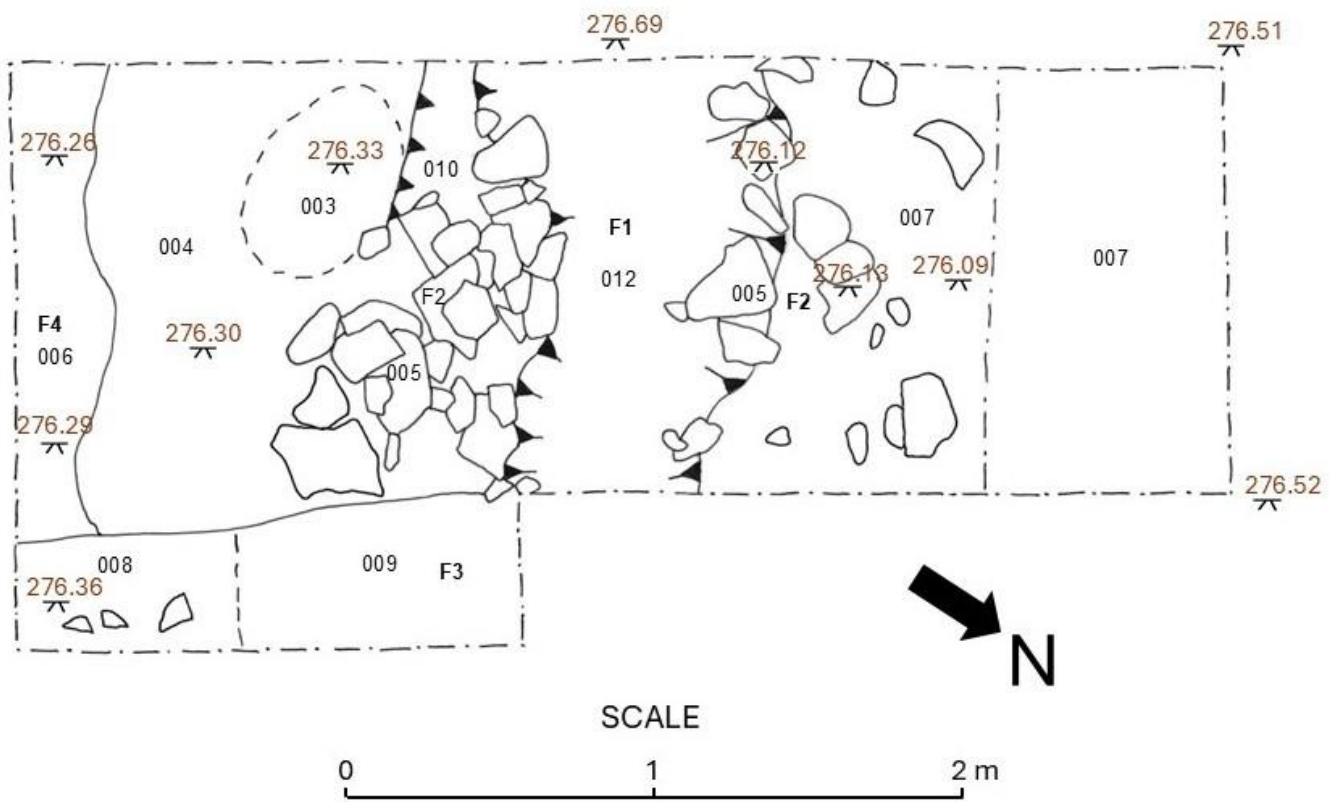
Finds from 013 and detail of the lead



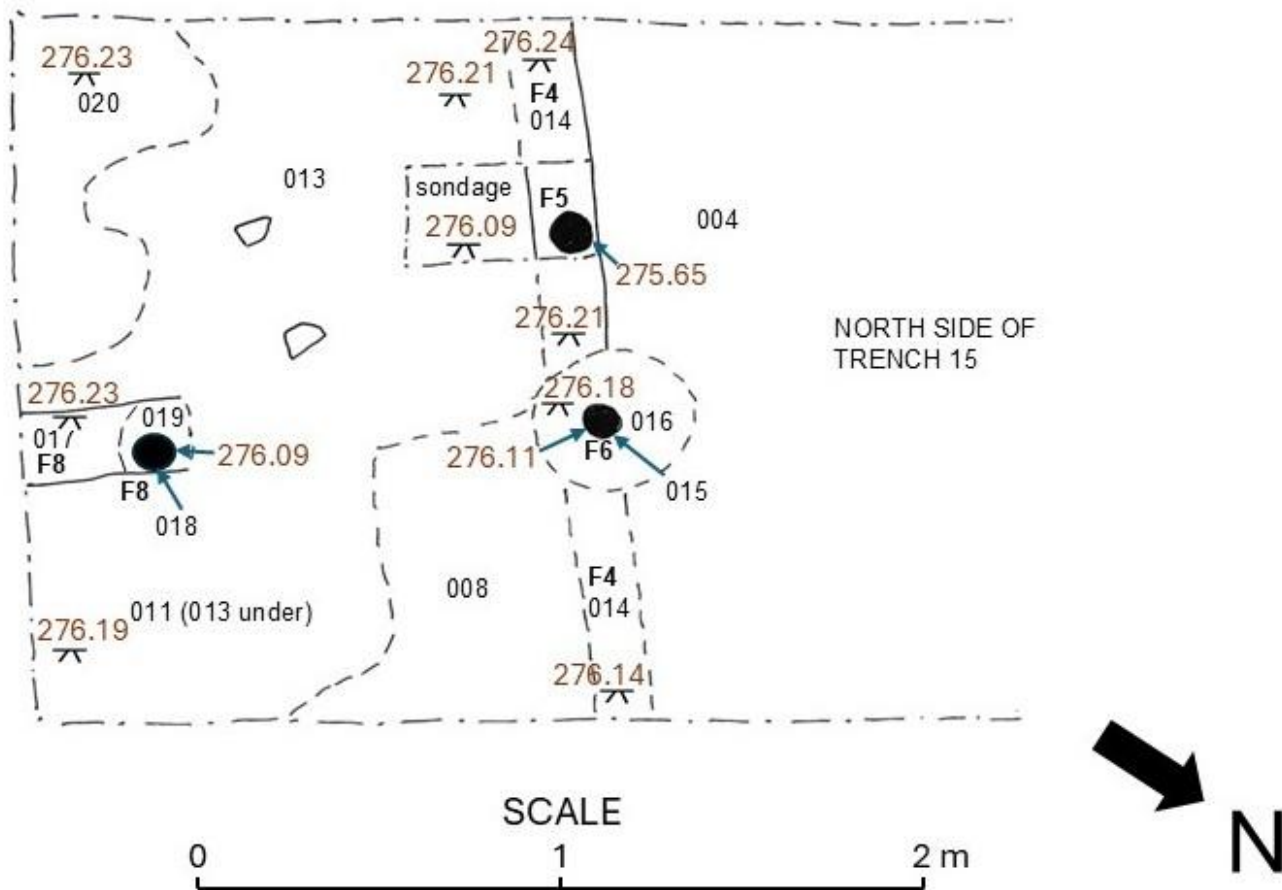
Roman daub and lead from 004.



Roman nail and lead from 010 (left) and nails from 011 (right).



Plan of Trench 15 - first phase of excavation.



Plan of Trench 15 south extension.

Contexts

F1 cut of Bruton trench c 1908. Filled with 012.

F2 Possible stone structure comprising concentration of stones 005. Found to be dump of stones, possibly from nearby stone oven F2 (Trench 11 2024). Cut by F1.

F3 Possible south to north building foundation slot identified in 2024 against east edge of trench. Filled with 009.

F4 Building foundation slot running east to west. Links with F7 and possibly F3. Filled with 006 and 014 and contains post holes F5 and F6.

F5 Circular post hole appearing as void in slot F4.

F6 Circular, tapering and shallow post hole with packing pit at junction of F4 and F8. Filled with 015 and 016.

F7 Building foundation slot running south to north across middle of southern part of trench. Connects to F4 and F6 and contains post hole F8. Filled with 017.

F8 Circular post hole comprising a small hole filled with 018 and a wider circle filled with 019. Within slot F7.

001 Dark grey silty clay loam topsoil.

002 Mid to dark brown silty clay loam plough soil.

003 Large patch of dense charcoal in matrix of dark grey silty clay loam. Over 004.

004 Mid grey yellow silty clay with occasional flecks of charcoal and frequent small patches orange yellow clay. Cut by F4, under 003.

005 Dense, linear spread of small to medium gritstones, some flat some at an angle, set within mid brown silty clay loam. Makes up F2 and against 004.

006 Dark brown silty clay loam with frequent flecks of charcoal. Upper fill of F4, over 014.

007 Light yellow silty clay forming sub natural. Cut by F1.

(humus). This was the same as 017 in 2024 Trench 8. The top of 003 was at 275.92 m AOD and the turf level above this was 276.30 m AOD.



Left: Trench 19 looking east with the charcoal layer 003 showing the site of slot F1 through the middle of the trench.
Right: Looking south across the part excavated F1 to Trench 15 – these were joined up later.

On either side of 003 was a deposit of firm light to mid brown silty clay loam with occasional medium or large gritstones 005. This was separated from 003 on either side by a narrow linear band of mid orange brown silty clay loam with moderate small pieces of decayed sandstone and occasional flecks of charcoal 004. On further excavation the same shape of the cut feature appeared as in Trench 8 ie. a stepped profile. 004 lay against the upper step and was packing material of up to 30 cm depth against steeply angled cut of F1, with the upper fill of the cut feature being 007 dark grey silty clay loam with occasional flecks of charcoal. This was directly under 003 and had a maximum depth of 31 cm and a base level of 275.62 m AOD. There was one find from 007 which was of considerable interest. Animal bones from the Roman period only survive in the acid soils at Castleshaw if they were cooked in antiquity. This created a 'white' fragile calcined bone. A complete second phalange of a pig came from 007. This is a very rare example of an identifiable animal bone from the site and provides evidence for pigs being cooked in the annexe.

Under 007 was a middle fill 011 which comprised light to mid grey silty clay loam with frequent flecks of charcoal, mid orange patches of silty clay and moderate medium gritstones and was a maximum of 16 cm deep. The base fill was 008 mid grey silty clay loam with frequent small patches dark orange silty clay loam and moderate flecks of charcoal and lenses of light grey silty clay. Unusually for the annexe excavation, there was some Roman pottery from the slot basal fill. There were 3 sherds: 2 were very small orange ware rim sherds and the other was a dark grey colour coated orange ware rim sherd. F1 was over dug to confirm its base, as there was a deposit 012 of mid grey silty clay with 30% small to medium patches mid to dark orange silty clay under 008 which was felt to be natural.

The bottom of F1 was at 275.24 m AOD giving it a depth of 66 cm (to the base of 003). The cut had near vertical sides and was 40 cm wide for the bottom 36 cm then shelved out to a width of 90 cm for the upper 30 cm. The shelf width was variable and was narrower on the south side, being c 20 cm wide, whereas the north side was up to 30 cm wide. The shelf revealed a different natural lying under 005 which can itself be considered as a sub-natural deposit. 006 was light yellow cream silty clay loam with occasional medium sized gritstones. It was under 005 and over 012. The shelf height was 275.69 m AOD on the south side which was slightly raised above the north side level. From the top of 006 came a single orange ware base sherd in poor condition due to the acid soil.

In the south west corner of the trench was a large gritstone which had the potential to be in the fill of a slot (F3) approaching a junction with F1. Trench 19 was joined up to Trench 15 but excavation here failed to find the slot and this was confirmed with the sondages dug at the north end of Trench 15.

The characteristics of F1 are very similar to the building foundation trench recorded in Trench 8 last year. The depth of the slot and the stepped profile make it stand out from the other timber building foundations uncovered elsewhere within the annexe. The length of the building is not yet known, nor the location and dimensions of any connecting slots.



Left: overhead view of Trench 19 showing the slot F19 part excavated to the left of the scale, under which is natural 006. Right: nearing completion F1 excavation looking west.



East facing section through F1.



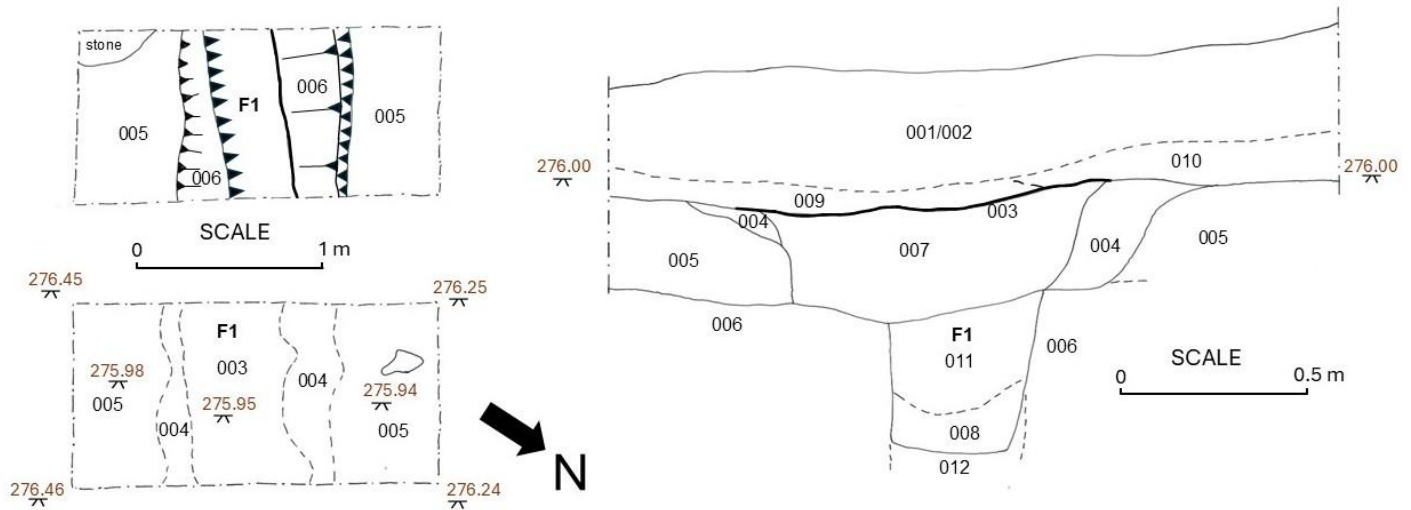
Finds from 001 (left) and 002 (right).



Roman pottery from contexts 006 (left) and 008 (right)



A calcined bone of a pig phalange from context 007 with (right) a close up of the distal end.



Pre and post excavation plans of F1 in Trench 19 and west facing section.

Contexts

F1 Linear feature running east to west continuing line of F10 partly excavated in Trench 8 in 2024. Large foundation trench for substantial timber structure. Sealed by 003 and contains fills 004, 007, 011 and 008. Cuts 005.

001 Topsoil.

002 Mid to dark brown plough soil.

003 Thin layer of charcoal or very dark grey decayed turf (humus) marking top of building foundation trench F1. Same as 017 over F10 in Trench 8 in 2024. Under 009 and 010, over 004.

004 Fill comprising mid to mid orange brown silty clay loam with moderate small pieces of decayed sandstone and occasional flecks of charcoal. Upper fill of F1. Under 003, over 007.

005 Deposit of firm light to mid brown silty clay loam with occasional medium or large gritstones. Cut by F1. Under 009 and 004, over 006.

006 Light yellow cream silty clay loam with occasional medium sized gritstones. Sub-natural. Under 005 and 007, cut by F1.

007 Fill of mid to dark grey silty clay loam with occasional flecks of charcoal. Fill of F1. Under 003, over 006 and 011.

008 Fill made up of mid grey silty clay loam with frequent small patches dark orange silty clay loam and moderate flecks of charcoal and lenses of light grey silty clay. Base fill of F1. Over 012, under 011.

009 Thin layer of dark brown silty clay loam with moderate flecks of charcoal. Over 003, under 002/010. Similar to 024 in Trench 8 in 2024.

010 Layer of mid grey brown silty clay loam with moderate medium to large gritstones and occasional flecks of charcoal and moderate small patches yellow/red clay. Under 002, over 004 and 009.

011 Fill comprising light to mid grey silty clay loam with frequent flecks of charcoal, mid orange patches of silty clay and moderate medium gritstones. Mid fill of F1. Under 007 and over 008.

012 Mid grey silty clay with 30% small to medium patches mid to dark orange silty clay. Probably natural. Under 008.

Test Pits 22, 23 and 24

These 3 test pits were located on a line east of the substantial building foundation slot F10 revealed in Trench 11 in 2024 to follow its projected alignment to locate its terminus. Given the distinctive character of the overlying charcoal/humic layer it was only necessary to excavate down to the top of this to confirm the presence/absence of the feature.

Test Pit 22

This was 1 m long by 0.5 m wide on a south to north axis and 3 m from the eastern edge of Trench 11. The charcoal/humic layer was encountered under top and plough soil at 50 cm depth at 275.76 m AOD. The turf level went from the 276.33 m AOD beside the south east corner of the test pit to 276.26 m in the north east corner.



Left: Test Pit 22 showing the humic/charcoal layer on the left (north) side. Right: TP 22 is in the foreground with near figure in the former Trench 11 (2024) and the rear in Trench 19 (2025) to show the alignment of the foundation slot.

There were some post medieval finds from the top and plough soils, comprising 3 white glaze, 1 brown glazed and 3 dark glazed earthenware sherds. Of note was a body sherd of trail slip ware from perhaps the late 17th/early 18th century.



Finds from the top and plough soils.

Test Pit 23

A similar size to TP 22, this was located 2 m to the west of the east edge of TP 22. Once again the charcoal/humic layer was successfully located indicating the presence of the feature. In this case it was found at a depth of 45 cm at 275.79 m AOD. The 'charcoal' layer covering the infilled feature appears to be

predominantly made up of decayed turf rather than charcoal, so could represent grass growing over the infilled slot then sealed by plough soil and leaving an organic trace after decay

The turf level beside the south east corner was 276.24 m AOD and the north east corner 276.20 m AOD.



Test Pit 23 with the charcoal/humic layer evident in the right hand (south) two thirds of the pit.



Finds from the top and plough soil produced a nice later 17th century 'pie crust' rim sherd of trail slip ware together with another trail slip dark glazed sherd with a handle and 2 more dark glazed earthenware sherds (including a base).

Test Pit 24

The final test pit was the same size and orientation as TP 22 and TP 23. It was positioned 2 m east of the east edge of TP 23. At the base of the west edge could be seen a thin lens of the charcoal/humic layer but it did not extend in to test pit. Instead there was mid to dark brown silty clay loam with frequent small to

medium gritstones and occasional small pieces of weathered dark orange sandstone and flecks of charcoal. This occurred at 58 cm depth at 275.85 m AOD. The turf level beside the south east corner was at 276.33 m AOD and the north west 276.27 m AOD.

Test Pit 24 appears to have found the terminus of the northern building foundation but this will need to be confirmed by further excavation next season. At the moment the length of the timber structure represented by the substantial foundation slot, should TP 24 prove to mark the east terminus, is nearly 12 metres. The western terminus is not yet known and this is also a priority for next season. Even so, this is a substantial structure of currently unknown function.



Left: looking west from Test Pit 24 along the line of the slot feature with the figure standing on Trench 11 (2024). Right: Overhead view of the test pit showing the absence of the charcoal/humic layer.

Top and plough soil produced a nice base sherd of dark glazed earthen ware which could be of 17th century date, together with a 2 white glazed, 1 dark glazed earthen ware and 1 plain earthen ware sherd, plus a piece of glass and coal.



Finds from Test Pit 24.

Trenches 16 and 20

This started as 2 trenches with Trench 16 being a 'L' shape and Trench 20 spurring off westwards from its north end. Trench 16 was designed to look for the eastern extent of the timber building foundation slot and associated post holes that were recorded last year in Trench 4 and Test Pit 15. The slot F1 ran alongside the southern edge of the stone platform F2 revealed in 2022. When Trench 16 was commenced it overlapped with 0.75 m of the east side of Test Pit 15. To the east it incorporated 1.5 m of the northern side of the former Trench 13 eastern extension of 2023 which had only been partially excavated at that time. Trench 16 ultimately continued eastwards for a further 1 m to try to locate the terminus of F1 so that the southern part of the trench ended being 3.5 m long (west to east), with a 1 m sq eastwards extension, and 2 m wide (south to north). The northern leg of Trench 16 was 1.1 m wide by 4 m long. At its north end it overlapped with the eastern end of Trench 20 which ran for a further 3 m westwards.

A number of post holes were revealed in two timber building foundations slots. These are detailed in the following table and described in the text below.

PH no.	Dimensions	Depth	Top level	Base level
F3	14 x 13 cm	42 cm	276.18 m AOD	275.76 m AOD
F11	15 x 12 cm	48 cm	276.21 m AOD	275.73 m AOD
F12	12 x 10 cm	39 cm	276.14 m AOD	275.75 m AOD
F14	14 x 10 cm	33 cm	276.08 m AOD	275.75m AOD
F15	18 x 10 cm	42 cm	276.08 m AOD	275.66 m AOD
F16	16 x 10 cm	55 cm	276.07 m AOD	275.52 m AOD
F17	15 x 13 cm	49 cm	276.26 m AOD	275.77 m AOD
F19	16 x 14 cm	64 cm	276.20 m AOD	275.56 m AOD
F8	18 x 10 cm	45 cm	276.23 m AOD	275.78 m AOD
F5	23 x 16 cm	40 cm	276.25 m AOD	275.85 m AOD
F6	21 x 13 cm	61 cm	276.23 m AOD	275.62 m AOD
F18	19 cm dia.	35 cm	276.18 m AOD	275.83 m AOD

Post hole measurements: yellow = within slot F1, blue = within slot F4.



