An Archaeological Excavation at Newcastle Road, Chester-le-Street, County Durham

Post-Excavation Assessment Report

Central National Grid Reference: NZ2745 5175

Site Code: CLS 06

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PART A: PROJECT SUMMARY

1. NON-TECHNICAL SUMMARY

1.1 An archaeological excavation was undertaken between 13th April and 3rd May 2006 by Pre-Construct Archaeology on land east of Newcastle Road, Chester-le-Street, County Durham. The central National Grid Reference of the site is NZ 4275 5170. The work was commissioned by CgMs Consulting on behalf of McCarthy and Stone (Developments) Limited, ahead of a residential care home development.

1.2 The site lies *c*. 0.5km north of the Roman fort of Chester-le-Street (*Concangis)* and immediately to the east of a road, known as Cade's Road, which ran northwards from the fort to Newcastle-upon-Tyne, probably following the route of the modern Newcastle Road. The archaeological importance of the site had been established by a desk-based assessment and a field evaluation, the latter having identified the presence of features of Roman and medieval date within the northern half of the proposed development footprint.

1.3 The excavation was undertaken across a sub-rectangular area covering 772m^2 within the development footprint. Natural clay and sand deposits of glacial origin were exposed across the excavated area, sloping down steeply to the south since the site lies on the northern valley side of the Cong Burn, a tributary of the River Wear.

1.4 The earliest archaeological features recorded during the excavation were of Roman date, including two east-west aligned boundary ditches from which mid 2nd century Hadrianic pottery was recovered. The northernmost ditch had been re-cut to the east and this element produced pottery dated to *c.* AD 160-180. These features are interpreted as having delimited boundaries of properties that fronted onto Cade's Road, and the ceramic evidence suggests a relatively long-lived boundary system. Although no definite structural features were recorded in the plots defined by these boundaries, the cultural debris within them was broadly indicative of nearby settlement.

1.5 Following disuse of the mid 2nd century boundary features, a new property layout was seemingly established, represented by a boundary ditch on a WNW-ESE alignment. To the south of this boundary was a substantial feature, interpreted as a quarry pit, presumably dug for the extraction of clay or sand within the natural geological material. Ceramic evidence dates the infill of this feature – it was probably used as a refuse pit as a secondary function - to late 2nd to early 3rd century. The feature contained substantial quantities of stone, possibly representing field clearance ahead of arable cultivation. Two smaller refuse pits of broadly the same date were also recorded to the south of the boundary ditch.

1.6 Artefactual evidence indicates that the former quarry pit continued to be backfilled with refuse into the mid to late 3rd century and a coin recovered from an upper fill provided a *terminus post quem* for the final infilling of AD 260-300. A substantial refuse pit also of mid to late 3rd century date was recorded adjacent to the eastern limit of excavation. Again there was no direct evidence for dwellings at the site during these later phases of Roman occupation, although the cultural debris within the features was again indicative of significant settlement in the near vicinity.

1.7 The later 2nd and 3rd century features at the site produced a ceramic assemblage comprising a range of Romano-British traded wares and imported samian wares that are standard for military sites in the region. The assemblage as a whole is consistent with Roman military consumption, such as at a fort, or consumption derived from or associated with a Roman military supply chain, as with a *vicus* or a roadside settlement on a major road in a military zone. Butchery patterns observed on the faunal assemblage recovered from the quarry pit are also broadly indicative of military consumption. The 'small finds' recovered during the excavation are characteristic of domestic rubbish and casual losses associated with Romano-British settlement. Glass and copper alloy objects suggest domestic activity, while part of a quernstone indicates the processing of grain in the vicinity.

1.8 The earliest Roman period activity recorded at the site is of considerable significance in local terms as it provides evidence for the existence of a Roman roadside settlement at Chester-le-Street prior to the accepted date - AD 175 - for the establishment of the fort. Assessment of the pottery assemblage – the bulk of which was from stratified Roman contexts - has provided important data concerning the date-range of this extra-mural site and, significantly, new data regarding pottery supply to Chester-le-Street itself. The importance of the pottery assemblage from this site is particularly enhanced by the fact that relatively little stratified pottery has been previously published from any sites at Chester-le-Street.

1.9 Archaeological remains of post-Roman date recorded at the site are of far lesser significance. A series of north-south aligned plough furrows produced ceramic material suggesting that the site was ploughed from at least the 17th century, possibly earlier. Several irregular features interpreted as possible tree boles may relate to the use of the site as an orchard, known from Ordnance Survey mapping to have been in existence in 1872 but disused by 1896.

1.10 This Post-Excavation Assessment Report is divided into two parts. Part A, the Project Summary, includes an introduction to the site, its location, geology and topography, planning and archaeological background, and a full description of the archaeological methodology employed during the investigations. It concludes with an illustrated summary of the archaeological remains representing each of the main phases of occupation, and an overall discussion of the archaeological findings of the project.

1.11 Part B, the Data Assessment and Conclusions, quantifies the written, graphic and photographic elements of the project archive and contains specialist assessments of the artefactual and bioarchaeological evidence, with recommendations for any further work for each category, and then sets out the conclusions of the project to date and a summary of the significance of the project data in local and regional terms. Part C contains the references and acknowledgements. The report has three appendices.

2. INTRODUCTION

2.1 General Background

2.1.1 This report describes the methodology and results of an archaeological excavation undertaken by Pre-Construct Archaeology Limited (PCA) on land east of Newcastle Road, Chester-le-Street, County Durham. The work was undertaken between 13th April and 3rd May 2006 in advance of the construction of a residential care home development. The work was commissioned by CgMs Consulting (CgMs), on behalf of McCarthy and Stone (Developments) Limited (the Client).

2.1.2 The site - centred at National Grid Reference NZ 4275 5170 – is sub-rectangular covering *c*. 0.34 hectares and is bounded to the west by Newcastle Road, to the east by an Aldi supermarket and a Territorial Army Centre, to the north by Chester-le-Street Civic Centre and to the south by the rear of properties off Picktree Lane (Figures 1 and 2).

2.1.3 The archaeological potential of the site was initially established by a desk-based archaeological assessment.[1] The Roman fort of Chester-le-Street, known as *Concangis,* lies *c*. 500m to the south, with a Roman road, known as Cade's Road, running northwards from the fort to Newcastle-upon-Tyne, and passing immediately to the west of the site. An archaeological field evaluation in 2005 revealed evidence of Roman settlement and agricultural features thought to be of medieval origin.[2]

2.1.4 Accordingly, further investigation of archaeological remains threatened by the development was required. The excavation, as detailed in this report, was undertaken across a roughly rectangular area within the footprint of the new building. The excavation area measured a maximum of *c.* 50m north-south by *c.* 20m east-west, covering a total area of *c.* 772m^2 (Figure 2). A Written Scheme of Investigation (WSI) for the excavation was prepared by CgMs and approved by Archaeology Section, Durham County Council (DCAS).[3]

2.1.5 The format of this post-excavation assessment report follows the methodology outlined in *'Management of Archaeological Projects - 2nd edition'* (MAP2).[4]

2.1.6 The completed project archive, comprising written, graphic and photographic records, as well as artefactual material, will be deposited with the County Durham Archaeological Archive at Bowes Museum, Barnard Castle, County Durham, under the site code CLS 06. The Online Access to the Index of Archaeological Investigations (OASIS) reference number is: preconst-18195.

[1] CgMs Consulting, 2005.
[2] PCA, 2005.
[3] CgMs Consulting, 2006.
[4] English Heritage, 1991.

Figure 1. Site location
Scale 1:25,000

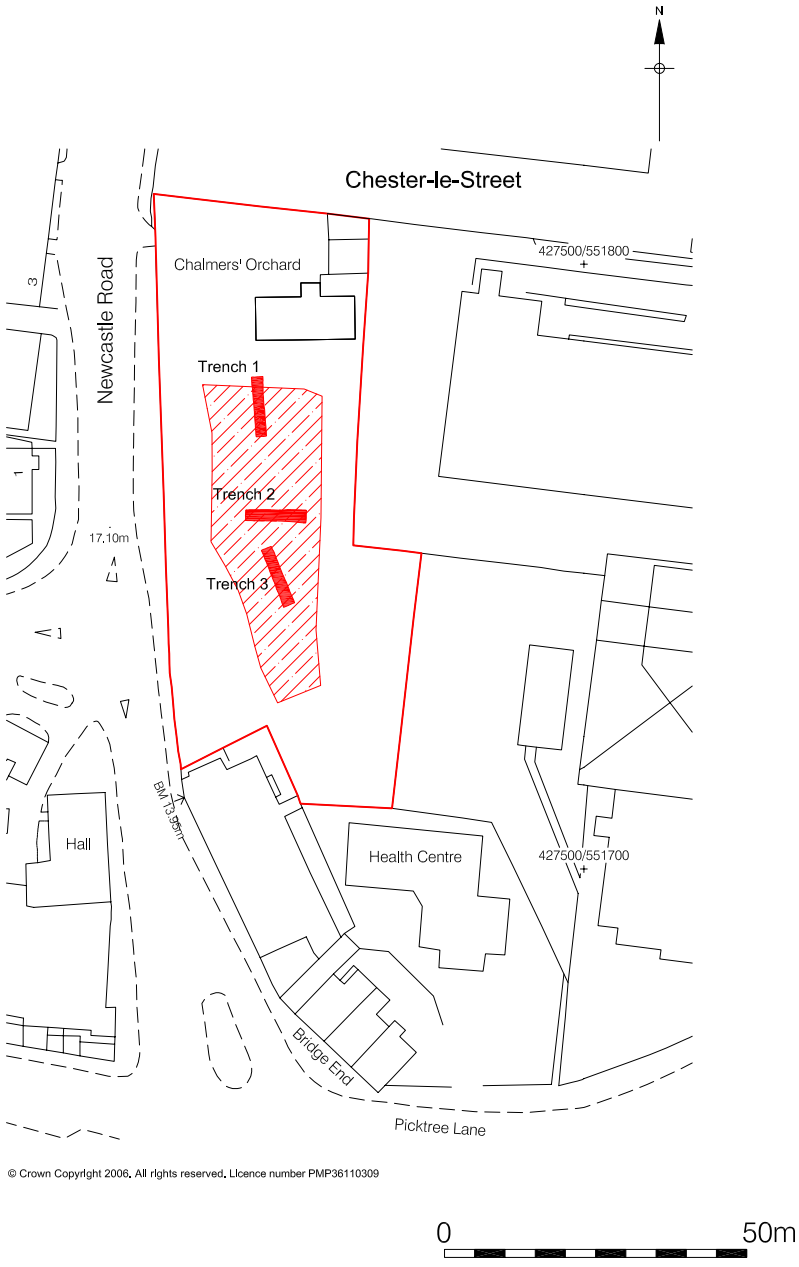


Figure 2. Trench location
Scale 1:1250

2.2 Site Location and Description

2.2.1 The site lies in the northern part of Chester-le-Street, *c*. 500m west of the River Wear and *c*. 100m north of the Cong Burn, a tributary of the Wear. The site is bounded to the west by Newcastle Road, to the south by the rear of properties off Picktree Lane, to the north by Chester-le-Street Civic Centre and to the east by an Aldi supermarket and a Territorial Army Centre. The site is centred at National Grid Reference NZ 4275 5170 (Figure 1).

2.2.2 The development site as a whole is sub-rectangular in shape and comprises *c*. 0.34 hectares of sloping ground on the northern valley side of the Cong Burn. The site was formerly occupied by a large detached two-storey brick property 'Chalmers' Orchard' and its access routes, outbuildings and gardens. The excavation area was located within what was the sloping south-facing garden of the dwelling, which was being demolished at the time of the archaeological investigation.

2.2.3 The excavation area comprised the majority of the footprint of the new building. It was sub-rectangular in shape and measured as maximum of *c*. 52m north-south by *c*. 20m east-west (Figure 2). In total, the area of investigation covered 772m^2.

2.3 Geology and Topography

2.3.1 The 1:50,000 scale Geological Survey (Sheet 20) indicates that the solid geology at the site comprises Carboniferous Coal Measures overlain by Boulder Clay/Glacial Till.

2.3.2 The site occupies sloping ground on the northern valley side of the Cong Burn, a tributary of the River Wear into which it flows *c*. 500m south-east of the site. Within the site, ground level stands at *c*. 21m OD, at the northern boundary, falling away to *c*. 13.95m OD, at the southern boundary , a drop of *c*. 7m over a distance of *c*. 100m. Within the majority of the western boundary of the site, the ground falls away in a steep bank down to the level of the adjacent Newcastle Road.

2.4 Planning Background

2.4.1 The Archaeology Section, Durham County Council (DCAS) has responsibility for archaeological development control issues throughout County Durham, including the district of Chester-le-Street. Heritage related policies set out in the '*Chester-le-Street District Council Local Plan*'[5] that are relevant to the development of the Newcastle Road site are

> **Policy BE11**
> **SITES OF ARCHAEOLOGICAL INTEREST**
> Where important sites of archaeological interest are likely to be affected by development, their preservation in situ will be required. On those sites where preservation in situ is not feasible Chester-le-Street District Council will require the developer to make suitable arrangements to a brief prepared by the County Archaeological Officer, for the excavation and recording and publishing of the remains.
>
> ***Policy BE11 Justification***
> **2.33** In addition to the Scheduled Ancient Monuments there are 173 sites of known archaeological importance in the District for which details are also held by the County Sites and Monuments Record Office.
>
> **Policy BE12**
> **ASSESSMENT OF SITES OF ARCHAEOLOGICAL INTEREST**
> Where development proposals affect sites of known or potential archaeological interest, Chester-le-Street District Council will require an archaeological assessment/evaluation to be submitted as part of the planning application. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them.
>
> ***Policy BE12 Justification***
> **2.34** In all cases there will be a presumption in favour of the in-situ preservation of the remains. If this is not possible, an archaeological condition may be imposed which will require a detailed recording and excavation of the site. Financial assistance towards these works may be available from English Heritage where the applicant is a non-profit making community body or if the individual cannot afford the works.

2.4.1 The aforementioned archaeological desk-based assessment and field evaluation established the archaeological importance of the site. Both pieces of work were undertaken on the recommendation of the DCAS, in line with advice given in *'Planning Policy Guidance Note 16: Archaeology and Planning'* (PPG 16)[6] as well as the archaeological policies of the LPA, as set out above.

2.4.2 The further archaeological work, namely the excavation herein described, was undertaken as a condition of planning permission for the development (planning application reference 05/00325/FUL), the construction of a residential development for the elderly. Condition 7 of the planning permission stated:

> '*No development shall take place until an agreed programme of archaeological works has been submitted to and agreed in writing by the Local Planning Authority in order to ensure the development pays due regard the archaeological potential of the site and to accord with the aims of Policy BE12 of the Chester-le-Street Local Plan*.'

[5] The Local Plan, effective from January 2002, is available online at: www.theplanningportal.gov.uk.
[6] D.o.E., 1990.

2.4.4 As it was not possible to preserve archaeological remains *in situ* within the development footprint, the excavation was required to mitigate the impact of the development on the archaeological resource through preservation by record. The aforementioned WSI was prepared by CgMs Consulting and approved by the DCAS prior to the excavation.

2.5 Archaeological and Historical Background

2.5.1 Prehistoric

2.5.1.1 Until relatively recently, very little was known of Chester-le-Street during any of the various prehistoric eras. A few stray discoveries of artefactual material of prehistoric origin are recorded in the town on the County Sites and Monuments Record (SMR) and evidence of ploughing has been recorded at Middle Chare, below the earliest phase of the Roman fort, although this could represent early Romano-British activity rather than pre-Roman agriculture. In a wider context, pollen analysis from County Durham broadly suggests considerable agricultural clearance was undertaken during the 1st and 2nd centuries AD.

2.5.1.2 Recent archaeological investigations at Highfield Hospital, on higher ground north of the current site, have identified a multi-period site with evidence of predominantly prehistoric and Roman activity, including two pits and a ditch of Bronze Age date.

2.5.1.3 Additionally, a Bronze Age axe was found associated with Roman artefacts during an archaeological excavation on land off South Approach, *c*. 1km south-west of the current site. This axe was found in a Roman context and as a result its provenance is unknown.

2.5.2 Roman

2.5.2.1 The Roman fort of *Concangis* had long been believed a cavalry fort founded *c*. AD 216. However, excavations on Church Chare and at Park View School have recorded evidence for an earlier clay and timber fort belonging to the second half of the 2nd century AD.[7] Samian pottery indicates that the foundation of the fort more likely dates from *c*. AD 175 and it is thought possible that a civilian Roman settlement existed in the area prior to this. Evidence from coins suggest that the fort was occupied until the middle of the 4th century, and the officers' quarters were probably demolished by the late 4th century.

2.5.2.2 The site of *Concangis* fort is a Scheduled Ancient Monument (SAM 105). Numerous archaeological interventions have been undertaken on the site of the fort and its environs, many of which have contributed important information to overall knowledge of the military complex, as well as its associated civilian settlement or *vicus*. While the position of the main elements of the fort are reasonably well established, there is growing evidence for the existence of an extensive *vicus* to the east of the fort. The *vicus* also probably extended to the south and west of the fort and a cemetery has been located to the south.

[7] Evans *et al.*, 1991, 15.

2.5.2.3 The Newcastle Road site lies *c.* 500m north of the fort. The fort was situated on a high bluff overlooking the River Wear to the east and the Cong Burn to the north. Cade's Road, the north-south aligned Roman road running from Chester-le-Street to Newcastle passed immediately to the west of the fort, crossed the Cong Burn and then passed immediately west of the current site, underlying the present Newcastle Road.

2.5.3 Saxon-Medieval

2.5.3.1 When St. Cuthbert's body was brought to Chester-le-Street by the monks of Lindisfarne in the late 9th century, settlement in the town is believed to have been concentrated on the site of the present parish church of St. Mary and St. Cuthbert. The church was established in the centre of the Roman fort, on the site of the *principia*, and remained in use after AD 995 when St. Cuthbert's remains were moved to Durham. The original church may have been constructed in wood, but it was certainly re-built in stone in the mid 11th century and it has been much altered since, including another rebuild in stone in 1267; substantial parts of the existing fabric are of medieval date.

2.5.3.2 The Roman road remained the main route over the Cong Burn to the focus of medieval settlement (now South Pelaw) north of the river, *c.* 600m west of the site.

2.5.4 Post-Medieval-Modern

2.5.4.1 The Ordnance Survey 1st edition map of 1872 shows the current site as part of an orchard, which is not shown on the 2nd edition map of 1896. In recent times, the site was used by the Territorial Army for training exercises, and is shown as open space until the Ordnance Survey map of 1961, which shows the property known as 'Chalmers' Orchard'.

3. AIMS AND OBJECTIVES

3.1 The general objectives of the archaeological excavation were:

- to locate, sample, record and interpret any archaeological deposits exposed;
- to locate, recover, identify and conserve (as appropriate) any archaeological artefacts exposed;
- to prepare a report summarising the results of the work;
- to prepare and submit a suitable archive to an appropriate museum.

3.2 The specific aim of the work was to establish the character of archaeological remains, within the '*North East Regional Research Framework for the Historic Environment'* (NERRF). The NERRF is an English Heritage-funded initiative that aims to provide a viable, realistic and effective academic basis for the undertaking of archaeological investigations.[8] The 'Roman Research Strategy' section of the NERRF contains several research topics of relevance to the Newcastle Road site, as highlighted by the project WSI.

[8] North East Regional Research Framework, www.durham.gov.uk.

4. METHODOLOGY

4.1 Fieldwork

4.1.1 The archaeological fieldwork at the Newcastle Road site was undertaken in accordance with the relevant standard and guidance document[9] of the Institute of Field Archaeologists (IFA). PCA is an IFA-Registered Archaeological Organisation.

4.1.2 The area investigated comprised an irregular, but roughly rectangular, trench measuring a maximum of 52.30m north-south by 19.79m east-west, with a total area of 772m^2 (Figure 2). This comprised the majority of the new building footprint, itself located within the overall area of development. Areas lying beyond the building footprint were not subject to archaeological excavation as there would be no impact on buried remains in those parts of the site.

4.1.3 In practice, the western limit of the excavation area was determined by the presence of a margin of trees overlooking Newcastle Road, the south-eastern limit was determined by the requirement to store spoil on site and the northern limit was determined by the requirement to maintain access for the mechanical excavator.

4.1.4 The removal of overburden and subsequent ground reduction was undertaken by a tracked 360º mechanical excavator employing a 1.80m wide toothless bucket. This work took place under direct archaeological supervision. All undifferentiated topsoil or archaeologically insignificant material was stripped down, in spits of approximately 100mm thickness, to the top of the first significant archaeological horizon or to the level of the natural sub-stratum, whichever came first. Spoil was stored in the south-eastern portion of the site.

4.1.5 Archaeological excavation and recording was undertaken in accordance with recognised archaeological practice and following the methodology set out in both PCA's '*Field Recording Manual*'[10]. Following machine clearance, the sections and base of the trench were cleaned using hand tools. Excavated features and stratigraphic deposits were recorded in section and drawn at a scale of 1:10. Excavated features were recorded in plan at a scale of 1:20 relative to a site grid established within the excavation area and tied in to the Ordnance Survey grid using a Total Station EDM.

4.1.6 All archaeological features were cleaned with hand tools by the archaeological team to enable identification and recording. All discrete features such as pits and postholes were initially 50% excavated and recorded in section before being fully excavated in order to aid artefact and dateable material recovery. A minimum sample of 25% of each linear feature was excavated.

4.1.7 Archaeological deposits and features were recorded using a 'single context planning' system. They were recorded on *pro forma* context record sheets.

[9] IFA, 1999.
[10] PCA, 1999.

4.1.8 A detailed photographic record of the investigations was compiled using SLR cameras. This comprised of black and white prints and colour transparencies (on 35mm film), illustrating the principal features and finds in detail and in general context. All photographs of this nature included a clearly visible graduated metric scale. The photographic record also included 'working shots' to illustrate more generally the nature of the archaeological investigations.

