LAND AT SHORTLANDS LANE CULLOMPTON DEVON

Results of a Desk-Based Assessment and Archaeological Excavation

The Old Dairy
Hacche Lane Business Park
Pathfields Business Park
South Molton
Devon
EX36 3LH

Tel: 01769 573555
Email: mail@swarch.net

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Authors: B. Morris

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For

Millwood Homes

By

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Project Director: Colin Humphreys
Desk-Based Assessment: Terry Green, Bryn Morris
Fieldwork Managers: Bryn Morris
Project Officer: Bryn Morris
Fieldwork Supervisor: Bryn Morris
Fieldwork: Matt Blewitt; Jeremy Bell; Lee Bray; Ross Dean; Jon Freeman; Peggy Gilji; Genevieve Hill; John Hutchings; Haley McPhearson; Bryn Morris; Matt Palmer; Steve Ottery; Amy Radford; Will Smith; Sophie Thorogood; Martin Tingle; Tom Williams; Imogen Wood
Open Day Co-ordinators: Colin Humphreys; Penny Cunningham
Post-Excavation Co-ordinator: Bryn Morris
Report: Bryn Morris
Report Editing: Natalie Boyd
Research: Bryn Morris
Graphics: Lee Bray; Bryn Morris; Lucy Blampied
Finds Processing: Martin Baker; Lucy Blampied
Specialist Finds Reports:
Worked Flint, Chert & Stone – Dr Martin Tingle
Prehistoric Pottery – Henrietta Quinnell with Dr Roger Taylor
Roman Pottery – Tyne & Wear Museums Service
Roman Ceramic Petrography – Dr Imogen Wood
Roman Coins – identifications by Dr Sam Moorhead
Roman Glass – Dr Birgitta Hoffmann
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Miscellaneous Finds – Bryn Morris
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Summary

An archaeological evaluation and excavation was carried out on land off Shortlands Lane, south of the New Cut, in the town of Cullompton, Devon. This work was carried out on behalf of Millwood Homes, in advance of the construction of two detached dwellings and a block of flats.

This excavation revealed a later 1st century military cremation burial and a Romano-British civilian settlement occupied from the mid 2nd century through to the early 4th century AD. A small amount of earlier material was also encountered, along with a large middle Iron Age ditch. Surprisingly few medieval features or artefacts were uncovered, and most of the later features related to water management.

The Roman cremation burial is the first undisturbed burial of its kind to be excavated in Devon in recent times, and the only one to produce human bone. The location and character of the burial indicates it belonged to a ranked soldier, almost certainly belonging to the garrison on St Andrews Hill.

The civilian settlement was established in the mid 2nd century AD and was occupied into the 4th century. The difference between the pottery dating and the radiocarbon dating raises interesting questions about the taphonomic processes that might have been operating on the site, with implications for similar settlements. The later phases at Shortlands Lane appear to have belonged to a class of multi-vallate sub-rectangular sites usually identified via cropmarks, and essentially the only known class of rural Romano-British settlement. It is likely, however, that these enclosures – usually covering an area of 0.1-0.2ha internally – are the homesteads of the Dumnonian elite; the homes of the rural majority have rarely, if ever, been successfully identified. The finds from the site suggest it was occupied by a literate family of modest means, who may well have had an interest in the iron smelting taking place in the combes to the west. The final phase of the Roman site is poorly understood, and it may well have been slighted.

Later occupation on the site was limited. There were no medieval features, and medieval finds were correspondingly rare. However, some of the Roman features were radiocarbon dated to the medieval period. In the post-medieval period a large pond bay was created, relating to the various leats that crossed the site. It formed part of the garden of the Workhouse in Cullompton, built in 1738 and sold to William Upcott of Shortlands House in 1841. There was little evidence of the Bilbie bell foundry, and anecdotal evidence suggests it might be located within the grounds of the cottages to the north.

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1.0 Introduction

Location: Land off Shortlands Lane
Parish: Cullompton
District: Mid Devon
County: Devon

1.1 Background

This report presents the results of a desk-based assessment and archaeological excavation carried out by South West Archaeology Ltd. at land off Shortlands Lane, Cullompton, Devon (see Figure 1, Figure 2) in September-December 2009, March 2010, January 2011 and March 2011. The work was commissioned by Mike and Erika Smith of Millwood Homes (the Client), in order to identify, investigate and record any archaeological remains that would be affected by a small housing development (11 flats and two detached dwellings). This work was initially undertaken as an evaluation, but when the quantity and importance of the archaeological remains became clear, a comprehensive area excavation was undertaken.

1.2 Topographical and Geological Background

The site is located within the town of Cullompton, which is itself located on a slight but pronounced terrace at the confluence of the River Culm and a lesser stream draining the higher ground to the west, at *c*.65m AOD. Immediately to the north stands St Andrews Hill, a tall discrete hill which rises to a height of 95m AOD.

The site is located within a town but the baseline soils of this area are the well-drained coarse reddish loamy soils of the Bromsgrove Association (SSEW 1983), overlying the sandstones of the Exeter Group (BGS 2013). However, the town almost certainly stands on a river terrace of the Culm, as the underlying natural was observed to comprise light yellowish-brown sands and coarse gravel.