This drone aerial view shows the trench layout within the northern half of the annexe, including Trenches 16/20.



Overhead view of Trench 16 in its early stages after removal of plough soil 002. The terminus of the stone platform F2 (2022) is visible on the extreme left (south) and the infilled 2024 excavated TP15 and its post hole to the right of the stones.

From south to north the turf level changed from 275.96 m AOD to 276.70 m AOD. There was around 30 cm of dark grey silty clay loam topsoil 001 and light to mid-brown silty clay loam plough soil 002, of about equal depth. They produced the standard range of post medieval finds including clay pipe stem and bowl fragments, brown and dark glazed earthenware sherds, white glazed sherds and

Taking firstly the south to north arm of Trench 16, the backfill of the 2024 Test Pit 15 was emptied to reveal the archaeology previously recorded. This included the edge of a south to north narrow building slot F4 and a post hole F3. Under the plough soil two layers were revealed. 005 was a mixed mid to light yellow silty clay with small patches of light yellow/cream silty clay and medium flecks of charcoal. This was a compact layer overlying post holes and the building slot F3. A roughly linear spread 006 of dark brown silty clay loam with frequent flecks of charcoal and occasional burnt daub pieces ran as a maximum 60 cm wide band west to east through 005. This also concealed post holes and F3. There were several Roman finds from 005 comprising 4 iron nails, a Samian body sherd and orange rim fragment. 006 produced even more Roman finds including 3 iron nails, a small Samian body sherd, fire heated and unburnt daub and a base sherd of a redware mortarium. These finds fit in the late 1st century AD and seal the first phase of activity in the form of timber building foundations. The top of 005 was at 276.37 m AOD and 006 was at the same level on the surface. The layers were excavated and found to be around 10 cm deep.

These layers came down onto several features which took the form of a line of post holes set within a narrow foundation slot. 2 of the post holes F5 and F6 appeared as voids under 005. It would appear the timbers were pulled out when the building was demolished and then the area capped with the yellow clay deposit 005 to level the ground for the second phase use of ovens/hearths etc. F5 and F6 were 40 cm and 61 cm deep respectively and formed perfect rectangles. At the top of the post holes the rectangular shape was less distinct but further down very clear, giving a dimension of 18 cm x 10 cm which was the same as another post hole in the alignment, F8, which lay south of F5 and in this case had a fill of light brown silty clay loam 009 which preserved the shape perfectly at the top. The dimensions and levels for the post holes are given in the table above, with the larger dimensions for F5 and F6 being for the broader tops of the features. These 3 post holes were part of the same foundation slot F4. Between the 3 post holes the fill of the slot F4 that they sat in was evident as light yellow silty clay and light grey silty clay 013.



Looking south to the stone platform terminus, with post hole voids F6 and F5 visible in the foreground and F8 pre-excavation to the left of the nearest photo scale. The two rectangular voids sit within slot F4 indicated by its light yellow and grey fill 013.



Left: post hole F8 after excavation showing the rectangular shape of the post and, on the right of the photo, charcoal from hearth F7 partly overlying building slot F4. Right: F8 with post hole F5 to the north.

A further post hole lay between F3 and F8 but was initially harder to detect along with F4 at this point. Based on the intervals between the known post holes, a section was dug through F4 in the potential location for a post hole. The east side of F4 became visible c 2 cm down as a vertical cut into natural clay, but the north side edge only became visible at about 10 cm depth. A circular post hole F19 only became evident further down and was sealed by a mixed fill of mid to dark grey silty clay loam and patches of light yellow silty clay 021 in the top of slot F4. The post hole was filled with mid to dark grey silty clay loam 022.



Left: the edges of slot F4 are visible in the sondage. Right: Further excavation revealed a circular post hole F19.

Between F19 and F3 was another post hole F17. This was previously excavated as F5 in Test Pit 15 (2024) and was sub-rectangular in shape. It was the closest post hole to the southern foundation slot F1 and was in line with the other post holes in F4. At the opposite, northern end of F4 and against the trench edge was a sixth post hole F18. This was circular in shape, with a diameter of 19 cm, and different to other post holes in slot F4 in that it sits in a square shaped post pit 38 cm across which was half excavated as the rest was under the trench edge. The post hole fill was light to mid grey silty clay loam with a patch of orange silty clay and moderate flecks of charcoal 019. The post pit was filled with 10 cm depth of loose, friable mid yellow grey silty clay loam with occasional small sandstones 018. A little beyond the trench edge were 2 similar post holes, F7 and F9, which were excavated in 2024 in Trench 7. These continued the line of F4 which terminated just to the south of the grain drying kiln F2 in 2024 Trench 5. Bordering the post pit of F18 was 020 a deposit of burnt red clay with 20% small patches of charcoal and light yellow silty clay. 020 went under the north east corner of the trench so its extent was not determined. It could be part of a hearth or a deposit derived from a nearby oven.



Left: post hole F18 is visible against the trench edge with a more regular rectangular post setting in the foreground. Right: detail of F18 with burnt deposit 020 to the right.

Combining Trench 7 (2024) and Trench 16 (2025) gives a length of 4.8 m for slot F4, which terminates at its junction with slot F1 on its south side and just before the kiln F2 to the north. Within F4 were 7 post

holes, of different sizes, shapes and depths. The northern 3 appeared to be circular whilst the middle 3 were rectangular and the most southerly sub rectangular. The depths vary from 35 to 64 cm but this might be misleading as the bottom fill may not have been fully excavated in some post holes due to the high water table. The gaps between the post holes running south to north (centre to centre) are as follows:

F3 - 33 cm - F19 - 52 cm - F8 – 46 cm – F5 – 52cm – F6 – 56 cm – F18 – 60 cm. The spacing along with the other characteristics are irregular.



The line of post holes in slot F4. North is to the left.

The timber building's southern foundation slot F1 was previously exposed in Trench 13 north west extension in 2023, Trench 4 and Test Pit 15 in 2024. It was anticipated that the slot's eastern terminus would correspond with that of stone platform F2 (2022) as this appeared to give access to the building, but this was not the case. Trench 16 was extended westwards to re-open the north half of 2023 Trench 13 (East Extension) which had only been partly excavated. At that time a linear deposit of dark brown silty clay loam (022) was partly revealed against the north side of the trench. Several sherds of Roman amphora came from its surface in 2023 and a section revealed a shallow linear depression. Re-excavation in 2025 showed that this linear spread of dark brown silty clay with frequent flecks of charcoal, now numbered 004, mostly overlaid the continuation of building slot F1.



Trench 16 (to the right) and Trench 20 (top left). In the bottom right is the extension of Trench 16 reopening the northern part of 2023 Trench 13 eastern extension. The dark filled patch was a section dug through 022 in 2023. Right: after excavating the backfill of the section showing layer 005 and small stake holes.

Removal of 004 yielded further Roman finds in the form of a substantial grey ware bowl sherd along with a small body sherd of degraded orangeware and a piece of daub. Under 004 was the mid to light yellow silty clay layer 005 which was peeled off in spits to reveal slot F1. There were 4 small stake holes visible in the surface of 005 and 3 of them formed a line 1.1 m long on a south to north orientation but a function is difficult to ascribe. Along the south side of Trench 16 a mid yellow clay layer 003 emerged and was seen to be cut by the continuation of slot F1. As seen in 2024 in Trench 4 and Test Pit 15 this clay was natural and formed a revetment for the timber wall erected in F1. The fill of F1 was a more mixed yellow silty clay which

was quite hard in places to discern on the surface but became clearer as the slot was excavated. F1 was chased eastwards but was found to run beyond the trench east edge. There was not time to follow it further so the eastern terminus of the slot is not yet defined, but the south wall of the timber building runs for at least 14 m.



Left: east extension of Trench 16 with a newly exposed void post hole (F16) on the right of the 1 m square extension.
 Right: looking east along slot F1 showing various excavated post holes with the slot continuing beyond.

Within the slot were 6 post holes. These are described from west to east and the measurements can be found in the table at the start of this chapter. The westernmost post hole was F3 which was excavated previously in TP15 in 2024, then F11 which appeared as a sub-circular void, then F12 which was similar to F11 and also appearing as a void, then F14 again a void but more of a sub-rectangular shape, then F15 which also a void and sub-rectangular and finally F16 which was the same as F14 and F15. A smaller post hole F13 occurred as a circular void just 50 cm to the north of F22, and a further 50 cm to the north east of this was a stake hole. It was noted that F14 cut into the clay revetment 003. The distances between the post hole centres were: F13 - 60 cm - F11 - 55 cm - F12 - 53 cm - F14 - 59 cm - F15 - 65 cm - F16. The post holes in F1 were all voids which indicates that the posts were pulled out then immediately capped with clay layer 005.



Left: Post holes F12 (left) and F11 (right) within slot F1, with small post hole F13 (lower left). Right: slot F1 being excavated in the east extension, with hearth F2 lower left.



Left: Post holes F15 (right) and F14 (left) in slot F1. Right: Post hole F16 in slot F1 at eastern end of Trench 16.



Left: Aerial view of F1 following excavation and showing the line of post holes. South is at the bottom of the photo.

To the east of and slightly overlying slot F4 and north of slot F1 was a hearth F2 which ran under the angle of the trench edge and so was not fully exposed. What was visible suggested a diameter of around 1 m. F2 was made up of mainly 007 a layer of dense charcoal in a light grey and yellow silty clay loam and an outer layer of 008, a burnt red clay and charcoal on the north west side of the hearth which overlapped and obscured part of slot F4. The top surface of F2 was at 276.29 m AOD. In the north eastern part of the Trench 16 005 was excavated 10 cm down to a layer 017 comprising mid brown yellow silty clay loam. A small cluster of stones within 005 proved to be of single depth and not a feature. It was felt that 017 was sub-natural.



Looking north east across hearth F2 and detailed overhead view (right).

Another hearth F7 (Trench 20) was recorded at the junction of Trenches 16 and 20 to the north west. This also was only partially exposed as it ran under the corner of the trench. It was similar in nature to hearth F2 and comprised 010 burnt red clay mixed with 50% dense charcoal and appeared to be roughly circular with a diameter of 85 cm and a top height of 276.25 m AOD. It was contiguous with layer 012 which sealed the timber foundation slots. Hearth F7 was a rare example of a hearth yielding useful palaeo-environmental information. Analysis of a bucket sample of 010 revealed 184 charred barley grains and a further 32 with intact chaff. There were also 11 charred spelt wheat grains and 92 indeterminate grains. Hulled barley and spelt wheat were in common use in the Roman army in Britain but the assemblage is significant in terms of military sites in the north of Britain where preservation is generally poor. The charcoal within the sample was relatively well preserved and allowed the identification of oak, hazel and willow/poplar, all useful sources of fuel (see Appendix).



Looking south to hearth F7 at junction of trenches 16 and 20 and (right) some of the charred grain from context 010.

Turning our attention to Trench 20, under plough soil 002 were layers 005 and 006 which were as described for Trench 16. The top of 005 was 276.40 m AOD in the middle part of the trench, with the adjacent turf level being 276.93 m AOD. 005 and 006 sealed layer 011 which comprised compact mid grey shale mixed with mid orange/yellow silty clay, covering the western 2 m of the trench, and 012 dark brown silty clay loam with frequent flecks of charcoal running from 011 to hearth F7. 011 appears to be part of the levelling deposit that seals the timber building features such as slot F4 and 2 more parallel slots that appeared to the west, whereas 012 was similar to 006. 012 contained several Roman pottery finds consisting of a large body sherd of amphora, half a cream ware base and 4 body sherds of grey ware from 2 different vessels. There were also several small pieces of daub.



Trench 20 with the west edge to the right, showing 011 (right) and 012 under the scale on the left. The edge of 2024 Trench 4 can be seen running along the edge of the trench at the top.



In situ cream ware bowl and amphora sherd from 012.

Excavation of 012 showed it to conceal south to north orientated timber foundation slot F9, while 011 at the west end of the trench overlay another parallel slot F10. Both were cut into sub-natural clay but F10 was also partly obscured by a charcoal spread 016 against the north west of the trench. This was related to the charcoal rake-out from stone oven F2 in Trench 11 (2024) and similar to 020 in Trench 15. The charcoal layer was shallow, only around 1 cm deep and ran for 1.85 m along the north edge of the trench and was 0.5 m wide before running under the west trench edge.

Slot F9 ran in south to north direction and was visible for the full 1 m width of the trench. It was 16 cm wide and 8 cm deep. It has not been explored further south but to a short distance to the north it continues as slot F4, terminating before post hole F6. To the east slot F4 ran parallel 1.25 m away (centre to centre). F9 was filled with dark brown silty clay loam with frequent flecks of charcoal. Slot F10 was west of and ran parallel with F9. It had the same profile and was 1.35 m away and was filled with 015 a dark brown silty clay loam with frequent flecks of charcoal very similar to 014. F10 was previously partly exposed in Trench 4 in 2024 where it was F6. In that trench the slot was exposed for 1 m length immediately to the south of Trench 20 and with a further, shorter length being excavated where it was shown to join the southern building foundation slot. To the north this slot continues as F3 in 2024 Trench 11 where it was adjacent to the west side of oven F2 and sealed by the yellow clay capping layer associated with the oven.

In the middle of the trench in the same location within the slots F9 and F10 were curious pairs of iron artifacts. In F9 there was an iron nail or spike 58 mm long next to a longer iron object with an oval shaped hollow centre 35 mm across and a spike or point protruding from one end (173 mm long). It looked as though a point had broken off at the opposite end. The 'nail' had a wedge-shaped end. In F10 the larger object was 115 mm long and had part of the smaller point surviving from the opposite spike end. The 'nail' survived less well and did not have the wedge terminus, and was 60 mm long. All the metal objects had been driven into the ground so would be under the horizontal timber in the beam slot, or put there after removal of the timber. Finding comparators for these artifacts has been challenging. The current interpretation is that they were used to secure the horizontal sill beam in place. Nothing similar has yet been found elsewhere on the site.



Parallel slots F10 (left) and F9 (right) after removal of 011 and 012. The white tag marks one of the metal finds.



Left: aerial view of Trench 20 (top) and Trench 16 (right) showing the relationship of the slots and post holes. Right: looking east across F10 and F9 post excavation.



Left: slot F10 is on far left, covered by thin charcoal layer 016 and 011 above. Right: slot F10 is on left covered by 012.



Iron objects in base of slot F9 and (right) during excavation.



Detailed view of F9 iron objects.



Iron object profile views.



Detailed view of F10 iron objects.



Iron objects from base of slot F10 in Trench 20.



Find from topsoil 001 and 002 in Trench 16



Find from topsoil 001 and 002 in Trench 20



Left: Roman pottery from 004 in Trench 16 Right: Iron nails, Samian body sherd and orange rim fragment from 005.



Left: Roman nail, Samian ware and daub from 006. Right: detail of Samian body sherd from 006.



More finds from context 006: iron nails and daub (left), nail daub and pottery (right).



Detail of interior of mortarium base sherd with characteristic grit from 006 (left) and exterior (right).



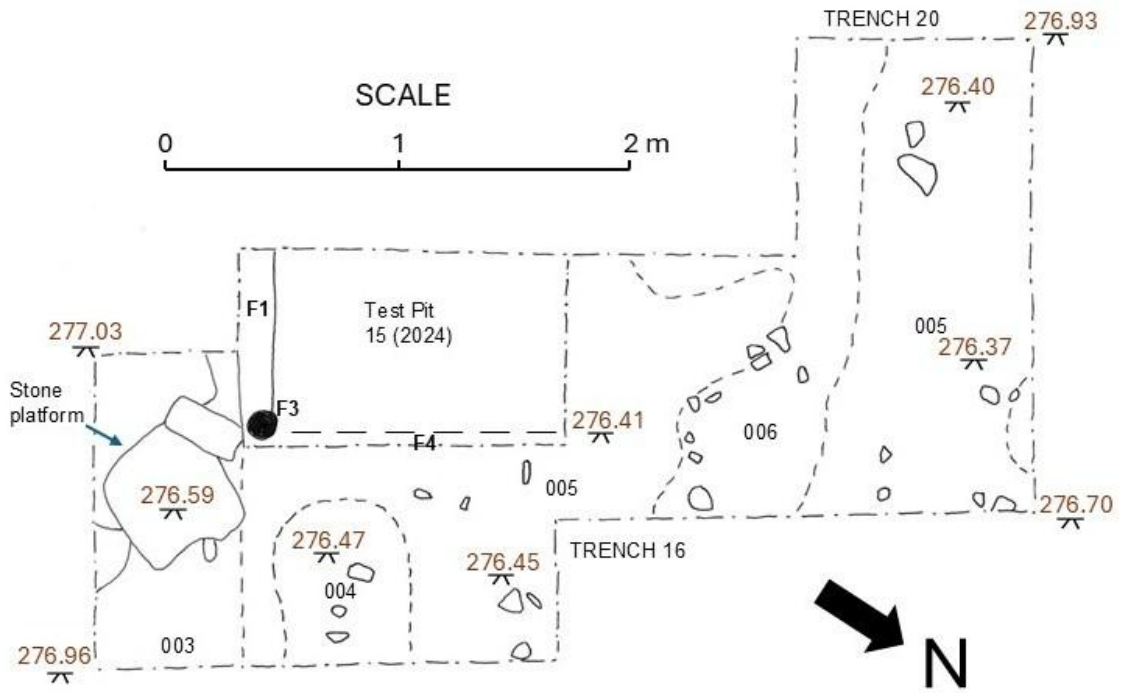
Cream ware bowl base sherd from Trench 20 context 012.



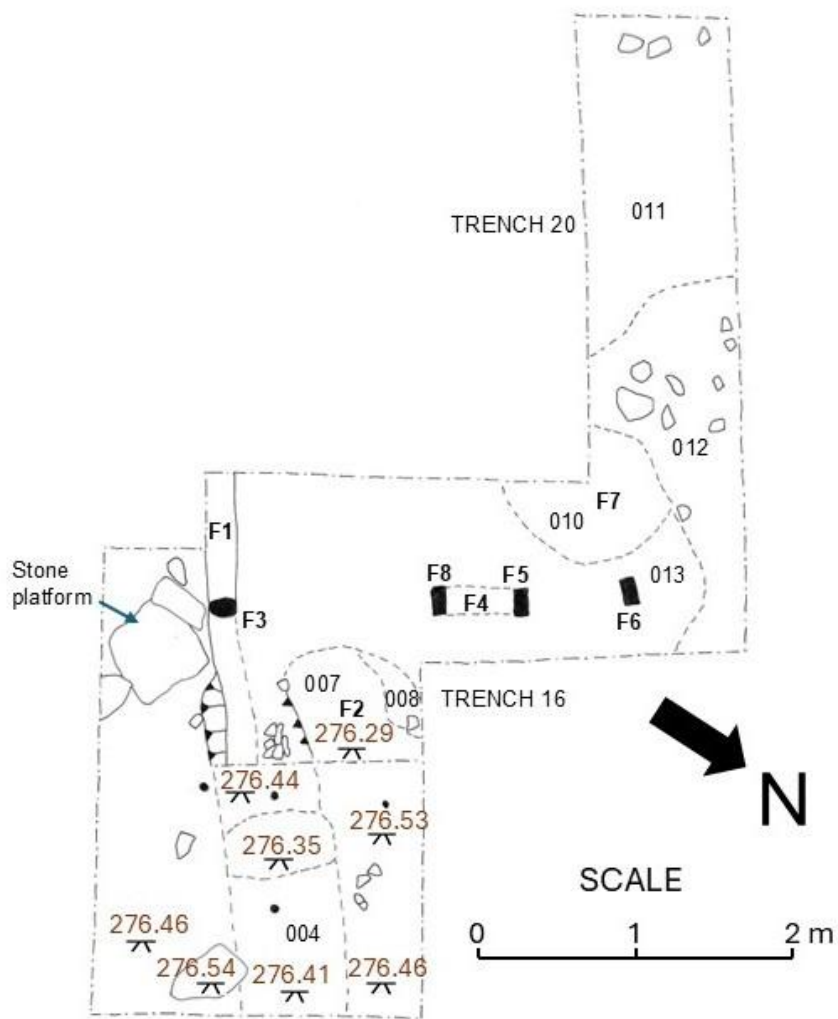
Amphora body sherd from Trench 20 context 012.



