# ARCHAEOLOGICAL EXCAVATIONS AT BREMENIUM ROMAN FORT, HIGH ROCHESTER, REDESDALE, NORTHUMBERLAND

## ~ INTERIM REPORT FOR REVITALISING REDESDALE ~

BY RICHARD CARLTON, THE ARCHAEOLOGICAL PRACTICE LTD.

### JUNE 2022



Prepared for: Revitalising Redesdale Landscape Partnership		By: The Archaeological Practice Ltd.	Site Code: HR21 Grid Reference: N Date of fieldwork Oasis Number: th	Site Code: HR21 Grid Reference: NY 83149 98619 (centre) Date of fieldwork: June-July 2021 Oasis Number: thearcha2-	
Project code:	<i>Stage</i> :	Compiled by:	Control:	Completion date:	
AP 21/26	Interim	RC	MJ	28/06/22	







## CONTENTS

- 1. INTRODUCTION
- 2. FIELD SURVEY
- 3. TRENCH DESCRIPTIONS
- 4. DISCUSSION

#### 5. REFERENCES

APPENDIX 1: High Rochester Roman Fort, Northumberland: Palaeoenvironmental Assessment, Archaeological Services University of Durham (ASUD)

APPENDIX 2: High Rochester Small Finds, by Lindsay Allason-Jones.

APPENDIX 3: Roman Pottery and Ceramic Building Material Assessment, by Alex Croom.

APPENDIX 4: Roman Shoe Conservation Report, by V. Garlick (ASUD)

APPENDIX 5: Photographic Record

#### APPENDIX 6:

At the Roaring Stream: Archaeological investigations at Bremenium Roman Fort, High Rochester, Northumberland: Written Scheme of Investigation.

#### ILLUSTRATIONS

Cover Photo.: View of the Roman fort from the north-west, showing sites of excavation trenches A, B & C.

Illus. 01 & 02: Bremenium Roman Fort shown in relation to sites of known Cultural Heritage importance (Scheduled Sites *in red; Listed Buildings in purple; others (in yellow) in Rochester Village.* 

Illus. 03: Site of Cultural Heritage importance in the vicinity of Rochester Village showing Scheduled and Listed sites (01-11) named in Section 3.2 and other sites of lesser importance keyed to Table 1 and Appendix 4 of the Rochester Village Atlas (The Archaeological Practice 2005).

Illus. 04: Rochester, Low Rochester and Bremenium shown on Fryer's Map of 1820.

Illus. 05: Tithe Plan for the High Rochester/Low Rochester,1840.

Illus. 06: Second Edition Ordnance Survey Map of Rochester, c 1898 (6" scale).

Illus. 07: Trench locations shown on a magnetometry survey plot produced in Summer, 2021.

Illus. 09: Trench 'A', WSW Facing Section. High Rochester 2021.

Illus. 10: Trench 'A', West Facing Section of Fort Annexe Ditch [10]. High Rochester 2021.

Illus. 11: Trench 'A', West Facing Section of Fort Annexe Ditch [22]. High Rochester 2021

Illus. 12: Trench 'Ai', South Facing Section, north side of later field drain. High Rochester 2021.

Illus. 13: Trench 'Ai', schematic interpretation of flue feature.

Illus. 14: Trench 'Ai', South Facing Section of [?]

Illus. 15: Trench 'Ai', South Facing Section of possible post-setting [05],[21].

Illus. 16: Trench B, Plan. High Rochester 2021.

Illus. 17: Trench 'B', South Facing Section. High Rochester 2021.

Illus. 18: Trench C, South Facing Profile through Kiln (0.66m from west edge of trench). High Rochester 2021.

Illus. 19: Trench C, North Facing Section. High Rochester 2021.

Illus. 20: Trench C, Plan. High Rochester 2021.

Illus. 21: Trench 'L(a)', East Facing Section. High Rochester 2021.

Illus. 22: Trench 'L(a)', Plan. High Rochester 2021.

Illus. 23: Trench 'L(b)', North Facing Section. High Rochester 2021.

Illus. 24: Trench 'L(b)', Plan. High Rochester 2021.

## ACKNOWLEDGEMENTS

The fieldwork carried out at High Rochester in 2021 was supervised on behalf of Revitalising Redesdale Landscape Partnership (RRLP) by Richard Carlton and Mike Parsons of The Archaeological Practice Ltd., who also produced this report. Special thanks are due to neighbouring landowner-farmers, Malcolm Corbitt of Dykehead and Willie Amos of Rochester House for allowing fieldwork on their land. Karen Collins, Revitalising Redesdale Heritage and Engagement Officer, ensured permissions were in place, co-ordinated volunteers and proof-read the report. Greatest thanks are reserved for the numerous volunteers who participated in the project and to John Patten of Elsdon who operated the mechanical excavator with all his usual dexterity.

## SUMMARY

The purpose of the fieldwork programme launched at High Rochester in Summer, 2021 was to investigate a number of research questions posed by the results of previous work, notably Crow's series of investigations in the 1990s, and by the results of geophysical survey carried out over the past 30 years, latterly as part of the current project. Accordingly, five trenches were opened on the west and south-west sides of the Roman fort at High Rochester in July, 2021.

In the south-western field little evidence was found, either by geophysical survey or excavation, for the apparent sub-division of the land into apparent enclosures or paddocks, as first suggested in the Revitalising Redesdale Lidar survey. Visual inspection suggests it is possible, however, that such a pattern was created by the enhancement of natural terraces with ephemeral earthen boundaries or fences to create sub-divisions just detectable through Lidar survey. In the eastern part of the field, close to the south-west corner of the Roman fort, evidence of Roman activity was found in the form of ditches and gulleys, one of them containing a line of stakes, the purpose of which may have been to control the flow of water out of the fort and fort ditches. Abundant Roman pottery and glass waste found in this area is suggestive of manufacturing activities somewhere in the vicinity, as well as disposal.

In Gallow's Knowe west of the fort the remains of a well-preserved lime kiln some 2.45 m in diameter and surviving up to eight built courses was discovered close to the west fort rampart.

Further north, trenches targeted two apparent annexe enclosures seen on historic and recent geophysical survey plots. The larger of the two was fund to be bounded on its north side by a boundary feature comprising the remains of turf rampart at least 4 m wide, the northern edge of which sat upon a line of flat stones arranged in a single course. A gap in this line provided access to a partially-flagged floor some 2 m wide, bounded on both sides by the remains of stone walls but truncated to the south by a modern field drain lined with Roman stone. The presence of burnt clay above the floor and in an apparent robbing trench suggested that this was the remains of a bakehouse or oven, rather than of a gateway. The external ditches to this rampart, separated from it by a 5-metrewide berm, were both 2 m deep and contained waterlogged deposits below secondary fills largely devoid of finds. Within the waterlogged fill of the inner ditch were found the well-preserved remains of a Roman shoe of probably 2<sup>nd</sup> century date which was subsequently cleaned and preserved for further analysis.

A second trench opened across what appeared to be the west side of a second, smaller enclosure revealed a substantial stone wall or bank, faced with a lower offset course externally, but apparently merging with an earthen or turf bank on its inner, east side. Variation in the composition of the stonework suggests that the stone bank may have been widened, perhaps when (re)faced on its west side. Inside the wall face a deposit of light, silty material may derive from fallen, earth rampart material and is likely to infill a defensive outer ditch, while further to the west are patches of surviving flagged surface probably associated with building remains. This trench was excavated only to the upper surface of Roman remains except in the north-east corner, inside the enclosure boundary, where a cobbled surface was revealed some 0.70 m below ground level. The pottery assemblage from the site, examined by Alex Croom, is considered typical for the Central sector of the frontier and dates mainly to the third century, with the latest material from the late third century, but contains some residual second-century material. Amongst a range of other small finds in copper-alloy, lead, iron and glass examined by Dr Lindsay Allason-Jones, perhaps most intriguing are several lumps of glass and pieces of glass-making waste in various hues which suggest local manufacture using recycled material.

These investigations have confirmed and extended the results of Crow's investigations in the 1990s by revealing the complexity of remains west of the Roman fort at High Rochester. In addition to continuing palaeo-environmental and other analyses, further investigations should aim to reveal the suggested external ditch to the smaller western annexe enclosure and phase the periods of activity suggested by remains within and outside it. Further excavation of the larger annexe ditches closer to the fort might reveal more extensive waterlogged deposits before they are threatened by wider environmental impacts. And exposure of the western flue to the lime kiln would allow sampling to shed light on the period of its use and method of operation.

#### 1. INTRODUCTION

The Roman fort of *Bremenium* at High Rochester was for two centuries the northernmost fort of the Roman Empire and its outline remains clearly visible, defining as it does the boundaries of the current settlement of High Rochester, with multiple ditch & bank ramparts present on all but the west sides. The routes of two Roman roads, Dere Street and the Redesdale to Alndale 'Link Road' cross immediately east of the fort, and an extensive cemetery has been surveyed and selectively excavated, most recently by Beryl Charlton (Charlton & Micheson 1984), close to the course of Dere Street south-east of the fort.

The Roman name of the site, *Bremenium*, signifies, "*the place on the roaring stream*", presumably a reference to the adjacent Sills Burn in spate. *Bremenium* was for two centuries the northernmost fort of the Roman Empire and remains one of the best-preserved archaeological sites in Northumberland National Park. The surviving remains of the fort are oriented NNW-SSE and are sub-rectangular in plan with rounded corners, being slightly longer on the N-S axis (147 m) than the E-W axis (136 m) axis. Multiple, surrounding ditch & bank ramparts are visible on all but the west sides, with the inner rampart surviving around the entire circuit, the remains of the curtain wall, towers and gates surviving upon it in places. Geophysical evidence backed up by limited excavation attests to a possible underlying late prehistoric enclosure and/or probable military annexe(s) containing numerous features immediately to the west of the fort, while recent Lidar survey evidence suggests the possibility of a civilian settlement, or *vicus*, to the south.

The fort long played an important role as an outpost fort beside Dere Street, the easterly Roman route into Scotland, and had a large mixed garrison usually consisting of a military equitate cohort and a unit of scouts (*numerus exploratorum*). Excavations in the 1930s (Richmond 1936 & 1940) provided evidence that the original Agricolan Fort (A.D. 78-85) consisted of a single ditch and rampart, later replaced by a larger rampart and complex system of ditches. In the Antonine period (AD 139-Late 2nd century) the fort was rebuilt with a rubble wall and clay rampart. During the Severan period (Early-Late 3rd century AD) the defences were levelled and a fort wall was built. The final alterations appear to have occurred during the Constantinian period (c. A.D. 306-mid 4<sup>th</sup> century) when a larger stone wall, four gateways and angle and interval turrets were added. Water was supplied to the fort via an aqueduct, which entered through a stone-covered channel through the south gate. Thus, the base was occupied during the Flavian period and from the Antonine period onwards with rebuilding phases in the early 3<sup>rd</sup> century and at the beginning of the 4th century. Military withdrawal from the site seems to have taken place in the early 4th century, perhaps under Constantine (Casey & Savage 1980).

The evidence regarding the date the fort of High Rochester was relinquished by permanent Roman garrisons presents some intriguing contradictions (cf. Crow 2004a, 222-3). The coin evidence recovered to date suggests that the fort was abandoned in the first or second decade of the 4<sup>th</sup> century and the pottery assemblages from Crow's excavations in the 1990s were almost devoid of the East Yorkshire grey wares (Crambeck etc.) which become common on the northern frontier from the late 3<sup>rd</sup> century onwards. Yet, as noted by Rushworth, the repairs to the west curtain between the west gate and the south west angle appear more characteristic of modifications made at other northern frontier forts, such as Housesteads and Vindolanda along Hadrian's Wall, much later in the 4<sup>th</sup> century or even later still. Could this reflect continued military occupation of the fort by a reduced force until at least the middle of the 4<sup>th</sup> century, or perhaps even its transfer to a friendly federate chieftain?





© The Archaeological Practice Ltd. [Ordnance Survey data supplied by Northumberland National Park Authority: Licence no. AL 08898L]

Illus. 01 & 02: Bremenium Roman Fort shown in relation to sites of known Cultural Heritage importance (Scheduled Sites *in red; Listed Buildings in purple; others (in yellow) in Rochester Village.* 



Illus. 03: Site of Cultural Heritage importance in the vicinity of Rochester Village showing Scheduled and Listed sites (01-11) named in Section 3.2. and other sites of lesser importance keyed to Table 1 and Appendixed and the Rochester Village Atlas (The Archaeological Practice 2005). 9



*Illus. 04:* Rochester, Low Rochester and Bremenium shown on Fryer's Map of 1820



Illus. 05: Tithe Plan for the High Rochester/Low Rochester, 1840.



Illus. 06: Second Edition Ordnance Survey Map of Rochester, c 1898 (6" scale).

Whatever the precise circumstances regarding the Roman withdrawal from the Dere Street outpost forts in the 4<sup>th</sup> century, there is an almost complete dearth of evidence concerning the subsequent history of Rochester, and indeed Redesdale as a whole (Rushworth 1996) until the later medieval era when it became part of the liberty of Redesdale held by the Umfraville lineage from the 12th century onwards. No direct evidence for permanent or seasonal settlement, contemporary with the 12<sup>th</sup>-13<sup>th</sup> century period of Umfraville lordship, has yet been found this far up the valley, though that may be because it has not yet been sought. A weakening of feudal lordship over the Northumbrian dales during the 14<sup>th</sup>-15<sup>th</sup> centuries and the attendant growth of the kinship 'surnames' may have afforded the tenant peasantry more opportunity for independence and it is within this framework that the establishment of a settlement at Rochester should be envisaged, perhaps in the 15th or early 16th centuries, perhaps building upon a possible earlier use of the site as a vaccary.

The earliest certain reference to a settlement at Rochester is incorporated in the 1552 Border Survey, when the inhabitants of 'Richester' were the Halls. Rochester appears on Saxton's map of 1576 and on all subsequent county maps, but, even in the late 16<sup>th</sup> century, Rochester, along with Birdhope, Woolaw and Evistones still represented the uppermost limit of settlement in the valley. A map of 1787 provides the first detailed plan of High Rochester settlement, but it is not until MacLauchlan's survey and the Ordnance Survey series that detailed plans of the surviving fort earthworks are incorporated into plans of the site.

Extensive but poorly-documented fieldwork in the 1850s was followed by Richmond's targeted interventions in the 1930s and additional survey and excavation of the Petty Knowes cemetery by Charlton in the 1970s). Crow's series of investigations between 1992-8 (Crow 1993, etc.), which included analysis of geophysical survey, topographical survey and limited excavations within and outside the fort, represents the only concerted programme of research into the entire fort complex, but further, limited interventions carried out in 2010 (Carlton 2010), 2019 (Williams 2019) and 2021, as well as additional geophysical survey by Biggins et. al. in 2004 (Illus. 09 & 10, below) have all added to the database.

While the earlier excavations focussed on the fort interior and its defences, Crow's investigations with Newcastle University concentrated on the wider fort environs, notably Gallow's Knowe west of the fort. While the extensive range of fieldwork elements carried out by Crow (summarised in Crow 2004) provided evidence broadly in support of the fort plan and phasing established by Richmond, no evidence was found for a vicus on the south-eastern approach to the fort. Evidence was found, however, for annexe-like enclosures attached to the west side of the fort which may have had some functions in common with vici along Hadrian's Wall and at sites such as Lanchester, Whitley Castle and Bowes to the south. Geophysical survey in 2004 focussing on Gallow's Knowe traced further features possibly related to various phases of annexe(s), as well as underlying remains interpreted as those of temporary camps or native settlement.

The present research initiative is based on the perceived need to further investigate the remains documented in various phases of investigation within Gallow's Knowe, as well as upon a LIDAR survey of the area from 2018-19 which identified possible features south-west of the fort which may suggest extra-mural settlement in that area.

Thus, the purpose of fieldwork in 2021 was to resolve some of the issues thrown up by Crow's investigations west of the fort, as well as to target an area further to the south where LIDAR survey identified possible features which it was thought could relate to extra-mural settlement. In preparation for excavation in July 2021, Magnetometry and targeted

Resistivity surveys were carried out in the field south of Gallow's Knowe and, subsequently, in Gallow's Knowe itself which, along with earlier surveys (GeoQuest Associates 1992a&b; Hancke et. al. 2004), provided the basis upon which to target a number of specific features (see *Appendix 6*).

#### 3. TRENCH DESCRIPTIONS

#### Trench A

The dimensions of the main (south part) trench area are 9 m N-S by 7 m E-W, with an 11 m x 2 m extension to the north from the east end of the north side.

At the south end of the trench is a c. 0.25 m depth of topsoil sitting directly upon a deposit of fine sandy-silt, of varied off-white, grey, iron red and black components, containing little or no stone. A slot cut into this material from the south end of the trench revealed it to be up to 0.75 m thick (i.e. 1 m bgl) at the south end of the 2.6 m long test slot. Below 0.40 m, however, the deposit was of a consistent grey colour suggesting that it may be a degraded and bleached original plough soil rather than turf or layered rampart deposit, as suggested for the upper, mixed component. At the intersection of the mottled/layered (mixed) deposit and underlying grey are some iron streaks which may be mineralised twigs or similar laid below the rampart base. The top of the suggested rampart deposit slopes downwards west to east at this southern end of the trench.

A section of this rampart material is revealed in a drain running from the south-west corner of the trench to a point on the east side of the trench 4.8 m from the SE corner. The west-east flowing drain is 1.12 m deep at the SW corner and is cut from the surface (as visible in rampart/sub-soil 0.20 m bgl). It is formed from two lines of sandstone blocks laid edgeways, up to 0.44 m long and 0.35 deep, sitting on a based deposit of orange-red silty-clay, with a deposit of smaller stones 0.25-35 m deep thrown on top to create a permeable fill & capping. The gulley bottom is 0.09 - 0.16 m wide, generally about 0.14 m and about 0.35 m deep. The cut for the drain is straight on the north side but wider and curving on the south, perhaps suggesting removal of stonework in this area (potentially the south face of a building wall - see below). In the west-facing section the drain fill material appears at 0.35 m bgl and the base is at 0.80 bgl.

The North-facing section of the drain displays similar, apparently layered 'turf rampart' material to the top of the drain lining stones at c 0.75 m bgl.

The south face reveals, at the west end, the southern ends in section of two N-S walls with remains of floor flagging level with their foundation stone; two such flags on the west side and three on the east with fragmentary others against the middle part of the west wall and two larger flags similar in size to the southern flag against the west wall, perhaps at a slightly higher level at the north end. The northern of these two flags is actually at the same level as what is interpreted as the wall face to the west of it, so could perhaps be a remnant of the north end wall. The flags are up to 0.48 by 0.38 m in max. diam. (on the west) but generally a little smaller. The bottom of the flags is 0.43 m above the drain floor at the west and 0.50 m at the east - i.e. probably sitting on suggested blanched plough soil, rather than 'turf rampart' deposits. Both walls are made of roughly-faced stones generally c 0.30 m sq. but up to 0.82 by 0.33 m at north end of the west, perhaps creating a wall c 0.54 m wide, further investigation of which was not possible due to constraints of the trench. The east wall face is of two surviving courses.



Illus. 07: Trench locations shown on a magnetometry survey plot produced in Summer, 2021.

Excavavations at Bremenium for Revitalising Redesdale



15



0 Scale 1:75 4m

*Illus.* 09: *Trench 'A', WSW Facing Section. High Rochester* 2021.







*Illus.* 12: Trench 'Ai', South Facing Section, north side of later field drain. High Rochester 2021.



The space between the walls is 1.93 m at both north and south ends. Within the space a 0.30 m deposit of clean yellow clay sits upon the flags at the south end and partly overlaps the stones descending onto the underlying light, sandy silt layer (top of plough soil?) below. Indeed, a c 0.03-0.05 m layer of this entirely covered the floor above natural deposits. Above this is a deposit of red burnt (but not fired) clay, with a box-shaped lense of black burnt deposit separating it from the underlying unburnt clay. This material extended north into the building at least as far as the north end of the eastern part of the flagged floor but may have been redeposited here as the remains of a robbing trench was apparent cutting into the grey 'plough-soil' up to 0.10 m in a slot c 0.65 m wide though the centre of the building, which survives to 2.79 m long at the west side and 1.53 m at the east side (or 1.96 m if the end of the east wall is actually at the line of stones running along the top of the rampart lip). At the north end of the 'robbing trench', adjacent to the end of the building (defined by walls [07] and [16]), outside (north of) the line of rampart-edge stones [06], is a bowl-shaped feature, measuring 0.68 m N-S (and possibly extending further to the north) x 0.44 m E-W, cut into the 'plough soil', its base 0.40 m below the top of the flagged floor [17] on the east and 0.50 m below those on the west. A single small post-hole at its centre mirrors another 1.96 m to the south, with perhaps another 0.96 m from the southern one together forming a line(?). Above the bowl feature on its west side, just below top-soil level is a spread of ash/charcoal some 0.10 m deep and sitting at a level between the surviving second course of the building wall and its flagged floor.