1.3 Historical Background

The town of Cullompton was an important royal manor, mentioned in the Will of King Alfred in *c*.880. In 1086 it formed part of the large royal manor of Silverton, later forming part of the estates of the Earls of Devon, and thence to the Abbot of Buckland Abbey. The manor has a complex post-Dissolution descent. The Church formed part of a different manor, and appears to have been a collegiate minster church in the pre-Norman period. The land on which the site is located is flanked to the north by the New Cut, an alleyway linking Fore Street with Shortlands Lane. In 1356 the Abbot of Buckland granted the town a water supply, and one of the leats carrying water ran along the New Cut. From 1746 until 1855 a bell foundry operated from this part of the town, probably within the grounds of the town Workhouse immediately to the east of the site. Until 1841 the site itself belonged to the Workhouse, when it was sold to the Upcotts of Shortlands House together with the Workhouse, garden adjoining and the cottage to the west.

1.4 Archaeological Background

Cullompton is a medieval and modern town, and was the centre of an important pre-Norman royal manor. However, a series of archaeological investigations have taken place in the town

and most have failed to recover any material earlier than the post-medieval period. Only the test-pit evaluation carried out by SWARCH in 2012 at the Walronds recovered a few sherds of Romano-British pottery (SWARCH report 120117). It appears the post-medieval and Victorian townscape has comprehensively erased all traces of earlier occupation. Immediately adjacent to the town, on the summit of St Andrews Hill, a series of Roman forts have been identified (Simpson & Griffith 1993), and these presumably commanded a ford on the River Culm at an intersection of routeways. In the wider area, Neolithic features have been identified to the west of the town at Tiverton Road (SWARCH *forthcoming*) and Knowle Lane (AC Archaeology *forthcoming*), and early Roman rural farmsteads have been excavated at Knowle Lane and Willand Road (Hood 2010). Metal detector finds north of the town, around St Georges Well, suggest Roman occupation in this area as well.

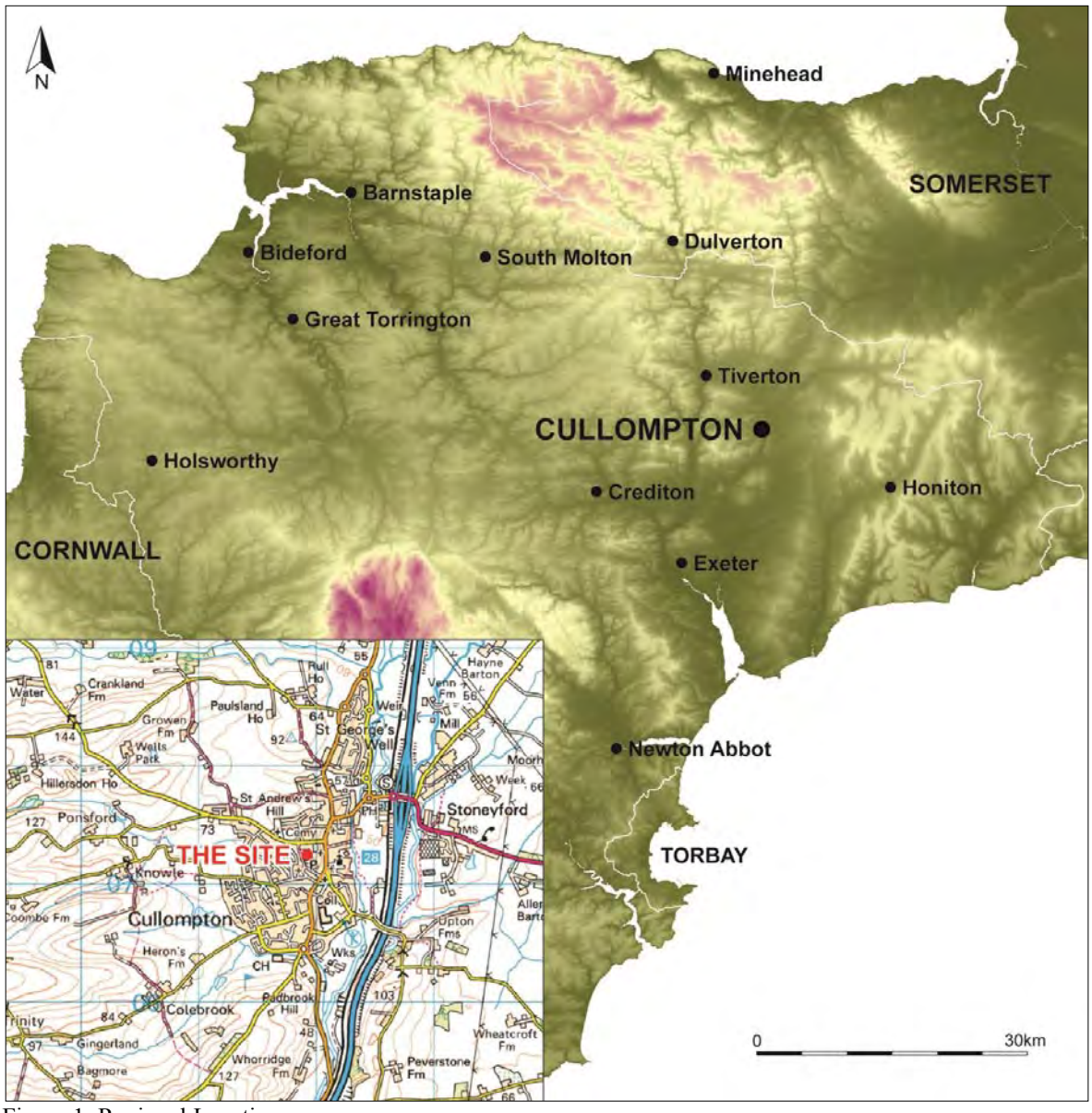


Figure 1: Regional Location.