4.1.9 Two Temporary Bench Marks (TBMs) were established on the site from the Ordnance Survey Bench Mark located on the west facing wall of a building fronting onto Newcastle Road, which had a value of 13.95m OD. The TBMs had values of 18.80m OD and 20.49m OD.

4.2 Post-excavation

4.2.1 This report sets out the findings of the archaeological excavation at Newcastle Road. In accordance with recognised guidelines, as set out in MAP2, the site data has been assessed for its potential for further analysis in relation to the project's research aims and any additional questions that came to light during post excavation analysis. This post-excavation assessment report, enumerating the different kinds of evidence (stratigraphic, artefactual and palaeoenvironmental) from the site and the potential of each for further analysis, has been prepared as the first phase of that process.

4.4.2 All processing of artefacts and ecofacts was undertaken away from the site. Assessment of artefactual and ecofactual material has been undertaken by suitably qualified personnel. For each category of artefact and ecofact an assessment report has been produced including a basic quantification of the material and a statement of its potential for further analysis and recommendations for such work (Sections 7-14).

4.4.3 All artefacts recovered from the investigations were treated in an appropriate manner and were cleaned, marked, conserved, bagged, packaged, boxed and stored, as appropriate and in accordance with recognised guidelines.[11]

4.4.4 Assemblages of ceramic material, including tile and fired clay, and faunal remains were recovered along with a variety of 'small finds' comprising glass, copper, ceramic, iron and stone objects.

4.4.5 The palaeoenvironmental sampling strategy was to recover bulk samples from suitable, well-dated archaeological deposits. To this end, 18 bulk samples were collected during the fieldwork, of which seven were selected for an initial assessment of the potential for survival of biological remains (Section 14).

4.4.6 All materials that required stabilisation were transferred to a specialist conservation facility as soon as possible. The conservation of vulnerable materials commenced with an initial assessment of all recovered artefacts and X-radiography of the metal objects. Quality of preservation was assessed and the long-term conservation and storage needs of all excavated material identified.

[11] UKIC, 1983; Watkinson and Neal, 1998.

4.4.7 Survival of all materials recovered during or generated by archaeological projects depends upon suitable storage. The complete project archive, comprising written, drawn and photographic records (including all material generated electronically during post-excavation) and all recovered materials will be packaged for long term curation according to relevant guidelines.[12] An acceptable standard for archives generated by archaeological projects has been defined in MAP2.[13] The archive will be quantified, ordered, indexed, and internally consistent. The depositional requirements of the receiving body, in this case the Bowes Museum.

4.4.8 The stratigraphic data from the site is represented by the written, drawn and photographic records. Post-excavation work involved checking and collating site records, grouping contexts, enhancing matrices, consulting with external specialists and phasing the stratigraphic data. A written summary of the archaeological sequence was then compiled, as described below in Section 5. The contents of the written, graphic and photographic archive are quantified in Section 6.

[12] UKIC, 1990.
[13] English Heritage, *op. cit.*

5. PHASED SUMMARY OF THE ARCHAEOLOGICAL SEQUENCE

5.1 Phase 1: Natural Sub-stratum

5.1.1 Natural sub-stratum, [102], was exposed across the excavation area and was of variable composition. In general, it comprised mid brownish pink clay with frequent patches of light brownish yellow sand with occasional fine rounded stones and patches of degraded coal fragments throughout. The variable nature of the natural sub-stratum as recorded is largely typical of glacial till deposits in the area.

5.1.2 The level at which natural was recorded sloped down from a maximum height of 20.28m OD in the northern portion of the excavation area, sloping down to 17.21m OD towards the southern limit of excavation. This reflects the natural topography of the area, situated as it is on the sloping northern side of the Cong Burn valley.

5.2 Phase 2: Mid 2nd Century

5.2.1 A shallow, linear north-south orientated feature, [143], cut into the natural sub-stratum towards the north-eastern corner of the excavation area (Figure 4). This had a rounded terminus in the north and a generally shallow U-shaped profile. It measured 2.60m in length, truncated to the south, by 0.30m wide and was 80mm deep. Its single fill, [142], comprised brownish grey silty clay, which yielded a small assemblage of Roman pottery that was not closely dateable. This feature is interpreted as a probable drainage gully. It may have drained into east-west feature [139] located to the south and, therefore, may have been contemporary with that feature rather than being truncated by it.

5.2.2 A linear east-west aligned feature, [139], extended across the northern portion of the excavation area (Figure 4 and Plates 2 and 3). It has been interpreted as a boundary ditch. It measured 18.60m in length, continuing to the west beyond the limit of excavation and truncated to the east, and was up to *c.* 0.85m wide by up to 0.65m deep. Its profile was not consistent along its length, but there were generally steep sides with a narrow U-shaped slot along the base (Figure 10; Sections 6, 7, 11 and 12). The feature was recorded at a maximum height of 20.03m OD.

5.2.3 Towards the western and eastern limits of excavation, ditch [139] was filled by similar silty clay deposits, [138] and [152], respectively (Figure 10; Sections 6, 7 & 12), from which a small assemblage of pottery of 2nd century date was recovered. Where examined in section c. 4.0m from the eastern limit of excavation (Figure 10; Section 11), fill [152] was observed to be a secondary fill, overlying a sandy silty clay primary fill, [153], from which a small assemblage of pottery of mid 2nd century date was recovered. In broad terms, the composition of each fill of ditch [139] indicated that it had gradually silted-up, rather than having been deliberately backfilled.

5.2.4 When investigated during the earlier evaluation, in what was the central portion of the excavation area, ditch [139] (recorded then as ditch [[12]]) also had two fills, The upper fill, recorded in the evaluation as context [6], produced five sherds of samian ware of Hadrianic to early Antonine date, *c.* AD 120-140 and 120-150.

5.2.5 Ditch [139] had been re-cut along its eastern portion by as ditch [170] (Plates 2 and 3). This was traced for a total of *c.* 11.0m, with a rounded terminal in the west and truncated to the east (Figure 4). It had a U-shaped profile and was up to 0.74m wide by 0.44m deep (Figure 10; Sections 11 and 12). Its silty clay fill, [144], had occasional inclusions of charcoal and very occasional fired clay and daub fragments throughout. Burnt bone was recovered from a bulk sample of deposit [144] and although close identification to species was not possible, some fragments could be identified as representing ungulates, possibly deer or cattle. The coarse pottery assemblage from fill [144] was of mid 2nd century date, indicative of a date of infilling in AD 140-180. Samian from this feature was exclusively of 2nd century date and the material indicated that the earliest date at which the feature could have become infilled was *c.* AD 160. Fragments of glass vessel, lead waste and an iron nail were also recovered. The composition of the fill of ditch re-cut [170] suggests that it had been deliberately backfilled, presumably incorporating refuse and occupation debris from a nearby settlement area.

5.2.6 A linear feature, [113], was recorded *c.* 12.50m to the south of ditch [139] and running roughly parallel to it. Traced for *c.* 12.50m on an east-west alignment and truncated at either end, the feature has also been interpreted as a boundary ditch. It was of variable width, 1.76m to 0.44m, probably due to horizontal truncation by subsequent activity, and was up to 0.36m deep (Plate 1). The highest level at which it was recorded was 18.78m OD. Its primary fill, recorded as deposit [112] in the west and deposit [130] in the east, comprised light grey clay, up to 0.20m thick. A small assemblage of pottery of mid 2nd century date was recovered from fill [112] and a fragment of samian dated from *c.* AD 120-200 was recovered from fill [130]. An upper fill, [129], recorded in the western portion only, comprised mid brownish grey silty clay. Two sherds of samian pottery of Hadrianic to early Antonine date, *c.* AD 120-160, a sherd dating from *c.* AD 140-200, and several sherds broadly dating from the 2nd century were recovered from this deposit.

5.2.7 Boundary ditches [139] and [141] are interpreted as delimiting a parcel of land 12.50m wide that presumably fronted onto the eastern side of the Roman road known to run a short distance to the west of the excavation area. Dating evidence indicates that the features are of Hadrianic or early Antonine date and, therefore, pre-date the probable origin of the fort at Chester-le-Street, *c.* AD 175. The ditches appeared to have silted-up gradually and the eastern portion of the northernmost feature was re-cut, indicating some degree of longevity in the property boundaries. The re-cut was evidently deliberately backfilled in the period *c.* AD 160-180, incorporating cultural debris that presumably originated from a nearby settlement area.

5.3 Phase 3: Late 2nd to Early 3rd Century Activity

5.3.1 An approximately NW-SE aligned linear feature, [141], ran across the central portion of the excavation area (Figure 5 and Plate 4). This measured at least 18.20m in length, continuing to the east and west beyond the limits of excavation, and was up to 0.70m wide by 0.46m deep. Its profile varied in the excavated portions from U-shaped to steeply sloping V-shape and it was recorded at a maximum height of 19.28m OD (Figure 11; Sections 10, 14 and 15). Like the similar features from the preceding phase, this feature has been interpreted as a boundary ditch.

5.3.2 Towards the eastern limit of excavation, the fill, [159] of ditch [141] comprised a mixed sandy clay and clayey sand deposit from which a fragment of slag, likely to be a by-product of iron smithing, was recovered. The remainder of the feature was infilled with a silty clay deposit, [140]. The difference in composition in these fills may be due to a corresponding variation in the natural sub-stratum through which the feature was cut, and the nature of the fills indicated that the features had gradually silted up. The coarse pottery assemblage recovered from fill [159] is of late 2nd to early 3rd century date and that recovered from fill [140] dates from the mid to late 2nd century.

5.3.3 The boundary delimited by ditch [141] was again probably associated with a parcel of land fronting the Roman road to the west. Dating evidence demonstrates that this feature post-dates ditches [139]/[170] to the north and [113] to the south, and this, along with the difference in alignment, indicates that the northern and southern ditches had fallen into disuse when ditch [141] was in use.

5.3.4 Phase 2 ditch [113] was truncated to the west by a substantial feature, [137], located to the south of boundary ditch [141]. It measured 9.0m north-south by at least 5.60m east-west, continuing to the west beyond the limit of excavation, with an irregular shape in plan (Figure 5 and Plate 6). The highest level at which this feature was recorded was 18.62m OD and the lowest excavated level was 16.56mOD. A 1.50m wide sondage was excavated through the western portion of this feature, adjacent to the western limit of the trench, and this revealed that its northern side was gradually sloping and 'stepped in' twice (Figure 14). The unstable nature of the infills of this feature meant that it was not possible to ascertain its full depth or fully expose its southern edge, due to Health and Safety considerations, but the maximum exposed depth was 1.25m.

5.3.5 The lowest exposed fill, [160], of feature [137] comprised mid grey clay, at least *c*. 1.0m thick. The coarse pottery assemblage recovered from this deposit dates to the mid to late 2nd century, while a few samian sherds present were of broadly 2nd century date. Glass fragments from this deposit included a square bottle neck in blue glass and a rim fragment of 1st-2nd century AD date. The overlying silty clay deposit, [123], was noteworthy for the frequent inclusions of small to large sized sub-rounded and rounded cobbles/boulders throughout.

5.3.6 A bulk sample of fill [123] produced a single charred cereal grain, probably hulled barley. The coarse pottery assemblage recovered from this deposit dates to the mid 2nd to early 3rd century. A large assemblage of samian ware was also recovered from this deposit, most of the material being broadly of 2nd century date, but a fragment of East Gaulish material demonstrates that this infill deposit dates from after *c*. AD 180. Heavily butchered mammal bones, probably mainly cattle, were also recovered from fill [123]. Such deposits of bone waste, showing similar patterns of butchery, including extensive use of a cleaver, have been seen at many Roman sites, particularly those of a more urban nature or with associations with military establishments (Section 14).

5.3.7 Feature [137] is interpreted as a substantial quarry pit, probably dug for the extraction of a clay or sand deposit within the natural sub-stratum. Cultural debris within the backfills suggest that the feature had a secondary use as a refuse pit and most of the artefactual material from the pit suggests that it was utilised for the disposal of refuse from a nearby settlement area. The large quantity of stone within fill [123] may have originated from field clearance associated with preparation of land in the near vicinity for agricultural use. The range of size and type of stones is typical of material found within the local boulder clay drift geology. The dating evidence recovered from the uppermost fill of the feature indicates that final infilling took place at a later date, as described in Phase 4, below.

5.3.8 A small oval feature, [155], was located near the western limit of excavation *c*. 1m north of quarry pit [137]. This measured 0.66m east-west by 0.48m north-south by 0.25m deep and had a U-shaped profile (Figure 11; Section 13). Its single fill, [154], comprised brownish grey clay from which a small assemblage of coarse pottery, not closely dateable, was recovered along with two fragments of samian dating to *c*. AD 120-170 and 160-200. A small assemblage of faunal remains was also recovered from this feature, which is interpreted as a small refuse pit.

5.3.9 An oval feature, [169], was located in the central portion of the site and this measured 1.77m east-west by 1.14m north-south by 0.48m deep (Plate 5 and Figure 11; Section 18). It had an irregular, broadly U-shaped profile and its primary fill, [168], which was 0.17m thick, comprised brownish yellow silty clay with occasional small pieces of daub throughout. This was overlain by a greyish brown silty clay deposit, [167], with frequent small fragments of daub throughout. A small assemblage of coarse Roman pottery was recovered from the upper fill; this was not closely dateable, along with a fragment of samian ware dating to *c.* AD 150-190. This feature is also interpreted as a small refuse pit.

5.4 Phase 4: Mid to Late 3rd Century

5.4.1 The upper fill, [135], of quarry pit [137] comprised brownish grey silty clay, up to 0.55m thick (Figures 6 and 14). A copper alloy coin dating to AD 260-300 was recovered from this deposit. The assemblage of coarse pottery dates to the late 2nd century and the samian assemblage included fragments dating to *c*. AD 130-170 and AD 150-200, along with Hadrianic material. The date of the coin suggests that all of the pottery is residual in context, and the highly abraded condition of the pottery broadly supports this theory. A fragment of quernstone was also recovered from the upper fill of the quarry pit, along with two fragments of slag likely to be debris from iron smithing.

5.4.2 A substantial sub-circular feature, [128], interpreted as a refuse pit, truncated the southern side of Phase 3 boundary ditch [141]. This measured 2.18m in diameter and was 1.08m deep with an irregular U-shaped profile that was slightly undercut in some areas (Plates 7 and 8 and Figure 12; Section 9 and Figure 6). Its fills, [124], [145], [127], [146], [147], [148], [149], [150] and [151] generally comprised clayey silts varying slightly in composition and colour. Of note were deposits [127] and [150], both of which were rich in charcoal and coal.

5.4.3 Coarse Roman pottery and samian ware were recovered from most of the fill deposits within pit [128]. The lowest fills, [151], [150] and [148], produced small amounts of largely undiagnoistic material, broadly giving a Hadrianic or later date. The upper fills, [146], [127], [145] and [124], produced a far more significant amount of pottery. The latest material from the uppermost backfill is characteristically 3rd century, although much of the pottery present is Antonine, suggesting that the earlier material in this pit is residual. A relatively large samian assemblage was recovered from several of the fills, mostly broadly dated to the 2nd century. Sherds of samian from the same vessel, dated to *c.* AD 160-260, were recovered from deposits [146], [148] and [150]. Numerous 'small finds' were recovered from pit [128], including a fragment from a blue glass bowl base of 2nd-4th century AD date from the upper fill, a samian spindle whorl from fill [150] and a copper alloy brooch of 1st to 2nd century AD date from the primary fill, [151]. Several iron nail fragments were also recovered. A bulk sample of fill [150] produced a few poorly preserved charred cereal grains, some of which were probably barley and oat.

5.4.4 The features assigned to Phases 3 and 4 suggest that, during the late 2nd to late 3rd centuries, the area was utilised for quarrying and for the disposal of refuse. The 2nd century property boundaries were no longer in use by these phases of activity and there was no indication of any areas of habitation, although the artefactual material recovered from the pits again broadly indicates settlement activity in the vicinity. As with the earliest phase of Roman activity, any areas of habitation were most likely located to the west of the excavation area, fronting the Roman road.

5.5 Phase 5: 17th Century

5.5.1 A group of five linear north-south orientated features, [115], [117], [119], [126] and [132], interpreted as plough furrows, were recorded within the northern portion of the excavation area (Figure 7). All had shallow U-shaped profiles and were infilled with greyish brown clayey silt. They varied in width from 0.60m to 1.75m and the distance between the furrows ranged from *c.* 2.0-4.0m.

5.5.2 The westernmost plough furrow, [119], was recorded intermittently in three sections over a maximum extent of 28.50m and a section excavated through the northern portion of the feature revealed it to have a maximum depth of 50mm. Furrow [117], to the east, was recorded in two sections over a maximum extent of 30m and was up to 0.13m deep. Furrow [115], which was up to 0.16m deep, was only recorded in the northern portion of the trench over a maximum extent of 18.50m. Furrow [126] was partially revealed in two sections adjacent to the eastern limit of excavation and its maximum extent was 16m. Only a small portion of another feature, [132], was revealed against the eastern limit of excavation, but its form and the composition of its fill indicates it was also part of a plough furrow.

5.5.3 Pottery and clay tobacco pipe fragments within fill [114] of furrow [115] date from the late 17th century. This demonstrates that the area was utilised as agricultural land from at least this date, with the direction of ploughing following the slope down the side of the Cong Burn valley, as one might expect. A very small quantity of medieval pottery recovered from furrow [117] during the earlier evaluation (where it was recorded as feature [4]) broadly suggests that the site was used for agricultural purposes prior to the medieval period.

5.6 Phase 6: 18th Century

5.6.1 Three irregular shaped features, [104], [106] and [108], were recorded in the central and southern portions of the excavation area (Figure 8). The profile and dimensions of these features indicate that they may represent root action, possibly tree boles. Pottery of possible 18th century date was recovered from the fill, [107], of feature [108].

5.6.2 Ordnance Survey mapping shows that the site was in use as an orchard by 1872 but that this had gone into disuse by 1896. It is possible that the Phase 6 features relate to the use of the site as an orchard.

5.7 Phase 7: Post-medieval

5.7.1 A developed soil, [101], comprising dark greyish brown clayey silt was recorded across the entire excavation area (Figure 14). This varied in thickness from 0.22m thick at its northern extent to 0.32m at its southern extent. This deposit is interpreted as a developed soil possibly of medieval origin, having then been reworked through cultivation during the post-medieval period.

5.8 Phase 8: Modern

5.8.1 A sub-circular feature, [134], was recorded adjacent to the eastern limit of excavation, truncating the edge of plough furrow [126]. This measured 2.20m east-west by 2.02m north-south and was 1.22m deep (Figure 9). It had an irregular U-shaped profile that was slightly undercut in places (Figure 13). Its fills, [133] and [161-166], varied in composition from sandy clayey silt to sand, with fragments of modern glass and iron noted within the deposits. Deposit [161] comprised a thin layer of rusted iron 0.60mm thick. This feature is interpreted as a modern refuse pit.

5.8.2 Feature [158] was partially revealed against the western limit of excavation and measured 2.16m north-south by 0.90m east-west, continuing to the west, by 1.30m deep. Its form, seen better in section, with two narrow, steep-sided, flat-based slots in its lower portion, broadly suggests it was some form of garden feature, such as a bedidng trench (Figure 14).

5.8.3 Two sinuous features, [111] and [122], were recorded in the eastern portion of the excavation area and were noteworthy, as well as for their unusual shape in plan, for their near vertical sides (Figure 9). These features, along with feature [158], are interpreted as modern garden features, probably bedding trenches. A fragment of samian pottery was recovered from fill [110] of feature [111], this certainly residual in context.

5.9 Phase 9: Topsoil

5.9.1 The latest deposit recorded during the excavation was topsoil, [100], comprising a layer of brownish grey organic clayey silt that extended across the whole of the excavation area (Figure 14). The deposit varied in thickness from 0.25m thick at its northern extent to a maximum of 0.37m thick at its southern extent.