On the same line as, but two courses lower than the remnant flooring/N end wall of the rectangular structure is a line of stones extending from the SE edge of the 'bowl' feature eastwards until interrupted by the course of the field drain some 2.15 m from the east baulk. 10 stones survive, the largest at the west end -  $0.68 \times 0.33$  m - the others similar in size with the smallest  $0.34 \times 0.19$  m max. diam. These stones are set flat on a base of large unworked cobbles and stone fragments – one of which can be seen in the east-facing section of the feature. Others are set in possible rampart material immediately to the east, having been disturbed by the drain cut and redeposited there. At the east end of the line of flat stones (9<sup>th</sup> stone of 10) an additional stone  $0.46 \times 0.33$  m max. diam. is placed to the south.

Rampart material appears to extend a little north of the line of stones, especially on the west side, but is soon replaced by a brown sandy silt which deepens to the north, being some 0.45 m deep at 7.8 m from the south end of the trench, 0.66 m bgl. Here it sits upon natural, orange boulder clay. At this point is another apparent line of stones, exposed only in a short slot, one row and one course deep, dipping slightly to the north, which appears to form the lip of a ditch (the intervening space between the bank below upper line of stones and this being a flattish berm c 1 m wide. Within the upper fill of the ditch between 9.55 and 9.90 m, at 0.77 m depth bgl is a curving organic mark suggesting a tip line or ephemeral feature cut into the ditch fill here. When machine-excavated this proved to be deeper on the south than the north, indicating that it was a deposit of organic material tipped into a hole or hollow in the upper ditch fill. The northern lip of the ditch is interrupted by a modern drain -0.22-0.30m wide, defined by its surface of small stones 0.33 bgl (with indications of cut up to c 0.15 m bgl) - which cuts diagonally across the trench on the same line as the southern drain, entering the east baulk at 12.6 m. The lip of the ditch may be defined by some stonework at 0.51 m bgl between 11.7 and 12.2 m from the S end of the trench. Immediately north of this, sub-soil appears and rises to the drain at 0.43 m bgl. This appears to mark the position of the north lip of the ditch, the precise position of which is obscured by the drain and its upcast.

The ditch is 3 m wide across its north and south lips and some 2.4 m deep above the current turf, steeply cut through a band of bedrock c 0.6 m above its narrow base. The upper fill is a brown loam, the middle fill is a grey, silty clay and the lower fill a soft, silty grey waterlogged deposit. A lense of peat was apparent towards the base on the south side and a narrow band of coal finings - presumably natural - lay just above it.

Beyond this inner ditch is a 0.2 m deep deposit of grey silty material (perhaps turf rampart or degraded plough soil) sitting on the sub-soil at 0.61 m bgl where tested by a slot between 14.5 and 15.7 m from the south end of the eastern baulk. This gives way to another ditch at c 16 m, the primary fill of which is a grey silty clay containing sparse Roman pottery, flecks of red 'tile' and charcoal in its upper fill down to at least 1.3 m where tested between 17.5-18m along the baulk. The ditch is steeply cut through firm, brownish-red sub-soil and bands of bedrock, 3.5 m wide across its north and south lips and some 2.4 m deep above the current turf. Above the primary fill is a deposit of sandy-loam flecked with iron pan and below it is a grey, silty clay (within which Roman pottery was recovered) which descends to a deposit of what appears to be pure, low density organic material, light brown in colour, directly above a waterlogged grey, silty clay with some stone and gravel on the flat base. The northern lip is in the position of another drain which cuts across the trench at 19.7 m from the south end. The drain cut is 0.3 m across and stone fill approaches to 0.34 bgl. The fill is of small stones but there appear to be uprights at the base, as in the upper drain.

On either side of the drain is a thick, dense, hard accumulation of iron slag or pan, at 0.60 m bgl on the north side. 0.6m - 1 m south of the drain is an accumulation of stones at 0.77 m bgl which represents the lip of the ditch, a secondary fill of which contains iron pan and some small stones.

#### Trench B - (NGR: NY)

#### (described from the east end)

Underneath the turf and topsoil was a layer [37] of grey, becoming lighter with depth, silty material with some broken stones. Possible rampart material. Two patches of possible metalling/stonework at north and south sides (see DJI 729). Some large pieces of amphora within this deposit. In the NW corner revealed at 0.5 m depth a metalled/cobbled surface [] in which a fragment of glass vessel neck was found. [37] abuts a deposit of large stone [31] which may be packing against a wall face or, alternatively, infill of a robbing trench after wall demolition. The character of this material becomes much finer [] and is quite clearly delineated to the east - possibly the result of extending the wall face to the east. Below the eastern edge of this material is a wall face [] comprised of a single course of neatly-cut stone with an offset course below. Directly above this was a deposit of fine stone - perhaps from robbing - and directly east of it was a deposit of light, off-white silty material, similar to but with less stone inclusion that deposit [37] on the other side of the wall/rampart. On the surface of [] which may represent turf rampart material levelled from the top of [37]/[], was a spread of some broken similar in character to [31], some perhaps in situ, perhaps representing a demolished structure/tank? Against the rampart wall.

The spread of light material east of the wall may be ditch-fill, and is clearly delineated from a spread of darker material and stonework further to the east, suggesting the lip of a ditch. On the south side of the trench next to the lip is a patch of likely wall core material [88] which may be associated with [89] adjacent on the other side of the trench. East of this point are the remnants of a flagged floor [34] which may be the interior space of a structure bounded



Illus. 16: Trench B, Plan. High Rochester 2021.





*Illus.* 17: *Trench 'B', South Facing Section. High Rochester* 2021.

on the west by [88/89]. [28] is a patch of metalling on the lip of the ditch side [88] other remnants of which are apparent elsewhere. Associated with the larger flags in [34] were substantial dumps of iron slag (or iron pan???) and several large pieces of amphora. The SE corner is of different character [35], perhaps enclosed by a structure, traces of which were apparent below the flagging.

#### Trench C

Trench C was excavated over a 'hot spot' indicated by successive episodes of geophysical survey close to the south end of the western edge of the western fort defences. Excavation revealed, below an overburden of turf and topsoil, the stone wall construction [47] of a kiln comprising five courses of heat affected, rounded and tightly set sandstone blocks forming the primary kiln lining, three courses of a lower, off-set kiln lining made from sub-angular sandstone blocks, with no signs of heat damage or wear, and the remains of primary construction behind the rebuilt part of the kiln lining, comprising of rubble and more irregular stones that were heavily heat damaged. The kiln fill comprised rubble [44] in a matrix of silty grey clay and burnt red clay, with some stones burnt red and a single sherd of Samian ware pottery. Below this was a shallow humic layer [45] of grey-black silty-clay, with no obvious inclusions above kiln floor [46] of flatly laid sandstone flags. The construction cut of kiln [48] was seen in surrounding silty clay fill of the ban within which the kiln was set, and behind it was a circular burnt area of blackened stones, observed against the rear of the kiln structure [47] and extending to its construction cut, interpreted as a possible vent at the rear of the kiln.

#### Trench L(a)

Trench L(a) was located in the field to the south-west of the Roman Fort (*see Illus. 00*) and attempted to target linear features identified on geophysical survey images as potential field divisions or industrial units beyond the southern boundaries of the vicus. The trench was orientated NNW-SSE and measured approximately 6.25 m (length) x 2.10 m (width) x 0.82 m (max depth).

Below the turf and topsoil in the northern part of the trench, a linear sandstone feature [53] of approx. 1m in width, was identified upon an E-W alignment extending beyond the limits of the trench. Although partially disturbed by the plough, this feature has been interpreted as a putative wall line, possibly a boundary wall, comprising of core-material only and robbed of its edging stones, assuming it once had them. Associated finds included numerous sherds of Roman pottery and several shards of Roman glass (including SF1), and by association indicate the wall is probably Roman in origin. The glass finds in particular may indicate the re-processing of glass in this vicinity. A coherent bedding layer [54] of smaller metalling was observed below the putative wall line. A mixed plough-soil [56] was observed either side of the putative wall, containing a mixture of both modern and Roman pottery, suggesting that modern ploughing has churned the topsoil into the underlaying Roman levels, which were partially truncated. Further patchy and irregular stonework [59] was identified south of putative wall [53], again containing Roman pottery, but insufficient survival to indicate form. A sandstone field-drain [60] was observed approx. 2.40 m from the south end of the trench and sat directly below mixed plough-soil [56]. It was not possible to determine whether or not it cut through or abutted Roman levels [59] and therefore it was not possible to determine its date - although a limited quantity of Roman pottery was recovered from within its channel.





Illus. 18: Trench C, South Facing Profile through Kiln (0.66m from west edge of trench). High Rochester 2021.



*Illus.* 19: *Trench C, North Facing Section. High Rochester* 2021.







Illus. 20: Trench C, Plan. High Rochester 2021.



*Illus.* 21: *Trench 'L(a)', East Facing Section. High Rochester* 2021.



Illus. 22: Trench 'L(a)', Plan. High Rochester 2021 The Archaeological Practice Ltd. 2022

0



*Illus.* 23: *Trench 'L(b)'*, *North Facing Section*. *High Rochester* 2021.



#### Trench L(b)

Trench L(b) was located south-east of and perpendicular to Trench L(a), in the field to the south-west of the Roman Fort (*see Illus. 00*). It attempted to target similar linear features to Trench L(a), identified on geophysical survey images as potential field divisions or industrial units beyond the southern boundaries of the vicus. The trench was orientated ENE-WSW and measured approximately 10.80 m (length) x 1.88 m (width) x 1.06 m (max depth).

Below the turf and topsoil [63] and underlying plough-soil [64], a sandstone linear feature [65] was identified as the NNW-SSE aligned linear anomaly suggested as a potential field boundary or industrial area division on the geophysical survey. The feature measured 1.16 m in width and has been interpreted as core material from a possible broad sandstone wall of Roman origin. The sandstones comprising the core material were of varying size and irregular in form, though more sub-angular than those revealed in Trench L(a) [53]. It was noted that the stones were well bonded with clay [66]. It was difficult to determine where the edges of the feature were, due to possible robbing of edging stones, but its eastern edge [68] was better defined, appearing to abut a timber fence-line [72] which appeared parallel. The core-material contained Roman pottery and SF2 – a perforated ceramic button or stopper. The fence-line incorporated two ditch gullies, the west of which contained wellpreserved remains of a timber fence [71]. The fence-line was aligned roughly N-S but meandered along its course. It comprised of the remains of timber post uprights set into natural clay [77], apparently interwoven horizontally with additional smaller timbers and occasional packing stones, to create a fence-line, which although collapsed and incomplete, had been largely well-preserved due to the anaerobic conditions formed by the dense grey clay encasing it.

Immediately to the east of fence-line [72], a possible midden/rubbish dump feature [67] was observed to be of 2<sup>nd</sup>-3<sup>rd</sup> century Roman origin. The midden comprised of a clay layer, similar to bonding clay [66] but much darker grey in colour, of firm and medium compaction, humic and plastic but gritty in parts and with inclusions of small stones, hammer-scale, other burnt materials and accreted iron working/slag. Additionally, the layer contained considerable quantities of Roman pottery and other finds – including SF3,4,5,6. The layer was revealed for 6.20 m in total length, and observed from depths of 0.35 m (top) to 0.70 m (deepest part of base). Directly below the midden, and mirroring its eastern extent, was a layer of puddled clay [70], topped with a fibrous band. The maximum depth of the clay was not reached, but was still observed extending beyond the trench base at 0.84 m below ground level. This layer contained further sherds of Roman pottery and may simply be an earlier compact layer of midden, or a bedding for it.

Beyond the western limits of wall [65], an additional small ditch was revealed [74], appearing parallel and comparable to the western ditch of fence-line [72] on the east side of the wall. Like the ditch of [72], this ditch stepped down to form a box-shaped profile, potentially to house a timber fence-line. Although no timbers were evident, the dimensions, profile, location and materials of the ditch are indicative of a contemporary parallel fenced boundary to [72].

#### CONTEXT LIST

#### **Trench A**

[01] Topsoil. Observed to a depth of 0.25 m at the south end of the trench.

- [02] Stoney plough-soil, observed below topsoil [01] and over ditch feature [10]. Maximum depth of 0.35 m below ground level.
- [03] Middle fill of ditch [22], comprising of grey silty-clay. Observed to a maximum depth of 1.83 m below ground level.
- Field drain of probable 19th century origin. Large sandstone drain, aligned and with [04] direction of flow NE-SW, observed at the south end of Trench A. The east side of the drain was located 4.80 m from the SE corner of the trench, with its west side located 0.50 m from the SW corner. 1.12 m deep at the SW corner and is cut from the surface (as visible in rampart/sub-soil 0.20 m below ground level). It is formed from two lines of sandstone blocks laid edgeways, up to 0.44 m long and 0.35 deep, sitting on a based deposit of orange-red silty-clay, with a deposit of smaller stones 0.25-35 m deep thrown on top to create a permeable fill & capping. The gulley bottom is 0.09 - 0.16 m wide, generally about 0.14 m and about 0.35 m deep. The cut for the drain is straight on the north side but wider and curving on the south, perhaps suggesting removal of stonework in this area (potentially the south face of a building wall - see below). In the west-facing section the drain fill material appears at 0.35 m bgl and the base is at 0.80 bgl. The North-facing section of the drain displays similar, apparently layered 'turf rampart' material to the top of the drain lining stones at c 0.75 m bgl. The SE face reveals, at the west end, the southern ends in section of two NNW-SSE aligned walls [07][16]. The drain has been interpreted as a probable 19th century field-drain, reusing Roman stones, likely taken from the various structures in which in truncates. The drain is parallel to and associated with other drains [82] and [83] aligned NE-SW, approx. 6.10-6.40 m apart. The reused Roman material was split, quarried stone pieces but showed no sign of being dressed.
- [05] Fill of modern intrusion [20] in Trench A. A mixture of modern material, comprising a plough-soil of sandy-loam, occasional well-sorted sandstone fragments not greater than 0.05 m in diameter, common well-sorted fragments of CBM, rare grey sandy lenses, rare pieces of willow-pattern china. Observed to a depth of approx. 0.30 m.
- [06] Probable Roman wall, aligned WSW-ENE near centre of Trench A, interpreted as possible remnant of north-rampart wall for the Fort Annexe 'B', or alternatively a structural wall from a possible Roman building (see wall material [86]) subsequently demolished for the insertion of the rectangular structure to the west [07][16][17]. The wall was observed on the same line as, but two courses lower than the remnant flooring [17]/N end wall [07] of a rectangular structure. This line of stones extended from the SE edge of the bowl-shaped feature [21] eastwards until interrupted by the course of the large drain [04] some 2.15 m from the east baulk. Ten stones survive, the largest at the west end - 0.68 x 0.33 m - the others similar in size with the smallest 0.34 x 0.19 m max. diam. These stones are set flat on a base of large unworked cobbles and stone fragments - one of which can be seen in the eastfacing section of the feature. Others are set in possible rampart material immediately to the east, having been disturbed by the drain cut and redeposited there. At the east end of the line of flat stones (9<sup>th</sup> stone of 10) an additional stone 0.46 x 0.33 m max. diam. is placed to the south. It was noted that wall [07] was a different construction to wall [06] and built directly over its west end. A small sondage excavated against the north face of wall [06] revealed additional stonework that has been interpreted as possible tumble of upper courses from wall [06].
- [07] Part of group [87]. The east wall of three sandstone walls, [07][16][18], associated with flagged floor [17], and interpreted as belonging to a probable Roman building located immediately against or over the Fort Annexe 'B' north-rampart, observed at the west side of Trench A. The wall measured 1.96 m in length. The wall was bonded

with [11]. Aligned NNW-SSE and observed extending NNW from drain feature [04] near the SW corner of the trench. The south terminus or southernmost surviving extent of the wall could be seen in the SE section face of drain [04], but was probably truncated by the drain, and stonework located immediately to the south [18] could represent the possible perpendicular return of the wall. Approximately parallel by 1.93 m to sandstone wall [16] which is located to the SW. The wall comprises of a single skin of roughly-faced sandstone blocks, facing WSW, generally measuring c 0.30 m sq. The face of wall [07] comprises of two surviving courses. The walls are also associated with clay layer [15] which seals the flagged floor [17].

- [08] Layer east of and abutting wall [07]. Observed to be 0.20 m in depth. It appeared that this material was dumped against the side of wall [07], which belonged to a secondary rectangular structure. It comprises of fairly compacted, friable, soft, interleaved lenses of mid/light grey sandy material and mid brown sandy loam and occasional manganese inclusions. Interpreted as possible redeposited natural, thrown in and flattened from original upcast excavated from ditch [22]. It could be the remnant of a possible bund, similar to turf material [85].
- [09] Possible remains of turf from the north-rampart of Fort Annexe 'B'. Comprising of fine sandy silt of varied off-white, grey, iron-red and black components, with rare inclusions of sandstone. Revealed by sondage to be 0.75 m in depth (i.e., 1 m below ground level) at the south end of the 2.60 m long sondage. Below 0.40 m, however, the deposit was of a consistent grey colour suggesting that it may be a degraded and bleached original plough soil rather than turf or layered rampart deposit, as suggested for the upper, mixed component. At the intersection of the mottled/layered (mixed) deposit and underlying grey are some iron streaks which may be mineralised twigs or similar laid below the rampart base. The top of the suggested rampart deposit slopes downwards west to east at this southern end of the trench. A section of this rampart material is revealed in drain [04] running from the south-west corner of the trench to a point on the east side of the trench 4.8 m from the SE corner. Turf rampart material also appears to extend a little north of possible rampart-wall [06], especially on the west side, but is soon replaced by a brown sandy-silt [27], which deepens to the north.

See also comparable turf rampart material [85] observed between defensive ditches [22] and [10].

[10] Cut of northernmost (outer) defensive ditch forming north side of Fort Annexe 'B'. Located 3.50 m north of parallel ditch [22]. Ditch measures approximately 4.50 m in width and 2.50 m in depth below ground level. The appearance of the ditch-cut in profile is of a broad V-shape with a slightly steeper cut on its southern side than the north. The north edge appears to be truncated by a probable 19<sup>th</sup> century field drain [83].

The ditch is filled by [24][26][25] and is steeply cut through firm, brownish-red subsoil and bands of bedrock.

- [11] Bonding material within wall [07], Trench A. Light brown clay-sandy bond between the wall stones.
- [12] Upper fill of ditch [22], comprising of brown-loam. Observed to a maximum depth of 1.20 m below ground level. Within the upper fill of the ditch between 9.55 and 9.90 m, at 0.77 m depth below ground level is a curving organic mark suggesting a tip line or ephemeral feature cut into the ditch fill here. When machine-excavated this proved to be deeper on the south than the north, indicating that it was a deposit of organic material tipped into a hole or hollow in the upper ditch fill.