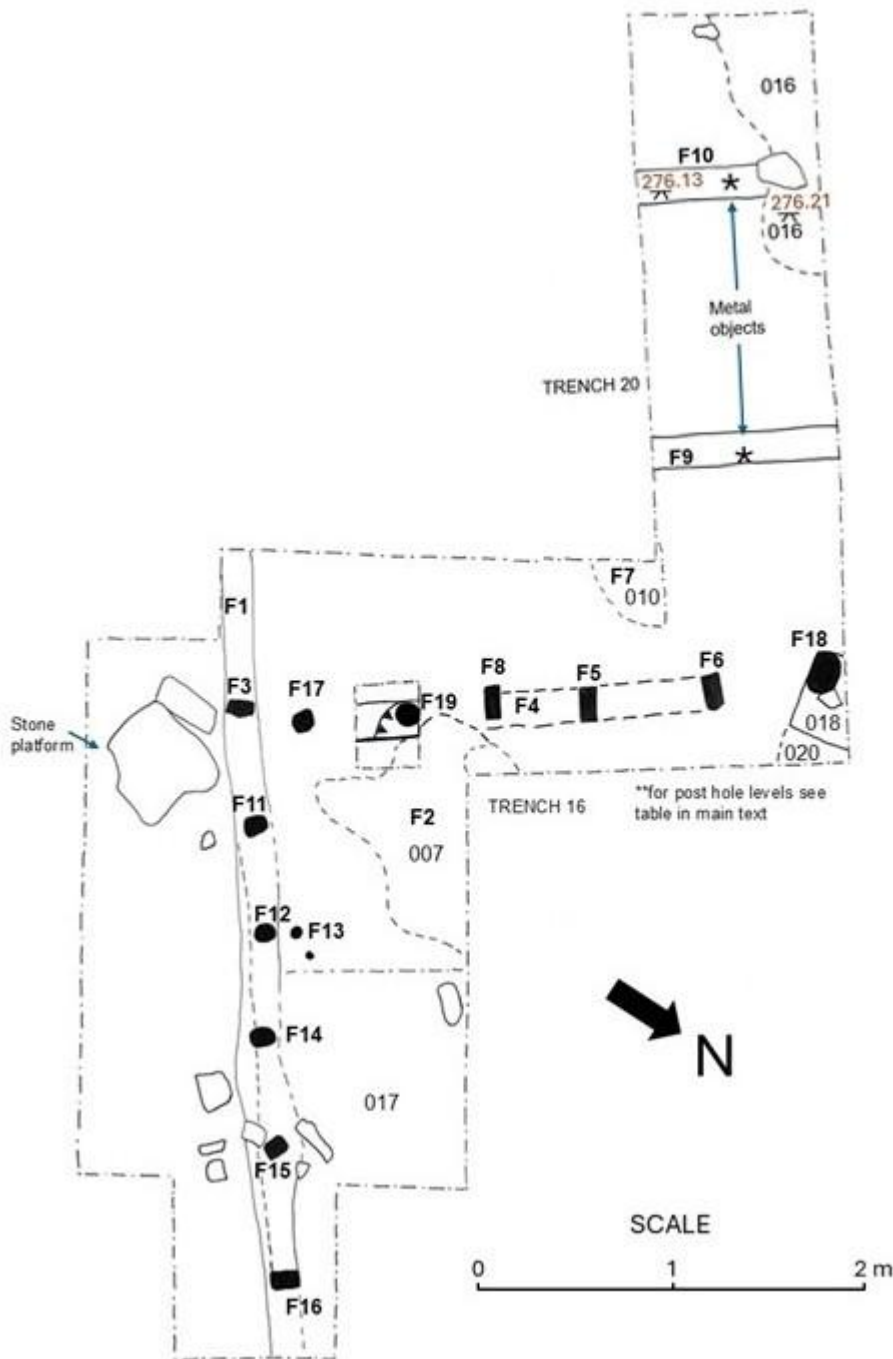
Roman grey ware body sherds (left) and pieces of daub (right) from Trench 20 context 012.



Plan of Trenches 16 and 20 in initial stage of excavation showing the site of the Test Pit 15 from 2024.



Plan of Trenches showing the emerging post holes and hearths.



Final plan of Trenches 16 and 20.

Contexts

- F1 East to west narrow building foundation slot forming southern wall beside stone platform F22 (2022). Continuation from Test Pit 15 in 2024. Eastern end not found as runs under trench edge. Contains a series of post holes F3, F11, F12, F14, F15 and F16. Connects with slot F4. Cuts 003.*
- F2 Area of burning representing a hearth. Comprises 007 and 008.*
- F3 Post hole. Sub-rectangular in shape. Previously excavated as F3 in Test Pit 15 (2024).*
- F4 Building foundation slot running south to north and joins with F1 to the south. Partially excavated as F4 against east side of TP15 in 2024 and continues as F3 in Trench 7 (2024). Contains post holes (from south to north) F17, F19, F8, F5, F6, F18. Under 005 and 006.*
- F5 Post hole. Appeared as rectangular void sealed under clay 005 and 006. Within slot F4. Flanked by post holes F6 and F8.*
- F6 Post hole. Appeared as rectangular void sealed under clay 005. Within slot F4. Flanked by post holes F5 and F18.*

F7 Area of burning representing a hearth. Comprised of 010.

F8 Post hole. Appeared as rectangular shape filled with 009 and sealed under clay 005. Within slot F4. Flanked by post holes F5 and F9.

F9 Shallow building foundation slot running south to north in Trench 20. Between slots F4 and F10, the latter being very similar. Continues into Trench 7 (2024) as F6. Filled with 014, under 005 and 006. Contains part buried iron objects in middle of exposed slot.

F10 Shallow building foundation slot running south to north in Trench 20 near west side of trench. Similar to F9. Filled with 015, under 011 and 016. Contains part buried iron objects in middle of exposed slot. Under 005, 006, 011 and 016.

F11 Post hole. Appeared as sub-circular void. Within slot F1. Flanked by post holes F3 and F12. Under 005.

F12 Post hole. Appeared as sub-circular void. Within slot F1. Flanked by post holes F3 and F14. Under 005.

F13 Post hole. Small and circular in shape, lying just to the north of F12 but outside of slot F1. Under 005.

F14 Post hole. Appearing as rectangular void. Within slot F1 but partly cutting into the revetted side of 003 to the south. Flanked by post holes F12 and F15. Under 005.

F15 Post hole. Appearing as sub-rectangular void. Within slot F1. Flanked by post holes F14 and F16. Under 005.

F16 Post hole. Appearing as sub-rectangular void. Furthest east of line of post holes within slot F1, with post hole F15 to the west. Under 005.

F17 Post hole. Sub-rectangular in shape. Previously excavated as F5 in Test Pit 15 (2024).

F18 Post hole. Circular in shape and different to other post holes in slot F4 in that it sits in a square shaped post pit which was half excavated as rest under trench edge. Similar in character to F7 and F9 in Trench 7 in 2024 as they continue the line of post holes. Post hole F6 lies to the south. Filled with 018 (post pit) and 019 (post hole). Under 003.

F19 Post hole. Circular in shape. Filled with 022. Revealed in section through building slot F4. Hidden on surface partly by 007 and only revealed in base of slot after removing slot fill 021.

001 Topsoil

002 Brown plough soil.

003 Mid yellow silty clay along south side of Trench 16. Probably natural as underlies stone platform F2 (2022) and is cut by the southern building slot F1.

004 Dark brown silty clay with frequent flecks of charcoal. Fills shallow linear depression and same as 022 partially revealed in 2023.

005 Mixed mid to light yellow silty clay with small patches of light yellow/cream silty clay and medium flecks of charcoal. Compact layer overlying post holes and building foundation slots.

006 Roughly linear spread of dark brown silty clay loam with frequent flecks of charcoal and occasional burnt daub pieces. Meanders in a west to east direction and included a range of Roman pottery. Overlies post holes and building slots. Links to 012.

007 Layer of dense charcoal in a light grey and yellow silty clay loam. Forms part of hearth F2. Under 002, over 005.

008 Burnt red clay deposit forming part of hearth F2. Under 002, over F4 and 005.

009 Light brown silty clay loam. Fill of F8.

010 Burnt red clay with 50% dense charcoal. Forms hearth F7.

011 Compact mid grey shale mixed with mid orange/yellow silty clay. Part of levelling deposit sealing post holes and building foundation slots.

012 Dark brown silty clay loam with frequent flecks of charcoal. Under 011, links to and same as 006. Contains a variety of Roman pottery.

013 Light yellow silty clay and light grey silty clay. Fill of slot F4 near the north end of Trench 16 and surrounding post hole F6.

014 Dark brown silty clay loam with frequent flecks of charcoal. Fill of slot F9. Under 011.

015 Dark brown silty clay loam with frequent flecks of charcoal. Fill of slot F10. Under 011 and partly 016.

016 Charcoal spread against north west corner of Trench 20. Related to charcoal rake out from stone oven F2 in Trench 11 (2024) and similar to 020 in Trench 15.

017 Mid brown yellow silty clay loam in eastern part of Trench 16. Under 005. Sub-natural?

018 Loose, friable mid yellow grey silty clay loam with occasional small sandstones. Fill of post pit associated with post hole F18. Over 019, under 012.

019 Light to mid grey silty clay loam with patch of orange silty clay and moderate flecks of charcoal. Fill of post hole F18. Under 018.

020 Burnt red clay with 20% small patches of charcoal and light yellow silty clay. Against north west corner of Trench 16 and only partly exposed adjoins post hole F18 and under 012.

021 Mixed fill of mid to dark grey silty clay loam and patches of light yellow silty clay. Upper fill of slot F4 and sealing post hole F19. Under 005 and partly 007. Over 022.

022 Mid to dark grey silty clay loam. Fill of post hole F19.

Trenches 17 and 22

This started off as 2 separate trenches aimed at uncovering more of the timber building foundation slot running along the edge of the stone platform F2 in Trench 13 excavated in 2022. Trench 17 was the more easterly of the 2 and started as a 1 x 2 m trench slightly overlapping, on its east side, Test Pit 12 from 2024 and on its south side Trench 13. TP 12 had been dug only enough to demonstrate the continuation of the timber building slot, the south edge of the yellow clay that lay alongside the edge of the stone platform. Trench 22 commenced as a 2 x 1 m trench that overlapped with the east side of the 2023 trench 13 north east extension. It relocated the building foundation slot and a post hole within that feature. It then picked up to the east part of Trench 6 from 2024 which had located the slot's southern edge on the surface but had not excavated it. Once these parameters were established it was decided to extend Trench 17 and 20 to join up to each other so the following description will treat these as one trench.



Trench 17 with old Trench 13 running along most of the top edge and old TP 12 to the right edge, with stone cluster 004 to the right.

When the trenches were joined up and topsoil/ploughsoil of c35 cm depth removed, there appeared to be some later features associated with the yellow clay capping layer that covered the earlier phase timber building foundations. These took the form of a spread of stones 004, 2 post holes F3 and F4, a hearth F5, and a linear spread of charcoal F6. 004 comprised a cluster of medium to large gritstones measuring 60 cm across.



Trench 17/22 joined showing later phase features/contexts – south is at the top.

They were found to be just one course deep and not related to any feature so were just a dump of stones. This was similar to 010 in Trench 4 in 2024. The top of 004 was at 276.61 m AOD. Post hole F4 had previously been partly revealed in Trench 1 in 2019. It was filled with a dark grey silty clay loam 009 which had been partly dug out at that time therefore leaving a void. The rest of 009 was excavated and careful trowelling around the post hole revealed a small circular post pit 35 cm diameter and filled with packing material of mixed light yellow/white clay 010. The post hole void was 18 cm diameter and 20 cm deep. There was a stone at the base and projecting from the south side to provide support for the post. The top of F4 was at 276.66 m AOD. The other post hole F3 lay only 30 cm to the north of F4 but it was of a very different character. It was not totally exposed within the trench with around a third being hidden beyond the trench edge. It took the form of small to medium gritstones 007 forming an outer ring of packing for the post hole shallow filling 008 comprised of mid yellow brown silty clay loam. The post hole formed a rough oval shape 45 cm across and up to 70 cm including the stones. It was only c 8 cm deep and had a base at 276.62 m AOD.



Left: post hole F4 showing clay packing 010. Right: Post hole F3 to left and F4 to the right.

Under the plough soil against the north edge towards the west end of the combined trench was 011, a small area of mid reddish brown silty clay loam with frequent flecks of charcoal. This was ringed by 012 a deep red brown silty clay with moderate small burnt stone and daub pieces. These burnt materials formed hearth F5 which was exposed for 1.9 m length along the trench edge and projected 45 cm into the trench. This was the southern end of the hearth F2 previously exposed in Trench 6 in 2024, with 011 being the same as 007 and 012 the same as 012.

The hearth lay on top of 003 which was a layer of mid yellow brown silty clay loam with frequent small pieces/flecks of charcoal and moderate heat reddened patches of clay. 003 covered much of the trench and was the capping layer sealing the first phase timber building foundations. The top of hearth F5 was 276.57 m AOD and 003 276.58 m AOD. Immediately to the east of the hearth, but at a lower level and appearing to run under it, was another hearth-like deposit of red clay and charcoal 016. It ran under the north edge of trench so only partly visible. As 016 was under the capping clay material 003 as well as

hearth F5 it is possible that it was part of a hearth within the first timber building, especially as the little part that was visible appeared to be similar to the 2 hearths in Trench 16/20.

F6 was a linear feature against the southern trench edge opposite hearth F5. It was under 002 and indicated by a spread of charcoal rich material in a mid yellow silty clay matrix 013. This turned out to be a shallow depression. It is a later feature as it cuts into 003. It might represent a burnt in-situ horizontal beam within a shallow foundation slot. F6 ran for 1.6 m at a slight angle to the trench edge so that it runs under the trench edge at its western end. Interestingly, this angle is the same as that for the earlier southern timber building foundation slot F1 which was against the stone platform F2. The stone platform had 2 phases so F6 appears to relate to the later use of the platform along with the adjacent hearth. Several stake holes F12 were revealed between the hearth and F6, including 2 pairs and 1 single stake hole. They were filled with mid to light grey silty clay loam 017. The stake holes did not form a meaningful pattern so their function is not known.



Detailed view of F6 (above photo scale) looking south, with hearth F5 in the foreground and stake holes F12 pre-excavation around the photo scale.

003 was removed in spits and it soon became clear that the slot F1 ran at a slight angle under the section edge towards the west, so the trench was extended by 3.6 m x 0.8 m to capture the southern edge of the slot. Excavation of part of the slot's fill of dark grey silty clay loam 005 revealed a series of post holes and exposed the slot across the entire length of the trench ie. 6 m. The north edge of the stone platform F2 (2022) was also exposed. At the east end of the trench a section was dug at right angles to reveal the nature of slot F1's south edge. This was cut into natural yellow clay and formed a revetment to support the timber wall. The top of the clay revetment was at 276.59 m AOD.

Of particular interest here were a series of vertical stripes of alternating dark yellow and mid grey, being 3-5 cm across and with 6 of each stripe colour. To the east they continue into last year's Trench 4 where they were also visible. To the west they run up to post hole F2. Their depth and that of F1 were not fully revealed, with the excavation stopping at 276.30 m AOD. To the east of F2 the evidence was less clear although a few possible stripes could be made out. These stripes were the vertical posts set in to the short sections of horizontal beams and provided the framework for wattle and daub to construct the walls. To the north of slot F1 and under 003 was a layer of mid yellow brown silty clay loam with 25% patches of charcoal, 20% light yellow grey silty clay patches and occasional pieces of burnt daub 016 which might relate to the demolition phase of the timber building. 016 had a top level of 276.31 m AOD.



Looking south at the stripes in the south side of slot F1 at the west end of Trench 17.



Aerial photo of Trench 17/22 after the trench extension to the south (bottom of photo) with arrows showing the southern edge of the construction slot F1 with previously excavated post holes F22 (left) and F2 (right).

Discounting later post settings F4 and F3, which belonged to a later phase, there were 6 post holes set in to timber building foundation slot F1. From west to east the post holes ran in the following sequence, with distances between as follows (centre to centre):

F22 – 30 cm – F7 – 70 cm – F8 – 88 cm – F9 – 72 cm – F10 – 1.25 m – F11 – 1.22 m – F2. The levels and dimensions of the post holes were as follows:

PH no.	Dimensions	Depth	Top level	Base level
F22	35 X 34 top, 15 cm across (bottom)	39	276.43 m AOD	276.04 m AOD
F7	14 X 10 cm	38	276.45 m AOD	276.07 m AOD
F8	15 X 11 cm	24	276.42 m AOD	276.18 m AOD
F9	33 X 15 cm	48	276.39 m AOD	275.87 m AOD
F10	18 x 9 cm	50	276.36 m AOD	275.86 m AOD
F11	21 X 14 cm	49 cm	276.31 m AOD	275.82 m AOD
F2	23 x 14.5 cm	49 cm	276.27 m AOD	275.78 m AOD

Post hole measurements.

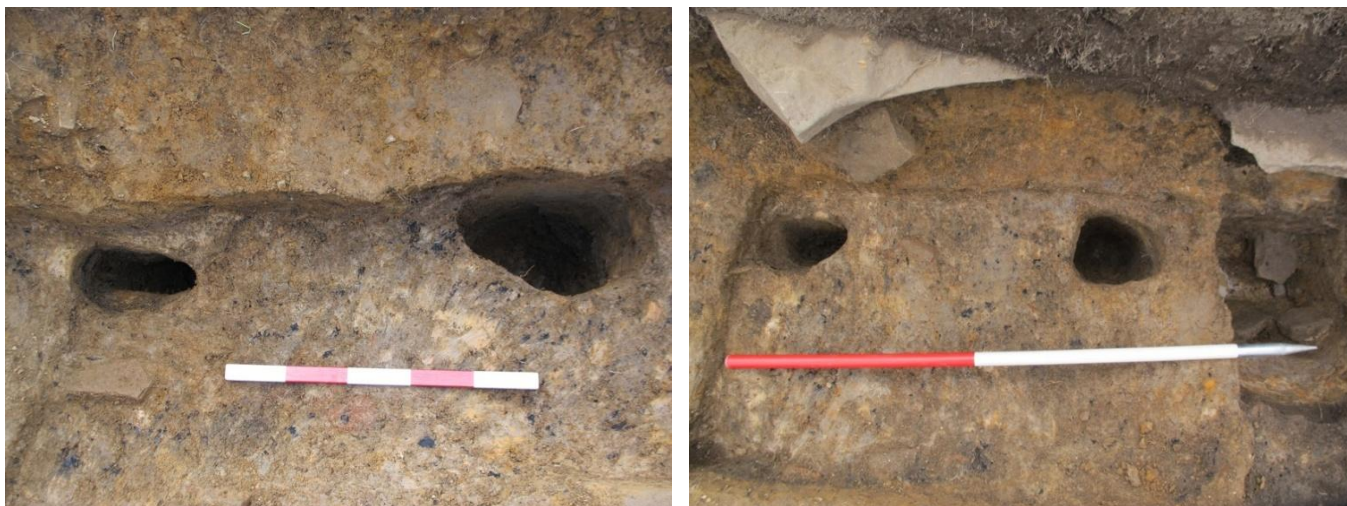
The gaps between F10, F11 and F2 were similar and considerably longer than between the westerly post holes. F2 and F11 were similar in and were both oval in shape on a south to north long axis and cut into the clay revetment so that they straddled the south side of slot F1. Lower down in the post holes the profile was rectangular suggesting the original post shape with the upper part being more rounded due to the way the post was pulled out or through weathering/erosion. F2 was filled with a soft light to mid brown silty clay loam 006 whereas F11 appeared as a void.

F10, whilst being of similar depth, was quite different in shape being more rectangular. It was narrower and was orientated differently with the long axis being east to west within slot F1. F10 appeared as a void. To the west of this F9 was a more substantial post hole. It had the appearance of 2 oval shaped post holes joined up suggesting that either there was considerable disturbance when trying to take out the post or that the original post was replaced or strengthened by inserting a new post next to it. The depth was similar to that of F2, F11 and F10.



Post holes F2 (left) and F11 (right) and detail of F11 post excavation (right).

The next post holes going west from F9 were F8 then F7. They were similar in shape, being sub-circular and of similar dimensions. F8 was less deep than F7, at 24 cm, but it was not easy to determine if all the silt had been removed from the base. Both were much less deep than the post holes to the east. They both appeared as voids but F7 was small to begin with as some soft light to mid brown silty clay loam 018 could be seen to the west which proved to be part of a fill.



Left: Post holes F10 (left) and F9 (right). Right: Post holes F8 (left) and F7 (right).

The last of the 6 post holes, F22, was of very different character. This was partly excavated tight against the east edge of 2023 trench 13 north east extension. The old trench backfill was removed to reveal F22 sitting within slot F1 and the opportunity was taken to excavate it more thoroughly. It was interesting to observe that there was only a gap of 30 cm (centre to centre) between it and post hole F7. Re-excavation allowed the full width of construction slot F1 to be exposed. Following removal of its fill 005, it was seen to be a vertical sided cut 34 cm wide. The sides and base were formed of natural mixed yellow and grey clay which was encountered at 276.43 m AOD. Post hole F22 was cut into the base of the slot in the form of a square shape. Against the north side of the post hole were 2 steeply angled packing stones whilst to the south side was another packing stone, this time laid flat with the post hole immediately to the east. The post hole was a circular void of 15 cm diameter with a base at 276.04 m AOD.

To the north of F22 was a layer of mixed charcoal and flat medium sized stones in yellow silty clay 014. This may be a continuation of a similar layer 042 excavated 1 m to the north in 2023 and identified as a possible floor F29 within the first phase timber building. The fact it runs up to slot F1 and post hole F22 and is overlain by the yellow capping clay deposit, and is therefore contemporary with the timber building foundations, gives credence to this interpretation. At a higher level between post holes F7 and F8 and later hearth F5 was deposit 019 a mixed deposit of mid brown silty clay loam with 30% small to medium patches of light yellow silty clay, frequent flecks and small pieces of charcoal and moderate small pieces of burnt red clay/ daub. This lay above 014 and under 003 with a top height of 276.42 m AOD and is probably associated with the first phase timber building and its demolition.



Left: Post hole F22. Right: overhead photo of Trench 22 showing post holes described above, 014 and F22 far right.