1.5 Methodology

The desk-based assessment and archaeological investigation were carried out in accordance with a Written Scheme of Investigation (WSI) drawn up in consultation with DCHET (see Appendices 1 and 2).

The desk-based assessment was based on the material held at the Devon Heritage Centre and the Westcountry Studies Library, as well as an examination of records held by DCHET.

The initial evaluation took the form of three trenches: a trench orientated with the long axis of the site, and two shorter trenches orientated at right angles. Once the quantity and importance of the exposed features became clear, the topsoil from the rest of the site was removed and all the archaeological features excavated and recorded. Most of the spoil was removed from the site, but due to problems with access a substantial proportion of the spoil had to be retained and shifted around the site. The Romano-British features were fully or partially excavated, and a comprehensive soil sampling strategy employed. This work was undertaken with reference to the WSI and the appropriate IfA and English Heritage guidelines.

For all excavated areas a photographic record, a drawn record at appropriate scales (1:10 to 1:50) and a written record of standard single context sheets was compiled.

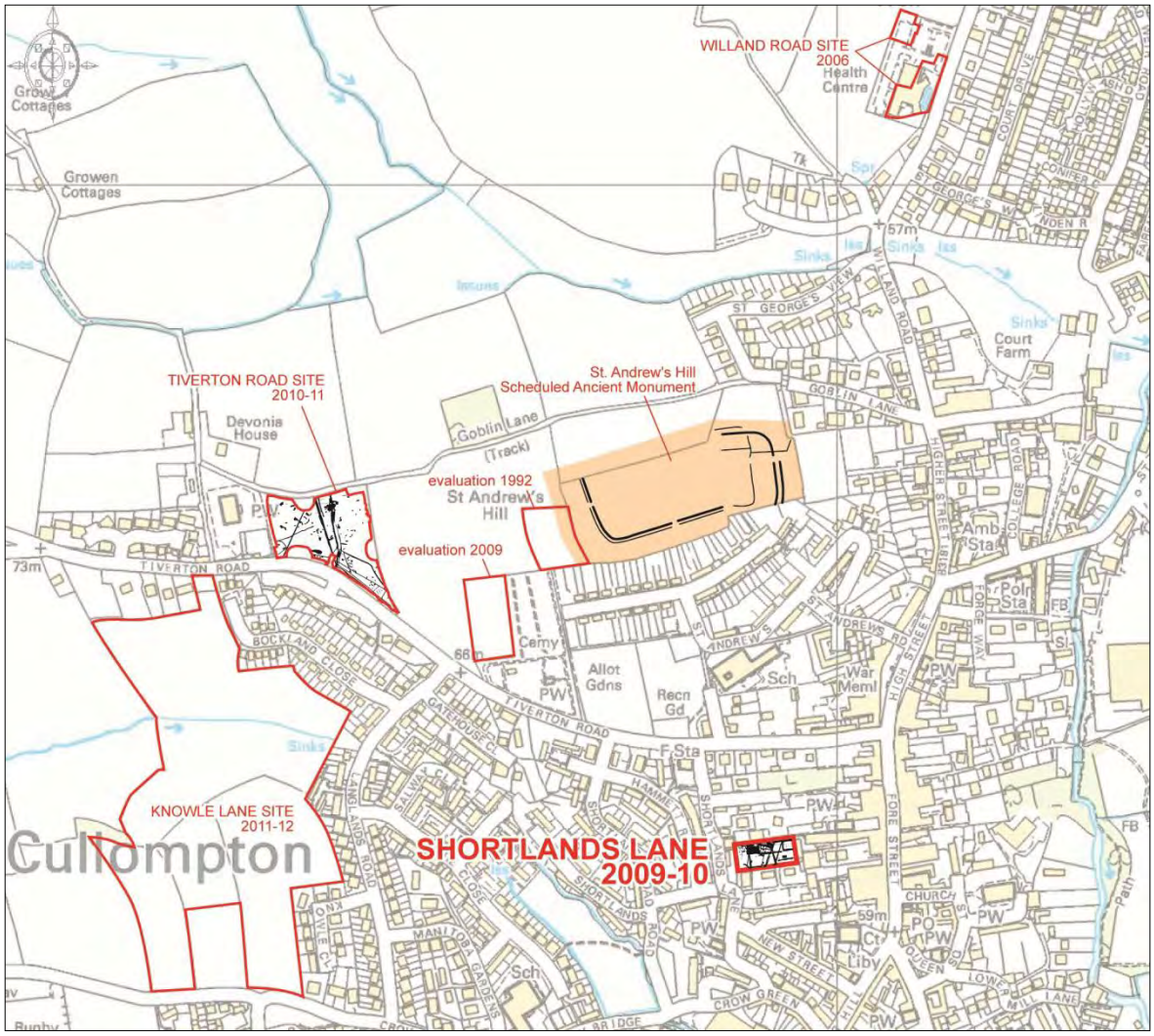


Figure 2: Location map, showing relevant archaeological investigations in the immediate area.