- [13] A possible demolition deposit comprising of red burnt (but not fired) clay, located within and associated with a possible Roman building [87] and delineated by clay layer [15] and floor [17], in Trench A. Also contains a box-shaped lense of black burnt deposit separating it from the underlying unburnt clay [15]. This material extended northwards from the edge of drain [04], into the building at least as far as the north end of the eastern part of the flagged floor [17] but may have been redeposited here as the remains of a robbing trench [20] was apparent cutting into the grey 'ploughsoil' up to 0.10 m in a slot c 0.65 m wide though the centre of the building.
- [14] Undisturbed fine ash deposit observed below demolition burnt clay layer [13] within the base of the linear cut/possible flue feature.
- [15] Part of group [87]. Within the space between walls [07]-[16], and below possible demolition layer of burnt clay [13], a 0.30 m deep deposit of clean yellow clay was observed to sit upon/seal the remains of a flagged floor [17] at the south end of Trench A, and partly overlapping the stones descending onto the underlying light, sandy silt layer (top of plough soil?) below. Indeed, a c 0.03-0.05 m layer of this entirely covered the floor above natural deposits.
- [16] The west wall of three sandstone walls, [07][16][18], associated with flagged floor [17], and interpreted as belonging to a probable Roman building located immediately against or over Fort Annexe 'B' north-rampart, observed at the west side of Trench A. The wall measured 2.70 m in length. The walls were aligned NNW-SSE and observed extending NNW from drain feature [04] near the SW corner of the trench. The south terminus or southernmost surviving extent of the wall could be seen in the SE section face of drain [04]. Approximately parallel by 1.93 m to sandstone wall [07] which is located to the NE. The wall comprises of roughly-faced sandstone blocks, generally c 0.30 m sq. but up to 0.82 by 0.33 m at the north end. The wall [16] seems to have up to two additional courses of core work to the west, perhaps creating a wall c 0.54 m wide, further investigation of which was not possible due to constraints of the trench. The walls are also associated with clay layer [15] which seals the flagged floor [17] observed between the walls and probably constitutes the interior space of the building. Core-work extended beyond the western edge of the trench and it is possible that it may abut a western wall face comprising the opposite face of wall [16].
- [17] Part of group [87]. Remains of a flagged floor, comprising the interior space from a probable Roman building, observed below clay layer [15], located in the space between and associated with walls [07][16]. The floor appeared level with the foundation stones of the associated walls. Two such flags on the west side and three on the east with fragmentary others against the middle part of the west wall and two larger flags similar in size to the southern flag against the west wall [16], perhaps at a slightly higher level at the north end. The northern of these two flags is actually at the same level as what is interpreted as the wall face to the west of it, so could perhaps be a remnant of the north end wall. The flags measure up to 0.48 m by 0.38 m in max. diam. (on the west) but generally a little smaller. The base of the flagged floor is 0.43 m above the drain floor at the west and 0.50 m at the east i.e., probably sitting on suggested blanched plough soil, rather than 'turf rampart' deposits.
- [18] Part of group [87]. Possible southern return of walls [07] and [16] in Trench A. Visible to the south of wall [07] but truncated after approx. 1m to the west by drain [04]. Two or three possible facing stones survive from the north edge, with core-work behind and some potential for this to meet the opposite southern face of the wall, although time constraints denied this during this season of excavation. The construction cut or robbing cut of this wall might be visible on pre-excavation aerial

views of this immediate area (see DJI\_0614), with indications of it extending to the east beyond the known limit of the rectangular structure forming group [87

- [19] Ash/charcoal spread. Above the bowl-shaped feature [21] on its west side, just below top-soil level is a spread of ash/charcoal some 0.10 m deep and sitting at a level between the surviving second course of the building wall [16] and its flagged floor [17].
- [20] Possible robbing trench or other modern intrusion (19<sup>th</sup> century?), truncating a possible linear flue feature, the central portion of clay layer [15] and flagged floor [17] within possible Roman building [group 87] in Trench A. The robbing trench was apparent cutting into the grey 'plough-soil' up to 0.10 m in a slot c 0.65 m wide though the centre of the building, and survives to 2.79 m long at the west side and 1.53 m at the east side (or 1.96 m if the end of the east wall [07] is actually at the line of stones [06] running along the top of the rampart lip). Filled by modern material [05].
- [21] Bowl-shaped feature with post-hole. Located at the north end of the 'robbing trench' [20], adjacent to the end of the possible Roman building (group[87]), outside (north of) the line of possible rampart-edge stones [06], is a bowl-shaped feature, measuring 0.68 m N-S (and possibly extending further to the north) x 0.44 m E-W, observed below modern fill [05] and cut into the 'plough soil', its base 0.40 m below the top of the flagged floor [17] on the east and 0.50 m below those flags on the west. A single small post-hole at its centre mirrors another 1.96 m to the south, with perhaps another 0.96 m from the southern one together forming a line(?).
- [22] Cut of southernmost (inner) defensive ditch forming north side of Fort Annexe 'B'. Located 3.50 m south of parallel ditch [22] and approximately 7.20 m north of the trench SE corner. Ditch measures approximately 4.60 m in width and 2.65 m in depth below ground level (max depth is estimated, as excavation only got to 2.40 m and without reaching ditch base). The appearance of the ditch-cut in profile is of a broad V-shape with a slightly steeper cut on its southern side than the north. The ditch cuts through a band of bedrock nearer its base at approx. 1.80 m below ground level. The ditch contained three distinct fills: upper [12], middle [03], and lower (primary) [23].

The northern lip of the ditch is interrupted by a 19<sup>th</sup> century drain [82]. The northern lip of the ditch may be defined by stonework [81]. Immediately north of this, sub-soil appears and rises to the drain at 0.43 m bgl. This appears to mark the position of the north lip of the ditch, the precise position of which is obscured by the drain and its upcast. The southern lip of ditch can be defined by further stonework [80].

- [23] Lower (primary) fill of ditch [22], comprising of a soft, silty grey waterlogged deposit. A lense of peat was apparent towards the base on the south side and a narrow band of coal finings - presumably natural - lay just above it. Observed from a depth of 1.83 m below ground level, excavated to 2.40 m, but not bottomed, estimated depth of approx. 2.65 m bgl.
- [24] Primary fill of ditch [10], comprising of grey silty-clay containing sparse Roman pottery, flecks of red 'tile' and charcoal in its upper levels, which descends to a deposit of what appears to be pure, low density organic material, light brown in colour, directly above a waterlogged grey, silty clay with some stone and gravel on the flat base. Observed from a depth of 1.45 m below ground level and to a maximum depth of 2.52 m below ground level.
- [25] Secondary fill of ditch [10], comprising of sandy-loam flecked with iron pan. Observed from a depth of 0.82 m below ground level and to a maximum depth of 1.45 m below ground level.
- [26] Upper horizon of primary fill [24] in ditch [10]. Inconclusive.

Nb. See also Trench A additional numbers [78-85].

#### Trench B

- [27] Topsoil. Observed to depths of 0.15-0.28m below ground level. Slight rise in topography over wall [35], especially in the area over its west face.
- [28] Approx. 7 m from the SW corner of the trench, an area of smaller metalling was revealed beneath possible wall-core material on the east side of [88] and extending northwards within the trench. Broader excavation required to establish the extent of the metalling and help with interpretation.
- [29] Thin layer of plough-soil. Comprising of greyish-brown, sandy clay-loam, observed to depths of 0.26-0.40 m below ground level.
- [30] Layer of grey, friable, stony material beneath plough-soil [29] and from 0.62m west of wall [31]. Observed from depths of 0.24 m below ground level.
- [31] Remains of a large sandstone wall, interpreted as the innermost linear earthwork comprising the western rampart of Fort Annexe 'A'. Observed 2.25 m from the east end of the trench. Estimated approx. 1.50 m in width, and observed at a depth of 0.27 m (east edge) and 0.40 m (west edge) below ground level and observed extending below the limits of excavation which was 0.88 m against the west face of the wall. Comprises of large irregular sandstone blocks with dressed edging stones revealed to form a regular western face. Three courses were revealed by excavation against the west face. The uppermost course measured 0.22 m in depth. The second course also measured 0.22 m in depth and was offset to the west from the uppermost course by approx. 0.11 m. Only a small portion of the third course was revealed, but appeared to be further offset than the second course. This wall appears to match the geophysical anomaly interpreted as the rampart wall for annexe 'A'.
- [32] Layer of smaller stone-based material overlaying the west side of annexe wall [31]. Observed to a maximum width of 0.67 m; its uppermost horizon starting at 0.20 m below ground level, extending to a maximum depth of 0.65 m below ground level – which was level with the surface of the second (offset) course of wall [31]. Also seen beneath layer [35]. Interpreted as possible evidence of landscaping subsequent to the demolition of wall [31] with this material used to make-up the levels on the west side of the wall for unknown purposes, possibly to infill and stabilize ground within a new expanded Annexe 'B'? Alternatively, perhaps the wall was simply widened at a later stage, or perhaps this is evidence for widening before a rebuilding of the wall with a now robbed-out western face?
- [33] Equivalent to [35] and [37] and [30].
- [34] Remains of possible stone paving, observed in a broad spread across much of the west side of the trench. Possibly associated with outer linear earthwork of western rampart for Fort Annexe 'A'. Difficult to identify the extent of this feature, some of which may be masking a possible outer ditch for Annexe 'A'. The feature measured at least 4 m (E-W) x 2 m (N-S), observed at depths of approx. 0.30 m below ground level. The largest paving stone measured 0.70 m (E-W) x 0.58 m (N-S).
- [35] Layer of firm, grey, stony material observed below [30] and above paving stones [34] across the west side of the trench. Depth observed to 0.30 m below ground level.
- [36] A dump of iron-slag waste material, observed over part of paving stones [34] in the west part of the trench.
- [37] Equivalent to [30]. Observed extending eastwards from the east side of wall [31] to beyond the limits of excavation. Observed to a maximum depth of 0.48 m below ground level.
- [38] Layer of material directly above cobbled surface [39] and below [37], revealed only within a sondage excavated in the north-east corner of the trench. The layer comprised of a soft, plastic, mid-grey sandy-clay. Observed from 0.48 m below ground level to 0.66 m below ground level which marked the interface between it and the cobbled surface [39].
- [39] Cobbled surface, interpreted as a possible street surface within Annexe 'A', revealed only within a sondage excavated in the north-east corner of the trench and measuring 0.64 m wide. Observed below [38] at a depth of 0.66 m below ground level. Cobbles are sub-rounded and reasonably tightly packed, reminiscent of a Roman road in form.

Nb. See also Trench B additional numbers [88-90].

#### Trench C

- [40] Turf and topsoil. Observed to a depth of 0.16-0.23 m below ground level.
- [41] Layer of mixed post-medieval accumulation and rubble. Observed to be 0.18-0.34 m in depth.
- [42] Mid-brown clay-loam with occasional inclusions of sandstone pieces and tumbled burnt sandstone blocks. Observed to be 0.10-0.30 m in depth.
- [43] Mid-grey silty-clay with flecks of charcoal throughout. Observed to have a maximum depth of 0.28 m.
- [44] Rubble, intermixed with silty grey clay and burnt red clay. Some stones burnt red. Single sherd of Samian ware pottery, fairly crisp, found towards the base of the layer. Layer interpreted as mixed rubble from kiln demolition phase. Observed to have a maximum depth of 1.22 m.
- [45] Shallow humic layer observed above base of kiln [46]. Comprises of humic grey-black silty-clay, with no obvious inclusions. Rich smell. Interpreted as either remains of the final firing episode within the kiln feature, or silt and scrub/grass following abandonment. Observed to be approximately 0.03-0.06 m in depth. Sample #6.
- [46] Floor/base of kiln feature, comprising of flatly laid sandstones, with some gaps, but coherent and level. Observed at depths of 1.93-2.06 m below ground level. Only partially exposed by excavating a sondage approximately 1 m x 1 m and to the depth specified above. It was noted that the water table was reached at a depth of 1.69 m below ground level.
- [47] Stone wall construction of kiln feature, comprising of:

(a) Five courses of heat affected, rounded and tightly set sandstone blocks forming the primary kiln lining, fairly uniform in size, up to 0.40 m in length x 0.20 m in height;

(b) Three lower courses of kiln lining, made from sub-angular sandstone blocks, with no signs of heat damage or wear, slightly smaller up to 0.35 m in length x 0.20 m in height;

(c) Remains of primary construction behind the rebuilt part of the kiln lining, comprising of rubble and more irregular stones that were heavily heat damaged.

(d) Irregularly packed stones and rubble within the construction cut [48] for the kiln and forming a packing/bedding layer around the outer skin of the kiln wall.

- [48] Construction cut of kiln feature. Observed to cut clay layer [49].
- [49] Yellow mixed clay and pebbles. Interpreted as possible redeposited material on the berm between the western ditches of the fort.
- [50] Circular burnt area of blackened stones, observed against the rear of [47c-d] and extending to the construction cut of the kiln [48]. Dimensions: 0.60 m in diameter. Interpreted as a possible vent at the rear of the kiln.

#### Trench L (a)

- [51] Turf and topsoil. Mid-dark grey, firm, friable clay-loam with frequent small stones and random pieces of coal.
- [52] Clay stony deposit, probably modern redeposited. Located at south side of trench for 1.90 m N-S and 0.08 m in depth. Comprises of yellow-brown, firm clay with puddling on surface. Clay is patchy; stones throughout. Appears to be over topsoil in parts suggesting a redeposit.
- [53] Sandstone linear feature, probably aligned E-W and expanding eastwards beyond the edge of excavation. Although far from clear, this has been interpreted as a putative wall line, possibly a boundary wall, identified as an E-W aligned linear feature from geophysical survey. Finds associated with the putative wall include numerous sherds of Roman pottery and several shards of Roman glass (including SF1), and by association indicate the wall is probably Roman in origin. The glass finds in particular may indicate the re-processing of glass in this vicinity. The structure of the wall comprises of core material only, without bond, fairly angular and uneven pieces of sandstone, partially truncated/knocked around by later ploughing and probably robbed of its edging stones, assuming it once had them. Measures approx. 1-1.20 m in width and was observed from 0.05-0.20 m below ground level to its upper surface.
- [54] Smaller metalling observed below the north side of putative wall [53] and extending beyond the eastern edge of the trench. This coherent spread measured approx. 0.80 m E-W x 0.40 m N-S and was observed 0.30 m below ground level to its upper surface. Interpreted as either a base/bedding-layer for putative wall [53] or possibly a track surface or yard hardstanding.
- [55] Natural sandy clay. Observed from 0.45 m below ground level.
- [56] Mixed plough-soil observed either side (north and south of) of, and west of, putative wall [53] and metalling [54], and sitting directly above the natural [55]. Comprises of fairly firm, mid-dark grey-brown clay-silt plough-soil. The plough-soil contained a mixture of both modern and Roman pottery, suggesting that modern ploughing has churned the topsoil into the underlaying Roman levels, which were partially truncated.
- [57] Mixed plough-soil, equivalent to and probably just an extension of [56], observed across the southern half of the trench below redeposited clay [52].
- [58] Thin layer of silty soil observed directly beneath putative wall [53] and above metalling [54]. Measured approx. 0.01-0.04 m in depth. Observed only after removal of stones from wall [53].
- [59] Irregular stonework/cobbles forming a separate layer beneath putative wall [53] and underlaying silty deposit [58]. Observed extending southwards for an unknown distance. Patchy survival, but contains sherds of Roman pottery. Insufficient remains to give a satisfactory interpretation, other than it may be structural and it is probably Roman in origin.
- [60] Sandstone field-drain, observed upon an E-W alignment bisecting the trench and located approx. 2.40 m from its south end, at a depth of approx. 0.58 m below ground level. The drain measured approx. 0.36 m in width. It comprised of roughly hewn sandstone blocks forming fairly shallow side walls, approx. 0.10 m in height, for a narrow water channel, of approx. 0.10 m in width, and with sandstone capping blocks [61], again of approx. 10 m in height, resting upon the side walls to form the roof. Revealed only in the later stages of excavation and limited to a length of 0.86

m (E-W), which equalled the extent of excavation at this depth within the trench. The drain sits directly below mixed plough-soil [56], but it was not possible to determine whether or not it cut through or abutted Roman levels [59] and therefore it was not possible to determine its date – although a limited quantity of Roman pottery was recovered from within its channel.

- [61] Sandstone capstones forming cover over side-walls of drain [60]. Each stone measuring approx. 0.25-0.36 m in length x 0.14-0.20 m in width x 0.10 m in height.
- [62] Not used.

#### Trench L (b)

- [63] Turf and topsoil. Comprising of firm, mid-dark grey, friable, clay-loam with common inclusions of small stones and random coal. Observed to a depth of 0.20 m below ground level.
- [64] Plough-soil. Comprising of fairly loose, greyish-brown, sandy clay-loam with common inclusions of small-medium sandstone and coal and iron-ore/manganese deposits. Contains some sherds of Roman pottery and pieces of (iron?) slag, with burning deposits accreted on the pottery, stones and slag.
- [65] Sandstone linear feature interpreted as core material from a possible broad sandstone wall of Roman origin. Aligned N-S and measured 1.16 m in width. Observed 0.16-0.22 m below ground level, to a maximum depth of 0.50 m below ground level. The sandstones comprising the core material are of varying size and irregular in form, though more sub-angular than those revealed in Trench L(a) [53]. It was noted that the stones were well bonded with clay [66]. It was difficult to determine where the edges of the feature were, due to possible robbing of edging stones, but its eastern edge [68] was better defined, appearing to abut palisade feature [72] which seemed parallel. The feature contained Roman pottery and SF2 – a perforated ceramic button or stopper.
- [66] Clay matrix/packing and bonding of possible wall [65]. Comprises of firm, dark grey, silty-clay, homogenised - possibly being water affected. Contains occasional clusters of smaller stones within the matrix – possible packing? Occasional fragments of coal inclusions.
- [67] Possible midden/rubbish dump feature of Roman origin, located to the east of and abutting possible wall [65] and specifically its eastern edge [68]. Comprises of a clay layer, similar to bonding clay [66] but much darker grey in colour, of firm and medium compaction, humic and plastic but gritty in parts and with inclusions of small stones, hammer-scale, other burnt materials and accreted iron working/slag. Additionally, the layer contained considerable quantities of Roman pottery and other finds including SF3,4,5,6. Equivalent to [69], which was just an eastern extension of [67]. The layer was revealed for 6.20 m in total length, and observed from depths of 0.35 m (top) to 0.70 m (deepest part of base) before sealing palisade [72] and puddled clay layer [70]. The layer has been interpreted as a possible rubbish dump/midden of 2<sup>nd</sup>-3<sup>rd</sup> century Roman origin.
- [68] Eastern edge of sandstone linear [65] a possible broad wall of Roman origin. This east side contains larger coherent blocks forming a possible defined edge. The possible edging stones are clay bonded [66] and abut midden material [67].
- [69] Equivalent to [67], this layer being an eastern extension of it.
- [70] Layer of puddled grey clay, topped with a fibrous band. Located directly beneath midden material [67][69], and observed to be at the same level and abutting

palisade upcast [76]. The eastern extent of the layer directly mirrored that of midden [67][69]. Contained sherds of Roman pottery. The layer measured 3.50 m in length x 1.85 m (max width of trench). The maximum depth of the layer was undetermined, the trench reaching the limits of excavation at 0.84 m below ground level and the layer's uppermost level being 0.60 m below ground level.

- [71] Fill of fence-line trench [72]. Comprises of a grey puddled clay throughout the double fence-line trench; equivalent clay to [70], but containing well-preserved remains of a probable timber fence-line in the westernmost of the two ditches. The fence-line is aligned roughly N-S but meanders along its course. It comprises of the remains of timber post uprights set into natural clay [77], apparently interwoven horizontally with additional smaller timbers and occasional packing stones, to create a fence-line, which although collapsed and incomplete, has been largely well-preserved due to the anaerobic conditions formed by the dense grey clay encasing it. Observed to a maximum depth of 1.06 m below ground level.
- [72] Cut of fence-line trench. This natural cut trench is aligned N-S and incorporates two ditch gullies, the west of which contains well-preserved remains of a timber fenceline [71]. The overall width of the cut is quite wide at approx. 1.42 m. The western ditch was observed from 0.62 m below ground level, stepping down a further 0.18 m and forming a shelf approx. 0.36 m in width, before stepping down sharply to a maximum depth of 1.06 m and forming the flat-bottomed box-like ditch containing the fence approx. 0.28 m in width, thereafter the ditch steps back up to a shelf which is level to the shelf formed on the western side 0.44 m in width, a second square-cut ditch is formed east of this shelf reaching a maximum depth of 0.96 m below ground level and slightly wider than the west ditch at approx. 0.32 m. No discernible fence-line could be identified within this eastern ditch, but given its proximity and similarity to the parallel western ditch, it is likely that this was intended as a ditch in which to set a fence-line. Whilst the entire width the trench was excavated over the line of the western ditch containing the fence remains, the eastern ditch was only excavated to a maximum width of 0.56 m within the trench due to time constraints – and further excavation may well reveal potential fence remains further along. Upcast from the original excavation of this eastern ditch could be seen above its eastern side [76], which formed the interface with midden material [69][67] above it.
- [73] Fill of small ditch [74] at west end of trench, revealed only in a 0.50 m wide slot excavated against the north facing section of the trench. Fairly firm, dark grey-brown silty-clay. Contained sherds of Roman pottery.
- [74] Cut of small ditch at west end of trench, revealed only in a 0.50 m wide slot excavated against the north facing section of the trench. This ditch is comparable to the western ditch of fence-line trench [72]. The upper horizon was first recognised at a depth of 0.60 m below ground level and measured 0.72 m in width, reaching a shelf on its western side at 0.86 m below ground level and approx. 0.25 m in width, before stepping down sharply to a depth of 0.94 m below ground level forming a box-shaped potential fence-ditch of approx. 0.23 m in width at its base. Thereafter the ditch steps back up to form a shelf on its eastern side to a depth of 0.74 m below ground level and approx. 0.16 m in width and rises sharply thereafter to a depth of approx. 0.60 m below ground level. Interpreted as a potential fence-line trench of probable Roman origin.
- [75] Equivalent to possible sandstone wall-core feature [65] and clay bond [66], as seen in north facing section of a 0.50 m wide sondage excavated along the south side of the trench.