Compared to Trenches 16/20 and the 2024 Trench 4, there were only a few Roman finds from Trenches 17/22. The topsoil and plough soil levels produced a limited but typical assemblage of various glazed 18th and 19th century pottery sherds together with some clay pipe stems. In terms of Roman material context 003 produced 2 small pieces of burnt daub, 2 iron nail fragments and a small piece of calcined animal

bone. 008 in later phase post hole F3 yielded 3 iron nail fragments and 2 pieces of charcoal. The only other context that had finds was 013 which filled a later phase linear feature F6 and produced a single small piece of burnt daub and 2 iron nail fragments.

The aerial photo below shows the spatial relationship between Trenches 17/22 and 16/20. It can be seen that a considerable length of the southern construction slot with its post holes has been exposed, especially when joined up with previously excavated trenches. The internal form of the first timber structure is starting to materialize with several slots representing internal walls having been found.



Overhead photo showing Trenches 17/22 (right) and 16/20 (left) with 15 at the bottom.



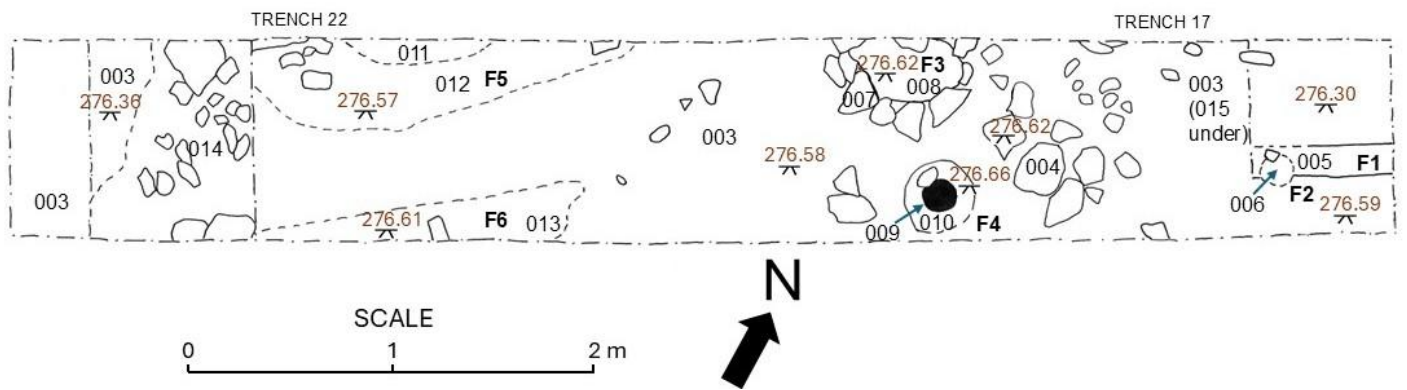
Finds from the topsoil and plough soil in Trench 17/22 and from the southwards extension (right).



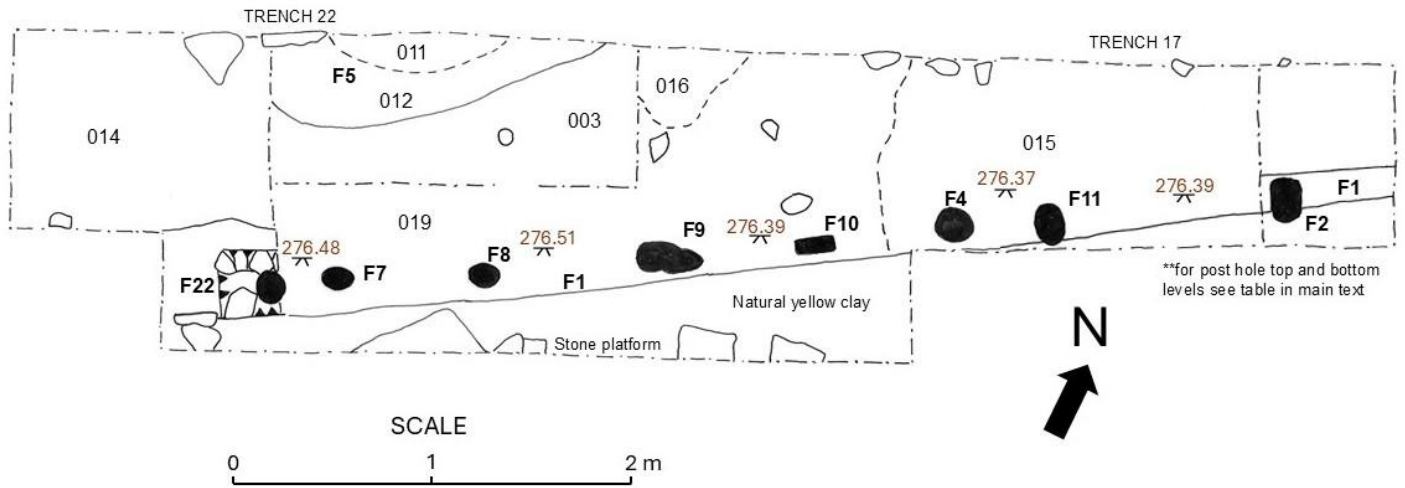
Left: burnt daub, nails and a calcined animal bone from context 003. Right nails and charcoal from 008 (F3).



Burnt daub and 2 nail fragments from fill 013.



Trench 17 and 22 showing later features/deposits.



Trench 17 and 22 final excavation plan.

Contexts

F1 Building foundation slot running west to east and forming southern foundation of timber structure alongside stone platform F2 (2022). Previously exposed in Trench 13 north west extension (2023) and Test Pit 12 (2024). Trenches 17/20 link these two to expose a continuous length of foundation slot. The slot continued in Trench 16. F1 contains a series of post holes (west to east): F22, F7, F8, F9, F10, F4 and F11. Filled with 005.

F2 Post hole. Sub-rectangular shape. Filled with 006, under 003 and 004. Furthest east post hole in Trench 17.

F3 Shallow circular shaped post hole lined with stones near north edge of trench. Different in character to other post holes and not within a building slot but cut into 003 so later in date to the others. Inner fill 006, outer stone packing 007. Cuts 003, under 002.

F4 Post hole. Circular shape with clay packing surrounding central circular shape of post pipe. Filled with 009 and 010. Cuts 003 so, similar to F3 which is a short distance to the north, this is a later phase post hole. It is close to post hole F11 to the east and does not conform to the regular spacing of post holes in F1 building slot. F4 was first revealed in Trench 1 in the evaluation of 2019 and then again within Test Pit 12 in 2024.

F5 Spread of burnt clay and charcoal representing a hearth, partly exposed against north edge of Trench 22. Formed of 011 and 012, under 002. Part of hearth F2 exposed in Trench 6 in 2024 and F15 in Trench 13 north west extension in 2023.

F6 Linear feature indicated by spread of charcoal rich material 013 within a shallow depression. Under 002, cuts 003 so a later feature. Could represent burnt in-situ horizontal beam within shallow foundation slot.

F7 Post hole. Sub-circular void with fill to the west. Within slot F1, flanked by post holes F22 (2023) and F8. Filled with 018, under 003 and 013.

F8 Post hole. Sub-rectangular void. Within slot F1, flanked by post holes F7 and F8. Under 003 and 013.

F9 Post hole. Sub-circular void. Within slot F1, flanked by post holes F8 and F10. Under 003 and 013.

F10 Post hole. Sub-rectangular void. Within slot F1, flanked by post holes F9 and F4. Under 003.

F11 Post hole. Sub-rectangular void. Within slot F1, flanked by post holes F4 and F2. Under 003.

F12 Stake hole between building slot F1 and hearth F5. Filled with 017. Previously revealed in Trench 6 in 2024.

001 Topsoil.

002 Plough soil.

003 Mid yellow brown silty clay loam with frequent small pieces/flecks of charcoal and moderate heat reddened patches of clay. Overlies post holes and building slot but underlies hearth F5.

004 Cluster of medium to large gritstones within Trench 17. Found to be shallow and not related to any feature so just a dump of stones. Overlies 015 and F11, under 002.

005 Dark grey silty clay loam. Fill of slot F1, under 003 and 013.

006 Light to mid brown silty clay loam. Fill of post hole F2. Under 003 and 004.

- 007 Small to medium gritstones forming a outer ring of packing for post hole F3. Northern part hidden under edge of Trench 17. Part of F3, under 002.
- 008 Mid yellow brown silty clay loam. Shallow fill of post hole F3.
- 009 Dark grey silty clay loam. Fill of post pipe for post hole F4.
- 010 Mixed light yellow/white clay. Forms packing material for post hole F4. Under 002.
- 011 Layer of mid reddish brown silty clay loam with frequent flecks of charcoal. Same as 007 revealed in Trench 6 in 2024. Part of hearth F5.
- 012 Deep red brown silty clay with moderate small burnt stone and daub pieces. Outer deposit making up hearth F5. Same as 006 excavated in Trench 6 in 2024.
- 013 Fill comprising 50% charcoal and mid yellow silty clay. Fill of linear depression F6. Under 002.
- 014 Mixed charcoal and stones in yellow silty clay. Within 2023 Trench 13 north west extension and possibly continuation of 041 and 042 from that year.
- 015 Mixed deposit of mid yellow brown silty clay loam with 25% patches of charcoal, 20% light yellow grey silty clay patches and occasional pieces of burnt daub. Under 003. Partly excavated at eastern end of Trench 17.
- 016 Deposit of red clay and charcoal to east of hearth F5. Runs under north edge of trench so only partly visible. At a lower level so may be part of another, earlier hearth. Under 003.
- 017 Mid to light grey silty clay loam. Fill of F12.
- 018 Soft light to mid brown silty clay loam
- 019 Mixed deposit of mid brown silty clay loam with 30% small to medium patches of light yellow silty clay, frequent flecks and small pieces of charcoal and moderate small pieces of burnt red clay/ daub. Under 003 at west end of trench, over 014.

Trench 18

This was located 4 m west of Trench 12 and was designed to re-open and extend the west end of an old, unrecorded, excavation trench thought to have been dug by Bruton in 1908. This old trench ran at right angles from the rampart towards the east and was the same trench that the Friends re-opened to reveal ovens and kilns. Trench 18 was close to the fort east rampart where the ditch is now known not to exist so how did the Romans utilise this space? The trench was initially 2 x 1 m but was then extended to help better understand the archaeological interest and potential, finishing at 2.5 m x 2.5 m.



Opening up Trench 18 with Trench 12 behind and, right, after clarifying the edge of the old excavation trench.

Beyond the old excavation trench 001 the south side of the Trench 12 was quite deep at 60 cm with a turf level of 276.87 and bottom of 002 plough soil 276.27. On the opposite, north, side 001/002 were about 50 cm deep with the turf at 276.70 cm and top of archaeology/bottom of plough soil at 276.33 m AOD. 002 was mid to dark brown silty clay loam.

Bruton's trench F1 was filled with dark grey silty clay loam 003. The trench was about a metre wide and ran from the south west side of Trench 18's to the north east corner. Removal of 003 revealed a possible square cut feature F2 against the western edge. The fill 009 was dark grey silty clay loam with moderate flecks of charcoal. Initially this was thought to be a possible Roman post hole or pit adjacent to the rampart

and explained why Bruton's trench was deeper at this point. However, further excavation demonstrated that F2 was just a deeper part of Bruton's trench and not Roman. Perhaps Bruton's diggers had been digging deeper here to better understand the archaeology levels or had chased/removed a Roman feature. The base of F2/F1 was at 275.28 m AOD. At the base of Bruton's trench on its south side near Trench 18's eastern edge was a pair of potential post holes F4 with a very dark grey silty clay loam fill 010. Again, these were initially thought to be Roman features but turned out to be part of the back fill of Bruton's trench. There was a considerable amount of discarded iron work in the backfill of Bruton's trench. Some of this comprised shaped bronze parts of a mechanism. There were also a variety of white and dark glazed sherds, a blue and white transfer printed plate, and several pieces of green and white glass.

The 'V' shaped cut of Bruton's trench revealed natural clays on either side at this deeper part. Where the old excavation trench was shallower a dense layer 006 of predominantly medium size gritstones was revealed in the northern half of the trench. These were a mixture of flat and angled stones with a patch of burnt red clay. The top of 006 was 276.44 m AOD. Partly overlying 006 and evident in the north west of the trench was a layer of mid yellow grey silty clay with moderate flecks of charcoal 005. This had a top level near the north west corner of 276.37 m AOD. Spread across the south side of the trench and cut by F1 was a mixed deposit of white/light yellow clay 007 with a top level of 276.27 m AOD. Where Bruton's trench was shallower in the middle eastern part of the trench was revealed a light grey silty clay with frequent patches of yellow silty clay, frequent small gritstones and occasional flecks of charcoal 008. This was felt to represent sub-natural. To the south east under 007 was another spread of densely concentrated medium sized gritstones set in a light yellow/cream silty clay matrix with frequent flecks of charcoal 011. The trench was extended by 1 m eastwards to reveal more of these stones which had a top height of 276.21 m AOD. As with 006 they were a mix of flat and angled stones so did not represent a floor surface. From the plough soil in the extension came several pieces of daub, two of which were heat reddened, together with a trail slip rim sherd of possible late 17th or early 18th century date.

After recording the stone spreads, 011 and 006 were removed and shown to be just one course deep. They appeared to be dumps of stone, perhaps deriving from a nearby oven structure. In the southern half of the trench was revealed 014 made up of dark orange and mid yellow silty clay loam with moderate flecks of charcoal. This was interpreted as sub-natural and overlay 008. The north half of the trench was quite different. Here the stones came off onto a broad band up to 70 cm wide of dark brown silty clay loam with 10% flecks/pieces of charcoal and 15% small patches of light yellow silty clay 012. This was sectioned and found to be only 2 cm deep, coming off onto natural 008. Running against the north trench edge was 013 a deposit of dark brown silty clay loam with dense charcoal patches, moderate medium gritstones and occasional patches burnt red clay. The top of 012 was 276.21 m AOD.



Left: the square shaped 'feature' F2, with its dark grey fill, shows against the top trench edge. Right: after further excavation of F2 showing it to be a deeper part of old excavation trench F1.



Left: stone spread 011 in south east part of the trench. Right: after removal of stone spread showing the deeper part of Bruton's old trench on extreme left, natural clay to the right, and hearth F3 deposits at the top.

The trench was extended by 0.75 m northwards to capture the extent of 013. Initially the trench extension was a metre wide and revealed possible structural remains 004 made up of a linear spread of lumps of burnt red daub and small heat reddened sandstones. These did not form a solid structure and appeared to be fragmentary remains of a hearth or oven F3 and sat on top of charcoal rich deposit 013. This turned out to form a roughly oval shape with a width of 1 m in the centre tapering east and west to run a little under the trench edges but with a length likely to be around 2.2 m. To the north the edge of 013 was evident against yellow silty clay natural 008. The top of the stones forming part of 004 was 276.23 m AOD and 013 ranged from 276.25 m AOD on the west side to 276.19 m AOD on the east. 008 in the base of the section was at 276.19 m AOD and 276.16 m AOD in the north west corner of the trench extension. From the plough soil in the north extension came several post medieval pottery sherds which included a rim and base of Midland Purple Ware with a dark glaze, possibly of 16th century origin.



Detailed view of F3 showing section through 012 (left) and looking east across the feature showing 013.

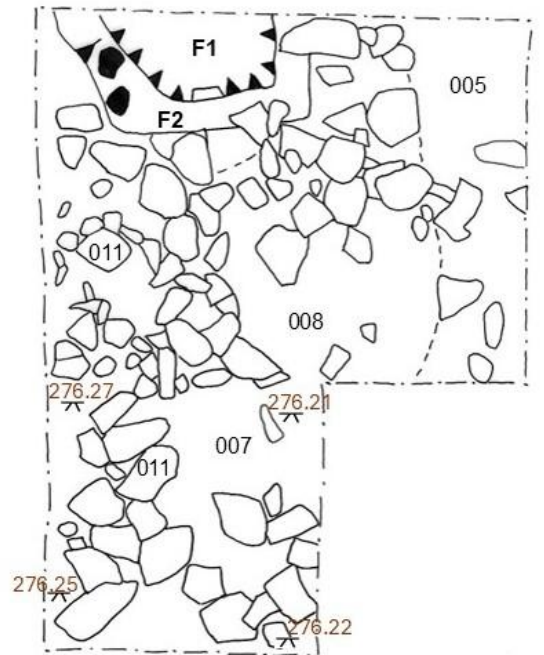
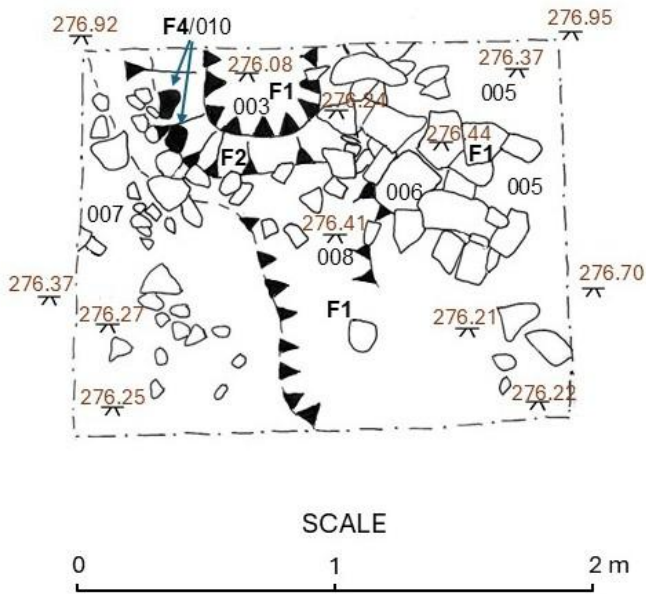
It is not clear if F3 represents an oven or hearth. 004 suggested structural remnants but are not bonded and just sat loosely on top of 013. Furthermore, the spread of stones 006 and 011 looked as they came from a demolished structure such as a stone oven but cannot be directly associated with F3. Nonetheless Trench 18 has shown that this area, devoid of a defensive ditch, was being used for probable cooking purposes in line with the rest of the north half of the annexe.



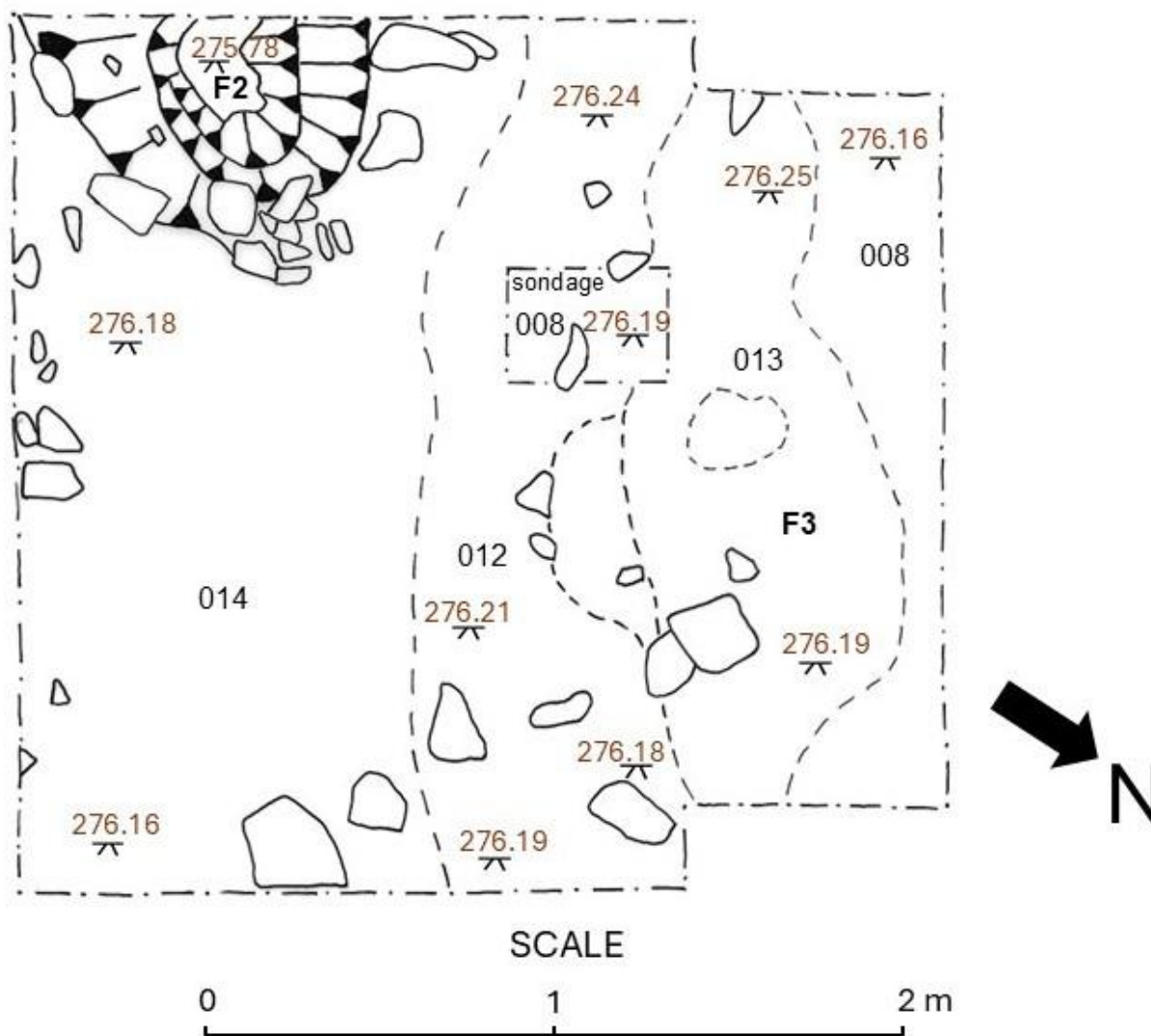
Finds from the backfill of Bruton's old excavation trench.