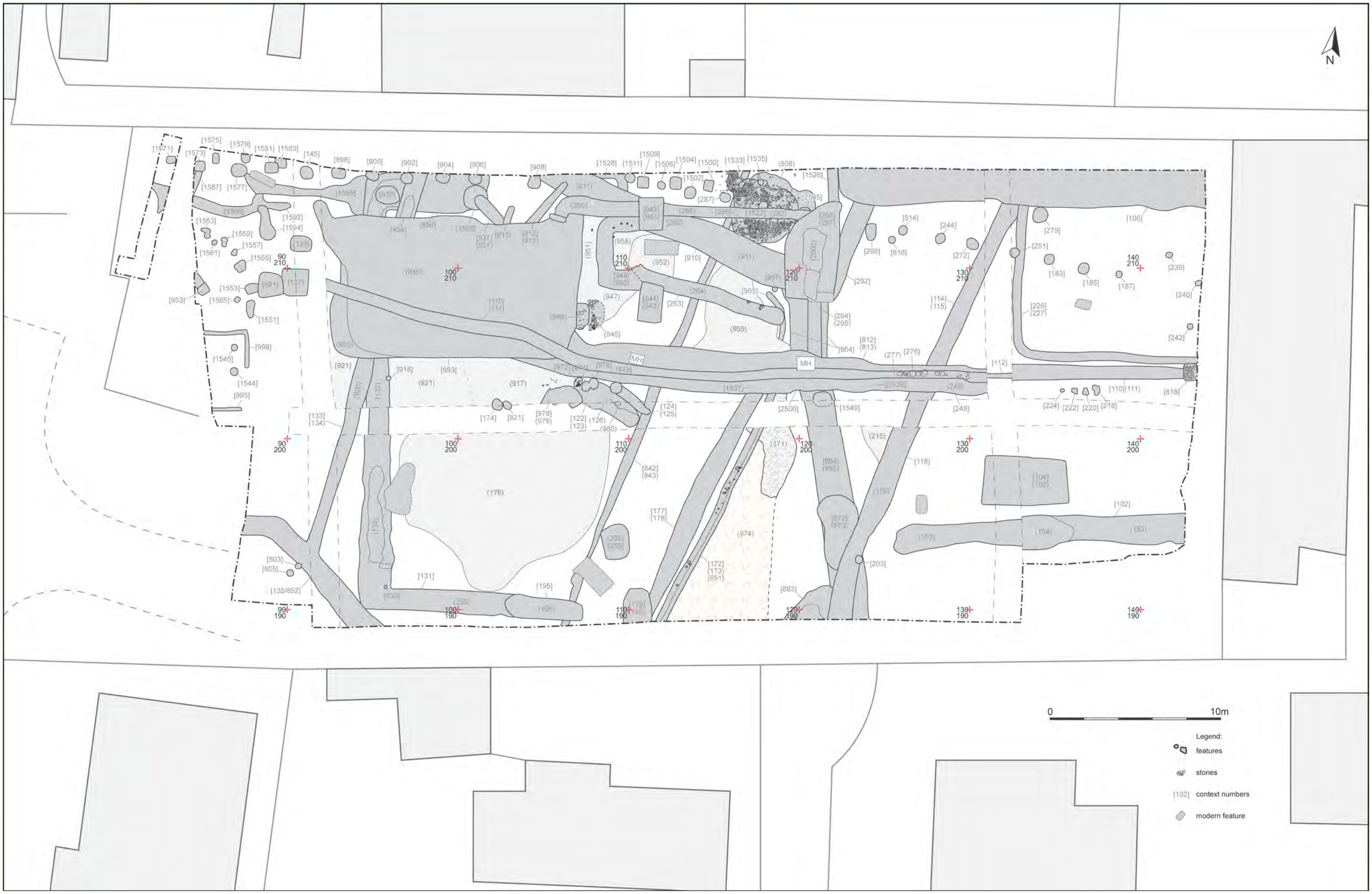


Figure 3: Plan of all excavated features.

2.0 Results of the Desk-Based Assessment

2.1 Introduction

Historically within Hayridge Hundred, now within Mid Devon District, Cullompton is an ancient market town consisting principally of a single main street – Fore Street to the south and High Street to the north – and was at one time one of the most important woollen manufacturing towns in Devon. The town lies on the western side of the River Culm in a gentle pastoral landscape with Exeter some 19km to the south. The Culm valley represents a natural corridor through which run the Roman Fosse Way, the main rail link to London and the M5 motorway. Good communications ensure that the town remains busy, and many residents now commute to Exeter.

Owing to a number of disastrous fires, there are few old buildings in the town, most having been replaced by undistinguished 19th century structures. Nevertheless some outstanding post-medieval buildings remain – notably the Walronds and the Manor House. The 15th/16th century church, standing apart from the main street, is reckoned one of the finest in Devon.

2.2 Archaeological and Historical Background

2.2.1 Prehistoric and Roman Period

The town and its immediate hinterland have been subject to a number of archaeological investigations in recent years, and this has added substantially to our understanding of the development of this landscape. Excavation in advance of the construction of the Willand Road Medical Centre uncovered a single pit containing Neolithic pottery (Hood 2010), and a similar feature at Knowle Lane contained Neolithic Peterborough Ware (AC Archaeology *forthcoming*). An open-area excavation at Tiverton Road carried out by SWARCH in 2011 uncovered a large number of pits and intercutting pit groups of probable Neolithic date, including one which contained Grooved Ware (SWARCH *forthcoming*). It is becoming clear that the Vale of Cullompton was a focus for Prehistoric activity, even if it is often – as at Tiverton Road – very difficult to identify.