- [76] Upcast mound of redeposited natural clay from the original excavation of the eastern ditch of palisade trench [72]. This could be seen above the ditch eastern side cut, and formed the interface with midden material [69][67] above it. It measured approx. 0.44 m in width and its uppermost horizon was observed at 0.58 m below ground level.
- [77] Natural. Yellow-orangey brown, dense, sandy-clay with lenses of grey clay, common inclusions of small sandstones and manganese. Observed from depths of approx. 0.54 m below ground level.

#### Trench A (additional)

- [78] Layer of brown sandy-silt, located immediately to the north of possible turf-rampart [09] and rampart wall [06], deepening to the north, being some 0.45 m deep at 7.80 m from the south end of the trench, 0.66 m below ground level. This layer of brown sandy-silt sits upon natural, orange boulder-clay [79].
- [79] Natural, orange boulder-clay. Observed at depths from 0.66 m below ground level towards the north end of Trench A.
- [80] Line of stones exposed only in a short sondage, located 7.80 m from the SE corner of the trench. The stones comprise of one row and one course deep, dipping slightly to the north, and appears to form the southern lip of the annexe ditch [22] (the intervening space between the bank below upper line of stones [06] and this being a flattish berm c 1 m wide).
- [81] The northern lip of ditch [22] may be defined by some stonework at 0.51 m below ground level, between 11.70 m and 12.20 m from the S end of the trench.
- [82] Drain of probable 19<sup>th</sup> century origin, which interrupts the northern lip of ditch [22]. Measures 0.22-0.30 m wide, defined by its surface of small stones 0.33 bgl (with indications of cut up to c 0.15 m bgl cutting through plough-soil [02]) which cuts diagonally across the trench on the same line as the southern drain, entering the east baulk at 12.6 m. The drain is parallel to and associated with other drains [04] and [83] aligned NE-SW, approx. 6.10-6.40 m apart. No larger stone uprights were utilized in the construction of this drain, simply being filled by medium-large angular and random pieces in a soak-away 'French' drain style.
- [83] Drain of probable 19<sup>th</sup> century origin, truncating the northern edge of defensive ditch [10]. The drain measures 0.30 m diameter. The fill is of small stones which approach to 0.34 m below ground level, but there appear to be occasional uprights at the base, similar to the upper drain [04] but not regular or as organised. On either side of this drain is a thick, dense, hard accumulation of iron slag or pan, at 0.60 m bgl on the north side. The drain is parallel to and associated with other drains [04] and [82] aligned NE-SW, approx. 6.10-6.40 m apart.
- [84] Stones possibly forming northern lip of defensive ditch [10]. Comprising an accumulation of stones located 0.60 m 1 m south of drain [83] and a depth of 0.77 m below ground level.
- [85] Possible turf rampart observed between defensive ditches [22] and [10]. Measuring 0.20 m in depth, this deposit of grey silty material (perhaps turf rampart or degraded plough soil) was observed sitting on the sub-soil at 0.61 m below ground level, where it was tested by a sondage between 14.50 m and 15.70 m from the south end of the eastern baulk. Comparable to turf rampart material [09], associated with rampart wall [06].
- [86] Abutting the south side of wall [06] was a deposit of large irregular stone pieces resembling possible core-work, and these stones were sealed by layer [08] which abutted the east side wall [07]. A parallel southern face to wall [06] may survive

beneath [08] and although possibly truncated by drain [04] within Trench A, may survive beyond the eastern edge of the trench. If this is the case then wall [06] would be more likely to comprise a broad structural wall from an unknown Roman building rather than a single line of rampart footing for the annexe. Disturbed stones/possible paving observed to the east of wall [06], are probably the result of truncation from drain [04] in this area, but may have originally belonged to wall [06] extending further to the east.

[87] Group number assigned to secondary structure at south end of Trench A, comprising of walls [07][16][18], flagged surface [17], and clay layer [15] containing remains of a linear flue [14]. It is likely that most of the stones comprising of drain [04] were reused from this structure. A later robbing trench [20] has truncated most of the central portion of the floor and flue. It also truncated layer [19] which was probably waste material from group [87]. Within the base of the linear cut/possible flue feature, were the undisturbed deposits of fine ash [14]. Also, at the north end of the structure, deposit [19], comprised of a similar ashy material. Given the presence of clay lining [15] and large quantities of CBM including flat-form material, possibly reused tiles, the structure has been interpreted as a form of industrial building requiring heat-insulation and a hearth/crucible/kiln requiring a flue/air draw, discharging to the north. Although clay layer [15] did not show signs of heat directly, the demolition of the building did show obvious signs of being heat affected and contained scorched clay in its make-up. It is possible deposit [19] is the remains of ash material raked from small-scale industrial processing from within the centre of the structure, i.e. glass or metal working. It was noted that the building is quite asymmetric in plan, utilitarian in layout, making it unlikely to be domestic or longlived.

## Trench B (additional)

- [88] Possible core-work from a sandstone wall, aligned N-S, with no surviving facing stones. Located approx. 5 m from the south-west corner of the trench. Measured approx. 1.12 m (E-W) x 1.52 m (N-S). Associated with [89] which may be an extension of the same wall or a corresponding terminal.
- [89] Possible core-work from a sandstone wall, associated with [88], revealed on the north side of the trench. Measures 0.70 m in width x 0.45 m min length.
- [90] Possible demolished structure comprising flat sandstone pieces, two possible upright sides may indicate a box-like feature, such as a water tank.
- [100] Unstratified context number for entire site.

#### 4. DISCUSSION

In the south-western field little evidence was found, either by geophysical survey or excavation, for the apparent sub-division of the land into apparent enclosures or paddocks, as first suggested in the Revitalising Redesdale Lidar survey (Frodsham unpub.). Visual inspection suggests it is possible, however, that such a pattern was created by the enhancement of natural terraces with ephemeral earthen boundaries or fences to create sub-divisions just detectable through Lidar survey. In the eastern part of the field, close to the south-west corner of the Roman fort, evidence of Roman activity was found in the form of ditches and gulleys, one of them containing a line of stakes, the purpose of which may have been to control the flow of water out of the fort and fort ditches, perhaps for uses associated with stock or light-industrial activity. Abundant Roman pottery was found in this area as well as glass waste suggestive of manufacturing somewhere in the vicinity.

In Gallow's Knowe west of the fort three trenches were excavated. Close to the west rampart of the fort were uncovered the remains of a well-preserved lime kiln some 2.45 m in diameter and surviving up to eight built courses. The form of this structure, with an internal ledge present some 0.80 m above the floor, is in keeping both with contemporary Roman descriptions and rare remains of such single-phase installations uncovered elsewhere in the Roman North, notably by Simpson at Housesteads in 1911.

Further north, trenches targeted two apparent annexe enclosures seen on geophysical survey plots from 1992, 2004 and 2021. Some 50 m west of the north-west angle of the fort a trench was cut across the north side of an extensive boundary feature which appears to enclose an area of c 1 ha west of the fort. This was found to comprise the remains of turf rampart at least 4 m wide, the northern edge of which sat upon a line of flat stones arranged in a single course. A gap in this line provided access to a partially-flagged floor some 2 m wide, bounded on both sides by the remains of stone walls but truncated to the south by a modern field drain lined with Roman stone. The presence of burnt clay above the floor and in an apparent robbing trench suggested that this was the remains of a bakehouse or oven, rather than of a gateway, but palaeo-environmental analysis did not further elucidate its function. The remains of turf from the rampart are being studied as part of Edinburgh University's Earthen Empire Project. The external ditches to this rampart, separated from it by a 5-metrewide berm, were both 2 m deep and contained waterlogged deposits below secondary fills largely devoid of finds. Within the waterlogged fill of the inner ditch were found the well-preserved remains of a Roman shoe of probably 2<sup>nd</sup> century date which was subsequently cleaned and preserved for further analysis.

A second trench was opened across what appeared to be the west side of a second, smaller enclosure built entirely within the larger enclosure. This revealed a substantial stone wall or bank, faced with a lower offset course externally, but apparently merging with an earthen or turf bank on its inner, east side. Variation in the composition of the stonework suggests that the stone bank may have been widened, perhaps when (re)faced on its west side. Inside the wall face a deposit of light, silty material may derive from fallen, earth rampart material and is likely to infill a defensive outer ditch, while further to the west are patches of surviving flagged surface probably associated with building remains. This trench was excavated only to the upper surface of Roman remains except in the north-east corner, inside the enclosure boundary, where a cobbled surface was revealed some 0.70 m below ground level.

The pottery assemblage from the site, examined by Alex Croom, is considered typical for the Central sector of the frontier and dates mainly to the third century, with the latest material from the late third century, but contains some residual second-century material. Within the assemblage were 29 sherds of amphorae, all of olive oil-carrying Baetican vessels, the most common form of amphora on northern military sites, while Lower Nene Valley colour-coated ware was the most common fine-ware type. The varied coarse wares consisted mainly of BB1, BB2 and locally-produced grey wares, but two sherds of calcite-gritted pottery, found with third-century pottery, likely indicate occupation in the late third century or later. Amongst a range of other small finds in copper-alloy, lead, iron and glass examined by Dr Lindsay Allason-Jones, perhaps most intriguing are several lumps of glass and pieces of glass-making waste in various hues which suggest local manufacture using recycled material. Fragments of a cylindrical bottle of likely  $1^{st} - 2^{nd}$  century date and a number of beads dateable to the  $2^{nd}$  - mid  $3^{rd}$  century AD fit into the date range suggested by the pottery assemblage.

These investigations have confirmed and extended the results of Crow's investigations in the 1990s by revealing the complexity of remains west of the Roman fort at High Rochester. In addition to continuing palaeo-environmental and other analyses, further investigations should aim to reveal the suggested external ditch to the smaller western annexe enclosure and phase the periods of activity suggested by remains within and outside it. Further excavation of the larger annexe ditches closer to the fort might reveal more extensive waterlogged deposits before they are threatened by wider environmental impacts. And exposure of the western flue to the lime kiln would allow sampling to shed light on the period of its use and method of operation.

#### 5. **REFERENCES**

BIGGINS, J. A. 2003 Geophysical Survey a/ High Rochester Roman Fort, Northumberland, Sep(ember 2003, Newcastle [unpublished report for T. Hancke and B. Charlton].

BOSANQUET, R C, 1933-1934, The Roman tombs near High Rochester, *PSAN*<sup>4</sup>, 6, 246-251.

BREEZE, D. J. and DOBSON, B. 2000 Hadrian's Wall, 4th ed., London.

BRUCE, J. c. 1857 'An account of the excavations made at the Roman station of Bremenium during the summer of 1855', AA 2, I, 69–85,

BRUCE, J. c. 1978 Handbook to the Roman Wall, 13th edition [ed. and enlarged by C. Daniels], Newcastle upon Tyne.

CARLTON R J & RUSHWORTH, A, 2005, Northumberland National Park Historic Village Atlas Series: Rochester. NNPA.

CARLTON, R J, 2010, *High Rochester Roman Fort, Northumberland: Archaeological Evaluation, Prepared by The Archaeological Practice Ltd.* Unpublished Report for Mr M Corbitt. OASIS Code: thearcha2-87139

CASEY, P. J. and SAVAGE, M. 1980 'The coins from the excavations at High Rochester in 1852 and 1855', AA 5, 8, 75-87.

CHARLTON, D. B. and MITCHESON, M. 1984 'The Roman cemetery at Petty Knowes, Rochester, Northumberland', AA 5 ,12, 1—31.

CHARLTON, D. B. 1986 The Story of Redesdale, Northumberland County Council, Hexham.

CHARLTON, D B, 1987, *Upper North Tynedale: A Northumbrian Valley and its People*. Northumbrian Water, Newcastle upon Tyne.

CHARLTON, D B, 1996, *Fifty Centuries of Peace and War. An Archaeological Survey of the Otterburn Training Area*. The Ministry of Defence Otterburn Training Area.

CHARLTON, D B, 2004, The Archaeology of the Otterburn Training Area, in P Frodsham (ed.) *Archaeology in Northumberland National Park*. Council for British Archaeology Research Report 136; York, 324-37.

COLLINGWOOD, R. G. and RICHMOND, 1. 1969 The Archaeology of Roman Britain, Chatham.

COLLINGWOOD, R. G. and WRIGHT, R. P. 1995 Roman Inscriptions of Britain — Volume I: Inscriptions on Stone, 2nd. ed.

CROW, J. 1993 'Survey and Excavation at High Rochester 1992', Universities e/Durham and Newcastle upon Tyne Archaeological Reports 1992, 16, 30—4.

CROW, J. 1994 'High Rochester, Survey and Excavation 1993', Universities of' Durham and Newcastle upon Tyne Archaeological Reports 1993, 17, 29-37.

CROW J, 2004a, Survey and excavation at Bremenium Roman fort, High Rochester 1992-98, in P Frodsham (ed.) *Archaeology in Northumberland National Park*. Council for British Archaeology Research Report 136; York, 213-23.

CROW, J. 1995 'High Rochester 1994', Archaeology in Northumberland 1994—1995, 34—5.

CROW, J. 1997 'High Rochester 1996', Archaeology in Northumberland 1996-1997, 29.

CROW, J. 1999a 'High Rochester — Bremenium', in: P. Bidwell (ed.), Hadrian's Wall 1989— 1999, Newcastle upon Tyne, 188—95.

CROW, J. 1999b 'High Rochester life beyond the wall', Current Archaeology, No. 164, 14 No. 8, London, 290—4.

FRODSHAM, P, 2019, Lidar Survey report for Revitalising Redesdale. Unpublished report for Revitalising Redesdale, NNPA.

GeoQuest Associates 1992a Geophysical and topographical surveys of Bremenium, Northumberland 1992.

Geoquest Associates 1992b Resistivity tomography sections through the defences of Bremenium, Northumberland.

Hancke T, Charlton B & Biggins J A, 2004, A Geophysical Survey at High Rochester Roman Fort, *Archaeologia Aeliana* Fifth Series, Volume 33, 35-50.

HODGSON, J. 1827 History of Northumberland, Part 3, Vol 1: Containing Ancient Records and Historical Papers, Newcastle upon Tyne.

HODGSON, N., STOBBS, G. C., and VAN DER VEEN, M. 2001 'An Iron Age settlement and remains of other prehistoric date beneath South Shields Roman Fort, Tyne and Wear', Archaeological Journal, 158, 62-160.

RICHMOND, 1. A. 1936 'Excavations at High Rochester and Risingham', AA 4, 13, 170–98.

RICHMOND, I. A. 1940 'The Romans in Redesdale', NCH, 15, 63-154.

RIVET, A L F, and SMITH, C, 1979, The Place-names of Roman Britain. 2nd edition; London

RUSHWORTH, A, 1996, *High Rochester Fort: A Documentary Assessment of Post-Roman Occupation* (unpublished report; commissioned by The Northumberland National Park Authority). The Archaeological Practice, University of Newcastle upon Tyne.

APPENDIX 1: High Rochester Roman Fort, Northumberland: Palaeoenvironmental Assessment, Archaeological Services University of Durham Report 5613, March 2022

#### 1. Summary

#### The project

1.1 This report presents the palaeoenvironmental assessment results of twelve bulk samples and associated wood fragments taken during archaeological works at High Rochester Roman Fort, Northumberland.

1.2 The works were commissioned by The Archaeological Practice Ltd, and conducted by Archaeological Services Durham University.

#### Results

1.3 The samples contain small assemblages of occupation waste including archaeobotanical evidence of cultivated crops, wild-gathered foods and imported fruits. Although limited in number, they are consistent with a later prehistoric or Roman period origin. Waterlogged conditions are noted within several features, which has allowed the preservation of a range of uncharred plant remains, wood and small leather/fabric artefacts. Areas of damp ground and open, disturbed habitats are indicated by the waterlogged weed flora.

#### Recommendations

1.4 Further examination of a selection of the waterlogged fills such as [23], [24] and [71] could provide a more detailed list of the plant remains preserved in the features. This would include processing of any remaining material. If the artefactual evidence does not provide close dating, targeted AMS dating of selected charcoal or wood fragments may confirm the origin of the deposits.

1.5 If dating is secured for the features, species identification of charcoal fragments from the well-preserved assemblages in ash spread [19] and fence-line trench fill [71] could be undertaken to consider the woodland resources available in the surrounding area and their exploitation for fuelwood.

1.6 A radiocarbon date of the pine charcoal from primary ditch fill [24] is recommended to confirm whether the pine charcoal is intrusive or contemporary with the feature. Due to the possibility of intrusion, a duplicate date should be considered for this fill.

1.7 Targeted pollen analysis could be undertaken on a selection of the waterlogged features where dating has been firmly established, to provide a snapshot of wider landscape use.

1.8 Further examination of the textile/fabric and leather remnants and waterlogged wood by appropriate specialists is warranted, including species identification, descriptions, recording of dimensions and photography as appropriate.

1.9 The flots should be retained as part of the physical archive of the site. The residues were discarded following examination. If additional work is undertaken at the site, the results of this assessment should be added to any further environmental data produced.

#### 2. Project background

#### Location and background

2.1 Archaeological works were conducted by The Archaeological Practice Ltd at High Rochester Roman Fort. This report presents the palaeoenvironmental assessment results of 12 bulk samples deriving from a range of features of probable Roman or late prehistoric origin immediately west of the Roman fort Bremenium including ditches, ash layers, midden material, a fence-line and a kiln. Associated waterlogged wood fragments were also assessed.

#### Objective

2.2 The objective of the scheme of works was to assess the palaeoenvironmental potential of the samples, establish the presence of suitable radiocarbon dating material, and provide the client with appropriate recommendations.

#### Dates

2.3 The samples were received by Archaeological Services on 12th August 2021. Assessment and report preparation was conducted between 5th September 2021 and 31st March 2022.

#### Personnel

2.4 Assessment and report preparation was conducted by Dr Carrie Armstrong. Wood identification was by Dr Charlotte O'Brien. Sample processing was by Dr Charlotte O'Brien and Dr Carrie Armstrong.

#### Archive

2.5 The site code is **HR21**, for **H**igh **R**ochester Roman Fort 20**21**. The finds and wood fragments are currently held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University awaiting collection. The flots and plant remains will be retained at Archaeological Services Durham University.

## 3. Methods

3.1 Most of the bulk samples were manually floated and sieved through a 500 $\mu$ m mesh. To recover additional plant remains from a peat lens within ditch fill [23], a 200ml subsample was washed through a stack of sieves (150 $\mu$ m, 300 $\mu$ m, 500 $\mu$ m) and scanned wet. The bulk sample residues were examined for shells, fruitstones, nutshells, charcoal, small bones, pottery, flint, glass and industrial residues, and were scanned using a magnet for ferrous fragments. The flots were examined at up to x60 magnification for charred and waterlogged botanical remains using a Leica MZ6 stereomicroscope. Identifications were aided by comparison with modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University, and by reference to relevant literature (Cappers *et al.* 2006). Plant nomenclature follows Stace (2010). Habitat classifications follow Preston *et al.* (2002).

3.2 Selected charcoal and waterlogged wood fragments were identified, in order to provide material suitable for radiocarbon dating and to determine the nature and condition of the assemblages. The transverse, radial and tangential sections were examined at up to x500 magnification using a Leica DMLM microscope. Identifications were assisted by the descriptions of Schweingruber (1990), Gale & Cutler (2000) and Hather (2000), and modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University. Where comparable anatomical properties prevent secure identification, charcoal/wood remains are recorded to genus level or assigned to family groups. *Prunus* sp

includes blackthorn, plum, bird or wild cherry. Willow and poplar are grouped as Salicaceae (willow family), and apple, hawthorns and whitebeams are represented by the subfamily Maloideae.