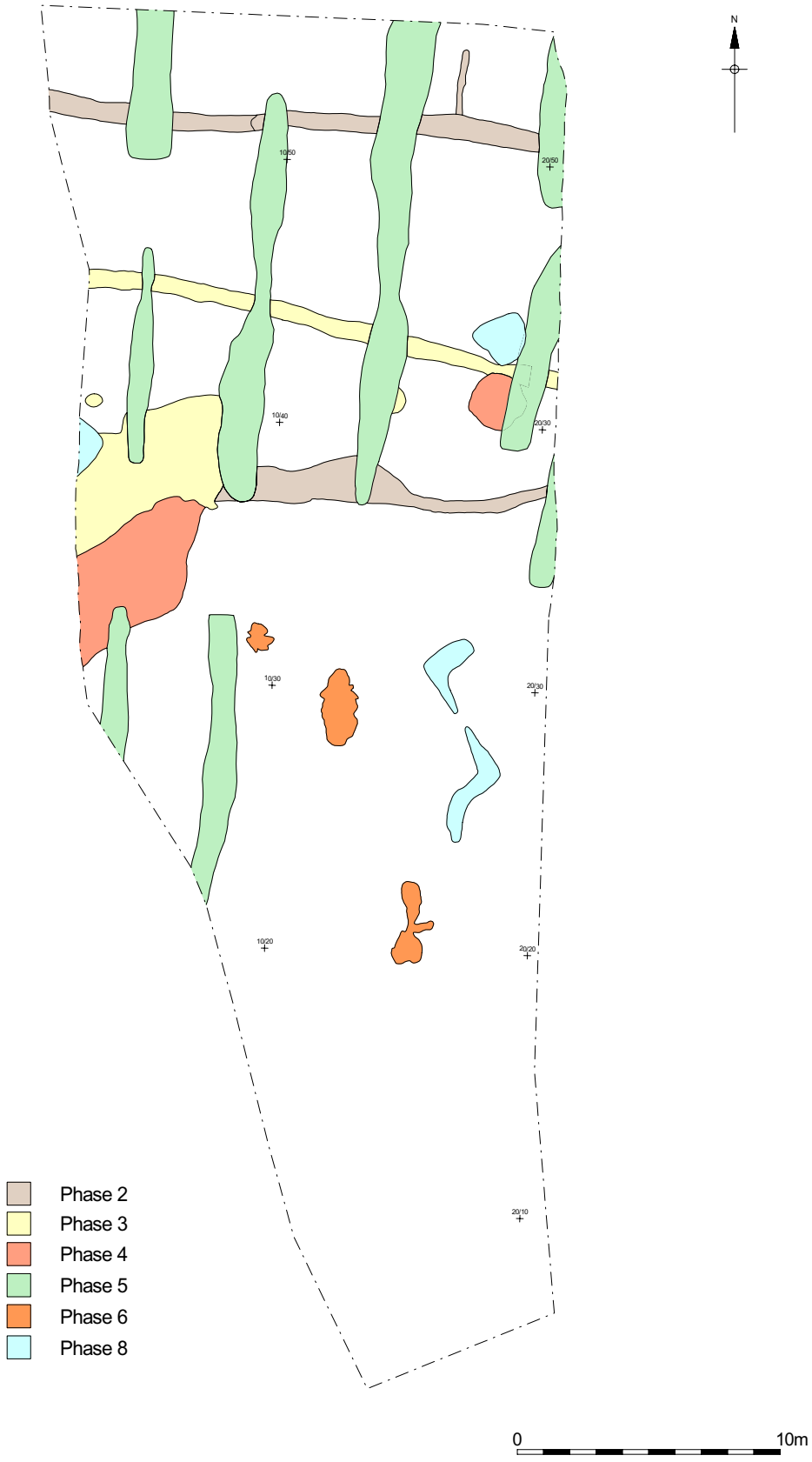


Figure 3. All features, all phases
Scale 1:250

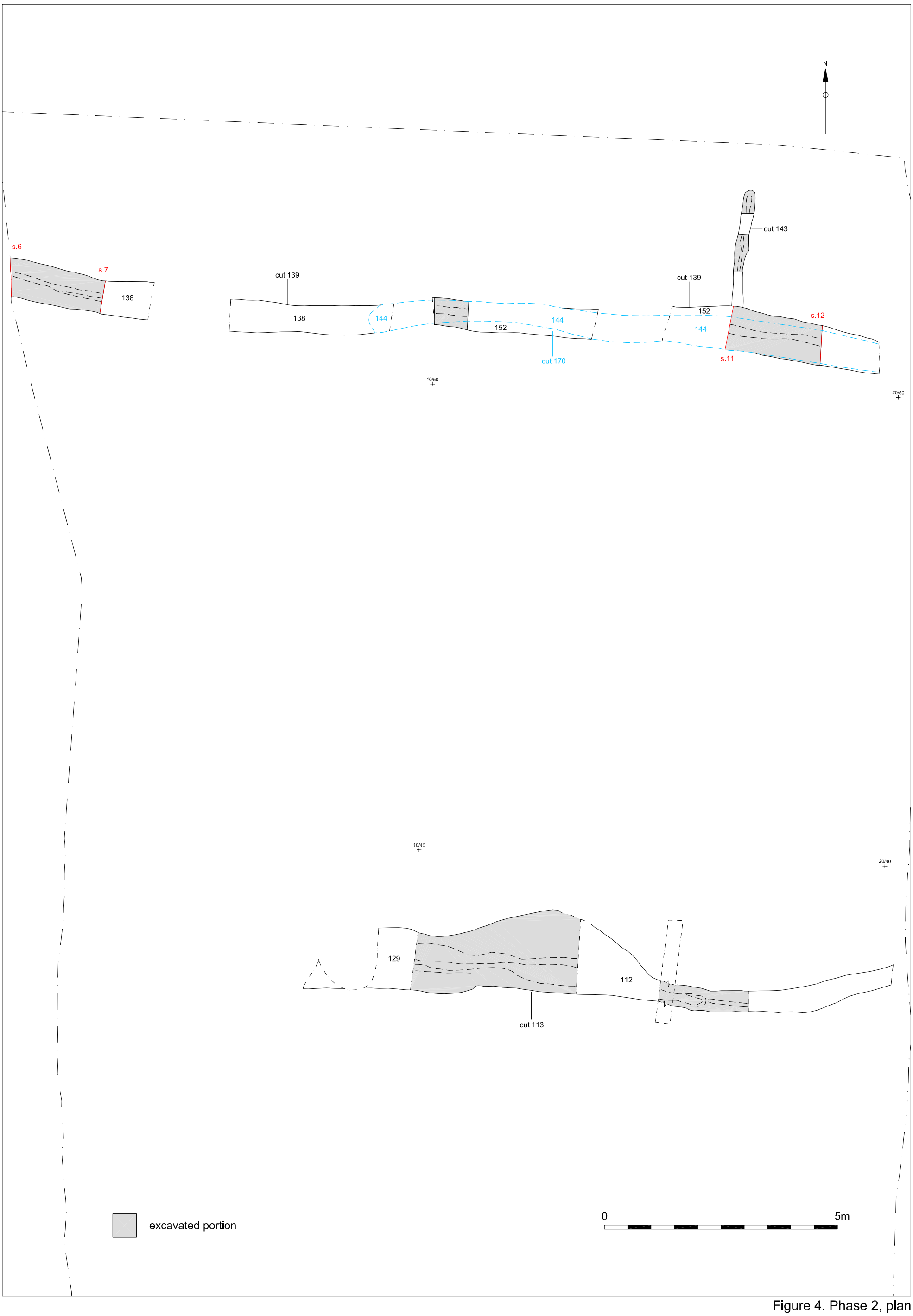


Figure 4. Phase 2, plan
Scale 1:75

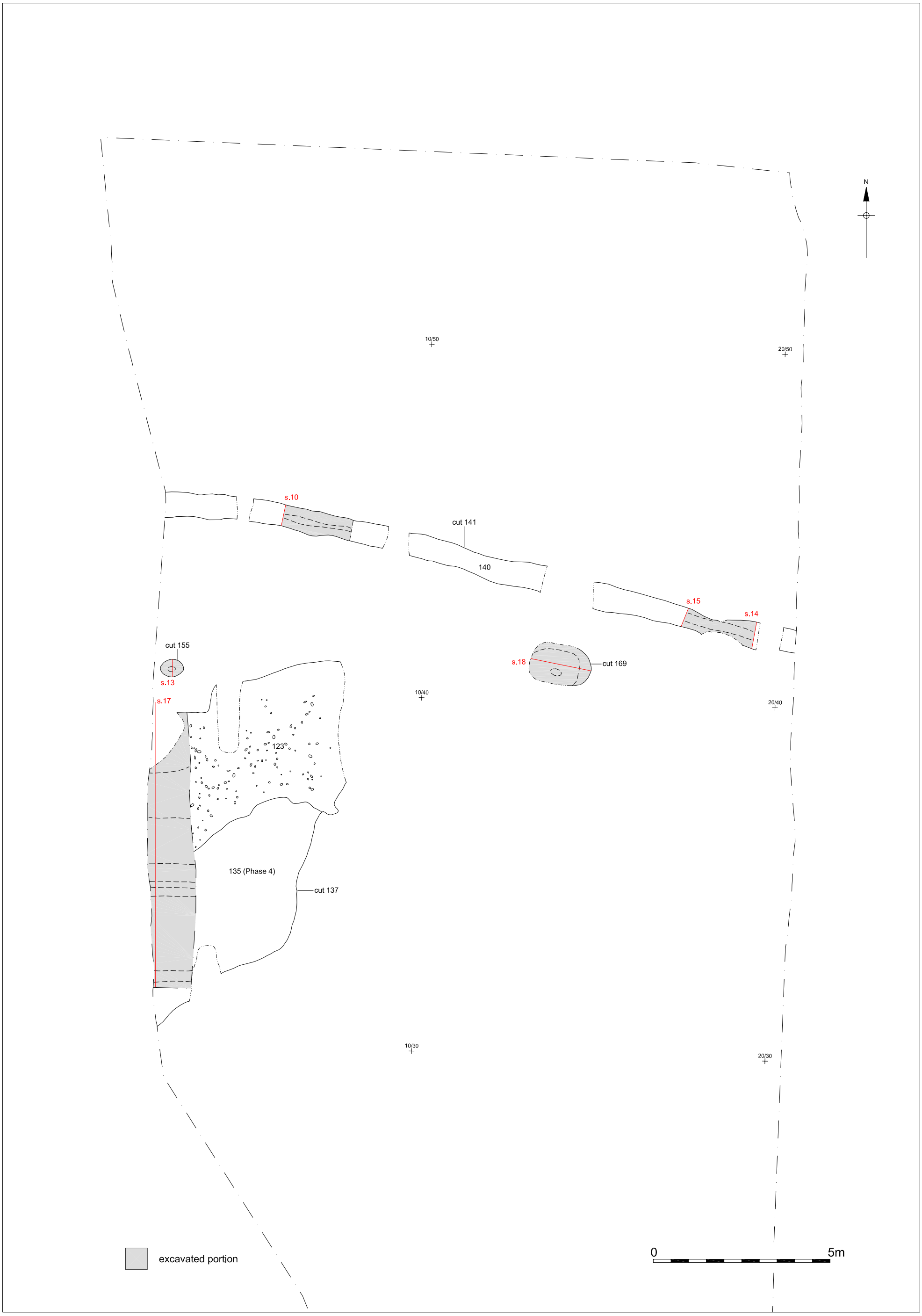


Figure 5. Phase 3, plan
Scale 1:100

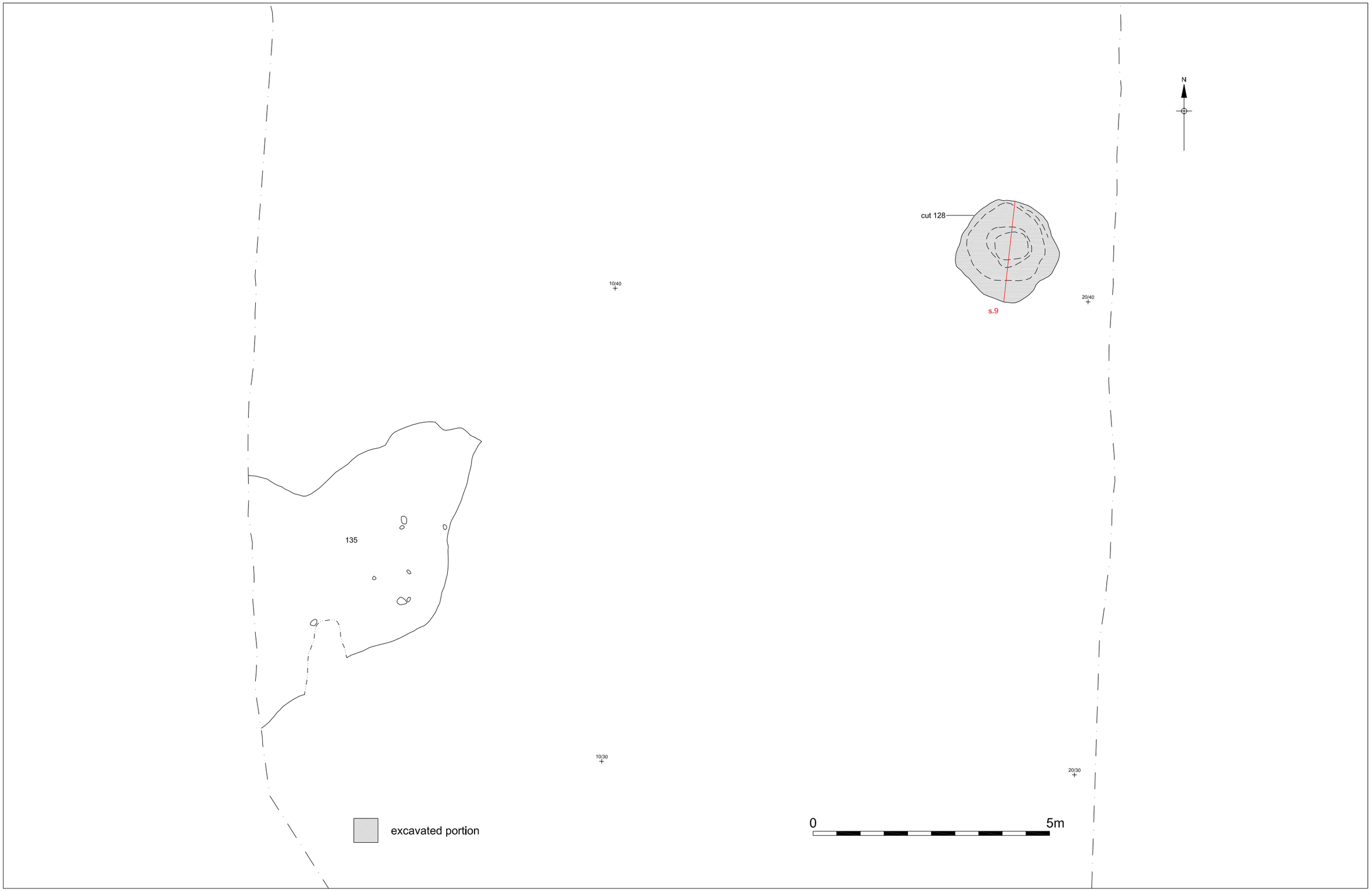


Figure 6. Phase 4, plan
Scale 1:75

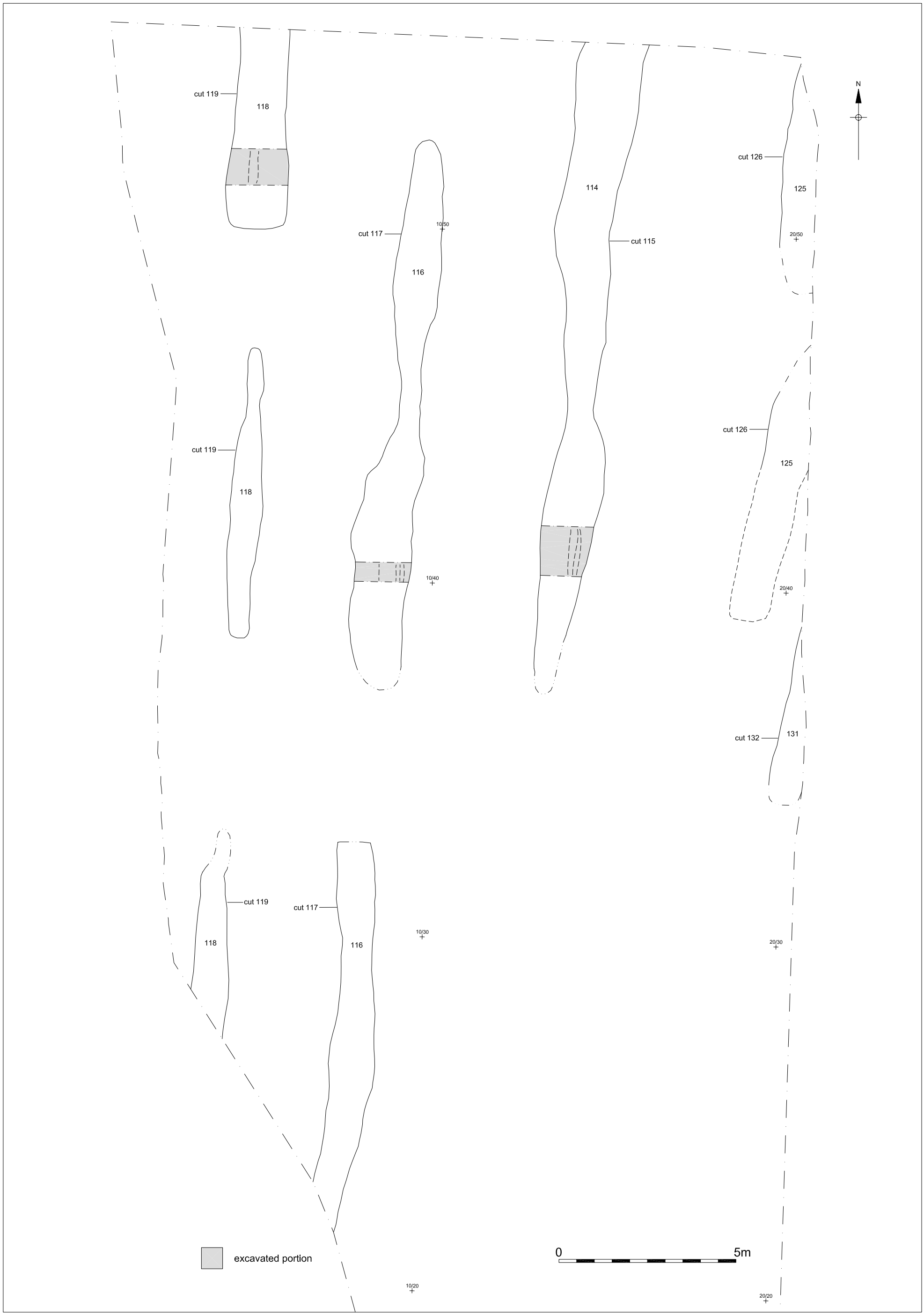


Figure 7. Phase 5, plan
Scale 1:100

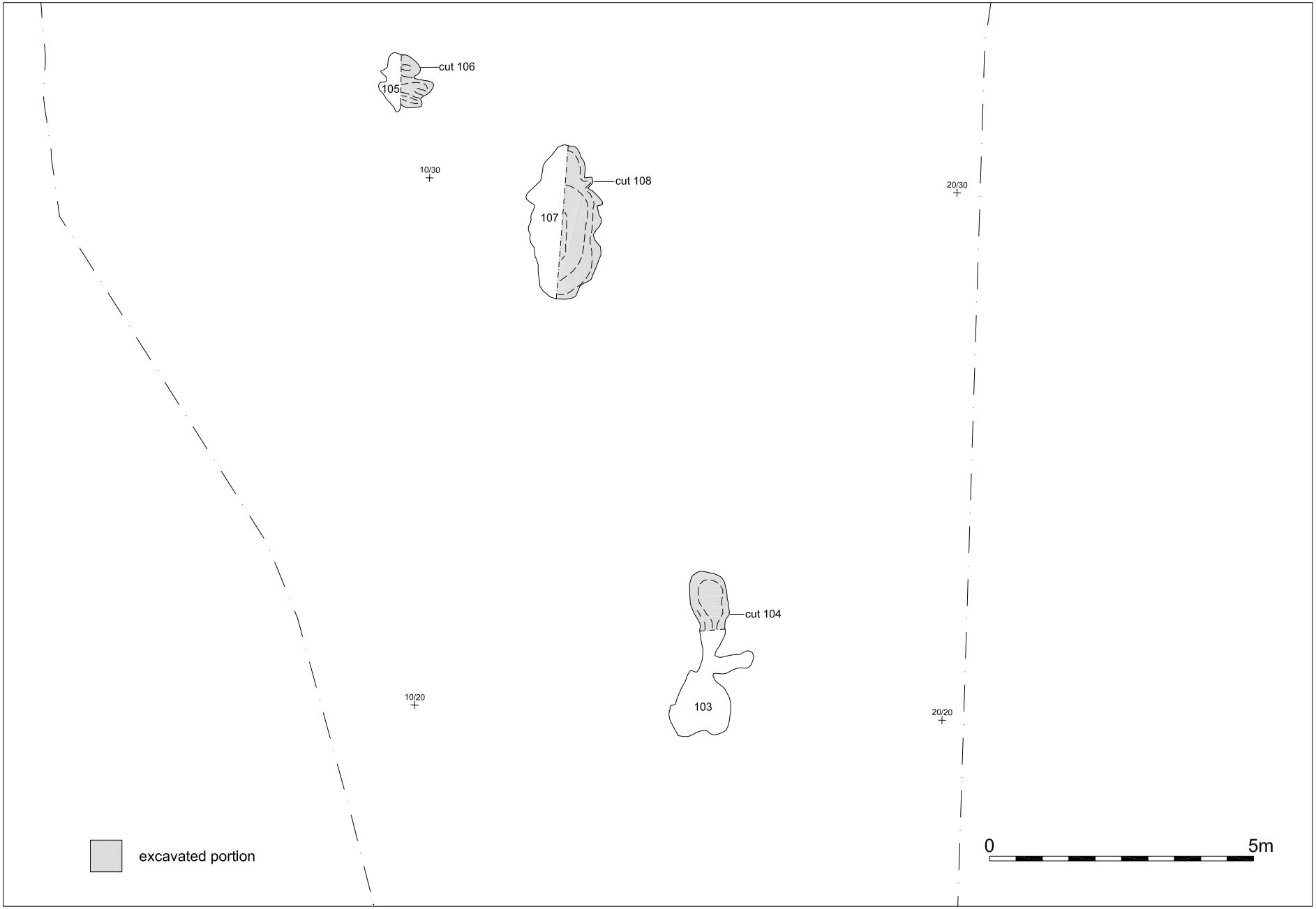


Figure 8. Phase 6, plan
Scale 1:100

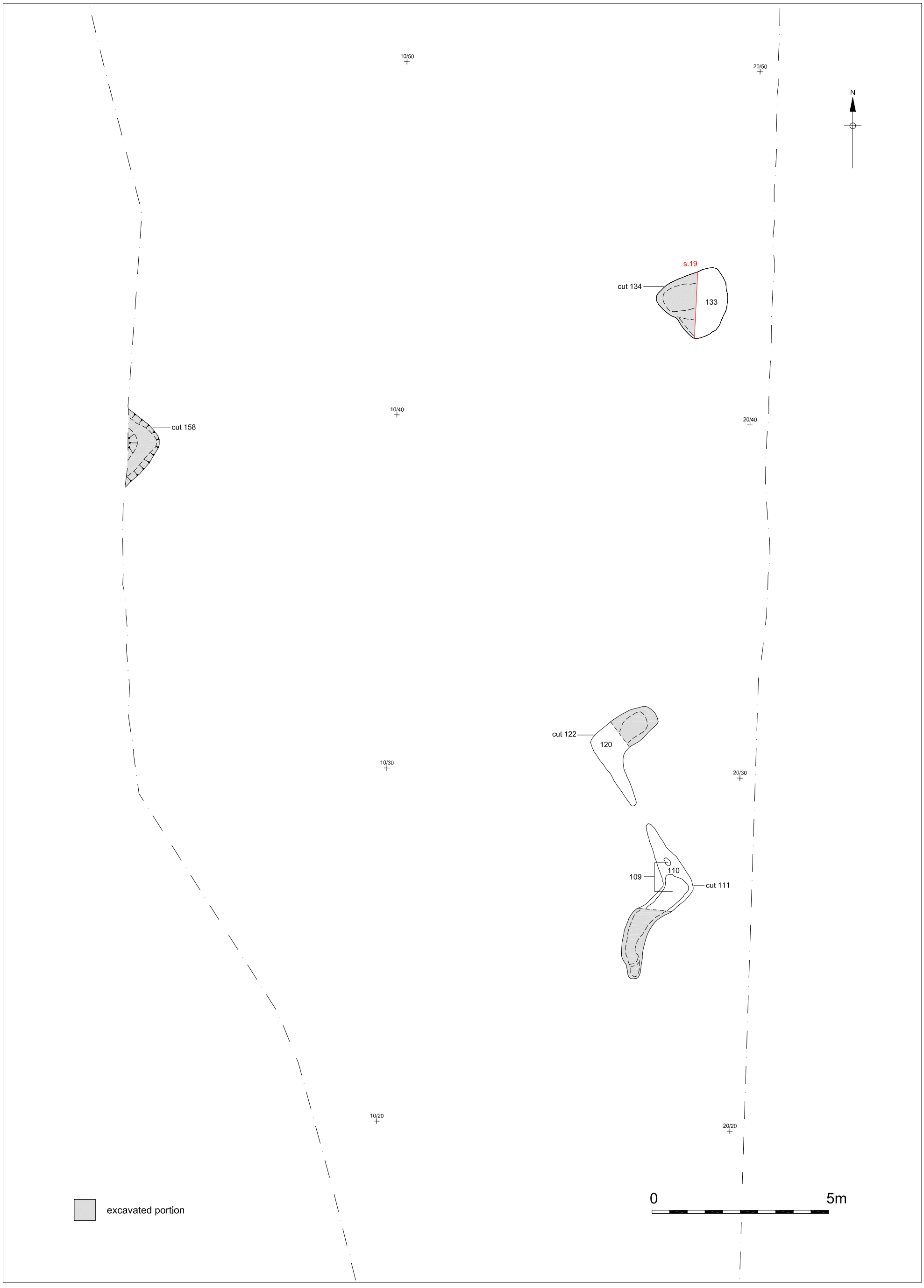
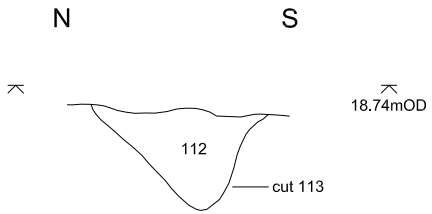
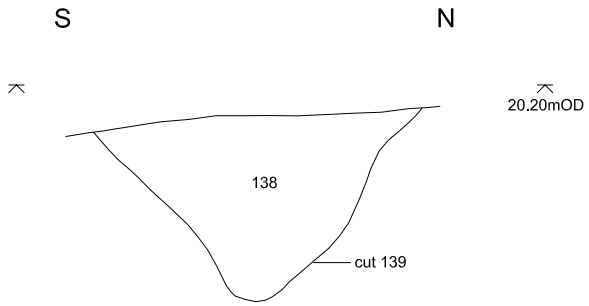


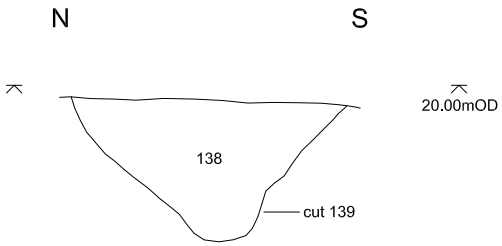
Figure 9. Phase 8, plan
Scale 1:100



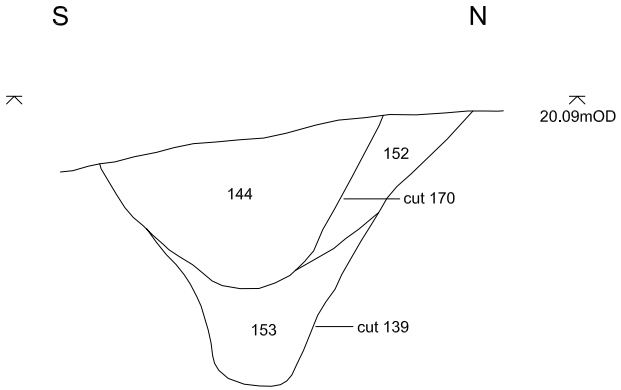
Section 2. West facing, ditch [113].



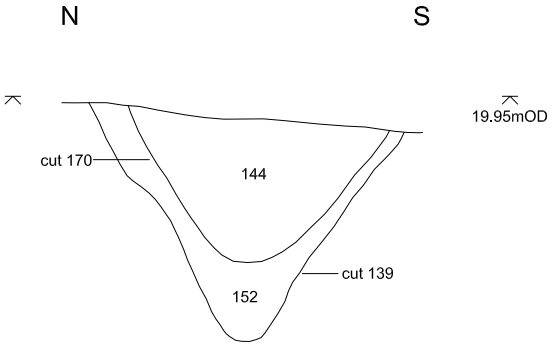
Section 6. East facing, ditch [139].



Section 7. West facing, ditch [139].

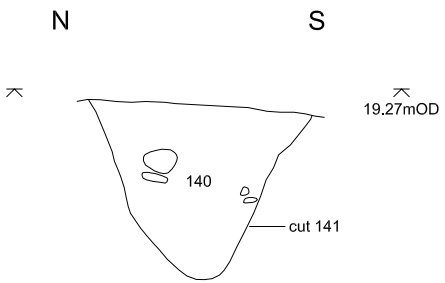


Section 11. East facing, ditch [139].

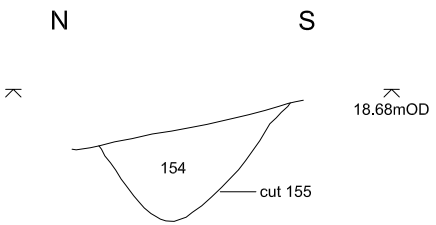


Section 12. West facing, ditch [139].

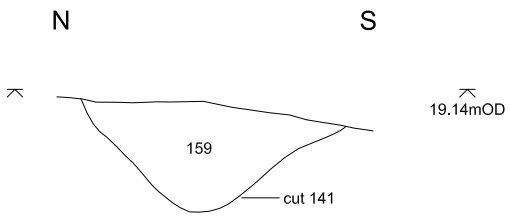
Figure 10. Phase 2, sections
Scale 1:20



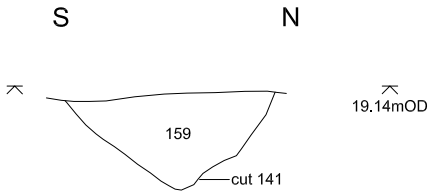
Section 10. West facing, ditch [141].



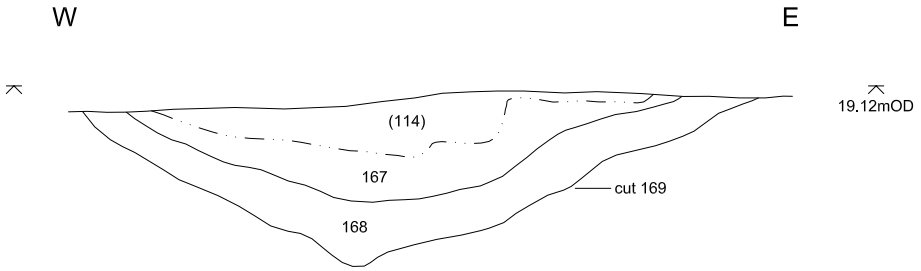
Section 13. West facing, pit [155].



Section 14. West facing, ditch [141].

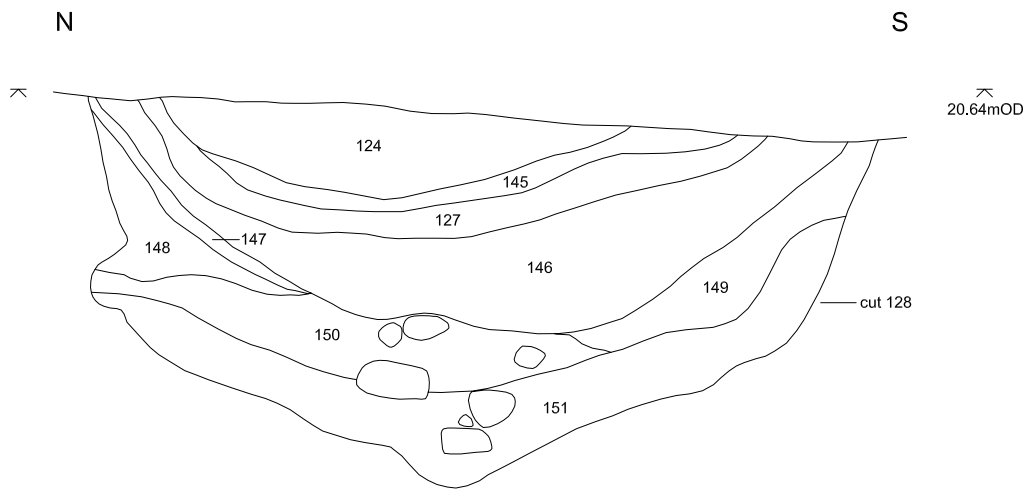


Section 15. East facing, ditch [141].



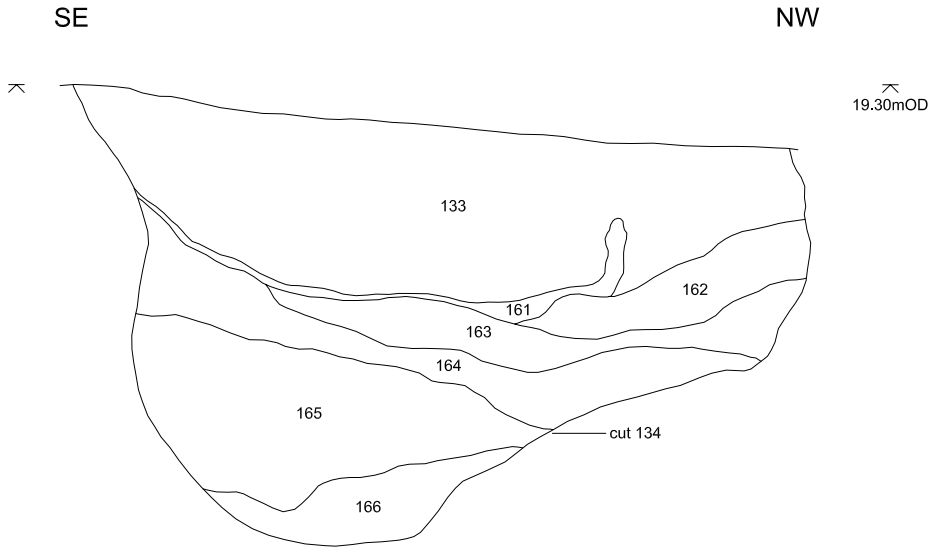
Section 18. South facing, pit [169].

Figure 11. Phase 3, sections
Scale 1:20



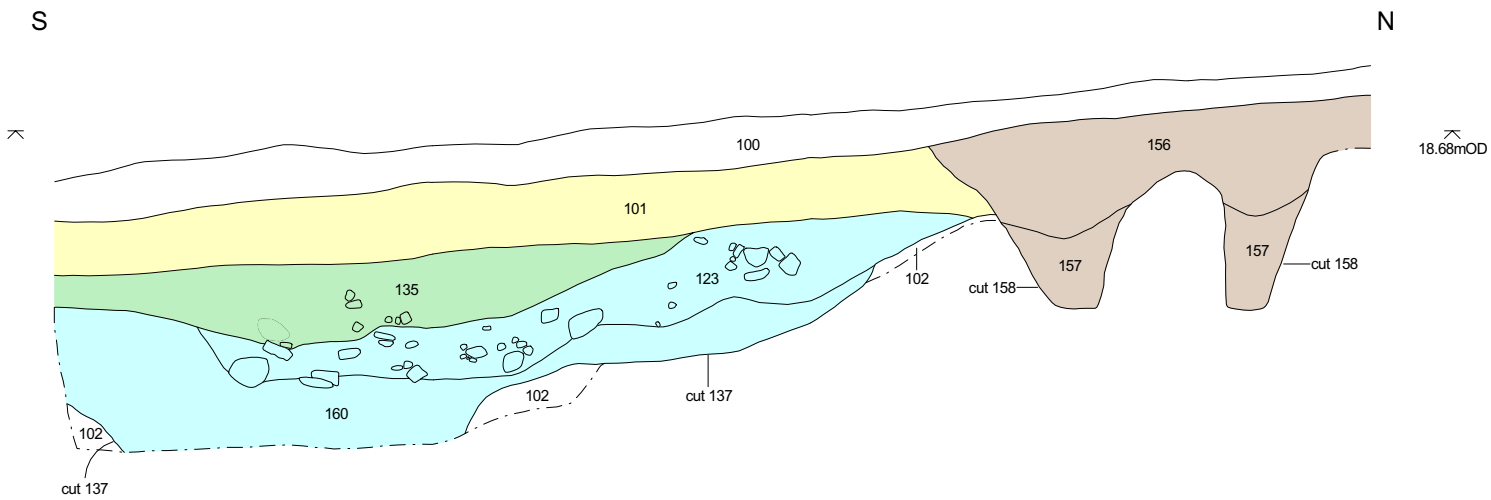
Section 9. West facing, pit [128].

Figure 12. Phase 4, section
Scale 1:20



Section 19. West facing, feature [134].

Figure 13. Phase 8, section
Scale 1:20



Section 17. East facing, pit [137].

Phase 8
Phase 7
Phase 4
Phase 3

0 2m

Figure 14. Multi phase section
Scale 1:50

PART B: DATA ASSESSMENT AND CONCLUSIONS

6. STRATIGRAPHIC DATA

6.1 Paper Records

6.1.1 The contents of the paper archive are set out in the following table:

Item	No.	Sheets
Context register	1	2
Context sheets	168	168
Section register	1	1
Section drawings	19	12
Plans	23	51
Environmental sample register	1	1
Environmental sample sheets	18	18
Small finds register	1	1

6.2 Photographic Records

6.2.1 The contents of the photographic archive are set out in the following table:

Item	No.	Sheets
Colour slide register	2	2
Colour slides	52	3
Monochrome print registers	2	2
Monochrome prints	51	8
Monochrome negatives	51	3

6.3 Project Archive

6.3.1 The complete project archive, including the paper and photographic records, is currently housed at the Northern Office of Pre-Construct Archaeology. Bulk soil samples are currently stored at the offices of Palaeoecology Research Services (PRS), along with paper and electronic records pertaining to the environmental assessment.

6.3.2 The archive will eventually be deposited with Bowes Museum for permanent storage and the detailed requirements of the repository will be met prior to deposition.

7. ROMAN POTTERY (EXCLUDING SAMIAN WARES)

By: ***T. S. Martin***

7.1 Introduction

7.1.1 The excavation at Newcastle Road produced an assemblage totalling 930 sherds weighing 14.8kg. This material came from 25 contexts. The figure excludes the samian and unstratified pottery, but includes all of the other fine wares, coarse wares, amphoras and the mortaria.

7.1.2 The following assessment has been compiled from the spot-dating archive and has been made with reference to the aims set out in the SCORP Report.[14] These may be refined down to:

- Using pottery (in conjunction with other finds) for dating.
- Providing new quantified assemblages to build on previous work.
- Seeing if the same general trends are discernible in the ceramic data from new sites compared with earlier published excavations, and discussing the resulting picture.
- Studying and reporting on pottery relating to the character of sites, or of intrinsic interest or with implications for pottery studies in general.

7.2 Method

7.2.1 The pottery was recorded on a context-by-context basis and sorted into fabrics based on identifiable source, or broad fabric groups where source could not be readily recognised or remains unknown. Where possible these were then referenced to The National Roman Fabric Reference Collection[15] or material from neighbouring sites.

7.2.2 In all, 23 fabrics or fabric groups were identified (Table 7d). A site-specific fabric series was created using fabric common names. Vessel forms were classified using Gillam's Northern coarse pottery typology (1968) and Gillam's paper on BB1 (1976).

7.2.3 In addition, the amphora rims were recorded with reference to the rim typology published by Martin-Kilcher (1987). The pottery was also recorded with reference to the guidelines issued by the Study Group for Roman Pottery.[16]

7.3 Summary of the pottery records in the site archive

7.3.1 The following tasks have been completed:

1. Spot-dating: a context-by-context paper record of all pottery recovered, listing fabrics (as quantified) and forms present and giving the date-range of each context (see Appendix 2).
2. Comments on the condition of the pottery such as worn and abraded sherds are also identified.