'It may be mentioned… the Cullompton tradition of an earlier church on St. Andrew's Hill…' (Joce 1915, 302). This is a locally prominent discrete hilltop within the valley of the River Culm. Whether it ever sported a church is as yet unknown, but it was certainly a focus for activity in the Roman period, if not earlier. There are the traces of two or possibly three Roman forts on top of the hill, discovered in 1984 and subject to a geophysical survey and evaluation in 1992 (Simpson & Griffiths 1993). The excavation of the outer ditch of the earthwork confirmed a Flavian date for that phase of the fort. The excavation at Tiverton Road (SWARCH *forthcoming*) uncovered a series of late Iron Age and Roman parallel intercutting ditches orientated north-south, and the remains of a possible structure.

The location of the fort reflects the presumed strategic significance of a ford (Stoneyford?) on the River Culm close to the town. Routeways used during the Roman period are presumed to run up the valley of the Culm from Exeter (*Isca Dumnoniorum*), to be joined or crossed by a route running across from Tiverton/Bolham (Roman fort occupied AD65-85/90 – see Maxfield 1991). Within the town, and at the junction of Tiverton Road and Fore Street, a length of paving was observed and ascribed a Roman date (Joce 1915, 302), which has led to the idea that Tiverton Road follows the line of a Roman route.

To the north of St. Andrew's Hill, in the area around St. George's Well, Roman coins and (reputedly) the head of a bronze Bacchus figurine have been found by a local metal detectorist

(Stuart Hellier). The Bacchus figurine might hint at the presence of a shrine or temple in the vicinity. The excavation at the Willand Road Medical Centre revealed part of a late Iron Age and early Roman rural settlement, with several penannular (roundhouse) gullies and enclosure ditches (Hood 2010). A similar settlement was excavated at Knowle Lane, which was again probably occupied in the early Roman period (Hughes & Firth 2011; AC Archaeology *forthcoming*).

Prior to the discovery of the Roman settlement at Shortlands Lane, no Roman material had ever been recorded in the town, but a small amount of Roman pottery was subsequently recovered during a test pit-evaluation in the garden belonging to the Walronds (SWARCH report 120117).

More generally, iron smelting took place during the Roman period in the Blackdown Hills (Reed 1997), and evidence is beginning to emerge for iron production in the valleys west of Cullompton as well (e.g. Reed 2002).

2.2.2 Early Medieval

As for much of Devon, there is very little evidence for early medieval activity in and around Cullompton. A charcoal-rich pit at Willand Road was dated to AD530-660 (Hood 2010), and a similar pit at Tiverton Road was dated to AD410-540 (SWARCH *forthcoming*); a single Saxon-Norman stirrup mount has been found in the town (HER 62396).

The first documentary reference to Cullompton is in *c*.AD 880, when it appears in the will of King Alfred. He bequeathed his estate of *Columtūn*, together with Axmouth, Axminster, Branscombe and Tiverton, to his younger son Ethelward (Weddell 1987, 2). This would suggest that in the 9th century Cullompton was a royal manor. Specifically it was the *tūn* (estate) with a river name prefix (see also: Plympton, Crediton, Tawton and so on). In Devon, place-names of this type are usually taken to indicate a major estate at the centre of a large territory.

2.2.3 Medieval to Modern

In 1086 Cullompton appears have formed part of the large and important royal manor of Silverton: ‘it is not known how many hides are there, because it never pays tax’; 41 ploughs were listed, and this implies an estate of some considerable size (Thorn & Thorn 1985).

After 1066 the manor was granted by William the Conqueror to Baldwin. Subsequently it was granted by Richard I to Richard de Clifford, but later, in the early 13th century it came to the Earls of Devon. In 1278, Baldwin de Insula, Earl of Devon was granted a Thursday market at Cullompton. At about this time Amicia, Countess of Devon willed the manor to the Abbot and Convent of Buckland Monachorum. Her daughter Isabella confirmed this bequest in 1300. In 1317 the Abbot and Convent were granted a market to be held on Tuesdays.

In 1356 the Abbot granted a stream of water running through the main street. A leat was taken off the stream that enters Collumpton from the west, bringing water to a pond adjacent to Shortlands House. From thence the water was carried across the town by a series of smaller leats, one of which ran down the New Cut. This system functioned into the 1960s, when responsibility for maintenance was transferred to the town council.

After the Dissolution of the Monasteries in the 16th century, the manor of Cullompton was granted to St George St Leger, whose son sold it to Thomas Risdon. From Risdon it went to Hillersdon to Sweet to Baker to Grant (Lysons 1822; Worth 1895; Foster 1910).

By 1086, the church in Cullompton was a separate estate of one hide held by the Thane Thorbert, and was granted to Battle Abbey (Thorn and Thorn 1985). At this period the term "church" did not necessarily designate a building, but rather a religious institution with rights to draw income from land (Reichel 1939, 334). This church had been granted away together with the sub-manors of Upton, Weaver, Colebrook, Hineland and Ash, which were designated "prebends", that is, sources of stipendiary income. The five manors provided support and income for five priests. This would indicate that, like Tiverton, Plympton and others, before 1086 the church at Cullompton had been a collegiate church with five canons. Weddell (1987) puts the case for the existence of a secular college of canons or a minster at Cullompton which, after the Conquest, was granted entire with its land-holding to Battle Abbey. The Chronicle of Battle Abbey states that William I gave to the abbey "his own church in the town of Cullompton" (Weddell 1987, 2), indicating that the church was at that time still a royal possession.