3.3 The waterlogged wood pieces were hand-washed under cold running water, following English Heritage (2010) guidelines. The items were visually examined under both natural and artificial light to observe obvious external features such as evidence of working. Maximum dimensions of the largest waterlogged wood piece in each context was recorded. After assessment, to preserve and retain humidity the wood fragments were resealed in polythene bags or boxes containing a small amount of water, and stored in cool conditions.

3.4 The works were undertaken in accordance with the palaeoenvironmental research aims and objectives outlined in the regional archaeological research framework and resource agendas (Petts & Gerrard 2006; Hall & Huntley 2007; Huntley 2010).

#### 4. Results

4.1 Finds recovered from the samples are sparse. A fragment of leather with associated thread was recovered from kiln floor [45] and a small scrap of fabric/felt was recovered from fence-line slot [71]. Several fragments of animal bone were recovered from ditch fill [23] and further bone was present in ditch fill [73] and upper midden fill [69=67]. Ditch fill [25] contained two pot fragments, and five pot fragments were recovered from upper midden fill [69=67]. Occasional fired clay fragments are present in a few fills [23, 25, 37, 71, 73, 69=67]. Kiln floor deposit [45] comprises abundant fired clay fragments, magnetised geological remains and rare heat-reddened stones, all of which supports the interpretation of this feature having experienced significant in-situ heating. Iron rich pan nodules were observed in stony material [37] and upper midden fill [69=67], with possible cess fragments also noted in [69=67].

4.2 The majority of the samples include limited charcoal assemblages. Charcoal preservation is variable, with mineral inclusions noted in a reasonable proportion of the fragments. Species present typically include a mixture of oak, hazel, alder and Salicaceae. Charred heather twigs are also present in limited quantities in most of the deposits. Ash spread [19] and fence-line slot [71] contain more frequent charcoal fragments, in good condition, most of which are non-oak roundwood. Primary ditch fill [24] contains several fragments of pine charcoal and an uncharred fragment of pine wood, as well as charcoal from *Prunus* sp. and ash. These species were not observed in the other assemblages. The samples also typically comprise small quantities of fragmented coal/coal shale and clinker/cinder.

4.3 Anoxic (waterlogged) preservation was evident in ditches [F10] and [F22] and in some fills within Trench L(b) [71, 73, 70], with significant quantities of degraded uncharred vegetative material, wood fragments and common uncharred seeds noted. The waterlogged remains are predominantly from plants of wetland/damp ground, open disturbed-ground habitats and scrub. Sedges and rushes are predominant in the peat lens within southern ditch fill [23]. Although damp conditions are indicated, obligate aquatic plants are not recorded in any of the features. Occasional seeds of fig (a Roman import) were noted in three of the deposits (primary southern ditch fill [23], fence-line [71] and ditch fill [73]). Varying quantities of wood fragments were present in all of the waterlogged fills, and a number of these exhibited signs of working. Larger pieces were recovered from fence-line [71] where small diameter roundwood and larger worked wood pieces may comprise stakes

and wattle, and lower midden fill [70] which comprises a number of clearly modified oak stemwood fragments.

4.4 Charred plant macrofossils are rare across the site and comprise a small grass caryopsis in ash layer [19], a sedge nutlet in ditch fill [23], an indeterminate cereal grain in [71], a hazel nutshell fragment and grass seed in [73], a wheat grain (cf. spelt) in [24], and a barley grain, wheat glume base and dock nutlet in ditch fill [25]. Small quantities of charred soil fungus sclerotia were noted in several fills.

4.5 Detailed palaeoenvironmental results for each context are presented in Appendix 1. Material suitable for radiocarbon dating is shown in Appendix 2. Appendix 3 presents descriptions and recommendations for the larger waterlogged wood fragments and organic artefacts.

#### 5. Discussion

5.1 The features generally comprise small background levels of waste associated with occupation rather than large deposits of settlement debris. The composition of the palaeoenvironmental assemblages, while limited, are largely consistent with Iron Age and Romano-British occupation, particularly for this region. The palaeoenvironmental remains are also similar to those found during previous work at the site (Archaeological Services 2010). There are a few remains of barley and glume wheats (cf. spelt), which are crops commonly associated with deposits of Iron Age or Roman origin (Hall & Huntley 2007; Greig 1991). The presence of fig in a few features points to a Roman or later date as this fruit was introduced to Britain during the Roman period (Van der Veen *et al.* 2008), probably as dried fruits (Greig 1996).

5.2 Charred heather twigs are present in small numbers in most of the deposits, and charred leaves and heather flowers were also occasionally identified. Such remains may derive from the collection of heather for fodder, fuel, bedding or thatch, which were all traditional uses (Gale & Cutler 2000; Fenton 1978), or perhaps also the use of heathy turves for fuel (Hall 2003). Available wild foods included hazelnuts, sloe, raspberry and blackberries.

5.3 The waterlogged plant remains may largely reflect the environment within and surrounding the features as they infilled naturally. Damp, marshy conditions are suggested within the large ditches [F10] and [F22]. Although there is a general lack of evidence for permanent standing water, the peat lens within the primary fill of [F22], points to a period of particularly wet, vegetated conditions (assuming it developed in situ). Open, nutrient-rich rough ground is indicated by the frequent remains of ruderal weeds, some of which may have grown beside the features, while others could derive from the dung of grazing animals.

5.4 The recording of small fragments of charred and uncharred pine wood in primary ditch fill [24] is noteworthy as the presence of pine declined sharply across the British Isles around 4000 BP, with pine only reintroduced more widely as a non-native in the 1800s (Sassoon 2018). While the pine fragments may potentially derive from imported material, the location of High Rochester may also reflect the persistence of a small population of pine in this region after the pine decline, with studies suggesting that the persistence of limited native populations in southern Scotland and northern England in "refugial sites" did occur (Sassoon 2018).

#### 6. Recommendations

6.1 Further examination of a selection of the waterlogged fills such as [23], [24] and [71] could provide a more detailed list of the plant remains preserved in the features. This would include processing of any remaining material. If the artefactual evidence does not provide close dating, targeted AMS dating of selected charcoal or wood fragments may confirm the origin of the deposits.

6.2 If dating is secured for the features, species identification of charcoal fragments from the well-preserved assemblages in ash spread [19] and fence-line trench fill [71] could be undertaken to consider the woodland resources available in the surrounding area and their exploitation for fuelwood.

6.3 A radiocarbon date of the pine charcoal from primary ditch fill [24] is recommended to confirm whether the pine charcoal is intrusive or contemporary with the feature. Due to the possibility of intrusion, a duplicate date should be considered for this fill.

6.4 Targeted pollen analysis could be undertaken on a selection of the waterlogged features where dating has been firmly established, to provide a snapshot of wider landscape use.

6.5 Further examination of the textile/fabric and leather remnants and waterlogged wood by appropriate specialists is warranted, including species identification, descriptions, recording of dimensions and photography as appropriate.

6.6 The flots should be retained as part of the physical archive of the site. The residues were discarded following examination. If additional work is undertaken at the site, the results of this assessment should be added to any further environmental data produced.

#### 7. Sources

Archaeological Services 2010 *High Rochester Roman Fort, Northumberland: palaeoenvironmental assessment.* Unpublished report **2473**, Archaeological Services Durham University.

Cappers, R T J, Bekker, R M, & Jans, J E A, 2006 *Digital Seed Atlas of the Netherlands*. Groningen.

English Heritage 2010 Waterlogged Wood: Guidelines on the recording, sampling conservation and curation of waterlogged wood. Swindon.

Fenton, A S, 1978 The Northern Isles: Orkney and Shetland. Edinburgh.

Gale, R, & Cutler, D, 2000 *Plants in archaeology; identification manual of vegetative plant materials used in Europe and the southern Mediterranean to c.1500.* Otley.

Greig, J R A, 1991 The British Isles, in W Van Zeist, K Wasylikowa & K-E Behre (eds) *Progress* in Old World Palaeoethnobotany. Rotterdam.

Greig, J, 1996 Archaeobotanical and historical records compared – a new look at the taphonomy of edible and other useful plants from the 11th to the 18th centuries A.D., *Circaea* **12(2)**, 211-247.

Hall, A, 2003 Recognition and characterisation of turves in archaeological occupation deposits by means of macrofossil plant remains. Centre for Archaeology Report **16/2003**. English Heritage.

Hall, A R, & Huntley, J P, 2007 A review of the evidence for macrofossil plant remains from archaeological deposits in northern England. Research Department Report Series no. 87. London.

Hather, J G, 2000 *The identification of the Northern European Woods: a guide for archaeologists and conservators*. London.

Huntley, J P, 2010 A review of wood and charcoal recovered from archaeological excavations in Northern England. Research Department Report Series no. **68**. London.

Petts, D, & Gerrard, C, 2006 Shared Visions: The North-East Regional Research Framework for the Historic environment. Durham.

Preston, C D, Pearman, D A, & Dines, T D, 2002 New Atlas of the British and Irish Flora. Oxford.

Sasson, D, 2018. A paleoecological investigation of Scots pine (Pinus sylvestris).

*refugia in north-east Wales and Shropshire*. University of Manchester.

Schweingruber, F H, 1990 Microscopic wood anatomy. Birmensdorf.

Stace, C, 2010 New Flora of the British Isles. Cambridge.

Van der Veen, M, Livarda, A, & Hill, A, 2008 New food plants in Roman Britain – dispersal and social access. *Environmental Archaeology* **13(1)**, 11-36.

# Appendix 1: Data from palaeoenvironmental assessment

Sample	Context	Feature	Volume processed (I)	Waterlogged preservation	Flot volume (ml)	C14 available	Rank	Notes	
1	23	TA1: [F22] – southern ditch 1° fill	20	Y	260	Y	***	Moderate flot. Common uncharred seeds including waterside/damp ground taxa (sedges, spike-rush, bugle), ruderals (redshank, knotgrass, common nettle, common chickweed), eurytopic weeds (goosefoots, cinquefoils, buttercups and docks -some in tepals) and a few fig seeds. Rare examples also of bramble and sheep's sorrel. Occasional charcoal fragments including oak but mostly diffuse-porous including Salicaceae, hazel and alder. Rare charred heather twigs and leaves. Charred plant macrofossils comprise a single sedge nutlet, heather flowers and several soil fungus sclerotia. Occasional uncharred vegetative material and rare wood fragments including small diameter roundwood. Traces of clinker/cinder and coal/coal shale, common large fragments of degraded animal bone. Traces of fired clay and hammerscale in residue.	
1	23	TA1: [F22] – peat lens in southern ditch 1° fill	200ml	Y	N/A	Y	**	Abundant fibrous vegetative material. Rare tiny wood fragments including some uncharred heather twigs. Other heather remains noted including leaves, flowers and a seed (cf. <i>Erica</i> ). Traces of insect/beetle remains. Traces of tiny charcoal fragments. Common uncharred seeds including sedge nutlets and rushes, and rare examples of cinquefoils and bull-rush. Occasional charred soil fungus sclerotia.	
2	19	TA1: ash spread	5	N	520	Y	***	Large flot. Common charcoal fragments in good condition, mostly non-oak roundwood including some near full diameter. Occasional charred heather twigs and several charred heather fruiting heads. Single small charred grass caryopsis and an indeterminate seed. A trace of charred indeterminate tuber/rhizomes. No uncharred plant macrofossils present. Rare clinker/cinder fragments. Fired clay and a tiny sherd of glass in the residue.	
3	14	TA1: ash layer	2	Ν	40	Y	**	Small flot with a trace of modern roots. Occasional small charcoal fragments, diffuse porous charcoal in good condition including cf. Salicaceae - mostly small diameter roundwood. No oak noted. Rare charred heather twigs. No charred plant remains. Trace of uncharred seeds. Fired clay in the residue.	
4	24	TA1: [F10] - northern ditch 1° fill	30	Y	500	Y	***	Large flot. Common uncharred vegetative material and uncharred seeds. Most frequent habitats represented are waterside/damp ground (sedges, lesser spearwort) and ruderal (henbane, common nettle, knotgrass, redshank) with docks (some in tepals), cinquefoils and buttercups also common. Rare charcoal fragments, some heavily mineralized- mostly roundwood including pine, <i>Prunus</i> sp., hazel/alder and cf. ash. Charred remains are a single cf. spelt wheat grain and a few charred soil fungus sclerotia. Rare wood fragments including pine stemwood and a few uncharred heather twigs. Trace of coal/coal shale. Leather shoe was recovered from this context.	
5	25	TA1: [F10] - northern ditch 2° fill	17	N	120	Y	**	Moderate flot. Rare charcoal fragments, some heavily mineralized, including oak, hazel and Salicaceae. Rare charred heather twigs noted. Charred plant macrofossils include a barley grain, a wheat glume base (emmer or spelt), a dock nutlet and several soil fungus sclerotia. A trace of uncharred seeds, including common nettles, cinquefoils and dock, wood and vegetative material. Occasional clinker/cinder and coal/coal shale fragments. Occasional fired clay fragments and two pot fragments.	
6	45	TC: kiln floor	9	Ν	40	?	*	Small flot with occasional modern roots. Single charcoal fragment only (Salicaceae - strong ring curvature). No charred plant remains. Trace of uncharred seeds- small grass seed only. Rare heat reddened stones and common magnetized geology. Abundant fired clay fragments. Small fragment of leather.	
7	26	TA1: [F10] – northern ditch upper fill	20	Y	400	Y	**	Moderate flot. Common uncharred seeds and occasional uncharred wood fragments (some worked, also small-diameter roundwood). Uncharred seeds include frequent ruderals (common chickweed, common nettle, knotgrass), waterside/damp ground indicators (sedges-some in utricle, yellowcress family), and eurytopic seeds (docks-some in tepals, buttercups, cinquefoils). Also rare seeds of wild radish, small nettle, pale persicaria, carrot family and hemp-nettles. Trace of charcoal (two fragments) - Salicaceae and alder. Small number of charred soil fungus sclerotia, no other charred remains. Broken down vegetative material common. Trace of coal fragments.	
8	71	TL(b): Fill of fence-line slot [F72]	19	Y	1100	Y	***	Large flot. Common uncharred vegetative material and seeds, including ruderals (common nettle, hemp-nettles, knotgrass, prickly sow- thistle, common chickweed), in addition to bramble, sedges and eurytopic seeds (cinquefoils, buttercups, docks-including in tepals). Also rare examples of pale persicaria, goosefoots, thistles, dead-nettle, woundworts, upright hedge-parsley and fig seeds. A sloe	

								fruitstone, uncharred heather fruiting heads and an uncharred hazel nutshell fragment are also present. Common wood fragments noted- including small diameter twigs and larger wood fragments potentially comprising stakes and wattle. Occasional charcoal fragments, excellent condition, mostly diffuse porous roundwood and heather twigs. Includes cf. Salicaceae and hazel. Charred plant macrofossils comprise a single indeterminate cereal grain and occasional charred soil fungus sclerotia. Trace of fired clay present in residue. Small fabric/felt fragment.
9	73	TL(b): [F74] - small ditch	16	Y	350	Y	**	Moderate flot. Common uncharred seeds, including frequent examples of common nettle, sedges and buttercups. Occasional uncharred vegetative material and small wood fragments present. Also limited examples of brambles, thistles, cinquefoils, hemp-nettles, bugle, lesser spearworts and fig. Rare charcoal, quite mineralized, some small diameter roundwood and including hazel, cf. Salicaceae. Heather twigs also rarely noted. Charred plant macrofossils comprise a tiny hazel nutshell fragment and a grass caryopsis. Traces of clinker/cinder and coal/coal shale present. Trace of calcined bone and fired clay noted in residue.
10	37	TB: stony material	21.5	Ν	80	Y	*	Small flot. Iron rich pan nodules/concretion common. Occasional charcoal fragments in moderate condition, some mineralization noted, diffuse porous roundwood present including hazel and Salicaceae. Trace of charred heather twigs. No charred plant remains. Trace of uncharred seeds. Trace of clinker/cinder and occasional coal/ coal shale fragments. Rare fragments of fired clay in residue and a trace of ball hammerscale.
11	70	TL(b): lower midden	18	Y	850	?	**	Large flot, trace of clinker/cinder and coal/coal shale. Common worked oak waterlogged stemwood fragments present. Uncharred vegetative material noted. Occasional uncharred seeds mainly represented by ruderals, particularly common chickweed and common nettle. Also examples of woundwort, wild raspberry fruitstone, cinquefoils and bugle. No charcoal fragments or charred plant macrofossils other than a single soil fungus sclerotia.
12	69=67	TL(b): upper midden	35.5	N	60	Y	*	Small flot with abundant modern roots. A trace of wood and rare uncharred seeds including single examples of bramble, sedge, cinquefoils and grass family. Several common nettle achenes present. Occasional charcoal fragments and a trace of heather twigs also present. No charred plant macrofossils except a single soil fungus sclerotia. Rare clinker/cinder and coal/coal shale. Pot fragments, a trace of calcined and unburnt bone and rare fired clay fragments present. Iron rich pan nodules/concretion and a trace of fuel waste also noted. Some rare possible cess fragments.

[Rank: \*: low; \*\*: medium; \*\*\*: high; \*\*\*\*: very high potential to provide further palaeoenvironmental information. ? = material may be unsuitable for AMS dating due to small size or long-lived species]

# Appendix 2: Material available for radiocarbon dating

Sample	Context	Single Entity	Weight	Notes	Single Entity	Weight	Notes
1	23	Hazel roundwood charcoal	247mg	9 rings, good condition	Alder charcoal	234mg	4 wide rings, good condition
2	19	Alder charcoal	583mg	Roundwood, nearly full diameter. < 10 rings	Salicaceae charcoal	113mg	Roundwood, 7 rings. Good condition
3	14	cf. Salicaceae charcoal	156mg	5-10 rings (unclear), reasonable condition	-	-	No back-up material
4	24	Prunus sp. charcoal	107mg	12 rings. Reasonable condition	Pine charcoal	453mg	Slightly vitrified. 12 rings Also cf. ash charcoal (68mg), 5 rings, small
5	25	cf. Salicaceae charcoal	46mg	Roundwood, 9 rings	Hazel charcoal	35mg	Good condition, < 10 rings (unclear), roundwood
6	45	Salicaceae charcoal	96mg	9 rings, strong ring curvature. Good condition.	-	-	No back-up material
7	26	Salicaceae charcoal	28mg	5 rings, roundwood, good condition	Alder charcoal	27mg	Good condition, moderate ring curvature. 3 rings Also waterlogged wood potentially available
8	71	Hazel charcoal	183mg	5 rings, small complete roundwood. Excellent condition	cf. Salicaceae charcoal	324mg	9 rings, small diameter roundwood. Excellent condition
9	73	cf. Salicaceae charcoal	50mg	7 even width rings. Reasonable condition. Small diameter roundwood	Hazel charcoal	114mg	Slight mineralisation noted. 6 rings. Reasonable condition
10	37	Hazel charcoal	63mg	Poor condition. Strong ring curvature, 8 rings	cf. Alder charcoal	325mg	Poor condition, very mineralised. <20 rings
11	70	Oak wood	9.6g	Waterlogged oak stemwood Caution for dating: Old wood effect possible			Multiple further oak stemwood fragments
12	69=67	Hazel charcoal	72mg	11 ring roundwood, reasonable condition	Hazel charcoal	167mg	8 ring roundwood, good condition- some encrustation

Appendix 3: Waterlogge	wood and organic artefacts
------------------------	----------------------------

Τ

Sample	Context	Contents and recommendations
		Contains 5 fragments of small roundwood ranging from 9-16mm diameter.
1	23	Bark present on one. No obvious work marks.
		Recommendations: Wood identification.
		Contains 1 small fragment of pine stemwood, worked. Poor condition. 13x10x6mm.
4	24	Recommendations: No further work.
		Contains 1 small (30mm) fragment of leather with fine string woven through perforations.
6	45	Recommendations: A small finds assessment by an appropriate specialist.
		Conservation if long term storage is required.
		Contains 1 fragment of knotty roundwood without bark (25mm diameter) and 4 small
7	26	fragments of worked wood - flat stemwood with notch and ?perforations.
	20	Dimensions of largest worked fragment: 50x20x6mm.
		Recommendations: Wood recording including species identification and photography.
		Contains 32 fragments of wood. Three are 'stake-sized' (approx 70mm diameter – two
	74	refitting), with work marks including puncture holes for nails. The other fragments are
8	/1	mainly smaller roundwood ranging from 10 to 44mm diameter, some comprising work
		marks. Bark is present on most fragments. Small piece of fabric/felt (now dry).
		Recommondations: Mood recording including reactes identification and abotography Contains 24 fragments of worked oak stemwood including notches and nail holes.
11	70	Tyloses and very narrow growth rings noted (dense woodland?).
	70	
		Dimensions of largest fragment: 275x68x54mm.