Finds from topsoil and plough soil from Trench 18 south east extension (left) and north extension (right).



Trench 18 after initial clean (left) and eastern extension with further excavation to reveal spread of stones 011 (right).



Final plan of Trench 18 after north extension to show extent of hearth F3.

Contexts

F1 Cut of Bruton trench. Filled with 003. Under 001.

F2 Possible post hole appearing as square cut feature against western edge of trench, linked to and found to be part of Bruton old excavation trench F1. Filled with 003 and 009.

F3 Area of charcoal on north side of trench indicating a hearth or oven. Comprises 004, 005, 011 and 012.

F4 Two possible small post holes against south side of F2. Filled with 010. Found on excavation to be part of Bruton trench cut F1.

001 Topsoil.

002 Plough soil. Mid to dark brown silty clay loam.

003 Dark grey silty clay loam. Backfill of Bruton trench F1.

004 Linear spread of lumps of burnt red daub and small heat reddened sandstones. Part of hearth F3 and over 013, under 002.

005 Mid yellow grey silty clay with moderate flecks of charcoal. Over stones 006 and hearth F3, under 002.

006 Medium sized gritstones, flat and angled and with a patch of burnt red clay. Single depth and appears to be dump of material overlying 012 and under 005.

007 Mixed deposit of white/light yellow clay. Spread across south side of trench and cut by F1. Under 002.

008 Light grey silty clay with frequent patches of yellow silty clay, frequent small gritstones and occasional flecks of charcoal. Revealed at base of Bruton trench F1. Sub-natural?

009 Dark grey silty clay loam with moderate flecks of charcoal. Fill of F2.

010 Very dark grey silty clay loam. Fill of F4.

011 Dense spread of small to mainly medium gritstones in a light yellow/cream silty clay with frequent flecks of charcoal across south half of trench and eastern extension. Found to be single depth and likely dump of stones as no signs of a structure. Over sub-natural 014.

012 Dark brown silty clay loam with 10% flecks/pieces of charcoal and 15% small patches of light yellow silty clay. Outlying deposit part of hearth F3.

013 Dense charcoal in deposit of dark brown silty clay loam the moderate medium gritstones and occasional patches burnt red clay. Main component of hearth F3.

014 Dark orange and mid yellow silty clay loam with moderate flecks of charcoal. Under 011 and appears to be top of natural.

Trench 21

This was located 3 m to the east of Trench 13 and as with that trench was designed to re-open and extend a previously excavated test pit (no. 12 in 2018) across the c 1908 unrecorded Bruton trench. This had exposed evidence for possible oven/hearth related activity in the form of a charcoal rich deposit which also included burnt daub pieces. Once the old excavation trench was located and confirmed to be clipping a possible feature, Trench 21 was extended to capture the complete feature. Ultimately it measured 2.9 m by 3.1 m with a 0.5 x 1.5 m extension on the east edge.

Bruton's trench F1 was found to cut across the edge of what turned out to be a stone walled feature (F2). Only the north west edge of F1 was revealed, with the rest being under the trench edge; this was enough to see the cut against the Roman feature. The old trench was filled with mid to dark grey silty clay loam 009. The surface (turf) level various at each corner of Trench 21: 276.51 m AOD at the south west corner, 276.55 m AOD at the north west, 276.46 m AOD at the north east and 276.63 m AOD at the south east. 001 topsoil and 002 mid to dark brown silty clay loam plough soil jointly measured between 38 cm and 50 cm deep. Nearly all the finds from Trench 21 came from 001/002 and included the usual array of glazed earthen wares, clay pipe stems, glass, but also some earlier dark glazed earthen wares and 3 sherds of trail slip wares which might date back to the 17th century. There were also some small pieces of fire reddened daub and 3 thin pieces of oxidised lead.

The trench revealed 2 distinct areas of archaeology after removal of the plough soil. In the middle and eastern part was evidence for burning activity in the form of 003 comprising burnt red clay and 20% patches of light yellow clay intermixed with randomly scattered angled small to large stones. On the north side of 003 were 2 lines of steeply pitched medium sized gritstones 010, whilst to the south 003 was bounded by a linear arrangement of flat stones 004 against the south trench edge. A large spread of orange red silty clay 007 lay against the north and east sides of 010. The north west quarter of the trench was occupied by a layer of light yellow silty clay with medium small stones and occasional flecks of charcoal 006. This had 6 stake holes in it but in a random pattern. The trench was extended southwards to fully expose the possible wall 004 and it soon became clear that this was part of a structure F2 that had the potential to be another stone oven or kiln. 004 comprised a single width line of 8 medium flat laid gritstones forming a possible wall 1.4 m long, running in a west to east alignment. Against the southern edge of the stones was a linear ridge of intensely heated red clay 005. This in turn was flanked on its south side by a line of 3 closely spaced stake holes F3 which had 20 cm spacings.



Trench 21 after removal of top and plough soil, with old 1908 trench against left corner and showing stake holes (left), and after extending southwards to incorporate stone wall 004 of feature F2 (right).

Excavation of 003 and 007 showed that the lines of angled stones 010 belonged to a wall or superstructure that had been pushed into feature F2 as part of the demolition process, with clay and daub 003/007 being used as back fill. 007 yielded the only finds from F2 in the form of a small Roman assemblage comprising 3 small pieces of daub, 2 small pieces of lead and an iron nail. Further investigation showed 008 a spread of hard baked light yellow, grey and red clay formed along the west side of F2. It contained two stake holes which appeared to be related to F3 and 005. Bruton's 1908 trench partly cut 008. Lying on the surface of 008 and on the side of the old excavation trench near its base was a badly worn, thin bronze coin which even when cleaned was difficult to decipher, but it appears to be ancient and shows signs of having been clipped. However, another interpretation is that is a late 18th century George III half penny. The coin was found at 276.22 m AOD. The top of F2 wall 004 was at 276.28 m AOD and that of 003 276.11 m AOD.



Bronze coin at the interface of Bruton's 1908 trench and the western side of the stone feature.



Left: structure F2 being cleaned to reveal its full extent, with possible stone wall 004 at bottom of photo. Right: looking west across F2 after cleaning, showing the wall on the left and lines of pitched stones to the right.

The western half of F2 was excavated initially to create a west facing section through the feature's fills. It showed several fills flanked by vertical walls to create a subterranean feature. On the south side 004 was confirmed as a wall 8 courses deep. Another, shallower, wall of 6 courses 025 came to light under 010 and 003 on the north side with the two walls joined by a linking wall 024 at the western end of F2 which was only 4 courses deep. 010 was found to be 36 cm deep and 003 was a similar depth overlying two large angled stones. The burnt red clay of 003 was also present between the angled stones of 010 suggesting a hide level of heat in had once been the side wall of the feature. One of the stones making up 010 was particularly large being 40 cm long and tipping at a 45 degree angle long with adjacent stones, strengthening the interpretation that 010 once formed part of a wall. The base of 003 was at 275.89 m AOD and that of 010 275.82 m AOD. Under these were fill 011 a mid to dark yellow grey silty clay loam with 30% small pieces of red clay that lay against the southern wall and 012 mixed charcoal and dark grey silty clay loam with 20% red and buff coloured pieces of daub/clay and occasional small to medium gritstones which was under 011 and went right across the north wall. 012 was a maximum of 28 cm deep with a base at 275.54 m AOD. Under 012 was a thin layer of dense charcoal 013 which covered the floor of the stone feature F2. It was less than 3 cm deep except in the middle of the floor where it filled a narrow slot 28 x 12 cm on a west to east alignment and 11 cm deep with a base at 275.36 m AOD. The slot had tapering rounded ends.



Left: looking east to section in F2 showing 010 and 003 post excavation in the section and 012 before excavation. Right: view of west facing section through F2.



Left: looking west across walls of F2 structure with charcoal layer 013 starting to emerge. Right: slot in floor of F2.

Excavation of the western part of F2 showed that this was potentially another kiln with walls on 3 sides and a floor of hard baked mid grey clay 022 which was semi-vitrified from heat during the use of the structure. The walls were not well constructed and of varying levels but, as with the stone-built kiln in Trench 5 in 2024, it survived post medieval land use including ploughing and Bruton's trench cut because it was a subterranean structure. F2 was 1.02 m wide at the top and 0.95 m at the base.

The rest of F2 was excavated towards the east and was found to go under the east trench edge leading to the trench being expanded by 0.5 m to capture the full extent. The eastern edge of F2 was indicated by a curving band of mid yellow clay with frequent small patches of burnt red clay and moderate small to medium gritstones and flecks of charcoal 026. This was the upper fill of F2 and overlay 003. Beyond F2 in the south east corner of the extension a large flat stone 019 partly protruded into the trench and overlay a cluster of smaller angular gritstones. 019 may be part of a structure/feature but time constraints did not allow further investigation at this stage. The top of the flat stone was at 276.03 m AOD. Beyond 026 was a layer of light yellow and cream silty clay with frequent small to medium gritstones 023 which appeared to be sub-natural. In the north part of the extension was a layer of light grey silty clay loam with occasional small sandstones and flecks of charcoal 018 with a surface height of 275.99 m AOD.



Left: east end of Trench 21 showing extension and edge of F2 indicated by yellow clay infill 026 and flat stone 019 in the corner. Right: vertical view during excavation of the eastern part of F2.

Removal of 003 revealed a lower fill 014 in the east side of F2. This comprised grey silty clay loam with 20% charcoal, 20% small to medium patches of cream coloured daub and buff mortar, 10% pieces of burnt red clay. This was contiguous with and a little similar to 012 which was the lower fill at the west end of F2. Covering the floor and under 014 was a thin layer of dense charcoal which was the continuation of 013. Walls 004 and 025 were found to terminate opposite each other and give way to a hollow area which was where the furnace was set. The base of the hollow was formed of highly fired, dark grey red clay 020 which formed a circle 50 cm in diameter and with a base height of 275.44 m AOD. To the west of this was a 20 cm wide band of burnt bright red clay 021 forming a crescent shape wrapping around the western half of 020. To the east 020 was bounded by yellow clay natural 027 which was visible in the eastern slope forming the back of the furnace area. Above 027 and also forming the back slope of the furnace hollow (east end of F2) was a hard surface of mid grey hard baked clay 028. This lay under charcoal 013 some of which was visible in section at the east end of the trench along with overlying 003 as there was not enough time to excavate this.



Left: 014 during excavation of F2 east end showing fill 014. Right: charcoal 013 over floor of kiln F2.



F2 mostly excavated showing bright red clay 021 in the foreground with the bowl 020 where the furnace was situated just beyond, then 027/028 on the slope behind and remnants of charcoal layer 013 and 003 visible in the section.



Overhead view of F2 post excavation – the furnace site lies on open left (east) side.

The walled part of structure F2 had an internal length of 1.5 m with south wall 004 and north wall 025 terminating on the east side where the furnace hollow 020 was located. This was similar arrangement to the kiln (2024 Trench 5 F2) discovered last year and suggests that we are looking at another grain drying kiln, especially as the wall materials and mortar are very similar. But the Trench 21 kiln structure had several differences. Firstly, the western end wall 024 was straight rather than curved and was also poorly constructed and poorly integrated with the other two walls. Secondly the north wall was not parallel with the south wall but ran at a slight angle to it so that the internal width of the kiln was 0.9 m at the west end and 1.10 m at the east end where the walls terminated. Thirdly the kiln was aligned east to west as opposed to south to north for last year's excavated kiln. Fourthly there was short slot (of uncertain function) inserted into the floor of the kiln towards its west end, and fifthly there wasn't a stone floor but just baked clay which was semi-vitrified due to extreme heat.

The north and south walls 024/004 were constructed mainly of thin coursed gritstones with a buff coloured mortar that had for the most part turned to an orange red colour due to high temperatures. The thinnest and longest stone measured 38 cm by 5 cm while a more typical stone measured 22 cm by 6 cm. The west wall 024 was considerably shorter, more crudely built and formed mainly of fatter stones, typically 12 by 8 cm. All 3 walls were only 1 stone thick, with a maximum width of 27 cm. The top of the north and south walls had lines of closely spaced, flatter and thinner stones which were slightly set back from the rest of the wall and probably formed the base for a suspended floor with hot air rising to dry the grain. Wall 004 was 63 cm high, 024 was 38 cm high, and 025 was 44 cm high. The top of wall 004 was 276.20 m AOD, 024 was 276.11 m AOD and 025 was 276.14 m AOD. The floor sloped down from the base of the walls to a low point of 275.51 m AOD.

There were disappointingly few finds, with the only ones coming from the top layer 007 (see above). Soil samples were taken for analysis from 012, 013 and 014. All 3 produced identifiable charcoal, with oak dominating in 012 and 014, but with hazel and willow/poplar also present, whilst 013 yielded a little of both oak and willow. A few charred cereal grains came from 014 in the form of 3 spelt wheat, 1 barley and 3 indeterminate. This supports the interpretation of F2 being a grain drying kiln (see Appendix).



Left: detailed view of the south wall 004 which was the best built part of the kiln surviving to 8 courses. Right: detail of western wall 024 which was poorly constructed and only 4 courses.



The north wall 025 which survived to a maximum of 6 courses deep and (right) detail of its coursing with wall 024 on the left.



For comparison, here is a photo of the grain drying kiln that was excavated in 2024.

The poor construction of the south wall 024 of kiln F2, when first exposed, was conjectured to be a possible blocking wall for an infilled feature behind it and indeed there appeared to be a discrete area of packed stones in the vicinity. Therefore, the trench was squared off and the southern strip carefully cleaned to reveal the nature of the Roman level archaeology. The spread of hard packed small gritstones in a compact mid to dark grey shale matrix 017 was better revealed, as well as a layer of light yellow silty clay which was the continuation of 006 seen further north. In the north west quadrant of the trench, bright orange red clay 007 was better defined. It wrapped around the north west corner of the kiln, continuing as thin ridge of material to the west side of the kiln where it had the appearance of 005 on the south side of the kiln. There was also a circular stake hole, but only 1 rather than the 3 identified alongside 005. 007 spread north west for 45 cm where it encountered a cluster of stones which turned out to be the site of a post hole F4. The post was set into a circular post pit 61 cm in diameter. The stones occupied the southern half of the feature with the rest of the fill being 015 mid yellow grey silty clay loam with 25% small to medium gritstones. Seen in section on against the west side of the pit was a post pipe indicated by 016 a dark yellow grey silty clay loam which was almost stone free. The post pipe was up to 18 cm wide and 30 cm deep. The top height for the post pit fill 015 was 276.11 m AOD and the base 275.78 m AOD.

At the bottom of the post pipe and partly visible in the western edge were several tightly packed gritstones which would have provided good support for the post and which appeared to form natural bedrock as the stones continued through the cut of the post hole/pit. It could be seen that these stones were similar to those making up 017 further south. Sub-natural 006 was removed in the south west corner of the trench and came off onto more of 017. The top of the stones was at 275.98 m AOD. It can be concluded therefore that 017 represents an outcrop of natural, weathered bedrock which dips down a little to be revealed near the base of post hole F4 with a top height of 275.93 m AOD. This bedrock substrata has been revealed in

excavations elsewhere, for instance in the 1980's section through Drycroft Lane against the fort/fortlet south defences and nearby in the south slope of the fortlet ditch near the fortlet's south east corner.

The post hole F4 cannot be interpreted in isolation. The surrounding area will need to be investigated so see if further post holes exist. However, it should be noted that the post hole is on the same alignment as slot post hole F5 and associated slot F4 in Trench 15 to the west so may relate to that first phase timber structure. Extending Trench 21 westwards towards Trench 13 would provide clarification. The poor and different construction of west kiln wall 024 might be due to it being built against the natural uneven stone of 017 whereas the north and south walls were probably cut into natural yellow clay which provided a solid even revetment against which to set the wall.



The south side of Trench 21 showing the cluster of stone representing post hole F4 on the left, red clay 007 against the western kiln wall 024 and the stone spread 017 bottom right.



Post hole F14 half sectioned from above (left) and (right) looking south showing the post pipe on the right side and with bedrock appearing bottom right.



Stone and grey shale 017 after removal of 006 in south west corner of the trench.



Photos from the late 1980s excavation showing a section dug through Drycroft Lane (left) and the fortlet ditch (right), with the shale and stone substrata clearly visible. The natural stone has been shown to outcrop at various heights across the site.



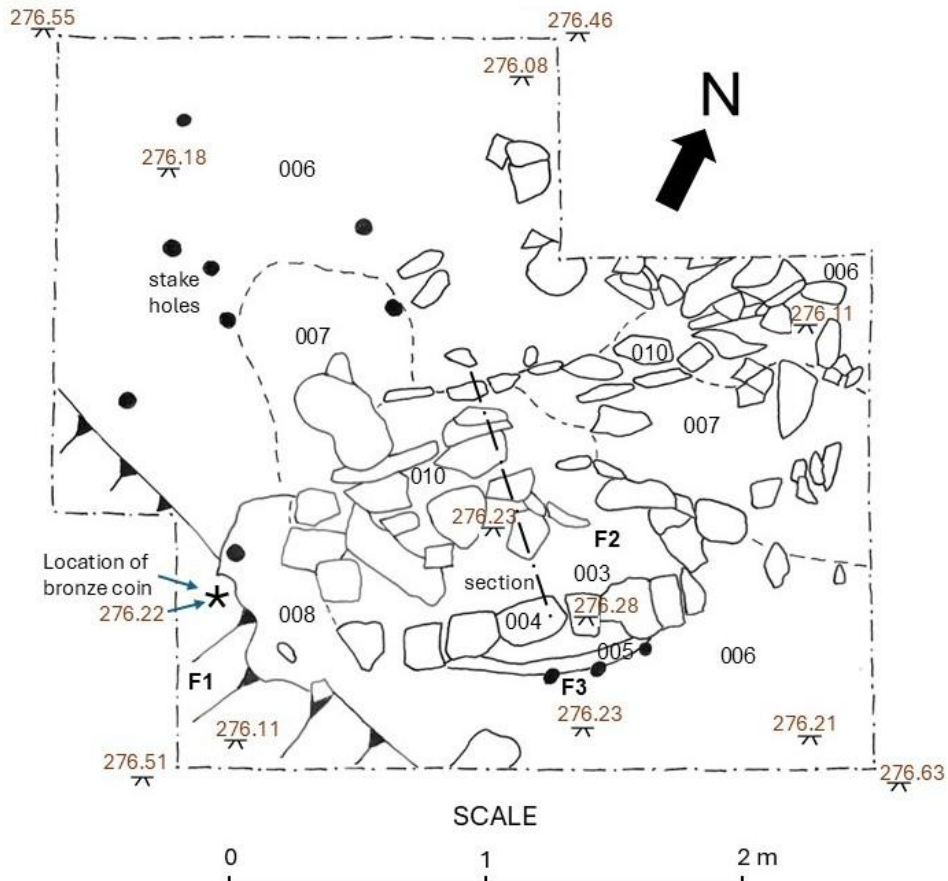
Finds from Trench 21 topsoil 001 and plough soil 002: initial trench excavation (left) and east extension (right).



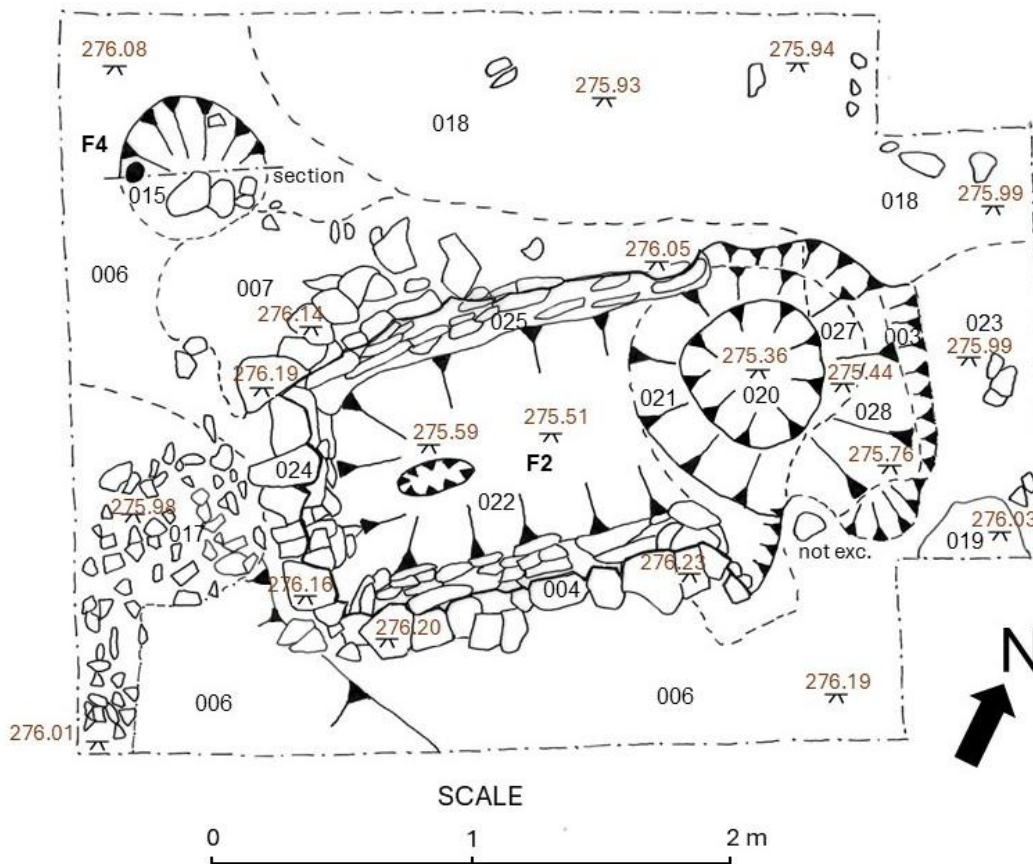
Further finds from Trench 21 top and plough soil: north east corner (left) and above oven F2 (right).