In the late 11th or early 12th century the church of Cullompton together with its endowments (its prebends) was transferred by Battle Abbey to the newly established St. Nicholas Priory in Exeter. With this, the collegiate nature of the church presumably came to an end, and from that point onward it became an ordinary parish church, remaining attached to St Nicholas Priory until the Dissolution.

The church as seen today replaced any earlier Saxon or Norman church in the 15th century. The building was begun in 1420 and was finally completed with the construction of the tower in 1545-1549. The dedication to St Andrew was granted in 1436. The south aisle, called Lane's Aisle, was begun by John Lane, a cloth merchant *c.*1526 (Chalk 1910). John Lane was a major representative of the woollen manufacturing industry which flourished in the town from the 16th to the 18th century. The decline of the woollen industry in Devon returned Cullompton to the status of small market town.

Like many other Devonshire small towns, whose houses were traditionally roofed with thatch, Cullompton has suffered a number of disastrous fires. The churchwardens' accounts for 1682 record a "great loss by fire"; in 1798 seven houses were burnt down; and in 1839 a fire beginning at the Boot Inn, destroyed a total of 264 houses in the Higher Bullring area. This last fire accounts for the loss of a large number of medieval or post-medieval buildings and their replacement by rather ordinary 19th century buildings.

2.3 Town Topography

The historical centre of the town consists of a main street divided by name into Fore Street and High Street, and these appear as such in the earliest sources. At the junction of the two the street widens into what is known as the Higher Bullring. The High Street and Fore Street area is characterised by properties fronting onto the street with long plots behind and courts passing between the buildings at intervals. To the east, some of the plots run all the way from the street to the Mill Leat; to the west the situation appears more complex. While there appears to be no documentary evidence that Cullompton ever had or attempted to acquire borough status, the layout of the town is typical of numerous settlements in this part of England that briefly were or permanently became boroughs. The long plots on either side of High Street and Fore Street are typical burgage plots and the wide High Street is clearly a market area. Numerous settlements with more or less this plan appear to date from the 13th century, a period when medieval lords – both secular and ecclesiastical – were attempting to 'urbanise' their manors to generate income. Although neither the Earls of Devon nor the Abbot of Buckland Monachorum apparently ever sought to create a borough here, the granting of a market to Cullompton in 1278 fits the general pattern.

Somewhat unusual in this context is the location of the church at Cullompton. Whereas in most other settlements the church lies close to the market place, the church in Cullompton is set well back off the southern end of Fore Street at some distance from the market place. This might suggest the original market place lay along Fore Street, perhaps between the church and Fore Street in an area now bounded by Church Street and Queen Street, or that the church formerly sat within a much larger enclosure (Weddell 1987, 5).

The earliest map of Cullompton is the excellent Wyndham plan of 1633 (Figure 4). This shows the town much as it is later periods, and even appears to distinguish the church and the Walronds. The depiction of the back plots is much less detailed, but does show that many of them were used as orchards.

Figure 4: Cullompton in 1633; the approximate location of the site is indicated (note that south is at the top of the map) (SRO).

2.4 Shortlands Lane and the New Cut

The development site lies at the furthest end of a burgage plot on the western side of Fore Street. The width of the plot strongly suggests it was formed when the end of two plots were thrown together, perhaps when the workhouse (immediately to the east) was built in the mid 18th century. The northern boundary of the plot is formed by the New Cut, an alley linking Fore Street and Shortlands Lane. The age of the route is probably relative, as it may well date back to the 14th century when the Abbot of Buckland granted a water supply to the town. The course of some of the town leats is still apparent on the later Ordnance Survey maps (see Figure 6).

Shortlands Lane runs parallel to Fore Street at the western end of the burgage plots. It is possible the main route to Exeter via Bradninch preserves the line of a Roman road, and if this were to be projected up into the Roman fort(s) on St Andrews Hill, that road would pass along Shortlands Lane. The lane itself probably acquired its name from Shortlands House, which in turn is probably derived from common Open Field terminology – literally, the 'short lands' at the end of the furlong. Shortlands House was demolished in the 1960s and a block of flats was erected on the site. Just as the Upcotts of Shortlands House bought the Workhouse, so in turn their home was demolished and social housing erected in its place.

The site of the development, numbered 2269 on the tithe map, was owned in the 18th century by the Overseers of the Poor in Cullompton. A workhouse was erected at the eastern end of the plot in 1738 and the Overseers held the land until 1841, when it was sold for £575 to William Upcott of Shortlands House. This sale followed the creation of the Poor Law Unions, which transferred liability for supporting the needy from the individual parish to groups of parishes, in this case the Tiverton Union. The sale in 1841 concerned a *Workhouse*, with *green and garden adjoining*, and *cottage to the west* with its *large garden*. At this time they were in the occupation of Henry Hill and Henry Weston (details from an original deed held by owner).

The Upcotts of Cullompton were a wealthy family of merchants and sergemakers (currently the subject of a HLF-funded research project (http://cullyonline.co.uk/cullompton-cloth-trade/). A lease dated to 1729 describes William Upcott as a merchant of Exeter; in this document the property known as *Shortlands* was leased to one John Middle, a sergemaker (DHC: 3828 M/L/1). Shortlands House was owned by successive members of that family, most of whom appear to have been called William. The will of another William Upcott dated 1847 described him as a *woollen manufacturer* (DHC: 3828 M/F/11), and the tithe apportionment describes Shortlands House as a *dwelling house, factory and pleasure ground*. The Upcotts were frequently in dispute with the Town over the water supply and – presumably – the small reservoir in the workhouse garden they had backfilled (see Figure 5). The will of John Samuel Upcott, dated 1908, bequeathed a property known as the workhouse garden to his son Charles John (DHC: 3828 M/F/14).