# APPENDIX 2: High Rochester Small Finds, by Lindsay Allason-Jones

#### Copper Alloy

1.HR21 TrB N.end. 04

Fragment of a curved strip of oval section, tapering to one broken end. This may be from an ear-ring (Allason-Jones 1989, Type 1).

Diam: 25 mm, W: 2.5 mm, T: 2 mm.

#### 2.HR21 TL(B)

Small phallic stud. The convex face has a small boss in the centre. On the back there is a thick rivet with a hammered end at the top with one pointed rivet behind one testicle. The arrangement of rivets is unusual in such a stud, and it is likely that there was a third rivet behind the missing section.

Phallic motifs are common throughout Roman Britain, the phallus being considered an effective talisman against The Evil Eye and bad luck. Copper alloy phalli are more often in the form of pendants, but studs were used to decorate belts and horse harness. Cf South Shields: Allason-Jones and Miket 1984, no. 3.588. 2nd-3<sup>rd</sup> cent. AD.

L: 22 mm, Surv. W: 11mm, Total H: 8.5 mm.

#### 3.HR21 Ai03

Petal-shaped open loop, possibly from a button-and-loop fastener. See Wild 1970. Surv. L: 23 mm, Total W: 13 mm, Max. T: 4 mm.

4.HR21 B 03

Hollow domed, circular washer with a small rectangular hole pierced off-centre. The rim on the back is flat. Roman?

Diam: 18 mm

#### Iron

#### 5.HR21 TCB 01

Thick rod with a disc flange at mid-point. Below the flange, the shank is circular in section whilst above the flange it is oval in section. L: 143 mm, Diam. Of flange: 34 mm

6.HR21 TB 032 Fragment of a knife blade with a strip tang? Surv. L: 54 mm, tang: 9 x 4 mm, Depth of blade: 20 mm

7.HR21 TB 04 Rod of circular section. L: 82 mm, T: 5 mm

8.HR21 TC 01Disc-headed nail with a square-sectioned shank and sharply pointed end.L: 7 mm, Diam. of head: 20 mm, shank: 7 x 7 mm

9.HR21 TL A. 07. Part of a disc-headed nail with a thick, square-sectioned shank. Surv. L: 37 mm, Diam. Of head: 22 mm 10.HR21 TC 02 Rectangular-sectioned nail, missing most of its disc head. L: 88 mm, shank: 14 x 10 mm

#### Lead

11.HR 21 67a

Two shapeless blobs of lead on both sides of a fragment of colour-coated ware.

Using lead cramps in this fashion to mend broken pottery is known in the Roman period (see Allason-Jones and Miket 1984, nos. 8.85 -90) but was more commonly used to mend cooking vessels, rather than fine wares. A complete, black-burnished ware pot (fabric B18/G18) repaired with two similar cramps, is known from South Shields Roman Fort (Great North Museum, Newcastle upon Tyne: Acc. No. NEWMA 1956.128.118.A); the date of the fabric indicating a date of AD 300-399.

12.HR21 TSP Centre of 'B'. 34. Roughly oval washer, missing part of its edge, and with a rectangular hole punched through. Max. D: 3 mm, T: 4 mm.

13.HR21 TB 09 Crumpled sheet with no obvious form. Max. L: 31 mm, Max. T: 1.5 mm

14.HR21 TB 04 Two fragments of lead offcuts. Both L: 37 mm

15.HR21 67b Two fragments of lead dribble.

#### Glass

16.HR21 TrLB 67 Very tiny, translucent, royal blue, globular bead. There are no traces of damage around the perforation, indicating that this was made as an individual bead and was not snapped from a segmented bead. Diam: 3.5mm

17.HR21 TrL B 67

Biconical, opaque, royal blue glass bead, damaged at both ends.

Long biconical beads have been found in Britain from early 2<sup>nd</sup> century AD to mid 3<sup>rd</sup> century AD contexts but are usually missing from 4<sup>th</sup> century sites (Guido 1978, 98, 221-2). A few examples have been found in Northumberland, at Vindolanda and Chesters (Guido 1978, 222), although their usual distribution is in the Midlands and the south of the country.

L: 12 mm, T: 4 mm

18.HR21 TB 012

Two fragments of a cylindrical vessel of transparent, light green glass, which expands to a rounded base. Part of an unguentarium. See Charlesworth 1959, pl. V, no. 2. Surv. H: 52 mm, Max. Diam: 20 mm, T; 1mm

19.HR21 TB 09

Fragment of a transparent, turquoise glass vessel with flat sides. Indications of a right-angled corner suggests this came from a cylindrical bottle of  $1^{st} - 2^{nd}$  century date. See Charlesworth 1959, 52-4, pl. III, no. 2. Surv. H: 23 mm, W: 24 mm, T: 5 mm

20.HR21 1000 [HR04]a Fragment of transparent white glass vessel with a tapered rib on its outer surface. L: 17 mm, T; 1.25 mm

21.HR21 TB 03 Fragment of sharply curved transparent, light blue glass vessel with a raised area giving a pillowed effect. H: 14 mm, W: 12 mm, T: 2 mm

22.HR21 TrLB 67 Beaded rim of a transparent, pale blue-green glass vessel, possibly a drinking cup. H: 11 mm, T of rim: 3mm

23.HR21 B02 [HR03] Fragment of a flat, very pale green, transparent glass. Possibly window glass, although very fine. L: 20 mm, W: 17 mm, T: 1.5 mm

24.HR21 TB 03 Fragment of fine, flat, translucent, pale olive green glass. Possibly window glass but very fine. L: 12 mm, W: 16 m, T: 1.25 mm

25.HR21 Tr:A 07 Four fragments of melted, transparent, blue-green glass, probably from a window-pane.

26.HR21 TB 04 Fragment of flat, transparent, white glass with a rounded edge. Window glass. This may be Roman in date but Roman window glass is usually light green or blue in colour. L: 45 mm, W: 45 mm, T: 3.5 mm

#### 27.HR21 TLA 053 03 SF 1

Four fragments of transparent white glass with a blue tinge. One fragment is a wavy thin rod, the others show sign of heat damage. This appears to be collet, ie a glass vessel which was being recycled. L of rod: 39 mm

28.HR21 TA/B U/S A fragment of fine, flat, translucent, pale olive green glass, as above.

29.HR21 TA/B U/S Two small fragments of transparent, light blue glass.

30.HR21 TA/B U/S Fragment of transparent white glass with no form or surfaces surviving.

#### 31.HR21 TA/B U/S

Unshaped fragment of opaque glass of mid and light blue glass. The rough outer surface suggests this was raw glass used for manufacture. The colours may suggest the manufacture of glass armlets, see lvleva 2018.

32.HR21 1000 [HR04]b

Transparent white wall sherd which has been distorted by contact with fire.

33.HR21 TA 09 Block of glass waste with olive green and blue swirls and a creamy sandy surface.

34.HR21 TLB 02 Fragment of opaque mid-blue glass waste.

35.HR21 TLB 01 Fragment of opaque grey glass waste with a creamy sandy surface.

36.HR21 TLA 04 Two lumps of white/grey glass making waste.

37.HR21 TC 03 Fragment of grey/white molten glass, possibly glass making waste.

38.HR21 TLB 63 Fragment of translucent blue-green glass waste with cream sandy surfaces.

39.HR21 TB 04 Body fragment of translucent light green glass vessel. Possibly Roman in date but more likely to be a 18<sup>th</sup> century wine glass. L: 29 mm, W: 11 mm, T: 2 mm

40.HR21 TC 02 Two fragments of dark green translucent glass, including part of the base, from an 18<sup>th</sup> century wine bottle.

41.HR21 TA 02 Three fragments of a dark green translucent glass from an 18<sup>th</sup> century wine bottle.

42.HR21 TLB 06 Two fragments of olive green transparent vessel walls. 18<sup>th</sup> century?

43.HR21 TA/B U/S Domed base of a very dark green, translucent wine bottle. 18<sup>th</sup>/19<sup>th</sup> century.

44.HR21 TA 03 [HR03] Several fragments of glass, including waste and 18<sup>th</sup>/19<sup>th</sup> century vessels and two fragments of transparent pale blue glass, one part of a base.

45.HR21 TCB [HR12] 05 Bag but no glass inside.

#### Pottery

46.HR21 TLB 03 SF 2

Disc of samian ware, with little of the surface surviving. In the centre there is small, drilled hole. This would not have functioned well as a spindle whorl, given its rough shape, uneven thickness and limited size of the central hole. Possibly a lid washer for a small vessel. Max. D: 22 mm, Max. T: 4 mm, Diam of hole: 3.5 mm

#### Mixed

#### 47.HR21 TA 09

Lump of iron slag with a fragment of grey ware body sherd and a sliver of dark green flat glass embedded in it.

#### Bibliography:

Allason-Jones, L., and Miket, R.F. (1984) Catalogue of Small Finds from South Shields Roman Fort. Newcastle upon Tyne.

Allason-Jones, L. (1989) Ear-rings in Roman Britain. BAR Brit. Ser. 201. Oxford.

Charlesworth, D. (1959) 'Roman glass in Northern Britain, Archaeol, Aeliana 4th ser. 37, 33-58.

Guido, M. (1978) The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland. London.

Ivleva, T. (2018) 'Roman-British glass bangles' Roman Finds Group Datasheet No 9.

Wild, J. P. (1970) 'Button-and-loop fasteners in the Roman Provinces', Britannia 1, 137-55.

## APPENDIX 3: Roman Pottery and Ceramic Building Material Assessment, by Alex Croom

#### 1. INTRODUCTION

1.1 The assemblage from HR21 consists of 476 sherds of Roman pottery from 30 contexts, weighing 7.657kg. In many contexts the sherds were small and battered, and the soil conditions have affected some of the sherds, in particular removing the surface slip from many of the samian sherds, and crazing the surface of some amphorae pieces.

1.2 The assemblage from BB21 consists of three sherds of Roman pottery, weighing 48g.

#### 2. SUMMARY

2.1 The assemblage mainly dates to the third century, although it contains residual second-century material. The latest material probably dates to the late third century.

#### 3. THE POTTERY

#### 3.1 Amphorae

There were 29 sherds of amphorae, all of olive oil-carrying Baetican vessels. This is the most common form of amphora on northern military sites.

#### 3.2 Samian

There were 54 sherds of samian, which were generally small and in poor condition. Almost all came from bowls and dishes, with only two sherds from cups. There were both plain and decorated vessels, although the decorated sherds were all small. There was evidence for one repaired vessel, and one sherd cut into a pierced disc, possibly used as a spindle-whorl although of unusually small size (35).

#### 3.3 Mortaria

There were 20 sherds of mortaria. Identifiable fabrics include locally produced oxidised ware, Mancetter-Hartshill and Lower Nene Valley white ware. There were both second- and third-century forms present.

#### 3.4 Fine and Coarse wares

Lower Nene Valley colour-coated ware was the most common fine ware, with a single sherd of imported Central Gaulish black-slipped ware, and a large fragment of a rouletted indented beaker in an unclassified colour-coated ware. The coarse wares consisted mainly of BB1, BB2 and locally produced grey wares, but also included Severn Valley ware, a Yorkshire grey ware and three sherds of local traditional ware of the type used from the late Bronze Age to the early medieval period. There were also two sherds of calcite-gritted ware (35/103).

#### 3.5 Post-Roman wares

BB21 and four HR21 contexts produced post-medieval pottery as well as Roman pottery (12, 28, 29, 100).

#### 4. DISCUSSION

All six contexts containing more than 20 sherds date to the third century, as do seven other contexts that produced less pottery. There is some second-century material in the form of samian, mortaria and locally

produced grey wares, but this may be mainly residual. The two sherds of calcite-gritted, found with thirdcentury pottery, likely indicate occupation in the late third century or later, although they are featureless body sherds. The range of fabrics is typical for the Central sector of the frontier, with imported fine wares, traded wares from south-west and south-east England and Yorkshire.

#### 5. **RECOMMENDATIONS**

#### 5.1 Archive report

The pottery requires a fully quantified Ceramic Archive catalogue (as defined by the *Study Group for Roman Pottery* guidelines: Darling 1999). This should comprise a detailed descriptions of the various fabric types, and their quantification by weight, sherd count and EVE (estimated vessel equivalents) as well as the dating of the individual vessels within each numbered deposit.

#### 5.2 Publication report

As so little pottery has been published from High Rochester this assemblage is worth publishing, including a report on the samian, a table of fabrics present, a catalogue of up to 10 illustrated vessels, and a brief discussion.

#### 5.3 Condition and curation

Some of the sherds have been affected by soil conditions but none require conservation. All should be retained, apart from scraps and the post-medieval sherds.

#### 6. CERAMIC BUILDING MATERIAL

#### 6.1 Summary

There were 23 fragments of identifiable ceramic building material weighing 2.691kg, and 102 scraps (not weighed). The assemblage includes small quantities of both roofing tiles and wall/flooring tiles. The wall/flooring tiles were most commonly used in the hypocaust systems of bath-houses. There were also two fragments of burnt daub, and three of probable kiln lining, partially vitrified.

#### 6.2 Tile types

Tile type	no.
Roofing tile	
Tegulae	5
Imbrices	2
Wall/flooring tiles	
Box	7
Bessales	6
Pedales	1
Uncertain	1
Pipe?	1
Total 23	

Most of the assemblage was of small unidentifiable fragments, and even most of the identifiable pieces were small and battered. The largest piece (BB21) was the top corner of a *tegula*, with a sanded cut-away flange reducing in height but perhaps also chipped to provide a better fit. It has faint finger groove decoration, which in this position would perhaps be part of a large X. This is an unusual form of decoration for this type of tile, but it was also used at Segedunum (Rushworth and Croom 2016, fig. 21.09, no. 1). There was a single fragment in a gritty fabric that could come from a water pipe, but it was too small and worn for certain

identification. Most of the other fragments are in a 'standard' tile fabric, with one box tile in a finer, paler fabric.

#### 6.3 Recommendations

The assemblage is too small for a full report, although if required one can be taken from the above. The scraps can be discarded, but the other fragments should be kept for study should a larger collection of tile be recovered.

#### 7. GLASS BEAD

#### 7.1 Description

Glass bead (L:7.5mm Diam:9mm). BB21

Opaque sky-blue globular bead, badly chipped round one end. This shape and colour of bead was used in the Roman period, but was also made from the mid-nineteenth century onwards and stray beads cannot be dated (Guido 1978, 18; 70, group 7v).

#### 7.2 Recommendations

If publication is required it can be taken from the above.

#### 8. BIBLIOGRAPHY

Darling, M. (ed.), 1999, *Guidelines for the Archiving of Roman Pottery*, Study Group for Roman Pottery, Guidelines Advisory Document **1**.

Guido, M., 1978 *The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland*, Rep. Res. Comm. Soc. Antiquaries London **35** 

Rushworth, A. and Croom, A., 2016 Segedunum: Excavations by Charles Daniels in the Roman Fort at Wallsend (1975-1984). Volume 2: the Finds, Oxford

# Appendix 1: Pottery spot dating

# HB21

context	Sh no	Wt (g)	Dating evidence	spot date
002	1	4	Samian form 33 cup	Had-Ant
003	9	177	Samian thick-walled vessel; local GW & OW	Had-Ant
007	5	30	BB2 rounded rim bowl/dish	I C2+
009	8	98	BB1 cooking pot body sherd with obtuse angle lattice, possibly with line above	225+; possibly 250+
012	1	3	Very worn samian, plus one sherd of post-medieval ware	Had-Ant / modern
028	40	258	One sherd of LNV CC beaker; six post-medieval sherds	C3/modern
029	13	60	LNV CC coarse ware form; one sherd post-medieval	C3 / modern
030	80	815	Lots of LNV CC sherds, including indented scale beaker; BB2 rounded rimmed bowl/dish; Mancetter-Hartshill hammerhead mortarium; samian pierced disc	well into C3
031	1	114	Local flanged mortarium	C2
032	36	538	LNV CC everted rim & indented scale; Yorkshire grey ware	С3
035	108	269 8	Lots of large amphora sherds; BB2; three LNV CC sherds; repaired samian sherd	С3
035/103	20	605	Collared Mancetter-Hartshill (?) mortarium; BB2; two sherds of calcite- gritted ware	C3, possibly late C3
037	1	616	Baetican (Dr 20) amphora	C1 - mid C3
040	3	5	LNV CC plain-rimmed beaker	C3
041	4	23	Oxidised wares; one oxidised ware with black exterior surface – possibly medieval	Roman?
042	8	57	LNV WH mortarium	C3
043	4	31	One sherd of LTW; one sherd of BB1	Hadrianic+
044	4	96	BB2 body sherd; 18/31R or 31R samian body sherd	L C2+
053	12	143	LNV CC sherd	С3
054	12	98	BB1 cooking pot with obtuse angle lattice	225+
056	12	149	BB2 rounded rim bowl/dish; sherd of LTW	I C2+

context	Sh no	Wt (g)	Dating evidence	spot date
057	6	100	Flanged locally produced mortarium; local grey wares	C2
059	7	81	BB1 body sherd	Hadrianic
060	2	16	BB1 cooking pot rim	C2
063	1	7	Possible Roman coarse ware, but vitrified on interior surface	unknown
065	11	115	BB1 and probably some BB2	probably I C2+
067	44	397	LNV CC sherds; large sherd of unclassified folded rouletted beaker; samian with drilled hole for possible pot mend	C3
068	2	12	battered BB1 of C3 type	С3
100	11	321	Local grey wares; sherd of thin-walled vitrified china	C2+ / modern

# BB21

context	Sh no	Wt (g)	Dating evidence	spot date
bag 1	1	36	Body sherd of LTW	l BA to e Med
bag 2			rim flower pot	Post- medieval
bag 3			8 x sherds, including one with both surfaces vitrified	C18 - e C20
bag 4	2	12	Body sherd, possibly Mancetter-Hartshill; small body sherd samian bowl/dish	l C2+

Кеу

GW grey ware

LNV CC Lower Nene Valley colour coated ware

- LNV WH Lower Nene Valley white ware
- LTW local traditional hand-built wares (late Bronze Age early medieval)

# OW oxidised ware4

APPENDIX 4: Roman Shoe Conservation Report, by V. Garlick (ASUD)

#### APPENDIX 5: Photographic Record

Photo. 1: Aerial view of Trench A.

*Photo. 1: Aerial view of Trench A, south end, showing built remains and modern drain.* 

Photo. 03: Aerial view of building, perhaps a bake-house or gate, in the SW corner of Trench A.

Photo 04: View to north of building, perhaps a bake-house or gate, in the SW corner of Trench A.

Photo 05: View to south of turf rampart remains cut into by a modern drain in Trench A.

Photo. 06: View from NW of excavated sections of the main annexe ditches at north end of Trench A.

Photo. 07: Section of one of the main annexe ditches at north end of Trench A.

Photo. 08: View from west of Trench B.

Photo. 09: View from south of middle section of Trench B.

Photo. 10: View from north of wall or faced bank at the east end of Trench B.

Photo. 11: Aerial view of annexe boundary wall or faced bank at the east end of Trench B.

Photo. 12: Wall with offset forming the south side of 'annexe' enclosure boundary at the east end of Trench B

Photo. 13: Limekiln in Trench C seen from the south.

Photo. 14: Aerial view of limekiln in Trench C.

Photo. 15: Aerial view of Trench L(a)

Photo. 16: Aerial view of Trench L(b)

Photo. 17: Coins of Hadrian and Trajan.

Photo. 18: Sole of Roman shoe found in one of the Trench A annexe ditches.

Photos. 19-21: Examples of the pottery recovered from excavation.

Photo. 22: Glass beads found in Trench L(a)

Photo. 23: Stem of twisted glass fund in excavation.

Photo. 24: One of several examples of waste or recyclable glass recovered from the excavation.