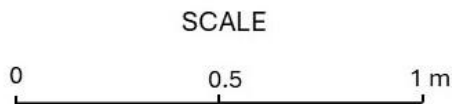
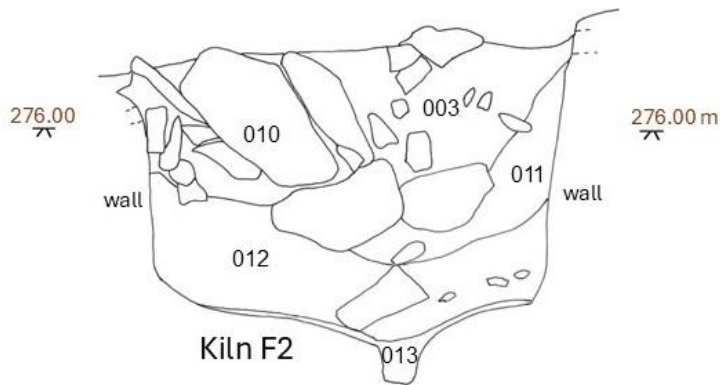
Finds from Trench 21 interface between 002 and 006 (left) and from fill 007 (right).



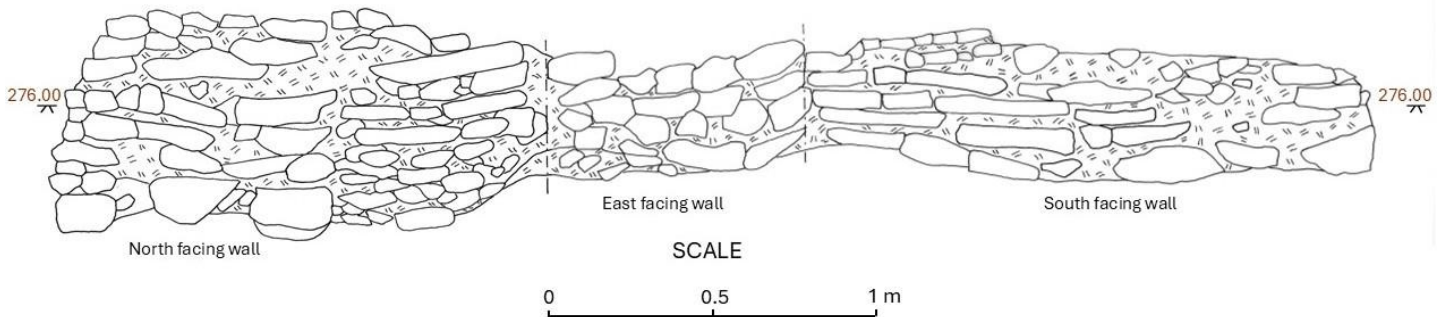
Trench 21 after removal of top/plough soil and initial clean.



Trench 21 plan of kiln F2 post excavation and post hole F4 half excavated.



Trench 21 west facing section across kiln F2 (left) and north facing section through post hole F1 (right).



Internal elevations of the walls of kiln F2.

Contexts

F1 Cut of Bruton's 1908 trench.

F2 Stone structure filled with rubble and burnt clay 003, 007, 012, 013, 014, with base formed of 022, 021 and 020.. Comprised of three subterranean walls and open east side where furnace was located for what is interpreted as a grain drying kiln.

F3 Stake holes closely spaced along south side of F2 and alongside 005.

F4 Post hole to the north west of F2 kiln. Post pipe fill 016 and packing 015.

001 Topsoil.

002 Plough soil.

003 Deposit formed of burnt red clay and 20% patches of light yellow clay intermixed with randomly scattered angled small to large stones forming upper infill of F2 and associated with 010.

Collapse/demolition of kiln F2.

004 Line of flat stones forming wall for south side of F2. Joins to 024

005 Linear ridge of intensely heated red clay on outer southern edge of F2 and stones 004. Flanked on south side by line of stake holes F3.

006 Light yellow silty clay with medium small stones and occasional flecks of charcoal. Forms sub-natural. Cut by F2 and F4.

007 Large spread of orange red silty clay against north and east sides of F2.

008 Spread of hard baked light yellow, grey and red clay formed along west side of F2. Contains one or two stake holes related to 005 and partly cut by F1. Bronze/copper Coin of unknown date found on surface.

009 Mid to dark grey silty clay loam. Fill of Bruton trench F1.

010 Two parallel lines of angled medium to large gritstones on north side of F2 opposite 003. Part of F2 superstructure representing collapsed walls.

- 011 Fill of mid to dark yellow grey silty clay loam with 30% small pieces of red clay. Filling in against south side of F2 wall. Under 003, over 012.
- 012 Fill of mixed charcoal and dark grey silty clay loam with 20% red and buff coloured pieces of daub/clay and occasional gritstones. Lower fill of kiln F2. Under 011, over 013.
- 013 Thin layer of dense charcoal at base of kiln F2 also fills short slot in west side of floor. Under 012.
- 014 Grey silty clay loam with 20% charcoal, 20% small to medium patches of cream coloured daub and buff mortar, 10% pieces of burnt red clay. Fill at east end of F2.
- 015 Mid yellow grey silty clay loam with 25% small to medium gritstones. Fill forming packing of post hole F4.
- 016 Dark yellow grey silty clay loam filling site of post pipe for F4.
- 017 Spread of hard packed small gritstones in a compact mid to dark grey shale matrix forming natural bedrock in south west corner of trench.
- 018 Layer of light grey silty clay loam with occasional small sandstones and flecks of charcoal. Cut by F2, under 002.
- 019 Flat large stone against south east edge of trench in eastwards extension. Runs under section. Possibly part of a structure. Under 002.
- 020 Highly fired, dark grey red clay forming base of hollow under site of furnace at east end of kiln F2. Under 013 and 014.
- 021 Band of burnt bright red clay forming a semi-circle against west side of 020, part of furnace area at east end of F2. Under 013 and 014.
- 022 Hard baked mid grey clay forming semi-vitrified floor of kiln F2. Under 013 and 014.
- 023 Light yellow and cream silty clay with frequent small to medium gritstones. Sub-natural?
- 024 West wall of F2. Joins to 004 and 025.
- 025 North wall of F2. Joins with 024.
- 026 Mid yellow clay with frequent small patches of burnt red clay and moderate small to medium gritstones and flecks of charcoal. Upper fill of F2 at its east end.
- 027 Mid yellow clay. Natural. Cut by east end of F2.
- 028 Mid grey hard baked clay. Upper side of back of furnace area in F2. Over 027, under 0013.

Overview and Discussion

As part of the Castleshaw Roman Forts Hinterland Survey, the Friends of Castleshaw Roman Forts (FoCRF) carried out an archaeological excavation of an area of land east of the defences at Castleshaw Roman Fort (Heritage Asset No. 1017837), centred on grid reference SD99830953. This took place over 19 days in late spring and summer 2025.

Within the north half of the military annexe 11 trenches were excavated along with 4 test pits over 15 days in August and early September. Prior to that 4 days in May and June saw 10 test pits and one trench reveal the terminus of the fort east ditch near the south east corner along with two ditches marking the north east corner of the annexe defences.

There was considerable evidence, in the form of post holes and foundation slots, for timber buildings. There is more work to do to further define the extent and form of the buildings, but a clearer picture is emerging of their layout and method of construction. The southern wall foundation slot for these buildings runs for at least 14 metres, with the eastern end yet to be found. The south wall was set against a stone platform which was accessed from the fort east gate via a gravel track. A substantial north wall foundation trench runs for over 10 metres with neither the east nor west ends yet defined. This gives a width of 9 metres for the timber buildings, with evidence for an internal east to west wall dividing the building in half and with several internal partition walls evident. The timber building foundations took the form of post-in-trench or sill beam construction. An unexpected bonus, given the site's acidic soils rarely preserve organic remains, was the discovery of preserved timbers in Trench 12, located on the west side of the building at a depth of 1.2 m and sealed under a dense clay deposit. The timbers were all laid horizontally and took the form of a cross beam with planks laid at right angles to it. These may be part of a partly revealed floor or, alternatively, a collapsed ceiling or wall. It is possible that this was a sunken storeroom, but further research needs to be undertaken on this.



Overhead view of the trenches on the penultimate day of excavation with south being at the top of the photo.

The timber buildings belonged to a first phase of activity, when the fort was established in the AD 70s. They appear to have been short lived before being dismantled and the area covered with clay and shale to create a level surface for intensive cooking activity. This took the form of clay ovens for roasting meat and stone ovens for baking bread. A second circular stone oven base was found to go with one discovered last year. These were dome shaped and flanked a stone walled, sunken grain drying kiln. In 2025 a second kiln was discovered to the east. It was of similar construction ie. being a roughly rectangular subterranean structure with 3 walls which would have supported a floor where the grain was laid to dry. There was a bowl-shape open end where the furnace was set so that warm air could circulate under the raised floor. From the base of the kiln within a sampled charcoal layer came a handful of spelt wheat and barley grains. Previous pollen analysis has demonstrated that spelt wheat was grown in the valley at the time of the fort and this would have required drying before being stored or ground into flour. Several hearths were revealed, one of which (F7 in Trench 16) had a charcoal rich layer which contained 184 charred barley grains and a further 32 with intact chaff. There were also 11 charred spelt wheat grains and 92 indeterminate grains. Analysis of charcoal samples showed that locally growing oak, hazel and willow/poplar were used as fuel. The function of the kilns was possibly multi-functional, as well as the drying of grain for storage/consumption, they may have been used for malting barley for use in beer making. It is known for example that beer was the favourite drink of Batavian soldiers at Vindolanda on the Roman frontier in the early 2nd century AD (McLaughlin 2018). Further research is required on this aspect.

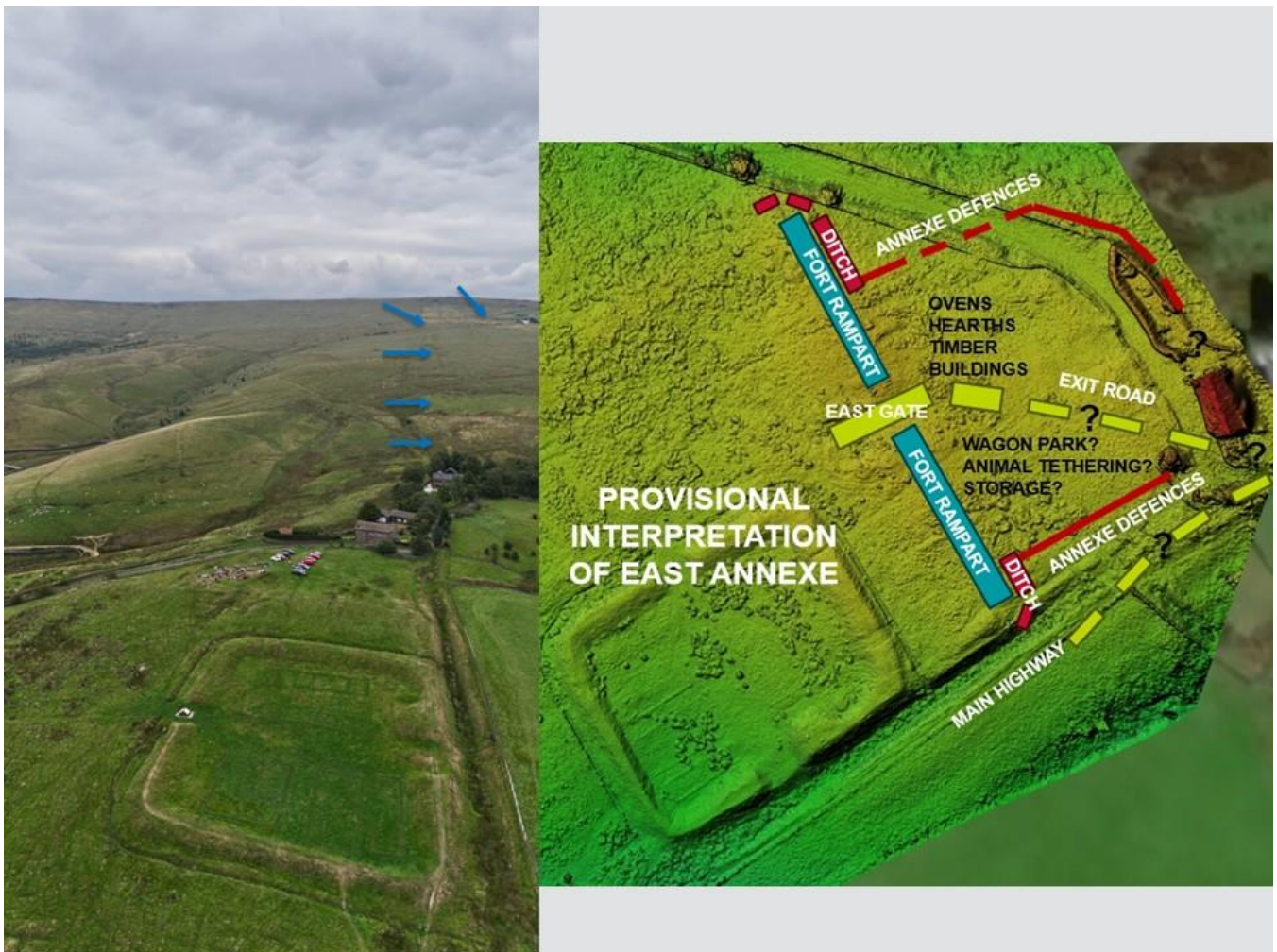
The north east corner of the annexe defences was located through the discovery of 2 ditches just beyond the east/north side of Dirty Lane. It was thought that the eastern defences had been destroyed by Dirty Lane together with the current and former houses that occupied this area, but the ditch system is now known to exist further east so there is an opportunity to better define the extent of the annexe.

The terminus of the fort ditch was found only c 5 metres north of the south east corner of the fort. This contrasts with the longer, 22 m section of ditch further north. Projection of the excavated sections of the southern annexe rampart indicate that the ditch terminates just beyond the junction with the rampart, reciprocating the arrangement further north. The length of rampart with no accompanying ditch on the east side of the fort can now be calculated as 67 m.

Several Roman pottery finds including two types of grey ware, a cream ware base, an orange-red mortarium base, and an amphora body sherd came from Trench 20, along with mysterious iron objects located at the base of two adjacent sill beam foundation slots. Elsewhere, occasional sherds of Roman

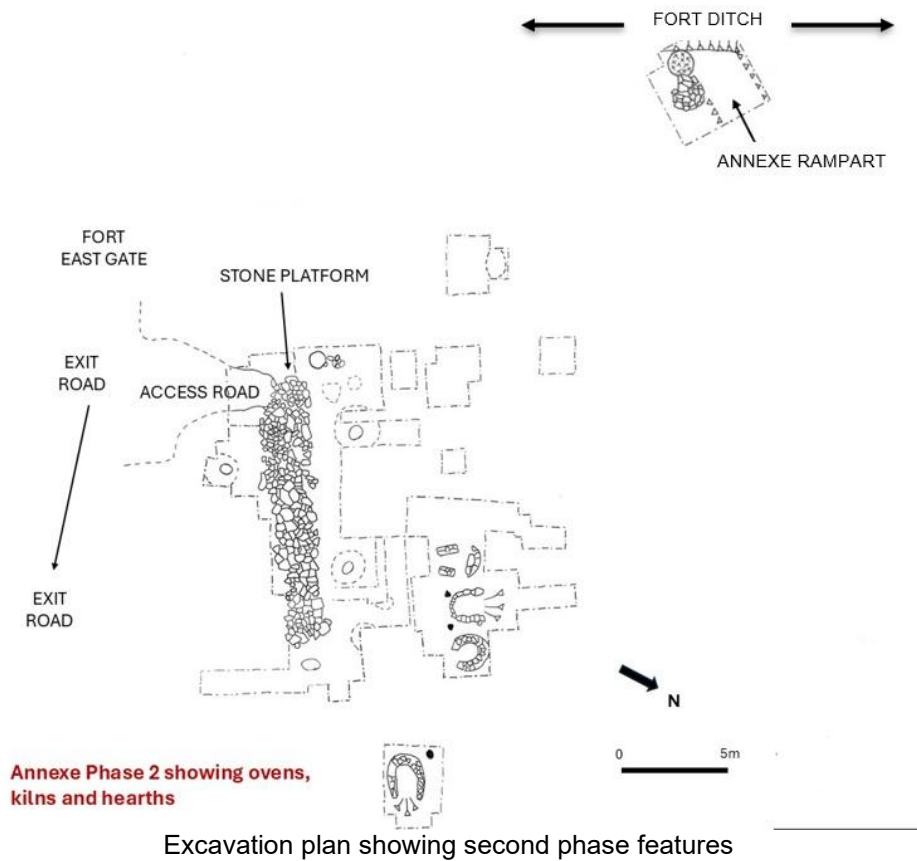
pottery, lead, nails and tile fragments have been found. This is in keeping with previous seasons and supports the late 1st century AD date for both phases of the annexe. However, there were several later features/deposits evident in Trenches 17 and 22, alongside the stone platform, which might belong to the early 2nd century AD fortlet phase.

The 2025 excavations reinforced the interpretation set out in last year's report on the 2024 excavations (Redhead 2025). The archaeology demonstrates a second phase of intensive cooking activity in the north half of the annexe. Was this to provide food and drink for travellers using the busy highway linking the legionary fortresses at York and Chester? There is a steep climb up to Standedge immediately to the east of Castleshaw fort, so perhaps draft animals would be kept in the southern half of the annexe, which is almost devoid of Roman features, and hitched up to wagons to help with the steep climb to Standedge at the head of the Castleshaw valley. Perhaps the function of the annexe can be equated to that of a modern motorway service station. The lack of a defensive ditch between the annexe and the fort suggests that the function of the annexe was military and controlled by the fort's commander.

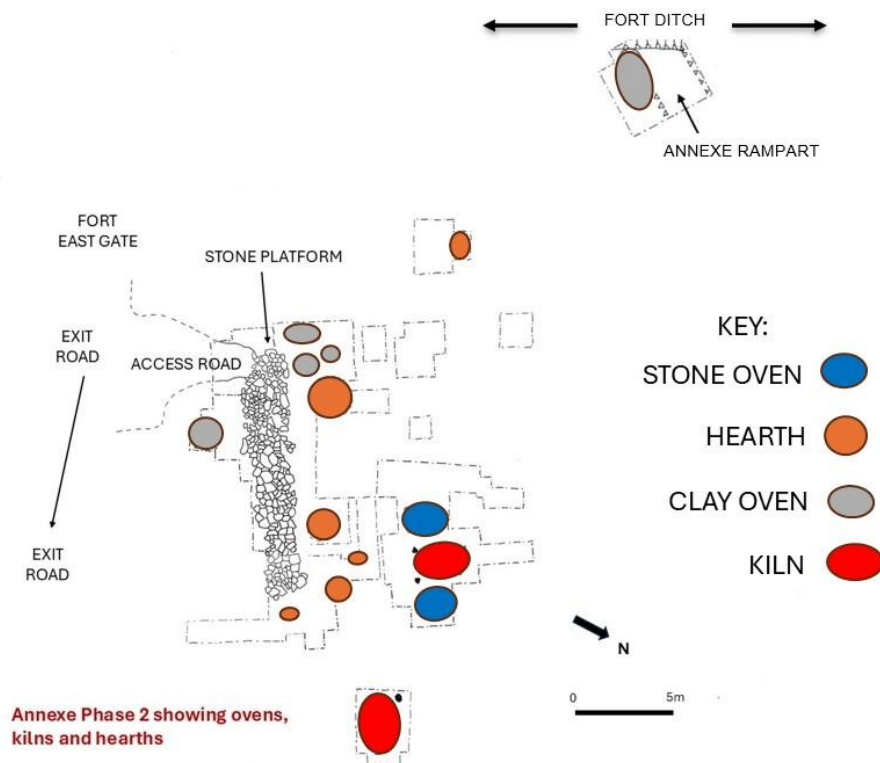


Updated interpretation plan of the military annexe showing the extended eastern defences alignment (right), whilst the photo on the left shows the Roman highway's steep ascent towards Standedge eastwards from the fort.

The second phase plan of ovens, hearths and kilns is updated below and provides evidence for deliberate positioning of these various features.



There appears to be a form of zonal planning as the three main types of food processing/cooking features occupy separate areas. This can be seen in the following plan.