The New Cut and the Workhouse were also associated with a bell foundry of some considerable local repute. In 1746 the churchwardens of St Andrews elected to have their ring of bells recast and commissioned Thomas Bilbie I of Chewstoke to undertake the work. Rather than transport the bells to and from the Bilbie workshop, the work was undertaken in Cullompton. Vestry documents dating to 1749 indicate this work took place at *the Alms House*. Thomas Bilbie II moved to Cullompton in 1754, settling at no.4 Fore Street, and his son Thomas III was born there in 1758. All three were highly proficient bell-founders, with 248 of their known 371 bells surviving. Just after the death of Thomas III in 1814, the foundry was sold to William Pannell, whose output was much smaller and very inferior; his dwelling was known as *Methodist Court*. The self-styled *West of England Church Bell Foundry* moved to Longbrook Street in Exeter in 1853 but closed in 1855, a victim of the railways (Scott *et al.* 2007, 94-8). In the event, no features and very few artefacts from the excavation could be attributed to the bell foundry; however, the garden of the property immediately to the north-

east contains substantial amounts of undiagnostic poorly-fired ceramic material, and this may relate to the foundry (local resident, *pers. comm.*).

A comparison of the tithe map and the later Ordnance Survey maps shows the eastern boundary of the site has changed slightly over that time (Figure 5 & Figure 6). On the tithe map, a small building is shown adjacent to the New Cut, just beyond the corner of the plot numbers 2269. On the later maps this building has disappeared and the Drill Hall – used by the Company of Cullompton Volunteers and a company of the 7th Devon Cylists Regiment – now forms the boundary. The Drill Hall survives and is used as a rifle range.

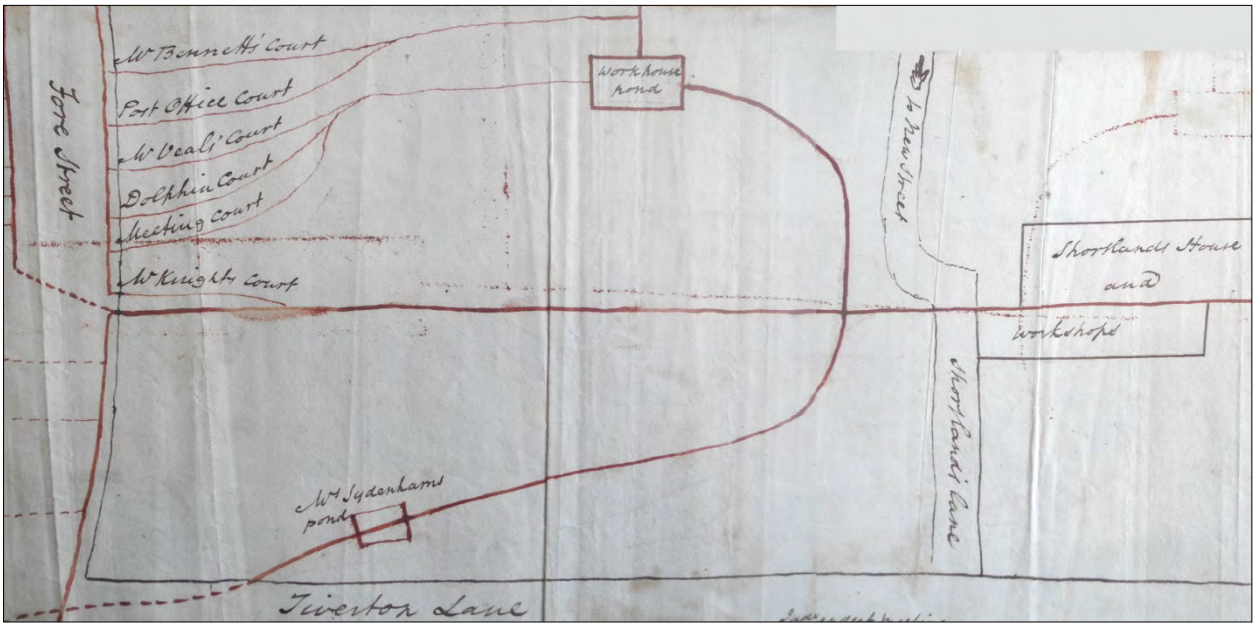


Figure 5: Extract from a stylised map held by Cullompton Town Council, showing the leats carrying water to the town, and the small reservoir labelled 'workhouse pond' (courtesy Penny Bayer, DCC).