![](_page_69_Picture_1.jpeg)

Photo. 05

![](_page_69_Picture_3.jpeg)

![](_page_69_Picture_4.jpeg)

Photo. 06

Photo. 07

![](_page_69_Picture_7.jpeg)

Photo. 08

![](_page_70_Picture_1.jpeg)

Photo. 12

![](_page_71_Picture_1.jpeg)

![](_page_71_Picture_2.jpeg)

Photo. 13

Photo. 14

![](_page_71_Picture_5.jpeg)

![](_page_71_Picture_6.jpeg)

Photo. 15

Photo. 16




Photo. 17

Photo. 18





Photo. 19

Photo. 20



Photo. 21



Photo. 22



Photo. 23

Photo. 24

# APPENDIX 6: AT THE ROARING STREAM: ARCHAEOLOGICAL INVESTIGATIONS AT BREMENIUM ROMAN FORT, HIGH ROCHESTER, NORTHUMBERLAND: WRITTEN SCHEME OF INVESTIGATION

BY RICHARD CARLTON & MARC JOHNSTONE, THE ARCHAEOLOGICAL PRACTICE LTD., FOR REVITALISING REDESDALE.

# AT THE ROARING STREAM: ARCHAEOLOGICAL INVESTIGATIONS AT BREMENIUM ROMAN FORT, HIGH ROCHESTER, NORTHUMBERLAND

WRITTEN SCHEME OF INVESTIGATION BY RICHARD CARLTON & MARC JOHNSTONE, THE ARCHAEOLOGICAL PRACTICE LTD. FOR REVITALISING REDESDALE

### 1 BACKGROUND

1.1 The Roman name of the site, *Bremenium*, signifies, "*the place on the roaring stream*", presumably a reference to the adjacent Sills Burn in spate. As described in the project brief,

Bremenium was for two centuries the northernmost fort of the Roman Empire and remains one of the bestpreserved archaeological sites in Northumberland National Park. The surviving remains of the fort are oriented NNW-SSE and are sub-rectangular in plan with rounded corners, being slightly longer on the N-S axis (147 m) than the E-W axis (136 m) axis. Multiple, surrounding ditch & bank ramparts are visible on all but the west sides, with the inner rampart surviving around the entire circuit, the remains of the curtain wall, towers and gates surviving upon it places. in evidence Geophysical backed up bv limited excavation attests to a possible underlying late prehistoric enclosure and/or probable military annexe(s) containing numerous features immediately to the west of the fort, while recent Lidar survey evidence suggests the possibility of a



Illus. 02: The position of Bremenium Roman fort (circled) at High Rochester.

civilian settlement, or *vicus*, to the south. The routes of two Roman roads, Dere Street and the Redesdale to Learchild 'Link Road' cross immediately east of the fort, and an extensive cemetery has been surveyed and selectively excavated close to the course of Dere Street further to the south-east.



*Illus. 03: High Rochester fort seen from the south during groundworks adjacent to The Bastle in April 2021, with sites of proposed excavation to west and south-west of the fort.* 

1.2 The fort long played an important role as an outpost fort beside Dere Street, the easterly Roman route into Scotland, and had a large mixed garrison usually consisting of a military equitate cohort and a unit of scouts (*numerus exploratorum*). The original Agricolan Fort (A.D. 78-85) consisted of a single ditch and rampart, which was later replaced by a larger rampart and complex system of ditches. In the Antonine period (AD 139-Late 2nd century) the fort was rebuilt with a rubble wall and clay rampart. During the Severan period (Early-Late 3rd century AD) the defences were levelled and a fort wall was built. The final alterations appear to have occurred during the Constantinian period (c. A.D. 306-mid 4<sup>th</sup> century) when a larger stone wall, four gateways and angle and interval turrets were added. Water was supplied to the fort via an aqueduct, which entered through a stone-covered channel through the south gate. Thus, the base was occupied during the Flavian period and from the Antonine period onwards with rebuilding phases in the early 3<sup>rd</sup> century and at the beginning of the 4th century. Military withdrawal from the site seems to have taken place in the early 4th century, perhaps under Constantine (Casey & Savage 1980).

1.3 The evidence regarding the date the fort of High Rochester was relinquished by permanent Roman garrisons presents some intriguing contradictions (cf. Crow 2004a, 222-3). The coin evidence recovered to date suggests that the fort was abandoned in the first or second decade of the 4<sup>th</sup> century and the pottery assemblages from Crow's excavations in the 1990s were almost devoid of the East Yorkshire grey wares (Crambeck etc.) which become common on the northern frontier from the late 3<sup>rd</sup> century onwards. Yet, as noted by Rushworth, the repairs to the west curtain between the west gate and the south west angle appear more characteristic of modifications made at other northern frontier forts, such as Housesteads and Vindolanda along Hadrian's Wall, much later in the 4<sup>th</sup> century or even later still. Could this reflect continued military occupation of the fort by a reduced force until at least the middle of the 4<sup>th</sup> century, or perhaps even its transfer to a friendly federate chieftain? 1.4 Whatever the precise circumstances regarding the Roman withdrawal from the Dere Street outpost forts in the 4<sup>th</sup> century, there is an almost complete dearth of evidence concerning the subsequent history of Rochester, and indeed Redesdale as a whole (Rushworth 1996) until the later medieval era when it became part of the liberty of Redesdale held by the Umfraville lineage from the 12<sup>th</sup>-13<sup>th</sup> century period of Umfraville lordship, has yet been found this far up the valley, though that may be because it has not yet been sought. A weakening of feudal lordship over the Northumbrian dales during the 14<sup>th</sup>-15<sup>th</sup> centuries and the attendant growth of the kinship 'surnames' may have afforded the tenant peasantry more opportunity for independence and it is within this framework that the establishment of a settlement at Rochester should be envisaged, perhaps in the 15th or early 16th centuries, perhaps building upon a possible earlier use of the site as a vaccary.

1.4 The earliest certain reference to a settlement at Rochester is incorporated in the 1552 Border Survey, when the inhabitants of 'Richester' were the Halls. Rochester appears on Saxton's map of 1576 and on all subsequent county maps, but, even in the late 16<sup>th</sup> century, Rochester, along with Birdhope, Woolaw and Evistones still represented the uppermost limit of settlement in the valley. A map of 1787 provides the first detailed plan of High Rochester settlement, but it is not until MacLauchlan's survey and the Ordnance Survey series (see *Illus. 04*) that detailed plans of the surviving fort earthworks are incorporated into plans of the site.



Illus. 04: Bremenium shown on the 2<sup>nd</sup>. edn. OS plan, 1897

1.6 Extensive but poorly-documented fieldwork in the 1850s was followed by Richmond's targeted interventions in the 1930s and additional survey and excavation of the Petty Knowes cemetery by Charlton in the 1970s). Crow's series of investigations between 1992-8 (Crow 1993, etc.), which included analysis of geophysical survey, topographical survey and limited excavations within and outside the fort, represents the only concerted programme of research into the entire fort complex, but further, limited interventions carried out in 2010 (Carlton 2010), 2019 (Williams 2019) and 2021, as well as additional geophysical survey by Biggins et. al. in 2004 (Illus. 09 & 10, below) have all added to the database (see Section 11: Bibliography).



Illus. 05: Geomagnetic survey of the west field by Geoquest in 1992.



Illus. 06: Resistivity survey of the west field by Geoquest in 1992.



*Illus. 07: Crow's interpretation of geophysical survey data produced by Geoquest for the area west of the fort in 1992.* 



*Illus. 08: South end of trench excavated in the west field in 1996, showing decayed rampart and turf lines.* 



Illus. 09:

Plot of Alan Biggins' Geomagnetic survey of the west field in 2003 (Hancke, Charlton & Biggins 2004).





Plot of Alan Biggins' Geomagnetic survey of the west field in 2003 (Hancke, Charlton & Biggins 2004).

1.7 While the earlier excavations focussed on the fort interior and its defences, Crow's investigations in Gallow's Knowe west of the fort revealed the remains of a likely annexe (*Illus. 07 & 08*, above), or annexes, perhaps overlying a pre-Roman enclosure of presumed Iron Age date. However, these excavations did not reveal remains suggestive of an extensive extra-mural settlement, except perhaps within the annexe(s). Geophysical survey in 2004 focussing on Gallow's Knowe traced further features possibly related to various phases of annexe(s), as well as underlying remains interpreted as those of temporary camps or native settlement.

1.8 The present research initiative is based on the perceived need to further investigate the remains documented in various phases of investigation within Gallow's Knowe, as well as upon a LIDAR survey of the area from 2018-19 which identified possible features south-west of the fort which may suggest extra-mural settlement in that area.

The present document sets out how the requirements of the Brief will be fulfilled by The Archaeological Practice Ltd.

### 1.9 AIMS AND OBJECTIVES

1.9.1 The aims of the project are to enhance knowledge and understanding of the site by investigating the archaeological nature and significance of the observed archaeological features in association with volunteers from the local community, as well as students of archaeology, using a series of specific objectives set out on page 3 of the Project Brief:

1.9.2 These include:

• determining the character, chronology, state of preservation and significance of the remains;

• identifying any dateable artefactual and/or environmental evidence from the site to help identify key phases in its chronology;

• Understanding the relationship of the site to other nearby contemporary native settlements, thereby potentially providing an insight into life and society in the frontier zone.

• Identifying, recording and analysing any architectural or decorated Roman stones recovered from the field wall south-west of the fort.

1.9.3 Key to this will be the engagement of the local community in order to develop new interests, awareness, skills and experience in archaeological time periods and fieldwork, and production and dissemination of records to enable the wider public to learn about the site and its context in the history of Redesdale.

1.9.4 In this regard, high-level training in archaeological fieldwork techniques and interpretation will be provided to all participants within a safe, supportive and encouraging working environment. At this particularly sensitive time in the evolution of the covid-19 pandemic, this will provide rewarding and stimulating activity which will contribute to improved health and wellbeing.

1.9.5 In achieving the above aims and objectives the project will address priorities identified in research frameworks, including the *Research Framework for Hadrian's Wall* (2009), the *Research Framework for Northumberland National Park* (2005) and the North East Regional Research Framework II (2020), as set out in the project brief.

#### 2 METHODS STATEMENT

# 2.1 Introduction

2.1.1 Part of the work required by the project brief included the undertaking of geophysical survey work in targeted areas to the south west of the fort, guided by the Lidar survey and using magnetometry/resistivity, with the aim to identify buried features associated with possible external settlement.

2.1.2 Having carried out this work in early July 2021 a number of targets have been identified here by Magnetometry, RA and Resistivity surveys, including high resistance features which may represent part of an enclosure or field boundaries (see *Illus. 11 - 13*).

2.1.3 The nature of these features, however, was not considered significant enough to continue further Resistivity survey in that area, so a further episode of Resistivity survey was carried out in the field to the north in order to attempt to achieve better resolution of features first identified through geophysical sur vey in 1993 and 2004.

2.1.4 Based on geophysical survey of targeted areas to the west and south-west of the fort, guided by the results of previous geophysical survey and Lidar survey, an attempt will be made through trial excavation to identify buried features associated with possible external settlement.

2.1.5 Targeted archaeological excavation informed by the results of the Lidar and geophysical survey, focusing on two key areas and a number of other 'hot-spots':

• The annexe to the west of the fort: specifically to examine the structural relationships and phasing of various linear features in this area, thought likely to be enclosure boundaries of fort annexe features and/or native settlement.

• 'Hot-spots' indicated by geophysical survey on the NE and SW periphery of the same area which may suggest foci of industrial activity.

• A possible area of settlement to the south-west of the fort in order to explore the nature of remains visible on Lidar and geophysical survey plots.

2.1.6 The exact position and size of these and any trenches additional to the above will be determined in relation to features noted by geophysical survey and/or visible on aerial photographs or on the ground. Provisional locations are given, however, in *Illus.* 14.

2.1.7 In addition to excavation, the examination of approx. 200 m of stone field wall crossing the site will be carried out to identify, record and analyse any worked Roman stones present [N.B. This work will not take place at the same time as excavation but will be coordinated with professional stone-walling to be arranged at a later date).

2.1.8 Detailed post excavation analysis of environmental samples and finds will be carried out to provide dating evidence for the site and potential evidence for links to other local sites.

2.1.9 Full reporting and publication of the results of fieldwork will follow, including deposition of reports with the Northumberland HER and creation of an OASIS online record incorporating the report which will additionally be made more widely available through the *Revitalising Redesdale* website and social media.



			NO	TES				
	1. TH TH PD EM SIT	IS DRAWI E ACCOM F) WHICH IPLOYED, TE SPECIF	ng must be Mpanying r Provides ( Their inhe Their sues,	USED IN EPORT (/ DETAILS ( RENT LIN	CONJUN ARC_298 DF THE T AITATION	ICTION WITH 4_1179_RPT. ECHNIQUES IS AND ANY		
//	2. TH 'OS PR CC ME PR TH	IS DRA 6_MasterM OVIDED E 0-ORDINA <sup></sup> ASURED OJECTIOI E SURVE	WING IS lap_706118_9 BY THE CLIEN TES OBTAINN USING THE L N SHOULD E Y GRID IS RE	BASED 17270_03 NT. THE ED FOR IKOSTN18 BE TAKEN LOCATED	UPON 5_Masteri ORDNAN THIS SUI 5 PROJEC 1 INTO A	DRAWING map.dwg' ICE SURVEY RVEY WERE CTION. THIS ACCOUNT IF		
	3. PH RE OF	ASE SIT	E INVESTIC ILITY FOR TH ORMATION PI	GATIONS E RELIAB ROVIDED	Canno Ility or By a th	DT ACCEPT ACCURACY IRD PARTY.		
<u> 600</u>	4. TH TH CC DIS PA RE FO ALL	IS DRAW EREIN IS OPYRIGHT SCLOSURI RTIES PLICATIO RBIDDEN WAYS EXI	ING AND TH S ISSUED IN OF PHASE S E OF THIS AND UNAU N OF THIS E ERCISE CAU1	E INFOR CONFIE ITE INVES INFORI ITHORISE DATA WIT	MATION DENCE A STIGATIC MATION D COI HOUT A	CONTAINED ND IS THE DNS LIMITED. TO THIRD PYING OR PPROVAL IS		
500			PH		INVEST	GATIONS		
	Phase S Busine	Site Inves ss Park, I	tigations Ltd. Newton Aycli	703A W ffe, Coun	hinfield [ ity Durha	Drive, Aycliffe am, DL5 6AU		
		E	T: +44 [0] 0 <sup>-</sup> E: enquiries@ W: www.P	1325 311 )PhaseS haseSI.co	751 I.com om			
	Scale	[A3 Sheet]	Drawing	04 447	0 0F			
	Client	200	ARC_29	04_117	9_05	FRELIW		
	TH	E ARCI NEV	HAEOLO VCASTLE	gy pr Upon	ACTIC I TYNI	E LTD		
400	Site H R(	Site HIGH ROCHESTER ROMAN FORT ROCHESTER, NORTHUMBERLAND						
	ELEC1	ROMA COIL	GNETIC PAIR 2 (	COND MIDDL	UCTIV E PAII	/ITY DATA R)		
	Job No		ARC_29	84_117	79			
	Surveved	114	— / MS	 Drawn		۱\٨/		
	Chk.	NF	τ, MW	Date	09	07/2021		



$\square$									
	1. TI TI PI EI SI	HIS DRAWI HE ACCOM DF) WHICH MPLOYED, TE SPECIF	ng must be Mpanying r I provides ( Their inhe Fic issues.	USED IN EPORT (/ DETAILS ( RENT LIN	CONJUN ARC_298 DF THE T /ITATION	ICTION WITH 4_1179_RPT. ECHNIQUES IS AND ANY			
	2. TI 'O PI C M PI	HS DRA S_MasterM ROVIDED E D-ORDINA EASURED ROJECTIOI	WING IS Map_706118_9 BY THE CLIEN TES OBTAINS USING THE U N SHOULD E Y GRID IS BE	BASED 17270_03 NT. THE ED FOR JKOSTN13 BE TAKEN	UPON S_Masterr ORDNAN THIS SUI 5 PROJEC N INTO A	DRAWING map.dwg' ICE SURVEY RVEY WERE CTION. THIS ACCOUNT IF			
	3. PI RI O	ASE SIT SPONSIB	E INVESTIC	GATIONS E RELIAB ROVIDED	Cannc Ility or By a thi	OT ACCEPT ACCURACY IRD PARTY.			
600	4. TI TI CI DI P/ RI FC AL	HIS DRAW HEREIN IS DPYRIGHT SCLOSUR ARTIES EPLICATIO DRBIDDEN	ING AND TH S ISSUED IN OF PHASE S E OF THIS AND UNAU N OF THIS I ERCISE CAUT	E INFOR I CONFIE ITE INVES INFORI ITHORISE DATA WIT	MATION DENCE A STIGATIC MATION D COI HOUT A	CONTAINED ND IS THE DNS LIMITED. TO THIRD PYING OR PPROVAL IS /ATING			
500			PH			GATIONS			
500	Phase Busine	Site Inves	tigations Ltd, Newton Aycli	TO3A W	hinfield [	Drive, Aycliffe am, DL5 6AU			
500	Phase Busine	Site Inves ess Park, I	tigations Ltd, Newton Aycli T: +44 [0] 0 <sup>-</sup> E: enquiries@ W: www.P	703A W fffe, Cour 1325 311 PhaseS haseSI.co	hinfield I ty Durha 751 I.com om	<b>BE</b> GATIONS Drive, Aycliffe am, DL5 6AU			
500	Phase Busine Scale 1:1	Site Inves ess Park, I [A3 Sheet] 250	tigations Ltd, Newton Aycli T: +44 [0] 0 <sup>-</sup> E: enquiries@ W: www.P	703A W ffe, Cour 1325 311 PhaseS haseSI.co 84 117	hinfield I ty Durha 751 I.com om	Drive, Aycliffe am, DL5 6AU			
500	Phase Busine Scale 1:1 Client	Site Inves ess Park, I [A3 Sheet] 250	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29	703A W ffe, Cour 1325 311 PhaseS haseSI.co 84_117	hinfield I ty Durha 751 I.com om	Status PRELIM			
500	Phase Busine Scale 1:1 Client TH	Site Inves ess Park, I [A3 Sheet] 250 E ARC NEV	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLOG	Togy PR	hinfield I ty Durha 751 I.com 29_03 ACTIC	Status PRELIM			
500	Phase Busine Scale 1:1 Client TH Site R	Site Inves ess Park, I (A3 Sheet) 250 E ARCI NEV	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLOO VCASTLE DCHESTE STER, NO	703A W ffe, Cour 1325 311 PhaseS haseSI.cc 84_117 GY PR UPON ER ROI RTHUI	hinfield E ty Durha 751 Loom 29_03 ACTIC J TYNE WAN F WBERI	Status PRELIM E LTD CORT			
<u>500</u>	Phase Busine Scale 1:1 Client TH Site R Title	Site Inves ess Park, I [A3 Sheet] 250 E ARC NEV IIGH RC OCHES GF MAGN	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLO VCASTLE DCHESTE DCHESTE DCHESTE DCHESTE BTER, NO	A Contraction of the second se	ACTIC ACTIC ACTIC ACTIC ACTIC ACTIC ACTIC ACTIC ACTIC ACTIC ACTIC	Status PRELIM E LTD CORT LAND			
500	Phase Busine Scale 1:1 Client TH Site R Title	Site Inves ess Park, I E [A3 Sheet] 250 E ARCI NEV IIGH RC DCHES GF MAGN	Higations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLOG VCASTLE DCHESTE STER, NO REYSCAL NETIC GF ARC_29	TOJA W 5111 703A W 1325 3111 PhaseS haseSI.co 84_117 GY PR E UPON ER ROI RTHUI LE PLC RADIEN 84_117	hinfield I ty Durha 751 I.com 79_03 ACTIC I TYNE MAN F MBERI 0T OF NT DA 79	Status PRELIM CELTD CORT LAND			
400	Phase Busine Scale 1:1 Client TH Site R Title Job No Surveyed	Site Inves ess Park, I [A3 Sheet] 250 E ARCI NEV IIGH RC OCHES GF MAGN	Higations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLO VCASTLE DCHESTE DCHESTE DCHESTE DCHESTE DCHESTE DCHESTE TER, NO REYSCAL NETIC GF ARC_29 V, MS	TOJA W SITE 703A W iffe, Cour 1325 311 PhaseS haseSI.cd 84_117 GY PR UPON ER ROI RTHUI LE PLC RTHUI 84_117 84_117 0 0 0 0 0 0 0 0 0 0 0 0 0	hinfield I ty Durha 751 I.com 79_03 ACTIC I TYNE MAN F MBERI 0T OF IT DA 79	Status PRELIM CELTD CORT LAND			