3. General comments on how dating was arrived at and a note of the presence of any post-Roman material.

[14] Young, 1980, 1.
[15] Tomber and Dore, 1998.
[16] Darling, 1994.

4. The identification of pottery of intrinsic interest or complete vessels that may be worth illustrating.
5. Quantification by sherd count and weight in grams and sorting of fabrics: an attempt to provide a clearer indication of the quality of the dating evidence.
6. Transfer of spot-dating information onto an Excel spreadsheet to allow manipulation of the data in the course of any future research programme.

7.4 Preliminary results

7.4.1 General

7.4.1.1 Although the following preliminary notes should be treated with some caution in the absence of full stratigraphic analysis, the pottery from the site has already provided a significant amount of data concerning the date-range of the site and significantly, new data regarding pottery supply to Chester-le-Street itself. This is due to the undoubted quality of the excavated assemblage, the bulk of which was recovered from stratified Roman contexts.

7.4.2 Assemblage size and quality

7.4.2.1 From the amounts of pottery recovered from each context, the range of assemblage sizes, based on sherd count, can be shown to be variable (Table 7a) with three significant accumulations of pottery in terms of sherd count. The largest incidence of contexts (40%) contained ten or less sherds with a further 24% containing between 11 and 35 sherds. Only three contexts (12%) produced groups of over 100 sherds. These figures exclude the presence of any samian, however. A better indicator of assemblage quality is that four features produced groups with in excess of 100 sherds, while one feature produced a group of more than 300 sherds (Table 7b).

Very small (< 10 sherds)		***Small (11-35 sherds)***		***Medium (36-100 sherds)***		***Large (> 100 sherds)***	
No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
10	40	6	24	5	20	3	12

Table 7a: Assemblage sizes based on sherd count and their relative frequency (assemblage sizes exclude samian)

7.4.2.2 Another notable characteristic of the assemblage is that the bulk of the pottery was recovered from pit contexts (Table 7c). This is quite unlike the pattern of pottery deposition seen on rural sites[17] and may indicate deposition associated with more intensive occupation, perhaps more in keeping with an urban site. Ditches produced the second largest amount of material.

7.4.2.3 By comparison, post-Roman contexts produced very little material, suggesting little in the way of post-Roman disturbance on the site.

[17] Martin, 2003.

Feature	*Sherds*	*Weight (g)*
113	40	754
115	2	6
119	1	1
128	235	2663
137	309	6757
139	147	3532
141	172	893
143	11	51
155	2	6
158	1	3
169	6	137

Table 7b: Assemblage sizes by feature

Category	*Sherds*	*Weight (g)*
Ditch	359	5,179
Pit	552	9,563
PR features	4	10
Other	15	103
Totals	930	14, 855

Table 7c: Summary of the pattern of pottery deposition

7.4.2.3 Another positive indicator of the quality of the assemblage is that most contexts that contained pottery produced some datable sherds, with only seven contexts containing material that was essentially undated or not closely datable. This suggests that the overall quality of the dating evidence was good (Table 7e). However, the bulk of the grey wares were in a poor condition regardless of date. The Dressel 20 amphoras were also highly abraded. Much of the pottery was thus in a very poor condition exhibiting high levels of abrasion.

7.4.3 Date-range of the assemblage

7.4.3.1 The assemblage exhibits a comparable date range to the material published by Evans (1991) from the Middle Chare and Park View sites in that the bulk of the pottery falls within a 2nd to 3rd century date-range, but with a clear emphasis on the period *c.* AD 140-200. There is nothing to suggest any 1st century occupation and the amount of undoubtedly 4th century material is very scarce, being in the main restricted to Calcite-gritted pottery. Crambeck grey wares are conspicuous by their absence. As with all sites in the region, Black-burnished wares are an important chronological indictor. The latest forms comprise incipient bead and flanged dishes, which date to the late 2nd to early 3rd century. There are no examples of jars with obtuse lattice. This suggests that the BB1 at least had been deposited by the mid-3rd century.

7.4.4 Sources of pottery

7.4.4.1 The spot-dating programme has identified a wide range of sources for the pottery reaching the site (Figure *; Table 7d). Compared with the material from the Middle Chare and Park View School sites in Chester-le-Street, published by Evans (1991), there are few surprises. The bulk of the pottery comprises a variety of presumably locally made sandy grey wares. These appear in a range of fabrics that appears to be typical of sites in the region as a whole. The fabrics are insufficiently diagnostic to assign specific sources, however.

7.4.4.2 Some of the sherds in fabrics in BB2 allied fabrics (here classified as Grey burnished wares) may represent locally made copies in the BB2 tradition, but could also be imported into the region.