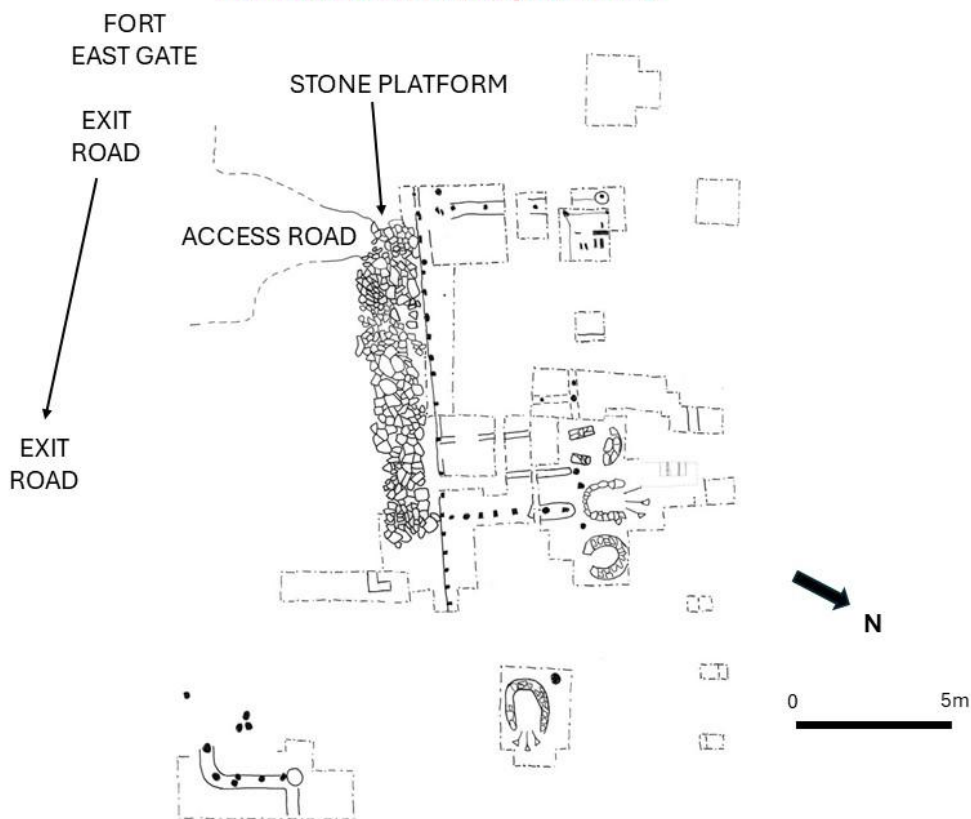


Clay ovens are focused near the western end of the stone platform and against the rampart in the north west corner of the annexe whereas hearths, with the exception of one outlier, are close up to the north and east edges of the stone platform. Stone ovens and kilns form a distinct cluster away from the platform to

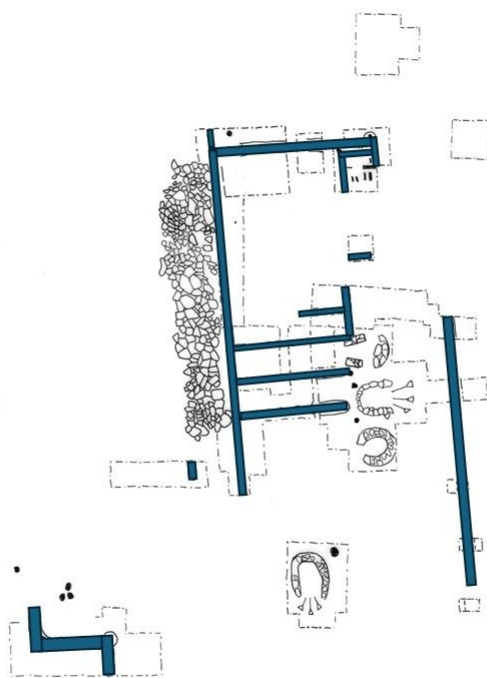
the north, with the most recently discovered kiln a little further away to the north east. It is possible that more kilns and ovens will be present and this will be a focus of the 2026 excavation.

The 2025 excavations have provided more information on the first phase which comprised an extensive range of timber buildings which appear to have been short-lived. The plan below shows the extent of excavated structures but there are many gaps in our current knowledge of the extent and planform of these buildings. Further work will be undertaken in 2026 to obtain better definition.

Annexe Phase 1 showing timber foundation slots and post holes



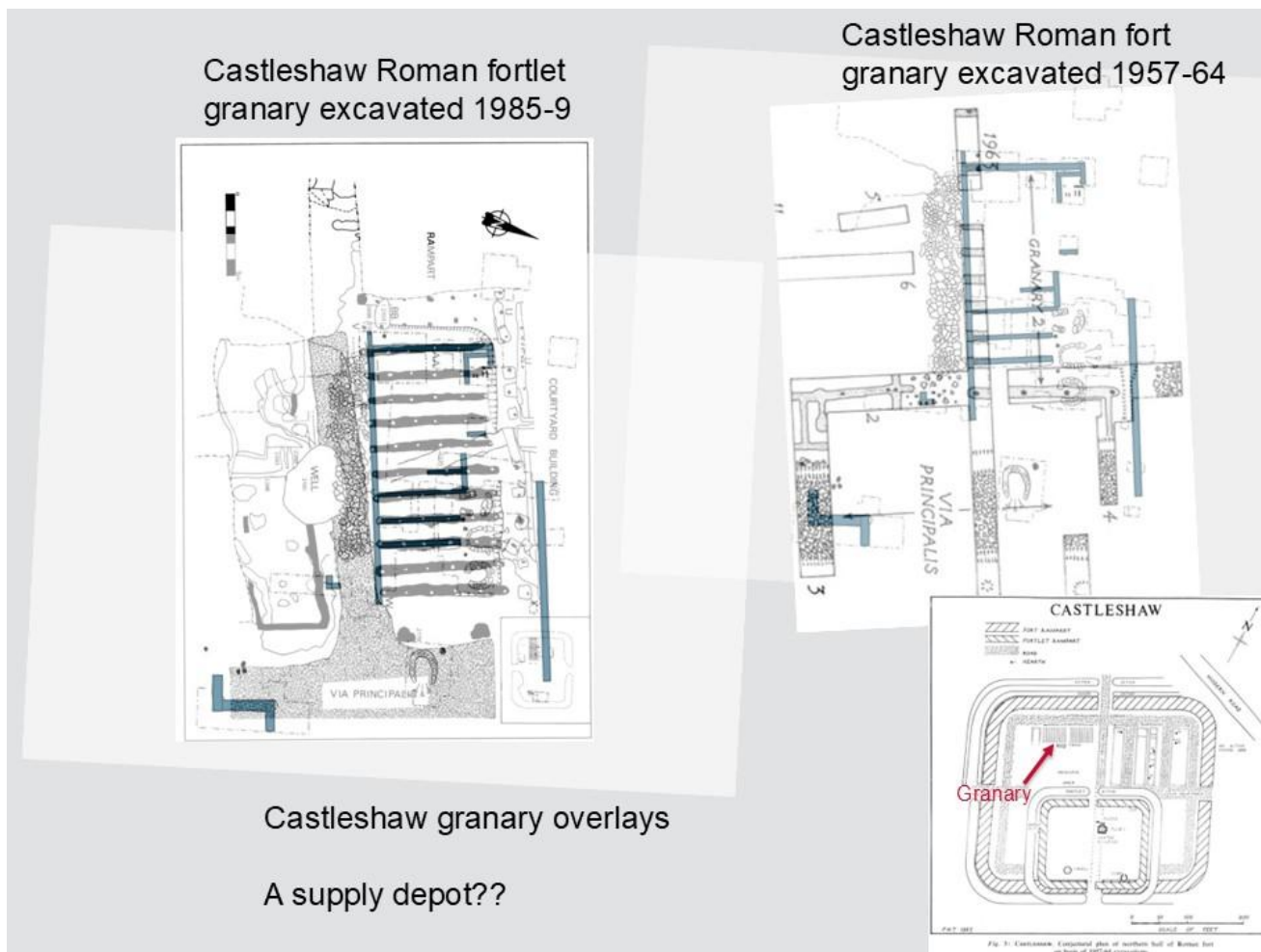
Plan showing all the post holes and building slots excavated to date.



Plan showing building foundation slots based on excavation and projected alignments.

The plan above shows the main building to the north of the stone platform, whilst indications of two further structures have come to light to the east of the platform. In 2023 Trench 1 revealed possible building foundation slots sealed under the service road linking the east gate to the stone platform (Redhead 2024) while further east a stone-free rectangular area alongside the main road revealed during the east gate excavations in 2014 (Nash et al 2014) is considered to indicate a building. This theory was reinforced in 2024 when the corner of a building was discovered in Trench 10 just beyond the south east end of the stone platform (Redhead 2025).

4 internal partition walls were revealed in the main building comprised 3 horizontal beam slots with a more substantial post-in-trench slot to the east. The slots were set 1.35 m apart which makes for very narrow rooms. The emerging plan of the building can be compared with the granary excavated by GMAU in the later fortlet (Walker 1989) and that within the fort which was excavated by Rosser and Thompson 1957-64 (Thompson 1967), it can be seen that there is a good correlation. Therefore, the slots may have been to support a raised floor. The illustration below shows the annexe building plan overlaid on to the fortlet and fort granary plans. Potentially, the building alongside the stone platform is a smaller-size granary. If this is the case then it suggests that the annexe, in its first phase when the fort was built in the AD 70s, served as a depot to support the campaign further north in the Pennines. At the moment this theory is speculative as further investigation is needed to elucidate a fuller plan – this will be a key focus of the 2026 investigations.



Castleshaw granary overlays
A supply depot??

Castleshaw fortlet and fort granary overlaid on to the annexe foundation trench excavation plan

Our understanding of the site is evolving with each season of excavation. The annexe has provided remarkable archaeology given that it was not even known about until 5 years ago.

It is worth repeating the discussion from the 2025 report and updating it as appropriate:

Why an annexe and not a *vicus*? An annexe was a military enclosure attached to a fort which was dedicated to essential functions not usually undertaken in the fort; this might include the housing of animals, goods in transit, food processing or minor industrial processes (Hanson 2007). The emerging evidence suggests all of these could be applicable to Castleshaw. Here the fort lies next to the main trans-Pennine highway which would have been busy with travellers who, going eastwards, were faced with a very steep climb up to Standedge. Perhaps draught animals were held in the annexe to be hitched up to wagons before making the ascent. Accommodation, food and drink may have been prepared for travellers and the team looking after the animals. This scenario would accord with the southern half of the annexe being a levelled, blank area which may have been a corral for the animals and a wagon park. The northern half, by contrast, is busy with timber buildings, ovens, and hearths. Despite the east side of the fort being the flattest, and therefore the most vulnerable side, the fort's east rampart is not defended by a ditch for much of its length – a most unusual and rare situation for Roman forts. This is due to the presence of the annexe. A *vicus* is a civilian settlement attached to a fort and sometimes defended by a rampart or/and ditch, but it would be unthinkable and unique for there to be no ditch separating the civilians from the fort.

The Agricolan fort at Elginhaugh in Scotland was, like Castleshaw, a short-lived site with perhaps a decade of occupation. The site was fully excavated and provides a fascinating and contemporary comparator for Castleshaw. Hanson, in his publication of 2007, describes the excavation and function of what he interpreted as an annexe attached to the fort (Hanson 2007, p 87-100). He pointed out the issue with comparative analysis in that so few annexe interiors have had extensive archaeological investigations, and that defended *vici* may be confused in some instances with annexes. He considered the rampart and ditches surrounding the Elginhaugh annexe to be very slight compared with the fort defences and more to demarcate the annexe as an ancillary enclosure. Similarly, at Castleshaw the bank and ditch that have been discovered on the south and north side of the annexe, and the recently revealed double ditch on the east side, are less substantial than the defences of the fort. He also mentions that at Malling and Cargill forts in Scotland the annexe is separated from the fort by only a rampart. It is worth noting that Slack fort near Huddersfield, 8 miles east of Castleshaw and possibly built by the same unit, also has a section of rampart with no ditch; this coincides with the location of the bath house which is protected within a small annexe (Bidwell et al 2018). To date, no bath house has come to light at Castleshaw fort and the recent excavations have demonstrated that it is not within the military annexe. At Elginhaugh there were several phases of activity in the annexe even though it was a short-lived site. This was particularly true of the industrial processing areas where there was intensive use. The road was the focus for activity, with hearths, ovens, pits and iron working. Foundation slots for simple, timber strip buildings were found. Activity decreased away from the road and in one largely blank area evidence for a possible rail fence was found which may have served to tether horses. Hanson suggested this area was used as a wagon park and for horse grazing (Hanson 2007). It is suggested that a similar arrangement existed at the Castleshaw fort annexe in its second phase.

As with Elginhaugh the focus of activity appears to be alongside or near to the road running through the annexe from the east gate. The 2025 excavation showed several phases and relatively complex stratigraphy within a discrete area of the annexe. There was an initial phase of timber buildings, with the emerging plan form suggesting that they were not simple strip buildings as at Elginhaugh but more for storage perhaps indicating a depot. The second phase saw intensive use of ovens, a number of simple clay ones for what appears to be meat cooking together with a line of stone structures including ovens and a kiln, with another kiln set further back. A long, narrow stone platform provided access. There is evidence for sub-phases as the clay ovens appear to have had a short life span and were constantly being replaced. Soil samples have now produced charred spelt wheat and barley grains from one of the kilns and a hearth suggesting that locally grown crops were harvested and dried on site (McKenna in this report). No quern stones have yet come to light within the annexe but the stone ovens were probably used for baking bread. Similarly to Elginhaugh, the annexe activity probably took place over a short span of years, from the AD 70s to the mid-90s at which time the fort was abandoned. Unlike Elginhaugh, the focus of activity did not straddle both sides of the road but was limited to the north side. Another difference is that there is as yet no evidence for metal processing although lead debris has been found on and near the stone platform. However, iron smelting waste has been found outside the northern defences at Castleshaw by archaeological evaluations carried out by the Friends in 2016 and 2017, so that might be the area that was the focus of metal working. The area to the north of the fort is badly truncated by post medieval ploughing; however, investigations have demonstrated the presence of a fort double ditch, the terminus of the fort

north exit road 50 m from the north gate, together with evidence for a building platform and stone surface (Redhead 2016 and 2017).

A recent review of Hartley's 1968-9 excavations at Slack Roman Fort near Huddersfield included a short discussion on comparative fort annexes (Bidwell et al 2018). Slack is the next fort eastwards from Castleshaw being only 8 miles away. It has a larger enclosure to the north which incorporated the main trans-Pennine highway that the fort guarded. This was a large annexe enclosing a *vicus* (civilian settlement) with defences being added in the early 2nd century AD. There is also a much smaller annexe attached to the fort's south east corner that encompasses a bath house. Interestingly, as with Castleshaw, the fort defences opposite the annexe lack a ditch. The bath house at Castleshaw has yet to be revealed and when that happens it will be interesting to establish if it sits within a defended enclosure. The study considers that annexes were commonplace in the late first and second centuries, for instance of 16 Roman forts in Wales and the Marches where substantial archaeological investigations have taken place no less than 13 have one or more annexes. But many of these are defended civilian settlements rather than those with a military function such as the one containing the bath house at Slack. It would appear that the range of sizes, characteristics and functions, and of course dates, vary tremendously so that they cannot easily be assigned simplified types or groups.

Castleshaw will make a significant contribution to the discussion on annexe typology. In 2025 significant advances were made in establishing the eastern boundary of the annexe but some further work is still required to define its size and shape. Our understanding of the annexe's function developed considerably through the 2025 excavations, with the discovery of more hearths, an oven and grain drying kiln supporting the existing theory of its use as a food production centre in the second phase. A very different role in the early, first phase is emerging, in the form of an extensive range of timber buildings perhaps used as a supply depot. The fact that the Castleshaw annexe has two phases of very diverse character, within the early campaigns in the north of Britain, only adds to its considerable research interest.

Research Strategy

In terms of the archaeological research strategy for Castleshaw Roman Forts (Redhead 2013), the 2022 to 2025 investigations have contributed to:

Research Objective 8: Understanding how the fort functioned.

Research Objective 9: Understanding the road network.

Research Objective 10. Understanding the immediate hinterland.

The greatest contribution has been towards Objective 8, in that the presence of a military annexe on the east side of the fort has recently been established. Objective 9 has seen limited progress due to post medieval disturbance, although some areas of potential Roman road survival can now be dismissed. The 2025 investigations did not focus on Roman roads. In relation to Objective 10 the discovery of the annexe is a major step forward. The recent excavations have made significant progress on understanding the layout and function of the annexe, with two distinct phases of operation with very different functions. In 2025 further clarity was provided regarding the location of the annexe's eastern defences.

It is suggested that the annexe was built in the AD 70s based on its relationship with the fort's eastern defences. However, this does not preclude re-use of the area during the later fortlet occupation. Reasons for interpretation as a military annexe rather than a civilian settlement (*vicus*) are set out in the discussion above. This means that we still do not know if the fort was in use long enough to establish a civilian settlement as no evidence has yet been found for a *vicus*, although an extra-mural civilian settlement attached to the later fortlet and dated to around AD 120 was postulated for remains excavated on land opposite the southern defences by GMAU in 1996-7 (Redhead 1997). Based on our current knowledge, the Agricolan fort at Castleshaw can be compared to the extensively excavated fort at Elginhaugh in Scotland, which is of similar date and where there was very little evidence for a civilian presence (Hanson 2007).

The recently revised Historic Research Framework for the North West of England (Nevell & Redhead eds, 2023) has a section dedicated to research questions under the Roman agenda theme *R3: Military Activity* (Philpott, 2023, 109). Two of the questions have relevance to the current investigations at Castleshaw:

Q11. How can we identify typologies and the development of military sites and Roman road systems?

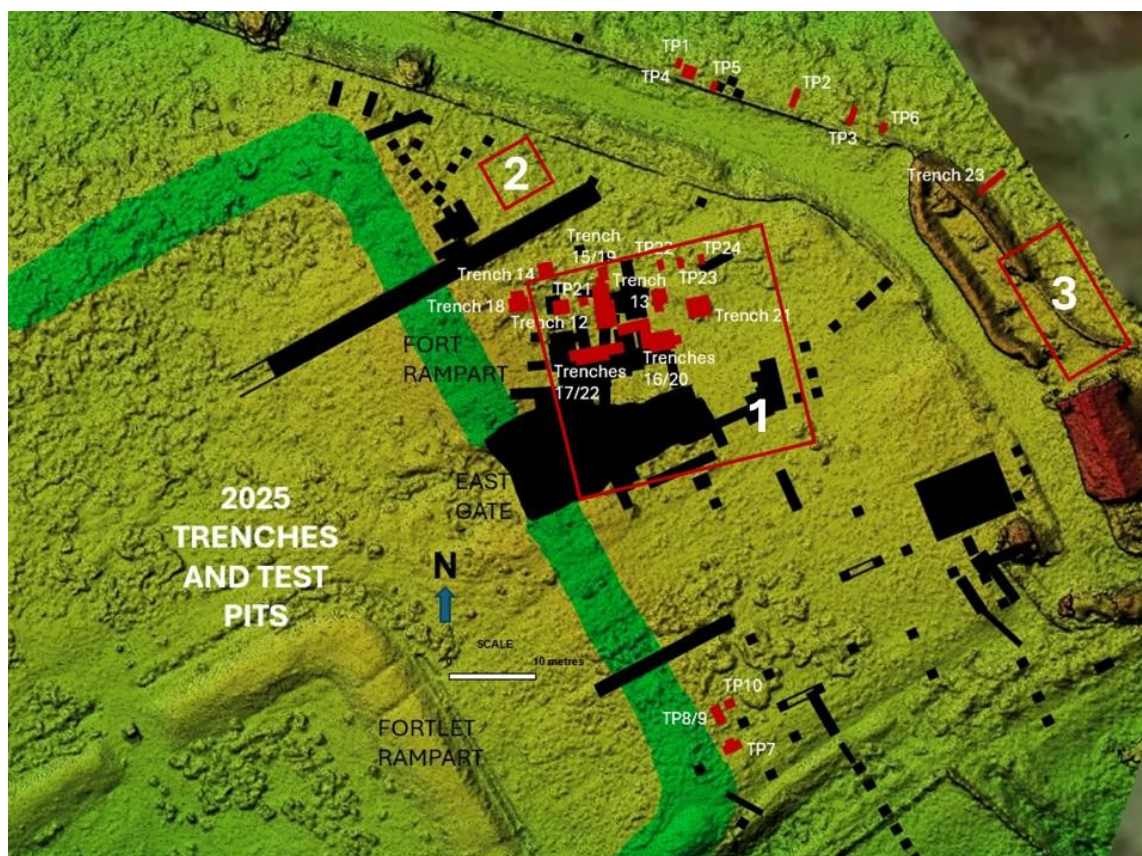
Q14. What were the date, extent, function and changes over time of extra-mural settlement (*vici*) in the region?

As set out above, the discovery of an annexe attached to the east side of the late 1st century AD fort is a significant advancement in our knowledge of the character, form and development of the Castleshaw site. The main highway linking Chester to York fortresses is clearly visible in the Castleshaw valley as it approaches the fort from the west and as it climbs out of the valley to Standedge to the east of the fort. But its alignment near the Agricolan fort is uncertain, partly due to it being diverted around the north side of the fortlet in c AD 120, so there is more research to do on this. In this regard, it is worth noting that in 2023 a separate piece of archaeological investigation was undertaken by Phil Barrett and Tim Jeffrey in Daycroft Field opposite the southern fort defences to look for the road. It combined Ground Penetrating Radar, Resistivity and Magnetometer surveys supported by Lidar analysis (Jefferey with Barrett 2024). The results were positive in showing the original highway running close to the fort's southern defences. The reference in Q14 to *vici* is interesting as there is a gap in the research agenda relating to military annexes - in terms of their distribution, chronology, form, and relationship to a fort and *vici*. Hanson has identified the paucity of archaeological excavation of annexe sites in Scotland and possible confusion with *vici*; does this also apply to the North West of England (Hanson 2007)?