$\wedge$			NO	TES				
	1. TH TH PD EM SIT	IS DRAWI E ACCON F) WHICH IPLOYED, FE SPECIF	NG MUST BE MPANYING R I PROVIDES [ THEIR INHE FIC ISSUES.	USED IN EPORT (/ DETAILS ( RENT LIN	CONJUN ARC_298 DF THE T /IITATION	ICTION WITH 4_1179_RPT. ECHNIQUES IS AND ANY		
3/	2. TH	IS DRA	WING IS	BASED	UPON S Masteri	DRAWING		
	PR	OVIDED E	BY THE CLIEN	NT. THE	ORDNAN	ICE SURVEY		
	ME		USING THE L	JKOSTN1	5 PROJE	CTION. THIS		
$\searrow$	TH	E SURVE	Y GRID IS RE					
	3. PH RE OF	ASE SII SPONSIBI ANY INFO	E INVESTIC ILITY FOR TH ORMATION PI	GATIONS IE RELIAB ROVIDED	CANNC ILITY OR BY A TH	ACCURACY		
	4. TH TH	IS DRAW EREIN IS	ING AND TH	IE INFOR	MATION DENCE A	CONTAINED		
	COPYRIGHT OF PHASE SITE INVESTIGATIONS LIMITED. DISCLOSURE OF THIS INFORMATION TO THIRD							
600	PARTIES AND UNAUTHORISED COPYING OR REPLICATION OF THIS DATA WITHOUT APPROVAL IS							
	AL	WAYS EXE	ERCISE CAUT	FION WHE	N EXCA	/ATING		
				N				
				$\square$				
		-						
500			PH		INVEST	GATIONS		
500	Phase S Busine	Site Inves	tigations Ltd, Newton Aycli	, 703A W	INVESTI hinfield I aty Durha	Drive, Aycliffe am, DL5 6AU		
500	Phase S Busine	D Site Inves ss Park, I	tigations Ltd, Newton Aycli T: +44 [0] 0 <sup>-</sup> E: enguiries@	, 703A W iffe, Cour 1325 311 PhaseS	hinfield I aty Durha 751 I.com	<b>GATIONS</b> Drive, Aycliffe am, DL5 6AU		
500	Phase S Busine	Site Inves ss Park, I	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P	, 703A W iffe, Cour 1325 311 PhaseS haseSI.co	hinfield I ty Durha 751 I.com om	Drive, Aycliffe am, DL5 6AU		
500	Phase S Busine	Site Inves ss Park, I [A3 Sheet]	tigations Ltd, Newton Aycli T: +44 [0] 0 <sup>-</sup> E: enquiries@ W: www.P	, 703A W iffe, Cour 1325 311 PhaseS haseSI.co	hinfield I hty Durha 751 I.com om	Status		
500	Phase S Busine Scale 1:12	Site Inves ss Park, I [A3 Sheet] 250	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29	, 703A W iffe, Cour 1325 311 PhaseS haseSI.co 84_117	hinfield I hty Durha 751 I.com om 79_07	Drive, Aycliffe am, DL5 6AU		
500	Phase S Busine Scale 1:12 Client TH	Site Inves ss Park, I [A3 Sheet] 250 E ARCI	tigations Ltd, Newton Aycli T: +44 [0] 0 <sup>-</sup> E: enquiries@ W: www.P Drawing ARC_29 HAEOLO	, 703A W iffe, Cour 1325 311 PhaseS haseSI.co 84_117 GY PR	hinfield I hty Durha 751 I.com om 79_07 ACTIC	Drive, Aycliffe am, DL5 6AU		
500	Phase S Busine Scale 1:12 Client TH	Site Inves ss Park, I [A3 Sheet] 250 E ARCI NEV	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLO	, 703A W iffe, Cour 1325 311 PhaseS haseSI.co 84_117 GY PR UPON	hinfield I hity Durha 751 I.com om 79_07 ACTIC	Status PRELIM		
500	Phase S Busine Scale 1:12 Client TH	CH PC	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLO VCASTLE	, 703A W iffe, Cour 1325 311 PhaseS haseSI.co 84_117 GY PR UPON	hinfield I hity Durha 751 I.com 29_07 ACTIC N TYNE	Status PRELIM		
500	Phase S Busine Scale 1:12 Client TH Site H RC	Site Inves ss Park, I [A3 Sheet] 250 E ARCI NEW IGH RC DCHES	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLO VCASTLE OCHESTE	, 703A W iffe, Cour 1325 311 PhaseS haseSI.cc 84_117 GY PR E UPON ER ROI RTHUI	ACTIC NAN F	Status PRELIM		
500	Phase S Busine Scale 1:12 Client TH Site H RC	Site Inves ss Park, I [A3 Sheet] 250 E ARCI NEW IGH RC DCHES	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLO VCASTLE DCHESTE DCHESTE	A SITE , 703A W iffe, Cour 1325 311 PhaseS haseSI.cc 84_117 GY PR E UPON ER ROI RTHUI	ACTIC NAN F MAN F MBER	Status PRELIM		
500	Phase S Busine Scale 1:12 Client TH Site H RC Title	Site Inves ss Park, I [A3 Sheet] 250 E ARCI NEW IGH RC DCHES GREYS	tigations Ltd, Newton Aycli T: +44 [0] 0' E: enquiries@ W: www.P Drawing ARC_29 HAEOLOG VCASTLE DCHESTE STER, NO	TOJA W 5111 5111 5111 5125 311 5125 31 5125 31	ACTIC NAN F MBER	Status PRELIM E LTD CORT LAND		
500	Phase S Busine Scale 1:12 Client TH Site H RC	Site Inves ss Park, I [A3 Sheet] 250 E ARCI NEV IGH RC DCHES GREYS F	tigations Ltd, Newton Aycli T: +44 [0] 0 E: enquiries@ W: www.P Drawing ARC_29 HAEOLOG VCASTLE DCHESTE DCHESTE DCHESTE DCHESTE STER, NO	TOTS C	ACTIC NAN F MAN F MBER OF EAF	Status PRELIM E LTD CORT LAND		
500	Phase S Busine Scale 1:12 Client TH Site H RC Title	Site Inves ss Park, I [A3 Sheet] 250 E ARCI NEW IGH RC DCHES GREYS F	tigations Ltd, Newton Aycli T: +44 [0] 0' E: enquiries@ W: www.P Drawing ARC_29 HAEOLOG VCASTLE DCHESTE STER, NO SCALE PL RESISTAN ARC_29	TOTS CONCE DA	ACTIC MAN F MBER DF EAF ATA	Status PRELIM CELTD CORT LAND		
400	Phase S Busine Scale 1:12 Client TH Site H RC Title Job No Surveyed	Site Inves ss Park, I [A3 Sheet] 250 E ARCI NEV IGH RC DCHES GREYS F	tigations Ltd, Newton Aycli T: +44 [0] 0' E: enquiries@ W: www.P Drawing ARC_29 HAEOLOG VCASTLE DCHESTE DCHESTE DCHESTE STER, NO SCALE PL RESISTAN ARC_29 V, MS	TOTS CONCE DA	hinfield I nty Durha 751 I.com 79_07 ACTIC J TYNE MAN F MBERI OF EAR ATA 79	Drive, Aycliffe am, DL5 6AU		

# Illus. 14:

HIGH ROCHESTER TOPOGRAPHICAL SURVEY (Hancke et. al. 2004) showing 1993 trenches (red fills), area of new Resistivity Survey in the northern field (red broken line), suggested focus area of excavation (purple dotted line), suggested trenches in northern and southern fields (yellow fills, numbered)



2.1.10 The excavation will be carried out in accordance with the guidance given in the Chartered Institute for Archaeologist's Standard and Guidance for Archaeological Excavation CIfA 2014).

2.1.11 The excavation will be directed by professional archaeologists and undertaken by Revitalising Redesdale volunteers.

# 2.2 Excavation methods:

2.2.1 The depth of the excavations is not expected to exceed 1.2 metres.

2.2.2 The excavation areas will be tied in to the survey points established by the geophysical survey.

2.2.3 Surface stripping will be by hand unless depths of deposits require some initial machine work, with all subsequent excavation of archaeological horizons by hand. Turf and soil will be carefully stored on site and after the completion of the excavation the general topography of the site will be recreated using the excavated materials and then re-turfed, so that upon completion of the work the general appearance of the site will be as close as possible to that prior to the excavation.

2.2.4 All archaeological deposits will be recorded using the Archaeological Practice's pro forma recording system.

2.2.5 A complete drawn record at appropriate scales of all archaeological features and deposits will be compiled. This will include both plans and sections drawn at a scale of 1:20 or 1:50. The Above Ordnance Datum (AOD) height of all principal features and levels will be calculated and plans/sections will be annotated with the AOD heights.

2.2.6 All potentially significant finds will be three-dimensionally recorded.

2.2.7 A comprehensive digital photographic record of the entire project, from the site's original appearance through to the reinstatement of excavated areas, will be maintained. This will record all significant features, finds, deposits and general site working. The photographic record will illustrate both the detail and the general context of the principal features and finds excavated and the site as a whole.

#### 3 FINDS, ENVIRONMENTAL SAMPLING AND HUMAN REMAINS

#### 3.1 Finds:

3.1.1 All artefacts from excavated contexts will be retained, except those considered to be of no intrinsic interest from features or deposits of obviously modern date which are not directly associated with occupation of the site. However, in such circumstances, sufficient artefacts will still be retained in order to elucidate the date and/or function of the features or deposits.

3.1.2 All retained artefacts will, as a minimum, be washed, weighed, counted, marked (as necessary), identified, and bagged or boxed in suitable containers. Roman small fids will be examined and reported on by Lindsay Allason-Jones and Alex Croom.

Where appropriate, this work will be undertaken on site.

3.1.3 Any artefacts requiring conservation or specific storage conditions will be dealt with immediately in line with First Aid for Finds (Watkinson and Neal 2001).

3.1.4 All artefacts recovered during the excavations on the site remain the property of the landowner. They will be suitably bagged, boxed in accordance with the United Kingdom Chartered Institute for Conservation, Conservation Guidelines no. 2 (UKIC 1993) and, after any necessary conservation (and subject to agreement with the landowner), they will be deposited with the Great North Museum as part of the project archive on the completion of the reporting.

3.2 Treasure:

3.2.1 If material is recovered that is considered to be covered by the Treasure Act of 1996 all the necessary information required by the Act (i.e. finder, location, material, date, associated items etc.) will be reported to the Coroner within 24 hours. The Portable Antiquities Scheme will also be advised.

3.3 Environmental sampling

3.3.1 Multiple samples will be taken from any buried sealed contexts that survive within or beneath the site that might potentially be appropriate for pollen analysis, soil micromorphology, or other analysis.

3.3.2 Bulk environmental soil samples for plant macro fossils and small animal bones will be taken from appropriate, well-sealed and dated/datable archaeological contexts. Samples will be 40 litres or 100% of smaller contexts.

3.3.3 All pollen and soil samples and the residues and sieved fractions of the bulk environmental soil samples will be recorded and retained with the project archive.

3.3.4 Palaeoenvironmental samples will be submitted for processing to Dr Charlotte O'Brien at Durham University, with additional advice taken from Dr Don O'Meara, Historic England Science Advisor for the North East and Hadrian's Wall (see Section 8.4).

3.3.5 In addition to excavation, recording and standard paleo-environmental sampling work (as agreed with HE in advance), a number of other initiatives have been discussed, at least some of which will be implemented:

3.3.6 Should it be merited by the results of excavation, Professor Sam Turner of Newcastle University will assess the potential for carrying out OSL-dating analysis of in situ soil horizons as part of the ongoing *TerraSAgE project*. This involvement would be largely dependent on capacity and current Covid-restrictions, but could provide useful confirmation of dates based on C14 and artifact analysis.

3.3.7 Any turf ramparts exposes in Gallow's Knowe west of the fort will be assessed by a team from the Earthen Empire: Earth and Turf Building in the Roman North-West project (Leverhulme Trust RPG-2018-223), led by Dr Ben Russell, Senior Lecturer in Classical Archaeology, University of Edinburgh, in order to advise and sample deposits which would the be sub-sampled for XRF and particle size analysis and thin-sections produced for micromorphology, allowing analysis of the turf for building techniques, etc. in comparison with other samples already taken from Vindolanda, the Antonine Wall and Carlisle.

3.3.8 Dr Derek Hamilton of the *SUERC Radiocarbon Dating Laboratory* and Glasgow University, and Dave Cowley of Historic Environment Scotland have expressed interest with regard to their

Leverhulme Grant-funded (with Manuel Fernandez-Gotz (Edinburgh) reassessment of Iron Age and Roman encounters in northern Britain, within which one of the case study areas incorporates Redesdale. Although not beginning until September 1<sup>st</sup> 2021, Dr Hamilton has offered advice and modelling (and potentially some dating) if later Iron Age/native Roman Iron Age remains are encountered. His advice will also be pertinent in wider discussions of the relationship between native and Roman activity sites, as covered in the current Project's Aims and Objectives. 3.4 Human Remains

3.2.1 Should human remains be found then they will be fully recorded, excavated and removed from the site subject to compliance with the appropriate legislation and guidance. A Ministry of Justice Licence for the removal of human remains will be acquired should it be considered necessary.

3.2.2 All excavation and post-excavation will be in accordance with the standards set out in IfA Technical Paper 13 Excavation and post-excavation treatment of cremated and inhumed remains (McKinley and Roberts 1993).

# 4 REPORT

4.1 A brief interim report will be prepared within three months of the completion of the excavations and it, or suitably edited versions of it, will be submitted to appropriate archaeological journals and newsletters. The interim report will also be published on the Revitalising Redesdale and NNPA websites.

4.2 An OASIS form will also be completed and submitted.

4.3 All finds will be studied by appropriate experts and materials analyses will be undertaken of the existing and any new finds. Environmental samples will be assessed and where appropriate analysed. Funding for these analyses will be sought from the Revitalising Redesdale project contingency.

4.4 Upon completion of post-excavation work, a final report will be prepared and submitted to the client and Northumberland Heritage Environment Record (HER). If appropriate, an edited version of the report will be submitted for publication in an appropriate journal. It will also be made available via OASIS, and a link to it will be placed on the Revitalising Redesdale and NNPA websites.

# 5 ARCHIVE

5.1 On completion of the project a cross-referenced and internally consistent project archive will be compiled in accordance with the guidelines outlined in Appendix 3 of Management of Archaeological Projects (English Heritage 1991) and in accordance with the Guidelines for the preparation of excavation archives for long term storage (UKIC 1990) and the Chartered Institute for Archaeologists, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (IfA 2009).

5.2 The project archive will be submitted to the Great North Museum, Newcastle-upon-Tyne, and a copy of the digital archive will be submitted to the Archaeology Data Service.

5.3 The Archaeological Practice Ltd. will complete the online form for the Online Access to Index of Archaeological Investigations Project (OASIS), which is the procedure whereby the information on the

form will be placed in the public domain on the OASIS website. A technical summary of the report (DSR) will also be prepared for inclusion in the OASIS report.

#### 6 **PROJECT TEAM**

6.1 The excavations are being directed by Richard Carlton, assisted by Marc Johnstone and project staff from The Archaeological Practice Ltd. which is responsible for the provision of all equipment, and for the provision of on-site training to volunteers. Fieldwork will be undertaken by Revitalising Redesdale volunteers with training and supervision provided by professional staff from The Archaeological Practice.

6.2 The Archaeological Practice Ltd. will produce a risk assessment, and will be responsible for health and safety on site throughout fieldwork.

6.3 The Archaeological Practice Ltd. staff will be responsible for the post-excavation analyses and production of the project report.

#### 6.4 The Project Team:

Karen Collins Revitalising Redesdale Heritage and Engagement Officer Northumberland National Park Authority Email: karen.collins@nnpa.org.uk Responsible for overall project management/coordination, including coordinating volunteer involvement in the project, and site preparatory work.

Richard Carlton The Archaeological Practice, Newcastle upon Tyne Telephone 0191 2730777; mob. 07930947979 Email: Richard.carlton@ncl.ac.uk Responsible for Direction of Excavations and reporting.

Marc Johnstone The Archaeological Practice, Newcastle upon Tyne: Excavation Supervisor. Email: info@archaeologicalpractice.co.uk Responsible for volunteer supervision, recording of excavations.

Chris Jones Historic Environment Officer Northumberland National Park Authority Email: chris.jones@nnpa.org.uk Responsible for liaison with NNPA and monitoring of fieldwork.

Charlotte O'Brien, Palaeoenvironmental Laboratories Manager Durham University

### 7 COMMUNICATIONS

7.1 Karen Collins maintains a volunteer database of all Revitalising Redesdale volunteers, and information about the project will generally be disseminated by email or telephone using contact details contained within this database. For ease of communication, any local people wishing to take part in the project who have not registered with the Revitalising Redesdale project will be asked to do so, at least temporarily. All communication with volunteers will then be via the Revitalising Redesdale volunteer database.

7.2 Richard Carlton and other project staff will be in daily contact during the fieldwork phase, and will communicate as necessary by email, telephone and face to face meetings as necessary during project planning and post-excavation phases.

# 8 STAGES, TASKS AND TIMETABLE

This project is divided into three stages, broadly concerning pre-commencement planning works, fieldwork and post-excavation analysis, reporting and archiving.

Regarding fieldwork, the landowners have kindly consented for works to be carried out over two 5day working week periods between Monday 19<sup>th</sup> and Friday 30<sup>th</sup> July, with the potential for additional work on Saturday 24<sup>th</sup> July.

The working day will be 10am – 4pm, although there may be opportunities/requirements for some variance. Volunteers should arrive in the car park for 9:45 am each morning, as per arrangements provided separately by the Revitalising Redesdale Heritage and Engagement Officer.

**STAGE 1** (to be completed prior to commencement of fieldwork):

- 1.1 Landowner approval and appointment of the excavator to carry out the work
- 1.2 Finalising of Written Scheme of Investigation (project design).
- 1.3 Agree health & safety provision and complete risk assessment.
- 1.4 Circulate WSI and RA by email to registered volunteers

#### **STAGE 2** FIELDWORK

- 2.1 Site set-up, sign-in, fieldwork and RA briefings (10 am, 19<sup>th</sup> July 2021)
- 2.2 Fieldwork continues to 30<sup>th</sup> July

#### **STAGE 3** REPORT, ARCHIVE & PUBLICITY

3.1 Production by AP Ltd of first stage, summary interim project report

by 1<sup>st</sup> November, 2021.

### 9 SITE ACCESS AND ON-SITE FACILITIES

9.1 Volunteer parking will be in the south part of the village green within the Roman fort or, if this leads to congestion, in Low Rochester with coordinated transfer from there to the fort by transport coordinated by KC and APLtd staff.

9.2 It is proposed to provide an onsite portaloo with running water for hand-washing close to the excavation site, as well as emergency shelter and storage. These arrangements will be finalised and full details communicated to all participants prior to the commencement of fieldwork.

# 10 HEALTH & SAFETY AND INSURANCE

10.1 Full consideration will be given to matters of health and safety throughout this project.

10.2 All work will be undertaken in accordance with the 1974 Health and Safety Act and its subsequent amendments, the 2007 Construction Design and Management Regulations, and the Standing Conference of Archaeological Unit Managers (SCAUM) Health and Safety Manual (2007).

10.3 In accordance with standard practice, all work will be subject to a specific risk assessment, covering all real and potential hazards associated with this particular site and taking full account of the current Covid-19 pandemic. A comprehensive health and safety induction will be given to all volunteers at project start-up, and all will be required to read a written statement on health and safety which will be kept on site and which all volunteers partaking in the project will be required to sign, stating that they have read and understood it and that they will abide by its terms.

10.4 Staff members will be supplied with appropriate safety clothing and equipment, and advice as to appropriate clothing and equipment will be provided to volunteers.

10.5 All aspects of the Revitalising Redesdale project are covered by Northumberland National Park Authority's comprehensive insurance policy. In addition, Archaeological Practice Ltd staff are covered by their own company's policies.