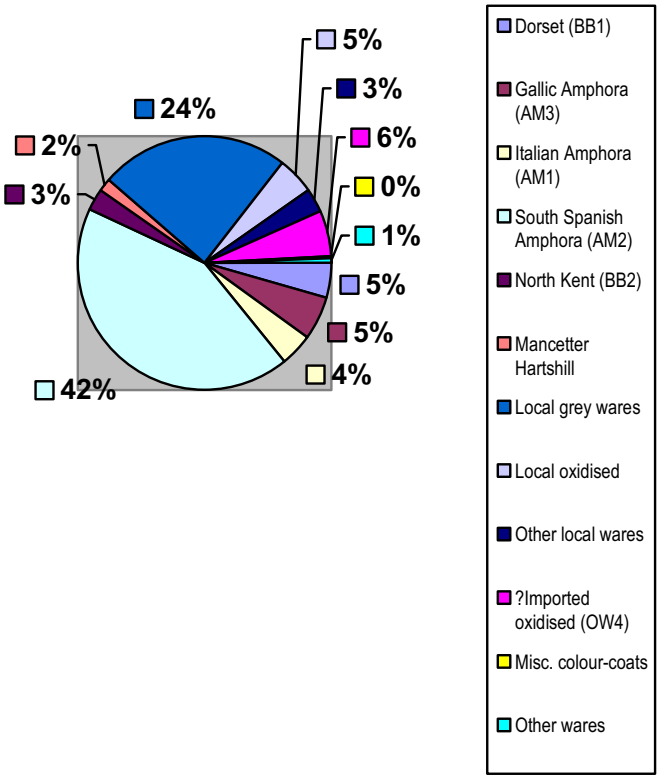


Figure 15: The proportions of each of the main suppliers expressed as a percentage of weight (excluding samian)

7.4.4.3 The range of Romano-British traded wares present are standard for military sites in the region like South Shields, for example.[18] The sources include Dorset BB1, Northern Kent BB2, Nene Valley colour-coats, and Mancetter-Hartshill. In addition to these is a single sherd from a Colchester colour-coat beaker. Although Crambeck wares are not present, East Yorkshire is represented by the small amounts of Calcite-gritted ware present.

7.4.4.4 The range of mortaria includes vessels from the Mancetter-Hartshill manufactory as well as from a variety of local sources. These local sources include a stamped mortarium in a fabric similar to Corbridge white ware. This vessel bears the stamp of IANVS on a vessel that probably dates to the early to mid-2nd century.

7.4.4.5 Overall, there are two significant features relating to the excavated assemblage that are noteworthy. Firstly, there is an almost complete absence of fine wares apart from samian. Colour-coats are mainly restricted to very small amounts of Nene Valley wares. Secondly, the range of amphora present is not restricted to South Spanish Dressel 20 type vessels,[19] but also present are sherds of Gallic and possibly Italian wine amphoras (non black sand fabric). The form probably corresponds to Dressel 2-4.[20] Several fine-walled sherds in a fabric reminiscent of that of the possible Italian wine amphora may be from a flagon of some type (OW4).

7.4.5 Function

7.4.5.1 The range of vessel forms identified was restricted, for the most part, to bowls, mortaria dishes, cooking pot jars, beakers and amphoras. A single coarse ware lid was also present. This appears to be the standard repertoire of forms found in the region. A notable feature of the assemblage is the presence of a number of hemispherical bowls imitating samian form 37 **(**Gillam 195). These vessels are attributable to the period *c*. AD 140-200.

7.5 Statement of potential

7.5.1 The presence of several large accumulations of pottery in individual contexts and as composites within features suggests some potential for further study. However, only one group is of sufficient quality to warrant detailed analysis and publication. Nevertheless, the current assemblage provides a useful insight into the nature of pottery assemblages from extra-mural sites at Chester-le-Street. The importance of the assemblage is further enhanced by the fact that relatively little stratified pottery has been previously published from any sites at Chester-le-Street.

7.5.2 The spot-dating record has identified significant accumulations of pottery from four features, pit [128], pit [137], ditch [139] and ditch [141]. None of the other groups produced material as closely dated.

[18] Bidwell and Speak, 1994.
[19] Peacock and Williams, 1986. Class 25.
[20] *ibid*. Class 10.

7.5.3 Pit [128] produced 235 sherds weighing 2.6kg, which was recovered from seven fills. The lowest fills [151], [150] and [148] produced small amounts of largely undiagnostic material. What was present pointed to a Hadrianic or later date. The upper fills [146], [127], [145] and [124] produced a much more significant amount of pottery, and although highly abraded, is much more closely datable. The latest material from this part of the sequence is more characteristically 3rd century, although much of the pottery present is more solidly Antonine. Thirteen vessels from this feature warrant illustration. All but one vessel comes from the upper fills of the feature.

7.5.4 Pit [137] produced 309 sherds weighing 6.7kg. This material comprises the largest group of pottery from the site and dates to the Antonine period. Twenty-two rim sherds were present, suggesting some potential for further analysis. These will require illustration for inclusion in the final publication report.

7.5.5 Ditch [139] and its re-cut [170] produced an assemblage of 147 sherds weighing 3.5kg. Here only the fill [144] of the later re-cut is reasonably securely dated. The pottery suggests a date within the period *c*. AD 140-180 for the final infilling of the feature. Eleven vessels from this feature require illustration.

7.5.6 Ditch [141] with 172 sherds weighing just 0.8kg is the most fragmentary of the large groups. The lowest fill [159] produced hardly anything closely datable, but what was present would not be out of place in Antonine groups. The top fill [140] is much more securely dated and more solidly Antonine in date. Only eight vessels from this feature require illustration.

7.6 Recommendations for further work

7.6.1 It is clear that the material from the excavation on Newcastle Road forms a very significant pottery assemblage and that publication of some groups from the site is merited.

7.6.2 Only the pottery from pit [137] probably warrants additional quantification using Eves (Estimated Vessel Equivalents) using rim percentage. All of the other large groups appear to be too fragmentary to be analysed using this method. The value of this material is further enhanced by the fact that so few groups have been published from Chester-le-Street given that much of the previously published material appears to be unstratified.[21] This group has the potential to provide some useful data regarding pottery supply and use.

7.6.3 The pottery assemblage recovered from the preceding evaluation phase of work at the site will be fully integrated with the material recovered from the excavation.

7.6.4 The final publication report will comprise an introduction outlining the methodology used and the condition of the assemblage. This will be backed up by a small number of illustrations and a synthesis of pottery supply and use.

7.7 Additional specialist work

7.7.1 Two pieces of specialist work are required for inclusion in any final publication report:

[21] Gillam and Tait, 1968.

- confirmation of the identification of and the reading of the stamped mortarium in context [144];
- analysis of the graffiti on the amphora sherds in context [123].

Fabric	*Code*	*Reference*
?Italian Campanian amphora	(Am1)	Tomber & Dore 1998, 89
South Spanish Amphora	(Am2)	Tomber & Dore 1998, 84
Gallic Amphora	(Am3)	Tomber & Dore 1998, 93
Black-burnished ware 1	(BB1)	Tomber & Dore 1998, 127
Black-burnished ware 2	(BB2)	Tomber & Dore 1998, 165-6
Black-surfaced wares	(BSW)	
Calcite-gritted ware	(Central Gaulish)	Tomber & Dore 1998, 201
Colchester colour-coat	(COLC)	Tomber & Dore 1998, 132
Corbridge white ware	(CORWH)	Tomber & Dore 1998, 172
East Gaulish Rhenish ware	(EGRHN)	Tomber & Dore 1998, 60
Grey burnished ware	(GBW)	
Sandy grey wares	(GW1)	
Fine grey wares	(GW3)	
Pale fine grey wares	(GW4)	
Coarse grey ware	(GW6)	
Coarse grey ware	(GW7)	
Nene Valley colour-coat	(NVC)	Tomber & Dore 1998, 118
Sandy red ware	(OW1)	
Fine oxidised ware	(OW2)	
Oxidised ware	(OW3)	
Oxidised ware	(OW4)	
Red slipped ware	(RS)	
Fine buff ware	(WW1)	

Table 7d: Fabrics

Context No.	*Date-range (All dates AD)*
112	M2nd+
114	Undated
118	Undated
123	M2nd-E3rd
124	3rd
127	M-L3rd
129	M2nd+
130	Undated
135	L2nd
136	2nd+
138	?2nd
140	M-L2nd
142	Undated
144	M2nd
145	L2nd-E3rd
146	M-L3rd
148	M2nd+
150	M2nd+
151	M2nd+
153	M2nd+
154	Undated
156	Undated
159	L2nd-E3rd
160	M-L2nd
167	Undated

Table 7e: List of spot-dates

8. FIRED CLAY AND DAUB

By: ***T. S. Martin***

8.1 Introduction

8.1.1 A total of 79 fragments weighing 1,075g of fired clay and daub were recovered from the site. This material came from 12 contexts. All but three fragments were recovered from Roman period contexts.

8.1.2 The assemblage was highly fragmented and comprised mainly featureless shards. Although several probable structural fragments were identified, none of these was found *in situ*.

8.2 Results

8.2.1 Much of the material is in very poor condition and in some cases difficult to distinguish from spalled tile. All but two fragments were completely featureless.

8.2.2 A possible structural fragment exhibiting the features of a corner came from context [123], the fill of pit [137], while a fragment with traces of a possible smoothed surface came from context [144], the upper fill of ditch [139].

8.3 Recommendations for Further Work

8.3.1 Only a very brief summary is required for publication.

8.3.2 No further work on the assemblage is required.

9. BRICK AND TILE

By: ***T. S. Martin***

9.1 Introduction

9.1.1 The excavation produced just 24 tile fragments weighing 1,953g. This material was spread over seven contexts. Just one small fragment was recovered from a post-Roman context.

9.1.2 The brick and tile was classified by type and quantified by fragment count and weight. The tile types identified comprised roof tile – *tegulae* and *imbreces*; flue tile – box; and wall tile (Table 9a). Tile fragments with insufficient evidence to classify to type were recorded as spall.

9.2 Results

9.2.1 Because the assemblage is so small, few conclusions may be drawn from its analysis. Tile was recovered from three features; pit [137], ditch [129] and ditch [113]. However, none of these features contained more than ten fragments.

9.2.2 The pottery evidence suggests that the bulk of the tile was probably deposited within the Hadrianic and Antonine periods. The most important category was wall tile or brick as commonly used in bonding courses in structures. The presence of a single box-flue-tile fragment cannot be taken as an indicator of the presence of a bath-house in the vicinity.

Type	***Wt. (g)***	***Fragments***
Box-flue	134	1
Imbrex	98	2
Tegula	250	4
Wall tile	1346	11
Spall	123	6
Total	**1953**	**24**

Table 9a: Summary of the brick and tile

9.3 Recommendations for Further Work

9.3.1 The final report will comprise a brief summary only.

9.3.1 No further work on the assemblage is required.

10. SAMIAN WARES

By: ***Steve Willis***

10.1 Introduction

10.1.1 Ninety-nine sherds of samian ware pottery weighing a total of 1,012.50g were recovered from 16 separate contexts.

10.2 Catalogue

10.2.1 The catalogue adheres to a consistent format and lists sherds by context number and ordered by date. The following data are given; the number of sherds and their type (ie whether a sherd is from the rim, base (footring) or body of a vessel), the fabric type of the item, the vessel form, the weight of the sherds in grams, the percentage of any extant rim (*i.e*. the re figure, where 1.00 would represent a complete circumference) or base (*i.e*. the be figure), and an estimate of the date of the sherds in terms of calendar years (this being the date range of deposits with which like pieces are normally associated). Any further attributes are then noted. Each entry in the catalogue, per context, represents an individual vessel; when items from the same vessel occur in more than one context, they are listed per context in which they occur and the presence of sherds from the same vessel in other contexts is noted.

[105]

- body sherd, Central Gaulish, Lezoux, form unidentifiable, 0.5g, *c.* AD 120-200

[110]

- rim sherd, Central Gaulish, Lezoux, Drag 18/31, 3g, rim equivalent (re) *c.* 0.04, *c.* AD 120-160, no surface gloss survives

[123]

- rim sherd, Central Gaulish, Lezoux, probably Drag 18/31, 5g, re 0.06, *c.* AD 120-150
- body sherd, Central Gaulish, Lezoux, from a beaker, 8g, *c.* AD 120-170, no decoration represented
- base sherd, Central Gaulish, Lezoux, probably small Drag 33, 9g, be 0.36, *c.* AD 120-200, fragment of stamp]via, vessel has been trimmed round at junction of floor and wall of vessel, crudely finished and from abrasion of fragment, looks as though this piece has been reused inverted
- base sherd, Central Gaulish, Lezoux, probably Drag 18/31 or 31, 3g, be 0.01, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, from a bowl or dish, 2g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, Drag 37, 2g, *c.* AD 120-200. bead border occurs
- body sherd, Central Gaulish, Lezoux, pale fabric Drag 37, 1g, *c.* AD 120-200, small area of decoration occurs with some vegetal tendrils
- body sherd, Central Gaulish Lezoux, from a bowl or dish, 2g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, Drag 37, 1g, *c.* AD 120-200, small area of decoration occurs but it is heavily abraded
- body sherd, Central Gaulish, Lezoux, from a bowl or dish, 1.5g, *c.* AD 120-200

- body sherd, Central Gaulish, Lezoux, Drag 30 or 37, 1.5g, *c.* AD 120-200, tiny area from the ovolo is represented
- body sherd (flake), Central Gaulish, Lezoux, form unidentifiable, 0.5g, *c.* AD 120-200
- body sherd (flake), Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-200
- body sherd (flake), Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-200
- body sherd (flake), Central Gaulish, Lezoux form unidentifiable, 1g, *c.* AD 120-200
- body sherd (flake), Central Gaulish, Lezoux, form unidentifiable, 0.5g, *c.* AD 120-200
- rim sherd, Central Gaulish, Lezoux, small Drag 37, 16g, re 0.12, diameter *c.* 160mm, *c.* AD 135-170, part of the ovolo occurs and this is poorly impressed, the ovolo and form detail suggest a product of Cinnamus II
- rim sherd, Central Gaulish, Lezoux, Drag 18/31 –31 transitional, 11g, re 0.06, *c.* AD 150-170
- base sherd, Central Gaulish, Lezoux, Drag 31, 25g, base equivalent (be) 0.33, *c.* AD 150-200, trimmed round at junction of vessel floor and footring, break has been smoothed round
- rim sherd, East Gaulish, Rheinzabern, probably Drag 30 or 37, 5g, re 0.07, *c.* AD 160-220, good gloss slip, no decoration is represented
- body sherd (flake), East Gaulish, Trier, form unidentifiable, 0.5g, *c.* AD 160-260
- base sherd, Central Gaulish, Lezoux, pale fabric Drag 31, 42g, be 0.21, *c.* AD 170-200, part of very poorly impressed stamp, illegible
- rim sherd, Central Gaulish, Lezoux, Drag 31R, 49g, re 0.12, *c.* AD 170-200, rim is worn
- rim sherd, East Gaulish, Trier, Drag 37, 6g, re 0.01, *c.* AD 180-260, no decoration represented

  This is a group of mixed sherds with no vessels represented by more than one sherd. The fragments are generally small apart from three items that come from particularly thick vessels. The material is quite abraded suggesting it has been moved a great deal, prior to finally deposition

[124]

- two body sherds, Central Gaulish, Lezoux, Drag 37, 68g, *c.* AD 120-140, both sherds have been partially burnt the decoration is heavily abraded but enough detail survives to indicate a Hadrianic vessel, this is further emphasised by the nature of the fabric and the excellent quality of the slip
- body sherd, Central Gaulish, Lezoux, probably a large bowl, 12g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, form unidentifiable, 4g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, from a bowl or dish, 5g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, probably Drag 37, 2g, *c.* AD 120-200, very heavily abraded, little surface gloss remains
- body sherd, Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-200
- body sherd (flake), Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, bowl or dish, 2g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, bowl or dish, 2g, *c.* AD 140-200, heavily abraded
- base sherd, Central Gaulish, Lezoux, Drag 31, 32g, be 0.24, *c.* AD 150-200, vessel has been trimmed round at the junction of the wall and floor and then smoothed off
- base sherd, Central Gaulish, Lezoux, probably Drag 31R, 32g, be 0.21, *c.* AD 160-200, vessel has been trimmed round at junction of floor and footring, heavily abraded, it may have been re-used, inverted

- body sherd, Central Gaulish, Lezoux, Drag 45, 2g, *c.* AD 165-200

  This is a group of mixed material which is heavily abraded and has been in a malign soil environment. The condition of the assemblage indicates that the material has probably been moved around, prior to final deposition

[127]

- body sherd, Central Gaulish, Lezoux, probably, Drag 37, 1.5g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-200
- rim sherd, Central Gaulish, Lezoux, bead rimmed bowl, 1g, re *c.* 0.05, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-200
- rim sherd, Central Gaulish, Lezoux, Drag 31, 15g, re 0.11, *c.* AD 150-200
- base sherd, Central Gaulish, Lezoux, cup, 3g, be 0.15, *c.* AD 150-200
- base sherd, Central Gaulish, Lezoux, probably Drag 37, 108g, be 1.00, *c.* AD 160-200, heavily abraded form, a slightly misshapen vessel, appears to have been trimmed round towards junction of floor of vessel and footring
- rim sherd, Central Gaulish, Lezoux, Drag 31R, 52g, re 0.16, *c.* AD 160-200

[129]

- body sherd, Central Gaulish, Lezoux, form unidentifiable, 1g, *c.* AD 120-150
- base sherd, Central Gaulish, Lezoux, Drag 18/31R, 31g, be *c.* 0.17, *c.* AD 120-160, vessel has been trimmed round at the junction of the vessel floor and the footring where the fracture has been smoothed off and this item appears to have then been re-used, inverted
- body sherd, Central Gaulish, Lezoux, Drag 36, 2g, *c.* AD 120-200
- rim sherd and conjoining body sherd, Central Gaulish, Lezoux, Drag 33, 6g, re 0.07, *c.* AD 120-200, both sherds are burnt
- body sherd, Central Gaulish, Lezoux, Drag 37, 1g, *c.* AD 120-200, tiny area of decoration occurs
- body sherd, Central Gaulish, Lezoux, Drag 37, 1g, *c.* AD 120-200, tiny area of decoration occurs
- body sherd, Central Gaulish, Lezoux, Drag 37, 3g, *c.* AD 140-200, a small undiagnostic area of decoration occurs, part of what appears to be a cleat cut is presumably evidence for repair

[130]

- body sherd, Central Gaulish, Lezoux, form unidentifiable, 2g, *c.* AD 120-200

[135]

- body sherd, Central Gaulish, Lezoux, Drag 37, 12g, *c.* AD 120-140, decoration is heavily abraded but strongly suggests a Hadrianic vessel as does the nature of the fabric and slip
- body sherd, Central Gaulish, Lezoux, Drag 18/31R, 19g, *c.* AD 120-145
- body sherd, Central Gaulish, Lezoux, off white fabric, form unidentifiable, 1g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, Drag 37, 1g, *c.* AD 120-200
- rim sherd, Central Gaulish, Lezoux, Drag 33, 2g, re 0.06, *c.* AD 120-200
- body sherd (flake), Central Gaulish, Lezoux, form unidentifiable,1g, *c.* AD 120-200

- body sherd, Central Gaulish, Lezoux, cup or beaker, 0.5g, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, probably Drag 38, 12g, *c.* AD 130-170, burnt
- base sherd, Central Gaulish, Lezoux, Drag 31, 14g, be 0.11, *c.* AD 150-200

[144]

- body sherd, Central Gaulish, Lezoux, Drag 18/31 or 31, 4g, *c.* AD 120-200, burnt
- body sherd, Central Gaulish, Lezoux, Drag 37, 6g, *c.* AD 120-200, decoration is abraded but a free style pattern is apparent
- body sherd, Central Gaulish, Drag 37, 12g, *c.* AD 130-200, unusual gloss slip to vessel which has a large indistinct ovolo, a medallion occurs with a cherub figure
- rim sherd, Central Gaulish, Lezoux, Drag 38 or 44, 10g, re 0.06, *c.* AD 130-200, rim is worn
- body sherd, Central Gaulish, Lezoux, Drag 37, 19g, *c.* AD 140-200, part of a basal wreath is apparent
- base sherd, Central Gaulish, Lezoux, Drag 31, 18g, be 0.13, *c.* AD 150-200, burnt
- body sherd, Central Gaulish, Lezoux, probably Drag 31, 5g, *c.* AD 150-200, from a different vessel to other sherds in this context
- base sherd, Central Gaulish, Lezoux, Drag 31, 24g, be 0.18, *c.* AD 150-200
- rim sherd, Central Gaulish, Lezoux, Drag 31R, 9g, re 0.02, *c.* AD 160-200, burnt
- body sherd, Central Gaulish, Lezoux, probably Drag 31R, 4g, *c.* AD 160-200, burnt
- rim sherd, probably East Gaulish, Rheinzabern, Drag 37, 14g, re 0.05, *c.* AD 160-250
- body sherd, East Gaulish, Rheinzabern, bowl or dish, 5g, *c.* AD 160-260, from a different vessel to the Drag 37 represented in this context

[146]

- body sherd, Central Gaulish Lezoux, bowl or dish, 4g, *c.* AD 150-200
- base and conjoining body sherd, probably East Gaulish, Rheinzabern, Drag 31R, 28g, be 0.16, *c.* AD 160-260, from same vessel as two sherds of 31R in context [148], joins a sherd in [150], both sherds are burnt

[148]

- base and body sherd, probably from same vessel, probably East Gaulish, Rheinzabern, Drag 31R, 33g, be 0.17, *c.* AD 160-260, base sherd is burnt, trimmed round at junction of vessel floor and footring and smoothed, another sherd from same vessel is in [150], 2 sherds from same vessel in [146]

[150]

- body sherd, East Gaulish, Argonne, form unidentifiable, 0.5g, *c.* AD 130-260
- base sherd, probably East Gaulish, Rheinzabern, Drag 31R, 17g, be 0.12, *c.* AD 160-260, joins a sherd from [146], two sherds from same vessel in [148], burnt

[151]

- base sherd, Central Gaulish Lezoux, cup, probably Drag 33, 5g, be 0.12, *c.* AD 120-200 burnt
- body sherd, Central Gaulish, Lezoux, thick walled Drag 37, 9g, *c.* AD 130-200, area of decoration is apparent with two figures represented but heavy weathering/abrasion means details not discernible

[154]

- body sherd, Central Gaulish, Lezoux, small bowl or dish, 3g, *c.* AD 120-170
- rim sherds and one body sherd, all conjoining, Central Gaulish, Lezoux, Drag 31R, 90g re 0.17, *c.* AD 160-200, rim is worn

[160]

- rim sherd, Central Gaulish, Lezoux, small Drag 33, 2g, re 0.06, *c.* AD 120-200
- body sherd, Central Gaulish, Lezoux, form unidentifiable, 0.5g, *c.* AD 120-200

[167]

- body sherd, Central Gaulish, Lezoux, Drag 37, 33g, *c.* AD 150-190, an area of decoration is represented, this is heavily weathered but enough survives to show a free style design with a boar and probable lion to the left and a panther and another running animal to the right, the style suggests the work of Paternus or an associate

10.3 Discussion

10.3.1 The presence of material of Hadrianic and early Antoine date within the samian assemblage is of some significance as the establishment of the known Roman fort and *vicus*, to the south of the Newcastle Road site, is conventionally dated to AD 175.[22] Early Roman occupation at Chester-le-Street, focused on Cade's Road, before the establishment of the fort in AD 175, has been speculated on and a few finds of earlier date are known, but have not been encountered previously in groups and stratified contexts.[23] The assemblage from the site suggests the presence of occupation or significant activity in the area before or around the mid 2nd century AD.