Recommendations

The results of the 2025 excavations inform a strategy for 2026 in what is anticipated to be the final major investigation of the annexe. However, it should be noted that the 2026 excavations will not re-open and extend Trench 12 where the Roman timbers were found. This will be the subject of a follow-on project, possibly in 2027, once suitable expertise and funding is acquired, so that appropriate scientific analysis can be pursued.

Three areas are proposed for investigation in 2026, with the focus being once again on the northern half of the annexe:

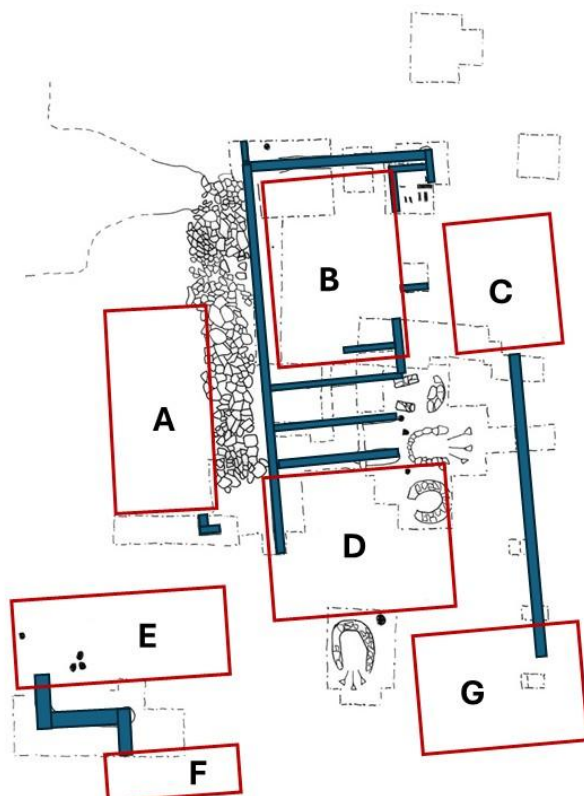


Plan of the 2025 excavation trenches and test pits with proposed areas for 2026 bounded in red.

Area 1: this will be the main focus of the 2026 investigations. In particular it is intended to establish the planforms of timber buildings and the presence of more ovens/kilns. This large area is broken down into smaller parts as shown on the plan below and the accompanying description.

Area 2: it was not possible to undertake work in this area in 2025 so this will be undertaken in 2026. It is intended to define the line of the annexe defences on the north side. A section through the rampart was recorded in Trench 3 in 2023 but the form of the ditch and the line of the northern defences require further investigation. The 2025 test pits on the north side of Dirty Lane established the north east corner of the annexe defences in the form of a double ditch. It will be interesting to see if this arrangement continues along the north side to link up with the fort ditch.

Area 3: The eastern side of the annexe was defined through the discovery of a double ditch in Trench 21 in 2025. Further south the course of these defences needs to be determined through trenching and test pits so that we can achieve a better understanding of the size and shape of the annexe.



Detail of proposed areas of investigation in Area 1.

Area 1 rationale for proposed trenching:

A = This area lies between the service road to the west where a possible building foundation slot was revealed in Trench 1 in 2023 and the building slot found in Trench 10 in 2024. The presence and character of this building which lies between the fort exit road and stone platform will be investigated.

B = The internal arrangement of this building will be further examined to see if the pattern of closely spaced internal walls continues, which will inform our understanding of the building's function.

C = It is important to locate the corner of the building represented by a substantial north wall foundation slot.

D = This will follow the southern foundation slot to locate the terminus/corner and establish the eastern external wall of this substantial timber building. There may be further evidence for internal walls. There is also the potential for another kiln or oven.

E = A series of post holes and a building foundation slot were partly revealed in Trench 2 in 2021 and Trench 4 in 2023. It is intended to re-visit this area to better define the building plan.

F= As for E above, the building found in Trench 4 in 2023 needs further investigation to define its planform.
G = In 2025 Test Pits 23 and 23 indicated that the corner of the timber building represented by the substantial north foundation slot lay between them. This area needs further excavation to confirm this and to locate and define the east wall foundation. There is also the potential for another kiln or oven.

These areas will be examined through a combination of trenches and test pits, using the methodology established in previous seasons. Investigations may be undertaken outside these areas where the extent of significant archaeological remains need to be defined.

Further soil sampling and analysis will be pursued in the proposed 2026, following the successful results from 2025. A scheme will be devised based on discussions with relevant experts.

Archives

Finds from the Friends excavations at Castleshaw are deposited with the Saddleworth Museum in Uppermill and a small band of Friends volunteers have been working through past excavation assemblages to fill in card catalogues for the finds deposited with the museum. These records include providing accession numbers and will be computerised at a later date.

Concern was raised at the large quantity of 19th and 20th finds with little or no archaeological value that were being accessioned. Most of these have come from the topsoil and are therefore unstratified. Norman Redhead, as archaeological adviser to the Friends, sought and obtained permission from the Museum Curator, Historic England and the landowner United Utilities to re-bury these more recent finds on site. This applies to the excavations from 2021 onwards so that for these years all Roman and Medieval period finds and a selection of later artifacts are retained for the museum. The bulk of the 19th and 20th century assemblage has been reburied in a hessian sack on the edge of the site. This was located just south of the cottage site in the backfill of Test Pit 19 from the 2021 excavation (grid reference: SD 99978 09676).

From the 2025 excavations the following finds have been re-buried:

TP 1 side of drain
TP2 002 (plough soil)
TP 6 001 (topsoil)
TP 7 001 and 002
TP 10 001/002 (1 bag)
TR 5 Topsoil
TR 13 001, 002 and 008
TR 15 001/002 (1 bag)
TR 19 Top/plough soil (1 bag)
TP 22, 23 and 24
TR 16 001 and 002
TR 20 001/002 (1 bag)
TR 17/22 001/002 and south ext. 001/002
TR 18 003
TR 21 001/002 (4 bags)

Acknowledgements

All of this has only been made possible through the fantastic and dedicated work of the Friends of Castleshaw Roman fort volunteers. 37 Friends volunteers took part in the dig this season and there were 364 visitors. More details of the excavation can be found on our Dig Diary via the home page of the Friends Castleshaw Roman Fort website <https://www.castleshawarchaeology.co.uk/> There are also reports on previous investigations to explore.

They are: Jayne Redhead, Sue Exon, Nick Brook, Gill Hoyle, Mark Townsend, Nat Townsend, Harrison Duddle, Steve Reynolds, Janet Hannah, Daniella Blewitt, Andrew Church, Bob Mawhinney, Jan Mawhinney, Lesley Mills, Joolze Dymond, Kurt Hunter-Mann, Stuart Kitchen, Ian Rowley, Mike Lloyd, Brian

Gibson, Dee Whitmore, Roy Barnes, Matthew Love, Dominic Wathey, Steve Milne, Ethan Green, Hannah Collingridge, Tim Jeffrey, Penny Meadowcroft, Craig Almond, Gareth Barnes, Richard Glover, Ben Ashcroft (and Leo) , Pam Sefton, Phil Martlew, Geraint Johnes.

A big thank you to Jayne Redhead for doing 105 guided tours involving 364 visitors, and to our neighbour Linda who did a great job as usual in keeping us all going with her supplies of drinks, cakes, fruit and snacks.

Many thanks also to United Utilities for permission to undertake the excavations on their land.

Sources

Site investigation reports and relevant publications can be accessed online as pdfs.

Internet source: <https://www.castleshawarchaeology.co.uk/>

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Appendix

Assessment of paleoenvironmental samples from Castleshaw Roman Fort Annexe, Saddleworth, Oldham, Lancashire

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Introduction

Eleven samples were taken during a volunteer led archaeological excavation at Castleshaw Roman Fort Annexe, Saddleworth, Oldham, Lancashire. Recent archaeological excavations have uncovered a military annexe against the east side of the fort revealing a number of oven bases represented by charcoal and stone platforms, together with two stone lined kilns and oxidised red clay indicating possible hearths. The samples taken are:

Sample Number	Context Number	Trench	Context Information
1	003	19	F1 Upper slot fill
2	008	19	F1 Lower slot fill
3	005	12	Upper charcoal layer
4	014	12	Lower fill of mixed clay and charcoal
5	010	20	F7 Hearth - Charcoal rich layer
6	012	21	F2 kiln infill
7	014	21	F2 Kiln charcoal and daub layer
8	013	18	F4 Hearth – charcoal rich deposit
9	011	15	F2 stone oven rake out
10	013	21	F2 kiln – basal charcoal layer
11	013	22	F6 – Linear feature

Methods

Eleven samples were submitted for an assessment of their paleoenvironmental potential. The samples were processed by the author using the bucket flotation method (Miller 1988). The light fraction (flot) was collected in a 250 micron sieve, and the heavy residue in a 1mm sieve. Once dry, a magnet was run through the heavy residue to recover any magnetic material that may include hammer scale (Dungworth & Wilkes 2007). The heavy residues were scanned in their entirety: any artefacts or bones were removed and recorded, and any plant macrofossils identified.

The flot was examined under a low-power binocular microscope at magnifications between x12 and x40. A four point semi quantitative scale was used, from '1' – one or a few specimens (less than an estimated six per kg of raw sediment) to '4' – abundant remains (many specimens per kg or a major component of the matrix). Data were recorded on paper and subsequently on a personal computer using a Microsoft Access database. The results of this can be seen in Table 1 at the end of this report. Identification of the charred plant remains was on observations of gross morphology and surface and cell structure, and where necessary relevant reference manuals (Jacomet 2006, Biejerinkc 1976, Jones – unpublished and Zohary & Hopf 2000), online resources (<http://www.plantatlas.eu/za.php>), and the authors own reference collection. Taxonomy and nomenclature follow Stace (1997). The results can be seen in Table 2 at the end of this report.

The flot was then sieved into convenient fractions (4, 2, 1 and 0.3mm) for sorting and identification of charcoal fragments. Identifiable material was only present within the 4 and 2mm fractions. A random selection of ideally 100 fragments of charcoal of varying sizes was made, which were then identified. Where samples did not contain 100 identifiable fragments, all fragments were studied and recorded.

Identification was made using the wood identification guides of Schweingruber (1978) and Hather (2000). The full species list appears in Table 3 at the end of this report.

Results

The presence of root / rootlet fragments and earthworm egg capsules within some of the samples provides evidence of bioturbation, and therefore some disturbance of the archaeological features.

Hammerscale was absent from the samples thus indicating no evidence of metalworking in these features. Burnt bone fragments were present in Sample 6, which also contained a single possible iron nail. A single fragment of glass was recorded from Sample 4. Mortar was recovered from Sample 10. The mortar was not indicative of date, however as it originated from the mortared stone wall of the kiln F2 in Trench 21 it is Roman in date.

Plant macrofossils were present in three of the samples. The preservation of the remains ranged from poor to fair, with many of the cereal caryopses being distorted by thermal degradation caused by the charring process and post-depositional processes. Alongside indeterminate cereal grains, the species recorded were spelt (*Triticum spelta*) and hulled barley (*Hordeum vulgare*), with some weed seeds such as grass, the cabbage family (*Brassicaceae*), goosefoot / orache (*Chenopodium / Atriplex*) and unidentifiable chaff fragments.

Charcoal fragments were present in all of the flots and all of the heavy residues, scoring between a '1' and a '4' on the semi quantitative scale. The preservation of the charcoal fragments ranged from poor to good. The majority of the fragments were too small to enable successful fracturing that reveals identifying morphological characteristics. Where fragments were large enough, the fragments were very brittle, and the material crumbled or broke in uneven patterns making the identifying characteristics difficult to distinguish and interpret, and so only a limited amount of environmental data can be gained from the samples. Identifiable remains were however present in all of the flots, the results of this analysis can be seen in Table 2 below.

The total range of taxa comprises oak (*Quercus*), willow/poplar (*Salix/Populus*) and hazel (*Corylus avellana*). These taxa belong to the groups of species represented in the native British flora. A local environment with a relatively small range of trees and shrubs is indicated from the charcoal of the site. All of the samples produced varying but generally small amounts of charcoal. As seen in Tables 2, oak was the most frequently recorded species in terms of frequency and volume, dominating all of the samples. Hazel was recorded in five of the samples and willow / poplar five of the samples. It is possible that these were the preferred fuel woods obtained from a local environment containing a broader choice of species. Bark was also present on some of the charcoal fragments, and this indicates that the material is more likely to have been firewood, or the result of a natural fire. The compositions of the samples are all similar, it is probable therefore that these small assemblages of charcoal remains reflect the intentional deposition or in situ burning of fuel wood.

Generally, there are various, largely unquantifiable, factors that affect the representation of species in charcoal samples including bias in contemporary collection, inclusive of social and economic factors, and various factors of taphonomy and conservation (Thiery-Parisot 2002). On account of these considerations, the identified taxa are not considered to be proportionately representative of the availability of wood resources in the environment in a definitive sense, and are possibly reflective of particular choice of fire making fuel from these resources.

Discussion

Few artefactual remains were recovered from this phase of excavation, especially that could be used for dating evidence. The mortar provides evidence for some building activity at or in the vicinity of the site during the Roman period, including the construction of the kiln walls in Feature F2, trench 21. An absence of hammerscale indicates that the burning activity was highly unlikely to be associated with iron working. The small fragment of glass was not diagnostic.

Charred plant remains from three samples provided information relating to the human diet and the function of the ovens / hearths. Barley and spelt appear to be the main cereal crops exploited at this site. They may have been charred accidentally during cooking and then deposited along with waste from the hearth (Giorgi 2006). The relatively small amount of weed seeds and chaff fragments indicates cleaned grain. The fact that some of the barley grains from sample 5 -hearth F7 were contained within their chaff, may indicate that grain was stored / processed in a cleaned state. It is probable that this sample represents the deposition of was associated with crop processing or storage. The other two samples contained very low numbers of remains, and it is likely that these represent windblown/dispersed settlement waste rather than deliberate inclusions.

The cereal assemblages signify that crop processing activities were likely taking place at or in the vicinity of the site. Previous excavations at the site also produced limited evidence of this. Excavations from 2024 (Redhead 2025) produced no evidence of charred plant remains. Excavations from 2014 (University of Salford 2016) produced a small suite of plant macrofossils including, hazel nutshell fragments and a single spelt wheat glume base. Whilst the evidence for cereals was limited, the presence of the glume base does indicate that spelt was being utilised at the site. Pollen from the site also contained evidence for a cereal-type and a herb rich grassland. Excavations from 1996 (GMAU 1997) produced a pollen sequence that indicated an herb rich grassland with some woodland also present. The remains of cereal within the landscape was indicated by the presence of cereal (*Cerealia*) pollen that was attributed to the wheat species.

Spelt wheat and hulled barley are the dominant species recorded from sites across Britain in the Roman period (Lodwick 2017, Greig 1991, Giorgi and de Moulins 2006). Charred cereals, such as the ones found at this site, can be found amongst the assemblages of charred plant remains from Roman period sites across the country. Roman military sites from Northern England in general yield surprisingly few significant assemblages. Binchester (Wessex Archaeology 2008) produced small quantities of spelt and barley. This may indicate the lack of remains due to poor preservation in the region, or that local consumption and cultivation was carried out on a small scale. More significant assemblages have been recorded at sites such as South Shields (van der Veen 1988) and Newcastle (Huntley and Daniell 2002).

The presence of charcoal within the samples did offer information regarding which samples were present in the local environment and utilised as fuel. The charcoal remains showed the exploitation of several species native to Britain. Oak has good burning properties and would have made a fire suitable for most purposes (Edlin 1949). Oak is a particularly useful fire fuel as well as being a commonly used structural/artefactual wood that may have had subsequent use as a fire fuel (Rossen and Olsen 1985.) Willow/Poplar are species that are ideal to use for kindling. They are anatomically less dense than for example, oak and ash and burn quickly at relatively high temperatures (Gale & Cutler 2000, 34, 236, Grogan *et al.* 2007, 29-31). This property makes them good to use as kindling, as the high temperatures produced would encourage the oak to ignite and start to burn. Hazel is recorded as a good fuel wood and was widely available within oak woodlands, particularly on the fringes of cleared areas (Grogan *et al.* 2007, 30). It is likely that the charcoal remains relating to the hearths, kilns and ovens at the site represent the remains of fuel waste. Where samples originated from slots and linear features, it is likely that these charcoal remains (consisting purely of oak) are indicative of building materials that were utilised and burnt in situ.

Excavations from 2024 (Redhead 2025) produced charcoal remains that were dominated by willow/poplar, with smaller amounts of oak and hazel also recorded. Excavations from 2014 (University of Salford 2016) provided evidence of charcoal that was characteristic of fuel debris from domestic hearths. It was dominated by oak, birch, hazel, alder, rowan and holly with willow/poplar and remains of apple (Maloideae family) also recorded. Excavations from 1996 (GMAU 1997) produced charcoal remains of pine and oak. The pollen sequence provided evidence of alder, birch and hazel with oak, holly and elm also recorded to a lesser extent.

Recommendations

The samples have been assessed, and interpretable data has been retrieved and is the basis of this report. Further work should be carried out on Sample 5 – the fill (010) of a charcoal rich layer in hearth F7 (trench

20). A more in depth analysis of the plant macrofossils could potentially add further interpretative data to the findings. If required, an assessment and identification of the charcoal remains from the heavy residues may be carried out.

A comprehensive and targeted sampling strategy should be implemented if future work is carried out. Fills of features such as hearths, ovens, ditch slots, pits and post holes should be sampled. Any material recovered by further excavations should be processed to 0.3mm in accordance with standardised processing methods such as Kenward *et al.* 1980, and the English Heritage guidelines for Environmental Archaeology (2002).

Archive

All extracted fossils and flots are currently stored with the site archive in the stores at the Saddleworth Museum / Friends of Castleshaw Roman Fort, along with a paper and electronic record pertaining to the work described here.

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Table 1: Components of samples - Complete list of material recovered from excavations at Castleshaw Roman Fort Annexe, Saddleworth, Oldham, Lancashire
Semi quantitative scale: + 0-10, ++ 10-50, +++50-150, ++++ 150+

Sample Number	1	2	3	4	5	6	7	8	9	10	11
Context Number	003	008	005	014	010	012	014	013	011	013	013
Trench Number	19	19	12	12	20	21	21	18	15	21	22
Feature Number	F1	F1			F7	F2	F2	F4	F2	F2	F6
Feature Type	Upper slot fill	Lower slot fill	Upper charcoal layer	Lower clay & charcoal fill	Hearth - charcoal rich layer	Kiln infill	Kiln charcoal & daub layer	Hearth - charcoal rich deposit	Stone oven	Kiln - Basal charcoal layer	Linear feature
Charcoal fgts.	+++	++++	++++	++++	++++	++++	++++	++++	++++	++++	++++
Earthworm egg Capsules	+		+	+	+	+	+		+	+	
Insect fgts.						+	+				
Plant macrofossils				+	+++		+				
Root/rootlet fgts.	++++	++	++	++	+++	++++	+++	++	+++	+++	++
Sand		+		+						++++	++

Table 2: Plant macrofossils - Complete list of taxa recovered from excavations at Castleshaw Roman Fort Annexe, Saddleworth, Oldham, Lancashire

Sample Number		4	5	5	7
Context Number		014	010	010	014
Trench Number		12	20	20	21
Feature Number			F7	F7	F2
Feature Type		Lower clay & charcoal fill	Hearth - Charcoal rich layer	Hearth - Charcoal rich layer	Kiln - charcoal & daub layer
		Flot	Flot	Heavy Residue	Flot
Latin Name	Common Name				
<i>Chenopodium / Atriplex</i>	Goosefoot / Orache			2	
BRASSICACEAE	Cabbage family			1	
POACEAE	Grass family			6	2
<i>Hordeum vulgare</i>	Barley	4		176	4
<i>Hordeum vulgare</i> (chaff intact)	Barley (chaff intact)			32	
<i>Triticum spelta</i>	Spelt Wheat			5	6
<i>Cereala</i> indet.	Indeterminate Cereal grain			90	2
	Indeterminate cereal glume base				1
	Indeterminate cereal chaff fgt.				3
Unidentified	Unidentified			1	

Table 3: Charcoal (flots) - Complete list of taxa recovered from excavations at Castleshaw Roman Fort Annexe, Saddleworth, Oldham, Lancashire
 Taxonomy and nomenclature follow Schweingruber (1978). Numbers are identified charcoal fragment for each sample.

Sample Number		1	2	3	4	5	6	7	8	9	10	11
Context Number		003	008	005	014	010	012	014	013	011	013	013
Trench		19	19	12	12	20	21	21	18	15	21	22
Feature Number		F1	F1			F7	F2	F2	F4	F2	F2	F6
Feature Type		Upper slot fill	Lower slot fill	Upper charcoal layer	Lower clay & charcoal fill	Hearth - Charcoal rich layer	Kiln infill	Kiln charcoal & daub layer	Hearth - charcoal rich deposit	Stone oven	Kiln - Basal charcoal layer	Linear Feature
No. fgts.		100+	3000+	40000+	5000+	1000+	200+	8000+	1200+	300+	1000+	500+
Max. size (mm)		11	21	23	21	34	13	34	20	39	27	22
Latin	Vernacular											
<i>Corylus avellana</i>	Hazel				18	26	10	12			4	
<i>Cf. Salix / Populus</i>	Willow / Poplar			19		32	15	9		11		
<i>Quercus</i>	Oak	100	100	81	82	42	38	79	100	16	5	100
Indeterminate	Indeterminate						37			83	91	