10.3.2 Hadrianic samian is surprisingly infrequent in Britain generally, making this group a notable assemblage. The assemblage as a whole is consistent with Roman military consumption (as at a fort) or consumption derived from or associated with a Roman military supply chain (as with a *vicus* or a roadside settlement on a major road in a military zone). The material therefore demonstrates the presence of such activity in the area to the north of the fort and the previously known *vicus*.

10.4 Recommendations for Further Work

10.4.1 A description and discussion detailing the samian assemblage, including the integration of the material recovered from the evaluation phase of work, should be included in the final publication report.

10.4.2 The stamp on the sherd recovered from context [123] should be identified.

10.4.3 The stamp, the decorated sherd with the cherub medallion from context [144] and the decorated sherd from context [167] should all be drawn for inclusion in the final publication report.

[22] Hartley, 1968; Breeze and Dobson, 1985; Evans *et al.*, 1991.
[23] Hartley, 1968; Evans *et al.*, 1991.

11. SLAG

By: ***Rod Mackenzie (ARCUS****)*

11.1 Introduction

11.1.1 The aim of the assessment was to identify the slag assemblage and determine whether further analysis could provide additional information about the site or the slag.

11.2 Results

11.2.1 The table below summarises the findings of the assessment.

Context No.	*No. of pieces*	*Description*	*Wt (g)*
135	1	Possible smithing slag	431
135	1	Possible smithing slag	435
159	2	Possible smithing slag	29/107

Table 11a :Slag assemblage

11.3 Discussion

11.3.1 During the Romano-British period, iron was produced using a two stage process. Iron was extracted from the ore by smelting in bloomery furnaces. The resulting ball, or 'bloom', of iron produced by the bloomery contained a high volume of slag. To improve the quality of the iron, the volume of slag was reduced by reheating and hammering the bloom; these cycles of reheating and hammering are known as 'primary smithing'. Primary smithing produced billets or bars of iron that could either be forged into finished artefacts by smiths on site, or sold on as raw material. Bloomery smelting and primary smithing were often carried out at the same site and both processes could produce significant amounts of slag. The manufacture and repair of finished goods, known as 'secondary smithing', involved further reheating and forging which also produced slags.

11.3.2 Visual examination of the slag from context [135] suggests that they are both composed of a silicate matrix with localised iron rich areas; small fragments of coal (typically <3mm in size) were observed on the surface of both pieces. The two pieces of slag are likely to have a broadly similar composition, although scientific analysis would be required to confirm this.

11.3.3 The two pieces of slag from context [159] appear to have a higher silica content than those from [135], although the larger piece does have at least one iron rich area. Small fragments of coal were observed on the surface of the larger piece of slag from [159].

11.3.4 The flecks of coal on the surface of the slags suggest that the smith was using coal, rather than charcoal, to fuel the reheating hearth. Although it is comparatively unusual for coal to be used for smithing, it is not unknown during the Romano-British period.[24]

11.3.5 The presence of iron, flecks of coal and general morphology suggests the slags are most likely to be by-products of iron smithing. The absence of bloomery smelting slags suggests these are more likely to be secondary rather than primary smithing slags.

[24] Cunnington, 1933; Webster, 1955.

11.4 Recommendations for Further Work

11.4.1 No further work is required at this stage. It is recommended that the slag be retained as part of the site archive and for possible future scientific analysis.

11.4.2 A description of the material should be included in the final publication report.

12. SMALL FINDS

By: ***Philippa Walton***

12.1 Introduction

12.1.1 A total of 16 objects, or multiple fragments thereof, were retrieved from the excavations and recorded under 16 'small find' numbers. The assessment has involved basic identification of the object materials and type and a consideration of those warranting further research at the analysis stage. The assessment has identified at total of 3 objects across all material categories that require further research and illustration.

(abbreviation in tables as follows: NFW = No further work, FW = Further work, I = illustration)

12.2 Glass Objects

12.2.1 A small assemblage comprising two body vessel fragments (SF 6; SF 14), a bowl base (SF 1) and bottle neck (SF 16) all dating to the Roman period. SF 1 and SF 16 require further work to establish forms and more secure dating.

SF no.	***Context no.***	***Description***	***Date***	***FW?***
1	124	Blue glass bowl base with tubular basal rim and pontil	2nd-4th century AD	FW, I
6	144	Clear glass vessel body fragment	Roman?	NFW
14	160	Blue glass vessel body fragment	Roman	NFW
16	160	Blue glass square bottle neck and rim fragment	1st-2nd century AD	FW, I

12.3 Copper Alloy

12.3.1 The copper alloy assemblage comprises one coin (SF 11) and one brooch (SF 13).

12.3.2 SF 11 is a barbarous radiate dating to period *c.* AD 260 to AD 300. The obverse of the coin is illegible but the reverse depicts a stylised female figure, probably intended to represent Spes, advancing left.

12.3.3 SF 13 comprises two fragments of a Trumpet brooch dating to the late 1st or 2nd century AD. The Trumpet brooch is a common Romano-British brooch form.

SF no.	***Context no.***	***Description***	***Date***	***FW?***
11	135	Barbarous radiate	AD 260-300	NFW
13	151	Trumpet brooch	Late 1st-2nd century AD	NFW

12.4 Ceramic objects

12.4.1 SF 10 is a spindle whorl constructed from a fragment of a Samian ware vessel. Spindle whorls in 'recycled' pottery are relatively common finds from Romano-British domestic contexts but can only be broadly dated to the Roman period.

SF no.	Context no.	Identification	Date	FW?
10	150	Samian spindle whorl	Roman	NFW

12.5 Lead Objects

12.5.1 The lead assemblage comprises a rolled lead sheet (SF 5), most likely to be rolled lead waste, and a pot mend (SF 3). Both objects cannot be dated with certainty but could be Roman in date.

SF no.	Context no.	Identification	Date	FW?
3	135	Pot mend	Roman?	NFW
5	144	Rolled lead sheet	Roman?	NFW

12.6 Iron Objects

12.6.1 The iron assemblage comprised a selection of updateable nail stems and heads.

SF no.	Context no.	Identification	Date	FW?
2	127	Nail stem x 2	Unknown	NFW
8	127	Nail stem x 2	Unknown	NFW
9	146	Nail head	Unknown	NFW
17	144	Nail stem	Unknown	NFW
18	123	Nail stem x 2	Unknown	NFW

12.7 Stone Objects

12.7.1 SF 4 is a large fragment of a quernstone dating to the Roman period. Further work is necessary to establish the type of stone from which it is made and thus its original provenance.

SF no.	Context no.	Identification	Date	FW?
4	135	Quernstone	Roman	FW

12.8 Conclusions

12.8.1 The small assemblage of finds recovered from the excavations are characteristic of domestic rubbish and casual losses associated with Romano-British settlement. The glass and copper alloy assemblages suggest domestic activity, whilst the presence of a quernstone fragment indicates the processing of grain close by.

12.9 Recommendations for Further Work

12.9.1 Specialist analysis of the quernstone should be undertaken to establish the provenance of the stone.

12.9.2 Further work should be undertaken on the glass vessel fragments SF 1 and SF 16 to establish forms and more secure dating.

12.9.3 A description of the small finds assemblage should be included in the final publication report.

13. POST-MEDIEVAL FINDS

*By: **Jenny Vaughan (NCAS**)*

13.1 Introduction

13.1.1 A small assemblage of 75 sherds of pottery weighing just under 0.5 kg, 29 fragments of clay tobacco pipe, and three glass fragments were recovered from the site.

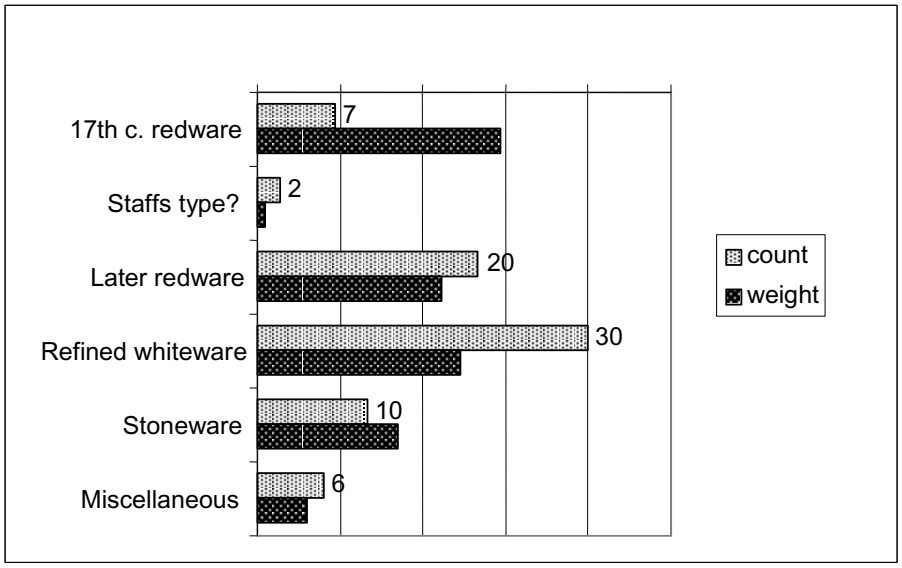
13.2 Pottery

13.2.1 Quantity and dating

13.2.1.1 There were a few fragments of 17th century date but most were 18th and 19th century types.

13.2.2 Range and variety

13.2.2.1 The types of pottery within the assemblage are shown in the chart below. As quantities were so small the actual number of sherds is given beside the bar representing the proportion of the total assemblage.



13.2.2.2 Four of the seven 17th century redware fragments were unstratified – these were from a dish with slip trailed decoration. This type is very common on Tyneside. A plain redware jar base of similar date was present in context [114]. Two small sherds were possible buff bodied Staffordshire type wares of late 17th/early 18th century date but they were too small to identify with any certainty. There was a number of other red earthenware sherds with slip coating or trailing but these were of 18th century or later date. A few sherds were plain black or brown glazed.

13.2.2.3 The largest number of sherds was of refined whitewares of later 18th century and later date, with examples of the usual range of decorative techniques present including transfer printed, sponged, banded and with different colour glazes. One sherd had a dull red slip coating and traces of copper lustre. However, the majority of these sherds were small and badly flaked.

13.2.2.4 Most of the stoneware sherds were from jam jars or bottles although one (context [156]) was possibly an earlier 17th century type and one was a very small fragment of white salt glazed stoneware (from context [165]) of 18th century type. Included amongst the 'miscellaneous' category was one small sherd of a porcelain ring base, three of white china and two sherds of brown glaze earthenware. Further details are in the catalogue.

13.2.3 Discussion

13.2.3.1 It is possible that a reasonable proportion of the pottery is 18th, rather than 19th century in date. 'Later' redwares in fact appear in the first half of the 18th century, but continue in production on Tyneside and Wearside into the 20th century. Some of the 'whitewares' are cream coloured and may also be of 18th century date. Fragments were too small and abraded to identify clearly.

13.2.4 Post-medieval pottery: recommendations for further work

13.2.4.1 While this might be of some interest for site interpretation the assemblage is of little intrinsic value and no further work is recommended on the assemblage.

13.3 Clay Tobacco Pipe

13.3.1 Quantity and dating

13.3.1.1 The clay tobacco pipe assemblage comprised 29 fragments. Based on stem bores and other characteristics the date range was 17th to 19th century.

13.3.2 Range and variety

13.3.2.1 Most of the items were stem fragments, one of which had a spur and another part of a heart shaped base. There were two small bowl fragments both with moulded decoration typical of later 18th to 19th century bowls. Most interesting was a complete large bowl (from context [120]) with long pedestal spur. This is an unusual form for the north-east and has some similarities to Irish style pipes of the late 19th century.[25]

13.3.3 Clay tobacco pipe: recommendations for further work

13.3.3.1 The assemblage has no potential for further analysis but a record including drawing and/or photograph should be made of the complete bowl.

13.4 Glass

13.4.1 Quantity and dating

13.4.2 One fragment, from context [103], was of light green opaque glass which appears to have been made in two layers, now separating.

13.4.3 A fragment of modern clear window glass and one of clear vessel glass with part of an acid etched design came from context [133].

13.4.2 Glass objects: recommendations for Further Work

13.4.2.1 These fragments are of no particular interest and no further work is necessary.

[25] Ayto, 1979, 8.

Context	*Spot date*
107	possibly 18th century
109	late19th to 20th century
110	mid 19th century but earlier elements
114	later 17th century
120	19th century with possible 18th century elements
121	18th/19th century
133	19th century
156	19th century some ?earlier material
165	18th century

Table 13a: Pottery and clay pipe spot dates

Abbreviations:

b	base
dec	decoration
frag	fragment
gl	glaze
lred	later redware
r	rim
refww	refined whiteware
sl	slip
stonew	stoneware
tp	transfer printed
ves	vessel

Type	*No. sherds*	*Wt (g)*	*Vessel part*	*Notes*
u/s				
red sl	4	80	r b	Metropolitan type red ware with slip trailed dec. Dish
lred sl	2	29		Poss 18th c. type. One has slip coating with tan and dark brown lines. Other has pattern in whiiblee slip with some greenish colouration in gl
lred	2	15	b	Poss 18th c. clubbed base
stonew	1	36	b	Clubbed base grey/buff fabric with light brown gl. 18th/19th c.
totals	**9**	**160**		
[107]				
lred sl	2	3		One fragment has raised slip straight lines after the fashion of Cistercian ware but glaze much glossier and lines end. Other frag plain but probably same ves.
[109]				
stonew	1	35	b	Light grey ridged jam jar base. Base marked ..LEY'S/..BEL
refww	1	6		?Teacup with Chinese type pagoda in light blue tp.
refww	1	4	lid	Small lid - from doll's tea set?
totals	**3**	**45**		
[110]				
refww	11	61	b r	Miscellaneous - 2 small tp, 1 sponge dec, rim of ?mug
china/porc	2	**3**	r	Rim with gold bands
stonew	**2**	**24**		Buff-grey util type. One frag has greyish blue mark
lred sl	**1**	**5**	r	Thin rolled/ev rim with white slip coat and some greeny/blue colour in gl.
yellow gl	**1**	**4**		Not certain, could be an earlier piece
totals	**17**	**97**		
[114]				
red	3	37	b	All join - clubbed base of jar/hollow ves - 17th c. type, redware
[120]				
refww	**5**	**4**		Small flakes - poss creamware
china/porc	**2**	**4**	b	Part of ring base greyish porc with some red brown dec. Other plain white

Type	*No. sherds*	*Wt (g)*	*Vessel part*	*Notes*
stonew	1	2	r	Squarish rim
lred sl	4	6		Three have slip coat, one has bit of trail - all small. 18th c.?
lred	1	2		
blackw	1	3		Shiney black gl, red fabric
Staffs sl?	1	0		Very small buff with yellow gl and brown line.
totals	15	21		
[121]				
stonew	1	8	b	Dark grey with brown ext - 18th/19th c. bottle?
brown gl buff	1	2		
refww	1	1	r	
totals	**3**	**11**		
[133]				
refww	4	8		One tp, one sponge, one ?
stonew	1	28	r	White jam jar.
lred sl	1	3		Later red with mang mottling
totals	**6**	**39**		
[156]				
refww	6	10		
cu lustre	1	3		Abraded/flaked frag with traces of copper lustre
lred sl	2	13	r	Slightly everted rim and burnt frag - int slip coat.
lred	1	2		
blackw	2	5		One is dark greyish brown fabric, other red sooted one side (from base).
ungl red	1	2		
stonew	1	17		Greyish - probably jam jar
brown gl	1	15	b	Ring base, greyish brown fabric with shiney brown gl.
stonew	1	16		Salt gl - possibly imported and may be 17th c.
totals	**16**	**83**		
[165]				
wsglst	1	1		Thin white salt gl stoneware
TOTAL	**75**	**497**		

Table 13b: Post-medieval pottery

Object	*Context*	*No.*	*Bore (mm)*	*Comments*
stem	107	1	5	
stem	109	1	5	
stem	110	1	6	
stem	110		5	
stem	114	2	7	One has bit of heart shaped base.
stem	114	1	6	
stem	120	4	5	
stem	120	1	6	
bowl	120	1	5	Large upright bowl with long pedestal spur
stem	121	1	6	Chipped/flaked but may be cut down end
stem	133	5	5	
stem	133	1	4	With spur
bowl frag	133	1		With leaf moulding on seam
bowl frag	133	1		Ribbed
stem	156	3	5	
stem	156	1	6	
stem	165	2	5	

Table 13c: Clay tobacco pipe

14. BIOLOGICAL REMAINS ASSESSMENT

By: ***John Carrott, Alexandra Schmidl, Deborah Jaques & Stewart Gardner (PRS)***

14.1 Introduction

13.1.1 Seven sediment samples ('GBA'/'BS' *sensu* Dobney *et al*. 1992) and a small quantity of hand-collected bone were submitted to Palaeoecology Research Services Limited (PRS), County Durham, for an evaluation of their bioarchaeological potential.

14.2 Methods

14.2.1 Sediment samples

14.2.1.1 The sediment samples were inspected in the laboratory and their lithologies recorded, using a standard *pro forma*, prior to the processing of sub-samples, broadly following the procedures of Kenward *et al*. (1980), for the recovery of plant and invertebrate macrofossils. The sub-samples were disaggregated in water for at least 24 hours before processing and their volumes recorded in a waterlogged state.

14.2.1.2 Plant and invertebrate remains in the processed sub-sample fractions (residues and washovers) were recorded briefly by 'scanning' using a low-power microscope (where necessary), identifiable taxa and other components being listed on paper. All of the fractions were largely of inorganic or charred organic material and were examined dry.

14.2.1.3 Nomenclature for plant taxa follows Stace (1997).

14.2.2 Hand-collected vertebrate remains

14.2.2.1 For the hand-collected vertebrate remains, subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Other information, such as fragment size, dog gnawing, burning, butchery and fresh breaks, was noted where applicable.

14.2.2.2 Fragments were identified to species or species group using the PRS modern comparative reference collection. The bones that could not be identified to species were described as the 'unidentified' fraction. Within this fraction, fragments were grouped into categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprovid, pig or small cervid) and completely unidentifiable. These categories are represented by 'unidentified' in Table 14a.

14.3 Results

14.3.1 Sediment samples

14.3.1.1 Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample numbers.

14.3.1.2 No ancient invertebrate remains were recovered.

Context [112] {primary fill of Phase 2 ditch [113]}
Sample 1/T (3 kg/2-3 litres wet sieved to 300 microns with washover; approximately 16 litres of unprocessed sediment remain)
Just moist, light to mid grey to mid grey-brown (occasional patches lighter and slightly darker), stiff to crumbly (working more or less plastic), ?slightly silty clay, with some rotted charcoal and dark brown to black ?ash present.
The tiny washover (~1 ml) was of modern waterlogged rootlets, unidentifiable plant fibres, coal and cinder.
The very small residue (dry weight 0.26 kg) was mostly of stones (to 20 mm), with some sand and coal (to 12 mm; 3 g) and a little bone (to 5 mm; <1 g). A single, probably modern, seed of elder (*Sambucus nigra* L.) was also noted.

Context [123] {fill of Phase 3 quarry pit [137]}
Sample 17/T (3 kg/2.8 litres wet sieved to 300 microns with washover; approximately 15 litres of unprocessed sediment remain)
Dry, light brown to mid to dark grey-brown (and shades of grey and grey-brown between), brittle to crumbly (working plastic when wetted), slightly sandy slightly silty clay, with some stones (6 to 60 mm), ?mortar, pot, coal and flecks of charcoal present.
The small washover (~35 ml) was mostly of modern rootlets, with a little coal and cinder. There was also a single well preserved charred cereal grain (probably hulled barley – *Hordeum distichon* L./*H. vulgare* L.) and one waterlogged seed of many-seeded goosefoot (*Chenopodium polyspermum* L.) – the latter probably a modern contaminant.
The small residue (dry weight 0.44 kg) was sand, with a little cinder (to 40 mm; 37 g), coal (to 30 mm; 34 g), brick/tile (to 5 mm; 1 g), pot (to 36 mm; 4 g), charcoal (an unidentifiable charred twig fragment to 14 mm; <1 g), 11 eroded fragments of bone (to 26 mm; 5 g) and a few stones (to 45 mm).

Context [127] {fill of Phase 3 pit [128]}
Sample 9/T (3 kg/2.8 litres wet sieved to 300 microns with washover; approximately 14 litres of unprocessed sediment remain)
Moist, mid to dark grey-brown (occasionally light to mid grey-brown with light to mid orange-brown streaks), slightly silty clay, with some stones (over 60 mm) present and abundant fine ?charcoal/coal.
The tiny washover (~5 ml) comprised a few modern rootlets, coal, cinder and small pieces of charcoal (to 5 mm).
The fairly small residue (dry weight 0.83 kg) was mostly stones (to 60 mm) and cinder (to 42 mm; 32 g), with some sand and coal (to 45 mm; 42 g) and a little brick/tile (to 15 mm; 2 g), pot (two sherds to 50 mm; 14 g) and four burnt fragments of bone (to 12 mm; 1 g).

Context [140] {fill of Phase 2 ditch[141]}
Sample 14/T (3 kg/2.4 litres wet sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)
Dry, light to mid brown and light to mid grey, brittle to crumbly (working more or less plastic when wetted), silty clay, with stones (6 to 60 mm) and traces of charcoal and modern roots present.
This washover was also tiny (~5 ml) and mostly of modern waterlogged rootlets and small pieces of charcoal (to 5 mm). There were also two poorly preserved unidentified charred cereal grains, and one seed of yellow-rattle (*Rhinanthus*) and one achene of buttercup (*Ranunculus* subg. *Ranunculus*) preserved by waterlogging – both were probably modern contaminants.
There was a small residue (dry weight 0.61 kg) of sand (fine and coarse) and stones (to 36 mm), with a little coal (to 8 mm; 2 g).

Context [142] [fill of Phase 2 gully [143]}

Sample 7/T (3 kg/2.4 litres wet sieved to 300 microns with washover; approximately 4 litres of unprocessed sediment remain)

Dry, light brown to mid grey (and shades of grey, brown and grey-brown between), indurated to brittle to crumbly (working crumbly, plastic when wetted), ?slightly sandy clay, with stones (2 to 20 mm) and traces of charcoal present. Modern rootlets and roots were noted.

The washover (~10 ml) was mostly of modern waterlogged rootlets, with a few modern earthworm egg capsules and small pieces of unidentifiable charcoal (to 10 mm). There were also two modern waterlogged seeds of fat-hen.

There was a small residue (dry weight 0.40 kg) of stones (to 26 mm), with some fine sand, coal (to 25 mm; 10 g), cinder (to 10 mm; 1 g), charcoal (to 18 mm; 1 g), pottery (to 20 mm; 3 g), brick/tile (to 6 mm; 1 g) and glass (to 3 mm; <1 g). A single waterlogged seed of the pea family (Fabaceae) was probably a modern contaminant.

Context [144] {fill of Phase 2 ditch {139]}

Sample 12/T (3 kg/2.4 litres wet sieved to 300 microns with washover; approximately 15 litres of unprocessed sediment remain)

Just moist, light brown to mid to dark grey-brown (and shades of brown, grey and grey-brown between), stiff to crumbly (working plastic when wetted), clay, with rotted charcoal and modern rootlets present.

Again, the small washover (~9 ml) was mainly of waterlogged rootlet fragments with cinder, coal, one earthworm egg capsule and fine charcoal (to 5 mm).

There was a small residue (dry weight 0.39 kg) of sand (fine and coarse) and stones (to 22 mm), with cinder (to 22 mm; 3 g), coal (to 20 mm; 14 g) and brick/tile (to 14 mm; 5 g). There were also a few additional earthworm egg capsules (almost certainly modern intrusions).

Context [150] {fill of Phase 3 pit [128]}

Sample 11/T (3 kg/3 litres wet sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain)

Moist, light to mid grey to mid grey-brown to dark grey, sticky to soft (working soft and more or less plastic), clay silt to silty clay, with rotted charcoal and stones (6 to 20 mm) present.

The tiny washover (~4 ml) was of cinder, coal and small pieces of charcoal (to 5 mm). Identifiable plant macrofossils were restricted to a few rather poorly preserved charred cereal grains (some of which were probably barley and oat).

The fairly small residue (dry weight 0.82 kg) consisted of stones (to 33 mm), together with fine sand, cinder (to 50 mm; 36 g), coal (to 60 mm; 91 g) and fine unidentifiable charcoal (to 5 mm). There were also nine fragments of large mammal tooth enamel and two small burnt unidentifiable bones (to 25 mm; 2 g).

14.3.2 Hand-collected vertebrate remains

14.3.2.1 Vertebrate remains were recovered from 15 deposits and the assemblage amounted to 233 fragments, most of which were concentrated in Phase 3 Context [123] (109 fragments). Regardless of phase, preservation was mainly recorded as ‘fair’, although material from most deposits was somewhat battered in appearance, the bones having damaged edges and, in some cases, eroded surfaces, *e.g.* Contexts [129] (Phase 2), and [160] (Phase 3). There was a high degree of fragmentation, partly as a result of fresh breakage damage, which was extensive, and partly from the butchery techniques employed in antiquity. The latter involved the chopping of large mammal (in all probability cattle) bones into chunks, and some of the long bones had been split longitudinally (Context [123]).

14.3.2.2 A heavily butchered cattle mandible fragment was noted from Phase 5 Context [135], whilst the removal (or partial removal) of the spines from three of the cattle scapulae from Context [123] was evident. Several of the metapodials from the same deposit had been chopped transversely, whilst a metatarsal fragment from Context [160] had been split through the proximal articulation.

14.3.2.3 None of the bones recovered from Phase 2 deposits could be identified. The bulk of the assemblage (46 fragments) came from a ditch fill, Context [144], which produced an assemblage of burnt fragments that were white in colour. These bones had either been subjected to high temperatures or prolonged exposure to heat. No close identification of these remains was possible, as there was much fresh breakage damage and few diagnostic features remaining. Some fragments could be identified as the distal articulations of ungulate phalanges. They were too large to be those of caprovid and may have been deer or cattle but the fragments were too morphologically indistinct to be identified with confidence.

14.3.2.4 Phase 3 and 4 deposits were dominated by cattle remains, with horse bones also relatively numerous. No other species were identified from these deposits. Most fragments (155 of 164) were recovered from two of the fills (Contexts [123] and [135]) of quarry pit [137] assigned to Phase 3. The cattle remains were primarily metapodial fragments (Contexts [123] and [160] – the latter also a fill of pit [137]), together with some pieces of scapula and mandible and several isolated teeth (Contexts [123], [135] and [160]). The unidentified component consisted of the remains of large mammals, including cranium, rib and vertebra fragments. Horse remains included several isolated teeth, a scapula, two humerus fragments, an astragalus and left and right distal tibia fragments (one fragment from Context [135] could be rejoined with a tibia fragment from Context [123] and these probably represent the same individual). An incisor from Context [123] suggested that one animal was between five and eight years of age at death.

14.3.2.5 The material from modern deposits showed the greatest diversity of species, albeit most were represented by only a few bones. These remains included those of pig, sheep/goat, cow and dog.

14.3.2.6 Overall, very few fragments were available for providing biometrical and age-at-death data.

14.4 Discussion and Statement of Potential

14.4.1 Ancient charred plant remains recovered from the samples were restricted to a few cereal grains and small fragments of unidentifiable charcoal. The charred cereals provide evidence for waste possibly from food preparation but little interpretative information. There were also some remains preserved by waterlogging but these were almost certainly modern contaminants.

14.4.2 Cereal grains from Contexts [123], [140] and [150] would provide suitable material for radiocarbon dating (via AMS) if required.

14.4.3 Vertebrate remains from this site were principally recovered from deposits assigned to Phases 3 and 4, with most of the Roman material probably being butchery waste from both primary and secondary carcass preparation. Heavily butchered large mammal bones, probably mainly cattle, were characteristic of the material recovered from Context [123] and, to a lesser extent, Context [135]. Such deposits of bone waste, showing similar patterns of butchery, including the extensive use of the cleaver, have been seen at many Roman sites[26] particularly those of a more urban nature or with associations with military establishments. The pit, from which most of this material was recovered, clearly provided a useful for receptacle for the disposal of such rubbish.

14.5 Recommendations for Further Work

14.5.1 The poor preservation and paucity of the ancient plant remains precludes any further interpretation, and suggests that the deposits of this site have little potential for the recovery of useful assemblages.

14.5.2 If material for radiocarbon dating is required, then processing of larger sub-samples from Contexts [123], [140] and [150] would be desirable to recover additional charred plant remains.

14.5.3 No further study of the current vertebrate assemblage is warranted, unless perhaps as part of a synthetic project with other material from Chester-le-Street. As with the vertebrate remains recovered from Park View School, Chester-le-Street,[27] this assemblage is limited by its poor condition and broad date.

14.5.4 Despite the scarcity of biological remains from the current assessment and from the previous evaluation,[28] any future excavations in this area should certainly allow for the possibility of encountering deposits with more interpretatively valuable concentrations and for the systematic recovery of both sediment samples and hand-collected biological remains.

14.6 Retention and Disposal

14.6.1 Unless required for the recovery of additional material for radiocarbon dating or purposes other than the study of biological remains, all of the remaining unprocessed sediment may be discarded. The plant remains recovered from the processed sub-samples, together with the small amount of hand-collected bone, should be retained as part of the physical archive of the site for the present.

14.6.2 All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

[26] *e.g*. Jaques, 2005; Dobney *et al*., 1996; O'Connor, 1988.
[27] Schmidl *et al*., 2006.
[28] Carrott *et al*., 2005.

Species		***Roman***	***Post-medieval***	***Modern***	***Total***
Canis f. domestic	dog	-	-	1	1
Equus f. domestic	horse	13	-	-	13
Sus f. domestic	pig	-	-	2	2
Bos f. domestic	cow	36	-	1	37
Caprovid	sheep/goat	1	-	3	4
Unidentified		165	2	9	176
Total		**215**	**2**	**16**	**233**

Table 14a. Hand-collected vertebrate remains

15. CONCLUSIONS

15.1 The earliest activity at the site (Phase 2) has been dated to the Hadrianic to early Antonine period, *c.* AD 120-140 and relates to the delineation of plot boundaries on the northern valley side of the Cong Burn. Two east-west aligned boundary ditches were recorded, defining a plot of land *c.* 12.50m wide (north-south) and at least 18m in length (east-west). These ditches may have delimited a plot that fronted onto the Roman road (Cade's Road) between Chester-le-Street and Newcastle, known to underlie the modern Newcastle Road immediately to the west of the site. The eastern portion of the northernmost ditch had been re-cut, indicating some degree of longevity to land management at this location, dating evidence suggesting that the re-cut ditch was infilled *c.* AD 160-180.

15.2 No primary evidence for actual habitation, such as *in situ* structural remains, was recorded in the area delimited by the boundary ditches, although elements of the cultural debris within the features are certainly indicative of the presence of settlement in the near vicinity. The accepted date for the foundation of the fort at Chester-le-Street is AD 175. It can, therefore, be concluded that the evidence from this site indicates utilisation of the northern valley side of the Cong Burn **before** the establishment of *Concangis* fort to the south in AD 175. The possibility of occupation at Chester-le-Street predating the establishment of the fort has been speculated upon previously, given that some finds of earlier date have been recovered from excavations within the internal area of the fort and its outer defences. However, none of this material was encountered in stratified contexts.[29]

15.3 It is postulated that the earliest phase of occupation at the current site relates to Hadrianic to early Antonine period roadside settlement adjacent to Cade's Road. While the Roman pottery assemblage as a whole representing this phase is broadly typical of military sites in the region, the samian element is consistent with Roman military consumption, such as at a fort, or consumption derived from or associated with a Roman military supply chain, as with a *vicus* or a roadside settlement on a major road in a military zone. The extent of the postulated roadside settlement on the northern valley side is uncertain, although it is reasonable to suggest that it extended to the north of the excavation area, onto higher ground.

15.4 Cade's Road was an important supply route leading from Brough-on-Humber to the forts at Newcastle-upon-Tyne and South Shields, the latter via a branch road that led from Cade's Road, north of Chester-le-Street. South Shields fort was established in the Hadrianic period[30] and the original design for Hadrian's Wall ended with the fort at Newcastle-upon-Tyne. Although the date of the establishment of Cade's Road is not known, it is likely to have been in existence in the earlier Hadrianic period, and was certainly established by the end of the Hadrianic period.[31] Similarly, the exact position of Cade's Road in the immediate vicinity of the current site is not known, although a recent excavation undertaken on the west side of Newcastle Road, a short distance to the north of the current site, revealed a Roman period metalled surface, possibly that of Cade's Road itself.[32]

[29] Hartley 1968; Evans 1991.
[30] Dore and Gillam 1979, 59.
[31] Breeze and Dobson 1987, Figure 9, p.48.
[32] M. Randerson, pers. comm.

15.5 No conclusive evidence was recorded to indicate what type or types of activity were undertaken within the plots of land defined in the earliest phases of occupation at the current site. The absence of any structural remains or other archaeological features perhaps suggest that these 'backlot' areas were utilised for agricultural or horticultural purposes, or perhaps for stock-keeping. The south-facing aspect would certainly have been favourable for cultivation.

15.6 This earliest system of land management at the site was succeeded by a slightly different layout (Phase 3), following backfilling of the northernmost east-west boundary ditch. A boundary ditch on a WNW-ESE alignment ran across the northern portion of the site, dating evidence indicating disuse in the late 2nd to early 3rd century. To the south, and adjacent to the western limit of excavation, was a substantial quarry pit, probably for extraction of clay or sand within the natural sub-stratum, but subsequently infilled as a refuse pit. A large pottery assemblage dates infilling to the mid 2nd to early 3rd century and the feature yielded heavily butchered large mammal bones, probably mainly cattle, typical of those seen at many Roman sites, particularly those of a more urban nature or with associations with military establishments. Other evidence of pitting for refuse disposal during the late 2nd to early 3rd century was recorded in the area to the south of the boundary ditch, the cultural debris recovered again indicative of the presence of a nearby settlement.

15.7 As the latest property boundary identified at the site fell into disuse the area continued to be utilised for the refuse disposal as evidenced by artefactual material of mid to late 3rd century (Phase 4) material recovered from the uppermost fills of the former quarry pit. A substantial refuse pit dating from this period was also recorded close to the eastern limit of excavation. As with the earliest phase of Roman period occupation, there was no primary evidence for actual habitation, but the cultural debris recovered again broadly points to the existence of significant settlement activity in the near vicinity. Again, this assumed to be roadside ribbon development immediately to the west, along Cade's Road, with the site itself occupying the backlot areas and utilised for a variety of purposes, as demonstrated by the excavated evidence.

15.8 As with the Phase 2 ceramic material, pottery recovered from Phase 3 and 4 features is, as a whole, consistent with Roman military consumption or consumption derived from or associated with a Roman military supply chain, as with a *vicus* or a roadside settlement on a major road in a military zone. 'Small finds' from the Phase 3 and 4 features are broadly characteristic of domestic rubbish and casual losses associated with Romano-British settlement. The glass and copper alloy assemblages suggest domestic activity, whilst the presence of a quernstone fragment indicates the processing of grain in the vicinity.

15.9 Although the fort at Chester-le-Street continued to be occupied into the 4th century, the absence of material of this date from the site indicates that settlement to the north of the fort did not continue into the late Roman period.

15.10 There was no evidence of occupation of the site from the Roman period until relatively recent times. A fragment of medieval pottery recovered during the earlier evaluation suggested that the area might have been utilised in the medieval period, probably as agricultural land.

15.11 A series of linear north-south aligned plough furrows were recorded at the site, ceramic material suggesting that the site was ploughed from at least the 17th century, and possibly earlier.

15.12 Several irregular features interpreted as possible tree boles may relate to the use of the site as an orchard, known from Ordnance Survey mapping to have been in existence in 1872 but disused by 1896.

16. SIGNIFICANCE OF THE PROJECT DATA AND PUBLICATION OUTLINE

16.1 Introduction

16.1.1 The archaeological remains recorded at the Newcastle Road site are of significance at a local and regional level. This assessment of the archaeological data-set has demonstrated that elements of the stratigraphic, artefactual and palaeoenvironmental evidence warrant further research and full publication of the results.

16.1.2 Academic justification for the conclusion above is provided by '*Section 4.0 - Roman Research Strategy*', in the aforementioned '*North East Regional Research Framework for the Historic Environment'* (NERRF). Topic 4.2 '*Roads and Communication*' specifies that there is a need to fill in the final links in our basic map of the Roman communication network in the region and gain a greater understanding of the way in which it developed:

> *'There is a need to establish an understanding of the chronology and structure of the roads that comprise the Roman road system in the North East.…Particular focus needs to be placed on….exploring Cade's Road and the installations along it.'*

16.1.3 Topic 4.3.3 '*Forts south of the Wall*' states:

> *'Amongst the basic research priorities on the southern forts is the need to expand our knowledge of the plan of their interiors and their related vici.'*

16.1.4 Topic 4.4.2, in discussing *vici* and other proto-urban sites, states:

> *'There is a need to better understanding of the chronology of the vici, particularly the date at which they fall out of use.'*

16.1.5 A stated aim of the excavation at Newcastle Road was to consider the NERFF research aim concerning relationship between Roman forts in the North East and their Iron Age predecessors.

> *'The relationship between Roman forts in the North East and their Iron Age predecessors is still poorly understood. An improved understanding of this relationship has the potential to improve understanding of the function of forts and the patterns of integration between native communities in the early stages of Roman rule in the region. It is important to explore the relationship between both forts and the settlements that directly preceded them, and also earlier settlements in the wider landscape'.*

16.1.6 To this end, no evidence for any Iron Age activity was encountered at the site and the earliest evidence for activity dates from the Hadrianic period and has been interpreted as relating to the establishment of a Roman roadside settlement along Cade's Road. It is therefore considered that any dating methods such as Thermoluminescence or AMS dating are unnecessary as the Roman ceramic assemblage is of sufficient quality to provide reliable dates, unlike assemblages of native pottery.

16.1.7 In summary, it is considered that dissemination of the archaeological evidence from the site through publication would contribute information to current understanding of the chronology of Roman occupation at Chester-le-Street and roadside settlement along Cade's Road. The importance of the site data underlines the need for further analysis ultimately leading to production of a publication in a refereed academic journal, such as the *Durham Archaeological Journal*. The justification for this recommendation has been demonstrated by examining existing academic research frameworks.

16.2 Summary of the Potential for Further Work

16.2.1 Roman Pottery (Excluding Samian Wares)

16.2.1.1 The pottery from Phase 3 pit [137] warrants additional quantification using Eves (Estimated Vessel Equivalents) using rim percentage. The value of this material is further enhanced by the fact that so few groups have been published from Chester-le-Street given that much of the previously published material appears to be unstratified. This group has the potential to provide some useful data regarding pottery supply and use.

16.2.1.2 The pottery assemblage recovered from the preceding evaluation phase of work at the site should be fully integrated with the material recovered from the excavation.

16.2.1.3 Specialist identification should be undertaken to confirm the identification of and the reading of the stamped mortarium in Phase 2 context [144].

16.2.1.4 Specialist analysis should be undertaken on the graffiti on the amphora sherds in Phase 3 context [123].

16.2.1.5 The final publication report will comprise an introduction outlining the methodology used and the condition of the assemblage. This will be backed up by a small number of illustrations and a synthesis of pottery supply and use.

16.2.2 Samian Wares

16.2.2.1 A description and discussion detailing the samian assemblage, including the integration of the material recovered from the evaluation phase of work, should be included in the final publication report.

16.2.2.2 The stamp on the sherd recovered from Phase 3 context [123] should be identified.

16.2.2.3 The stamp, the decorated sherd with the cherub medallion from Phase 2 context [144] and the decorated sherd from Phase 3 context [167] should all be drawn for inclusion in the final publication report.

16.2.3 Small Finds

16.2.3.1 Specialist analysis should be undertaken on the quernstone fragment to determine the provenance of the stone. If it is not possible to identify the material through visual analysis, then thin sectioning should be undertaken.

16.2.3.2 Glass vessel fragments SF 1 and SF 16 require further analysis to establish forms and more secure dating. Both of these vessels should be illustrated for inclusion in the final publication report.

16.2.3.3 A description of the small finds assemblage should be included in the final publication report.

16.2.4 Tile, Fired Clay, Daub and Slag

16.2.4.1 No further work is recommended on any of this material, but a brief summary should be included in the final publication report.

16.2.5 Post-medieval Finds

16.2.5.1 No further work is recommended on the post-medieval ceramic and glass assemblages.

16.2.5.2 The complete clay tobacco pipe bowl (from context [120]) with long pedestal spur is of some interest as it is an unusual form for the North East. A record, including drawing and/or photograph, should be made of this object for inclusion in the final publication report.

16.2.6 Biological Remains

16.2.6.1 The poor preservation and paucity of the ancient plant remains precludes any further interpretation, and suggests that the deposits of this site have little potential for the recovery of useful assemblages. No further work is recommended on the bulk soil samples.

16.2.6.2 A description of the faunal remains, including analysis of the Roman material by phase, should be included in the final publication report.

16.3 Publication Outline

16.6.1 It is considered that the archaeological data-set merits publication in the form of a detailed synthesised report published in a suitable regional archaeological journal, such as the *Durham Archaeological Journal.*

16.6.2 A full assessment of the data-set has been undertaken and a summary of the potential of each element for further research/analysis is set out in the preceding section. However, any publication of the site should, as a minimum, contain the following:

ABSTRACT: This introductory paragraph will summarise the site publication including its location, period, finds and significance.
INTRODUCTION: The introduction will describe the setting of the site, detail the background to the investigations and outline the methodology employed.
GEOLOGICAL AND TOPOGRAPHICAL BACKGROUND: This section will detail the geology and topography of the site.
ARCHAEOLOGICAL BACKGROUND: This section will set the results in context, with a particular focus on Hadrianic and Antonine Roman military occupation in the north.
THE ARCHAEOLOGICAL AND ARTEFACTUAL EVIDENCE: This will detail the results of the investigations and will include a synthesised description of the evidence from the evaluation and excavation.
DISCUSSION OF THE EVIDENCE: This will propose an interpretation of the archaeological remains based on the excavated features and the artefactual evidence.
ILLUSTRATIONS: These will include: site location plan; location plan of the excavated area; plans and section drawings along with interpretative plans.

PART C: REFERENCES AND ACKNOWLEDGEMENTS

17. ACKNOWLEDGEMENTS AND CREDITS

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PCA Credits

Fieldwork: Aaron Goode (Site Supervisor), Rebecca Doney, Clare Henderson, Kathryn Johnson, Paul Owens, Robin Taylor-Wilson (machine supervision)

Report: Aaron Goode and Jenny Proctor

Project Management: Robin Taylor-Wilson

Post-Excavation Management: Jenny Proctor

CAD: Adrian Bailey

Other Credits

Biological Remains: John Carrott, Alexandra Schmidl, Deborah Jaques and Stewart Gardner

Post-medieval Finds: Jenny Vaughan

Roman Pottery (Excluding Samian Wares), Tile, Fired Clay and Daub: Scott Martin

Samian Wares: Steve Willis

Slag: Rod Mackenzie

Small Finds: Philippa Walton

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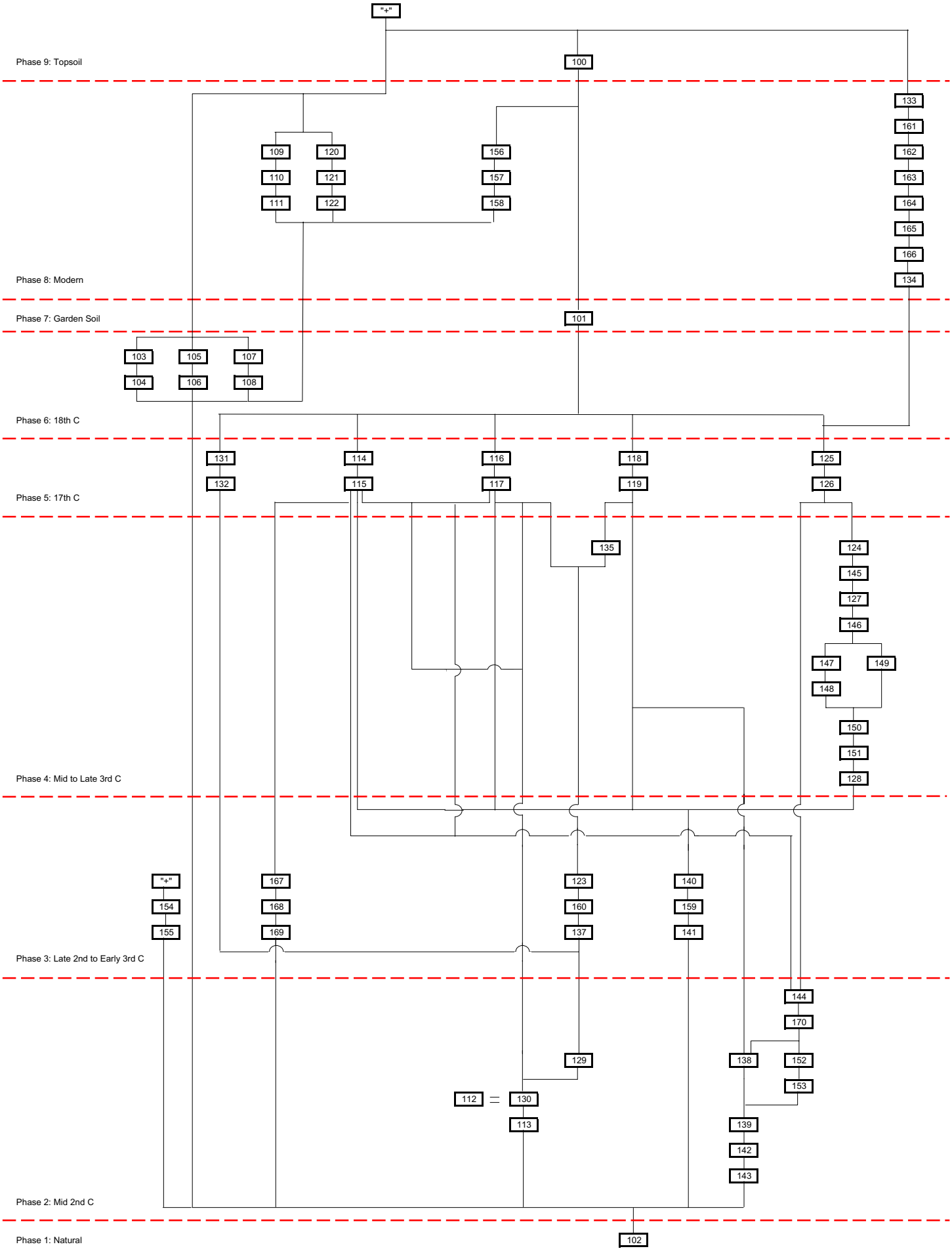
APPENDIX 1

STRATIGRAPHIC MATRIX


"+"
Phase 9: Topsoil
100
133
161
109
120
156
162
110
121
157
163
111
122
158
164
165
166
Phase 8: Modern
134
Phase 7: Garden Soil
101
103
105
107
104
106
108
Phase 6: 18th C
131
114
116
118
125
132
115
117
119
126
Phase 5: 17th C
135
124
145
127
146
147
149
148
150
151
Phase 4: Mid to Late 3rd C
128
"+"
167
123
140
154
168
160
159
155
169
137
141
Phase 3: Late 2nd to Early 3rd C
144
170
129
138
152
153
112
=
130
113
139
142
143
Phase 2: Mid 2nd C
Phase 1: Natural
102

APPENDIX 2

CONTEXT INDEX

CLS 06 Context Index

Context	Phase	Type	Type	Description	Interpretation
100	8	Deposit	Layer	Friable; dark brownish grey; sandy silty clay; occasional small sub-angular coal fragments and flecks; very occasional small rounded and sub-rounded stones, clay pipe, post-med pottery and small to medium sized fragments of CBM; extends across the whole of the trench, up to 0.32m thick	Topsoil
101	6	Deposit	Layer	Friable; mid greyish brown; clay silt; very occasional small rounded stones, fragments of sub-angular limestone, small pieces and flecks of coal and small fragments of CBM; extends across the whole of the trench, up to 0.38m thick	Subsoil
102	1	Deposit	Layer	Firm; mid brownish pink; clay with large patches of a friable, light brownish yellow sand; very occasional small rounded stones; occasional small patches of degraded coal; extends across the whole of the trench	Natural
103	7	Deposit	Fill	Soft; mid brownish grey; clay silt; very occasional pieces of degraded coal, small pieces of CBM and small rounded stones; measures 3.14m N-S x 1.14m E-W x 0.16m thick	Fill of 104
104	7	Cut	Linear	Linear; sharp top break of slope; moderately shallow to moderately steep concave sides side; imperceptible break of slope at base; shallow concave base; measures 3.14m N-S x 1.14m E-W x up to 0.16m deep	Garden feature
105	5	Deposit	Fill	Firm; mid greyish brown; silty clay; moderate medium sized patches of degraded coal; occasional small sub-rounded stones; very occasional flecks of orange sand; measures 1.12m N-S x 1.05m E-W x 0.50mm thick	Fill of 106
106	5	Cut	Pit	Irregular; gradual top break of slope; moderately shallow concave sides; imperceptible break of slope at base; uneven base; measures 1.12m N-S x 1.05m E-W x 0.50mm deep	Tree bole
107	5	Deposit	Fill	Firm; mid greyish brown; silty clay; occasional small sub-angular stones; measures 2.90m N-S x 1.47m E-W x up to 0.70mm thick	Fill of 108
108	5	Cut	Pit	Irregular; gradual top break of slope; moderately shallow concave sides; imperceptible break of slope at base; concave base; measures 2.90m N-S x 1.47m E-W x up to 0.70mm deep	Tree bole
109	7	Deposit	Fill	Soft; dark greyish brown; sandy silt; occasional small sub-angular and sub-rounded stones; measures 3.54m N-S x 0.72m N-S x 0.90mm thick	Fill of 111
110	7	Deposit	Fill	Firm; mid greyish brown; sandy clayey silt; occasional small sub-angular stones and patches of redeposited natural; measures 4.38m N-S x 0.88m N-S x 0.43m thick	Fill of 111
111	7	Cut	Linear	Linear; sharp top break of slope; moderate steep sloping sides; sharp break of slope at base; concave base; measures 4.38m N-S x 0.88m E-W x 0.50m deep	Garden feature
112	3	Deposit	Fill	Firm; mid brownish grey; silty clay; frequent small pieces and flecks of coal; occasional small sub-angular stones; measures >10.80m E-W x a minimum 0.44m to a maximum 1.78m N-S x 0.20m thick; same as 130	Fill of 113
113	3	Cut	Linear	Linear; sharp top break of slope; moderate steep concave sides; gradual break of slope at base; concave base; measures > 12.50m E-W x a minimum 0.44m to a maximum 1.76m x 0.36m deep	Boundary ditch
114	5	Deposit	Fill	Firm; mid greyish brown; clayey silt; very occasional small sub-rounded stones; measures >18.50m N-S x 0.75m E-W x 0.16m thick	Fill of 115
115	5	Cut	Linear	Linear; gradual top break of slope; moderately shallow concave sides; gradual to sharp break of slope at base; uneven base; measures >18.50m N-S x 0.75m E-W x 0.16m deep	Plough furrow
116	5	Deposit	Fill	Compact; mid greyish brown; sandy silt; occasional small sub-rounded stones; very occasional medium sized sub-round stones; measures >30m N-S x a minimum 0.60m to a maximum 1.75m E-W x 0.40m thick	Fill of 117
117	5	Cut	Linear	Linear; very shallow top break of slope; moderately shallow irregular sides; imperceptible break of slope at base; irregular base; measures >30m N-S x a minimum 0.60m to a maximum 1.75m E-W x 0.40m deep	Plough furrow
118	5	Deposit	Fill	Firm; mid greyish brown; clayey silt; occasional small flecks of coal and small sub-rounded stones; measures >28.50m N-S x a minimum 0.60m to a maximum 1.75m E-W x 50mm thick	Fill of 119
119	5	Cut	Linear	Linear; gradual top break of slope; very shallow concave sides; imperceptible break of slope at base; shallow concave base; measures >28.50m N-S x a minimum 0.60m to a maximum 1.75m E-W x 50mm deep	Plough furrow
120	7	Deposit	Fill	Soft; dark grey; sandy silt; occasional small sub-angular stones; measures 3.54m N-S x a minimum 0.20m to a maximum 1.04m E-W x 0.29m thick	Fill of 122
121	7	Deposit	Fill	Soft; mid brownish grey; mixed sandy clay and clayey silt; occasional small sub-angular stones; measures 3.54m N-S x a minimum 0.20m to a maximum 1.04m x 0.24m deep	Fill of 122
122	7	Cut	Linear	Curvi-linear; sharp top break of slope; moderately steeply sloping sides; sharp break of slope at base; uneven base; measures 3.54m N-S x a minimum 0.20m to a maximum 1.04m x 0.47m thick	Garden feature
123	4	Deposit	Fill	Firm; mid grey; silty clay; frequent small to medium sized rounded and sub-rounded stones; very occasional charcoal flecks and small pieces of degraded coal; measures 5.13m N-S x >4.72m E-W x 0.55m thick	Fill of 137
124	4	Deposit	Fill	Firm; mid brownish grey; sandy clayey silt; moderate small sub-angular stones, flecks and small pieces of coal and charcoal; measures 1.25m N-S x 1.70m E-W x 0.24m thick	Fill of 128
125	5	Deposit	Fill	Firm; mid greyish brown; clayey silt; no inclusions; >14.10m N-S x 1.30m E-W x thickness not established	Fill of 126
126	5	Cut	Linear	Linear; profile was not established; measures >16m N-S x 1.30m E-W x depth was not established	Plough furrow
127	4	Deposit	Fill	Firm; mid to dark brownish grey; clayey silt; occasional small sub-angular stones; moderate to frequent fragments and flecks of charcoal and coal; measures 1.66m N-S x 2.18m E-W x 0.11m thick	Fill of 128
128	4	Cut	Pit	Sub-circular; sharp top break of slope; slightly stepped sides varying from vertical to moderately sloping that are undercut in places; sharp break of slope at base; concave base; measures 2.12m N-S x 2.18m E-W x 1.08m deep	Refuse pit
129	3	Deposit	Fill	Firm; mid brownish grey; silty clay; occasional small flecks and pieces of coal; very occasional small flecks of charcoal and small rounded stones; measures >4.94m E-W x 0.97m N-S	Fill of 113
130	3	Deposit	Fill	Firm; light grey; clay; very occasional small flecks of coal, small flecks of charcoal and small rounded and sub-rounded stones; measures >4.90m E-W x 0.76m N-S thick, same as 112	Fill of 113

CLS 06 Context Index

Context	Phase	Type	Type	Description	Interpretation
131	5	Deposit	Fill	Firm; mid greyish brown; clayey silt; no inclusions; measures >5.20m N-S x >1m E-W x thickness was not established	Fill of 132
132	5	Cut	Linear	Linear; profile was not established; measures >5.20m N-S x >1m E-W x depth was not established	Plough furrow
133	7	Deposit	Fill	Soft; dark grey; silt; occasional small rounded stones; measures 2.20m N-S x 2.02m E-W x 0.47m thick	Fill of 134
134	7	Cut	Pit	Sub-circular; sharp top break of slope; sides vary from near vertical to slightly undercut; gradual break of slope at base; uneven base; measures 2.20m N-S x 2.02m E-W x 1.22m deep	Refuse pit
135	4	Deposit	Fill	Firm; mid brownish grey; silty clay; very occasional small to medium sub-rounded to sub-angular stones, charcoal flecks and small pieces of degraded coal; measures >5.39 N-S x >4.24m E-W x 0.55m thick	Fill of 137
136					Void
137	4	Cut	Pit	Irregular; sharp top break of slope; moderately shallow concave sides that are stepped in several places; mid breaks of slope are gradual; break of slope at base and base itself was not established; measures 10.80m N-S x >6.16m E-W x 1.24m deep	Quarry pit
138	3	Deposit	Fill	Firm; mid grey; silty clay; occasional small flecks and pieces of charcoal; very occasional small pieces of coal and small rounded stones; measures >15.04m E-W x a minimum 0.75m to a maximum 0.83m N-S x 0.34m thick	Fill of 139
139	3	Cut	Linear	Linear; sharp top break of slope; steep to moderately steep sloping concave sides; sharp to gradual break of slope at base; measures >18.60m E-W x a minimum 0.75m to a 0.83m N-S x 0.65m deep	Boundary ditch
140	3	Deposit	Fill	Compact; mid greyish brown; silty clay; occasional medium sub-angular stones, large sub-angular and sub-rounded stones; measures >15.36m E-W x 0.60m N-S x 0.46m thic	Fill of 141
141	3	Cut	Linear	Linear; sharp top break of slope; steep sloping sides varying from straight to concave; gradual break of slope at base; blunt tapered base; measures >18.20m WNW-ESE x 0.70m N-S x 0.46m deep	Boundary ditch
142	2	Deposit	Fill	Firm; mid brownish grey; silty clay; very occasional small rounded stones and small flecks of charcoal; measures 2.60m N-S x 0.30m E-W x 80mm	Fill of 143
143	2	Cut	Linear	Linear; sharp top break of slope; moderately shallow concave sides; gradual to imperceptible break of slope at base; shallow concave base; measures 2.60m N-S x 0.30m E-W x 80mm deep	Gully
144	3	Deposit	Fill	Firm; dark grey; silty clay; very occasional small patches of a firm mid brownish yellow silty clay, small to medium sub-rounded stones, small flecks and pieces of charcoal and small pieces of coal; occasional small flecks and pieces of CBM; measures >11.90m E-W x 0.74m N-S x 0.44m thick	Fill of 170
145	4	Deposit	Fill	Firm; mid brownish grey; sandy clayey silt; occasional small sub-angular stones, small flecks and fragments of coal and charcoal; measure 1.44m N-S x 1.85m E-W x 80mm thick	Fill of 137
146	4	Deposit	Fill	Firm; mid brownish grey; sandy clay; occasional small sub angular stones and small flecks of charcoal and coal; measures 1.98m N-S x 2.18m E-W x 0.34m thick	Fill of 137
147	4	Deposit	Fill	Firm; mid to dark greyish brown; sandy clay; very occasional small sub-angular stones and flecks of coal and charcoal; measures 0.60m N-S x 1.68m E-W x 40mm thick	Fill of 137
148	4	Deposit	Fill	Firm; mid greyish brown to mid orange brown; sandy clay; occasional flecks of coal and charcoal; measures 0.57m N-S x 1.68m E-W x 0.45m thick	Fill of 137
149	4	Deposit	Fill	Firm; mid greyish orange; silty clay; very occasional flecks of charcoal and coal; measures 0.82m N-S x 1.10m E-W x 0.20m thick	Fill of 137
150	4	Deposit	Fill	Firm; mid yellowish grey to dark grey; sandy clay; very frequent fragments of coal and charcoal; occasional small sub-angular, medium rounded and sub-rounded stones; measures 1.37m N-S x 1.10m E-W x 0.22m thick	Fill of 137
151	4	Deposit	Fill	Firm; mid grey to mid yellowish grey to mid orange brown; clay; occasional flecks of coal, medium sub-rounded stones and patches of grey sand; measures 2m N-S x 2.18m E-W x 0.26m thick	Fill of 137
152	3	Deposit	Fill	Firm; mid greyish brown; silty clay; very occasional flecks of coal and small sub-rounded stones; measures 0.57m N-S x >5.14m E-W x 0.21m thick	Fill of 139
153	3	Deposit	Fill	Soft; mid greyish brown; sandy silty clay; very occasional small flecks of charcoal, flecks of CBM and small sub-round stones; measures 0.43m N-S x >4.54m E-W x 0.22m thick	Fill of 139
154	4	Deposit	Fill	Firm; mid brownish grey; clay; very occasional small sub-rounded stones and flecks of degraded coal; measures 0.48m N-S x 0.66m E-W x 0.25m thick	Fill of 155
155	4	Cut	Pit	Oval; sharp top break of slope; moderately steep sloping concave sides; imperceptible break of slope at base; concave base; measures 0.48m N-S x 0.66m E-W x 0.25m deep	Refuse pit
156	7	Deposit	Fill	Loose; dark greyish brown; sandy silt; very occasional small sub-rounded stones; measures 2.16m N-S x 0.90m E-W x 0.80m thick	Fill of 158
157	7	Deposit	Fill	Compact; mid greyish brown; silty clay; very occasional small, medium and large sub-rounded stone; measures 2.16m N-S x0.90m E-W x 0.50m thick	Fill of 158
158	7	Cut	?Pit	Curvi-linear; sharp top break of slope; very steep straight sides; sharp break of slope at base; concave base; measures 2.16m N-S x 0.90m E-W x 1.30m deep	Garden feature
159	3	Deposit	Fill	Firm; mid orange brown to mid greyish brown; sandy clay and clay sand; occasional small sub-rounded stones; measures >2.34m E-W x 0.74m N-S x 0.29m thick	Fill of 141
160	4	Deposit	Fill	Firm; mid grey; clay; very occasional small pieces of degraded coal and small to medium rounded stones; measures >5.42m N-S x > 1.50m E-W x >0.93m thick	Fill of 137
161	7	Deposit	Fill	Compact; dark orange brown; iron; measures 1.32m N-S x 2.02m E-W x 60mm thick	Fill of 134
162	7	Deposit	Fill	Firm; mid yellow greyish brown; sandy clayey silt; very occasional small sub-rounded stones; occasional patches of redeposited natural; measures 0.80m N-S x 1.30m E-W x 0.18m thick	Fill of 134
163	7	Deposit	Fill	Soft; dark greyish brown; sandy silt; occasional small sub-rounded stones; very occasional small fragments of degraded iron; measures 1.44m N-S x >2.02m E-W x 0.22m thick	Fill of 134

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Context	Phase	Type	Type	Description	Interpretation
164	7	Deposit	Fill	Soft; mid orange and mid greyish brown; sand and sandy silty clay; occasional small sub-rounded stones; measures 1.67m N-S x >2.02m E-W x 0.29m thick	Fill of 134
165	7	Deposit	Fill	Firm; mid greyish brown; sandy clayey silt; occasional small sub-rounded and sub-angular stones and small flecks of redeposited natural; measures 1.13m N-S x >2.02m E-W x 0.43m thick	Fill of 134
166	7	Deposit	Fill	Soft; mid yellowish brown; sandy silt; occasional small sub-rounded stones; measures 0.84m N-S x >2.02m E-W x 0.20m thick	Fill of 134
167	4	Deposit	Fill	Compact; mid greyish brown; silty clay; very occasional small to medium sub-rounded stones; frequent fired clay material (?daub) (10%); measures 0.82m N-S x 1.45m E-W x 0.13m thick	Fill of 169
168	4	Deposit	Fill	Compact; brownish yellow; silty clay; very occasional small sub-rounded stones; occasional small pieces of degraded fired clay material (?daub); measures 1.14m N-S x 1.77m E-W x 0.107m thick	Fill of 169
169	4	Cut	Pit	Oval; gradual top break of slope; shallow sloping concave sides; imperceptible break of slope at base; concave base; measures 1.14m N-S x 1.77m E-W x 0.48m deep	Refuse pit
170	2	Cut	Linear	Linear with rounded terminus in west; sharp top break of slope; steeply sloping sides; gradual break of slope at base; concave base; generally U-shaped profile; >11.90m E-W x 0.74m N-S x 0.44m deep	Boundary ditch re-cut

APPENDIX 3

PLATES

Plate 1. Phase 2, west facing section, ditch [113], looking east *(0.5m scale)*.

Plate 2. Phase 2, east facing section, ditch [139] and re-cut [170], looking west *(1m scale)*.

Plate 3. Phase 2, east facing section, ditch [139] and re-cut [170], looking east *(1m scale)*.

Plate 4. Phase 3, east facing section, ditch [141], looking west *(1m scale)*.

Plate 5. Phase 3, south facing section, pit [169], looking north *(1m scale)*.

Plate 6. Phase 3, east facing section, pit [137], looking north-west *(1m+2m scale)*.

Plate 7. Phase 4, west facing section, pit [128], looking east *(1m scale)*.

Plate 8. Phase 4, fully excavated pit [128], looking east *(1m scale)*.