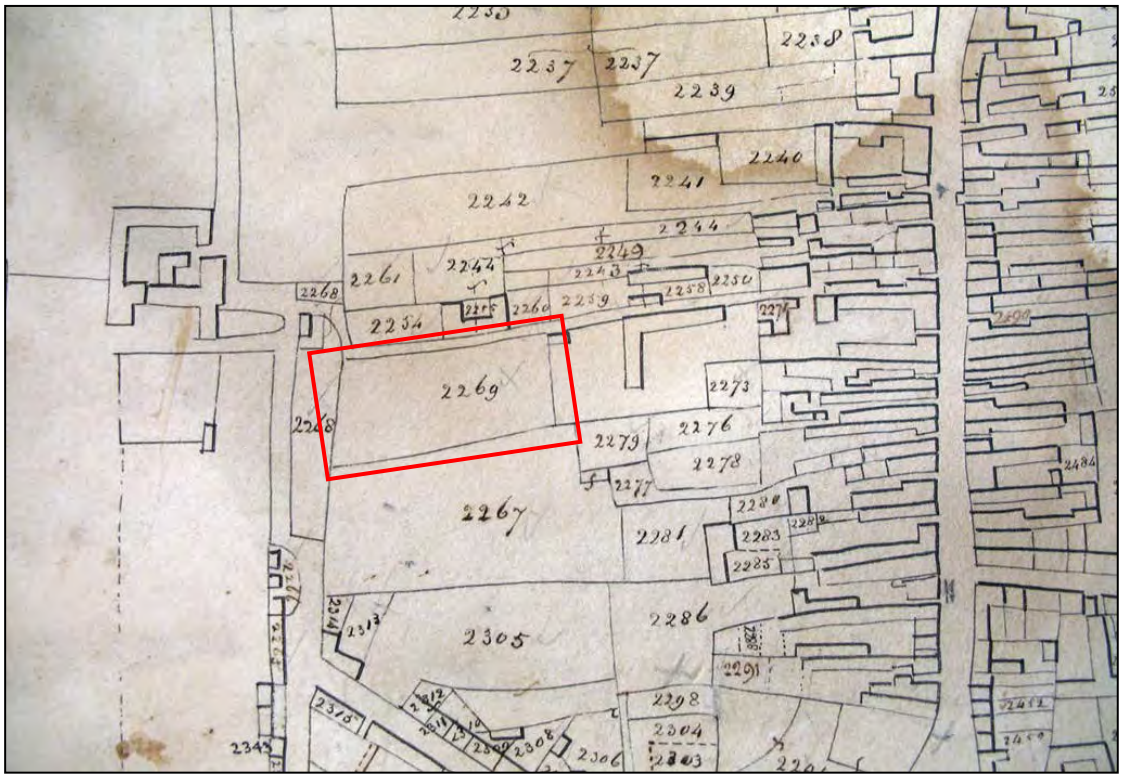


Figure 6: Detail from the Cullompton town tithe map (the site is indicated) (DHC).

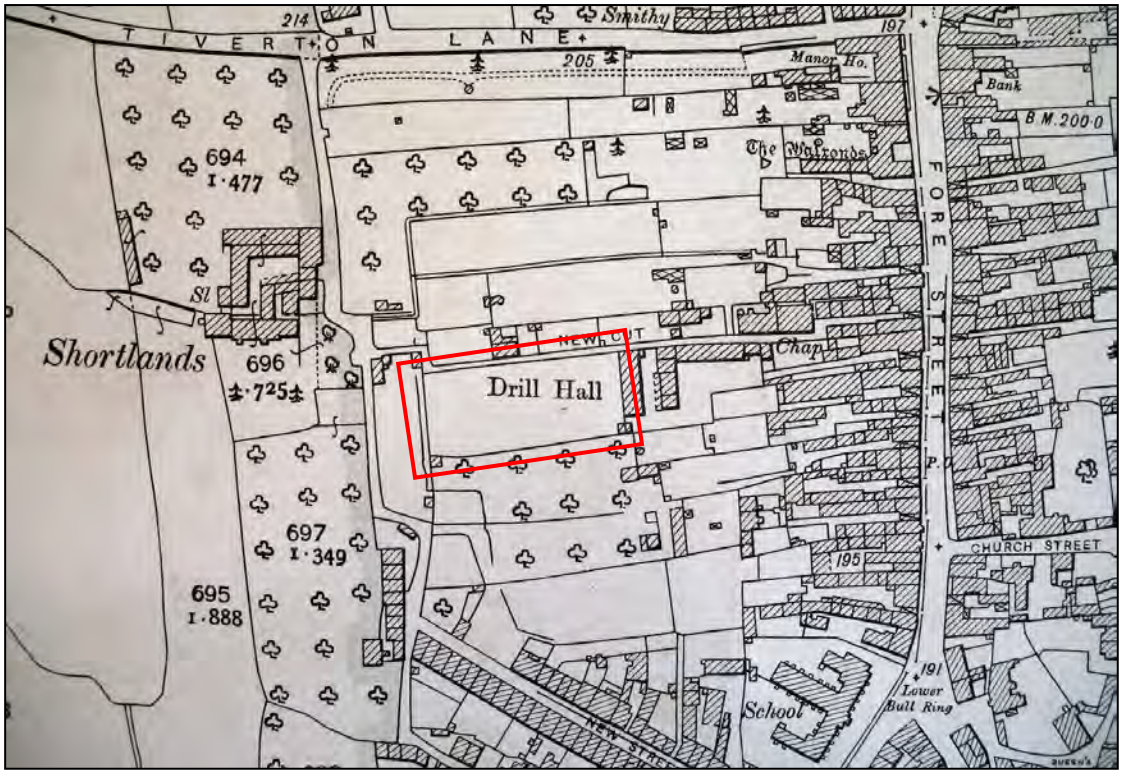


Figure 7: The Ordnance Survey 2nd Edition 25" map (the site is indicated) (WCSL).

3.0 Results of Archaeological Monitoring and Excavation

The site off Shortlands Lane comprises an area of approximately 70m by 30m, of which a total area of 1600m² was excavated. Initially, the spoil was removed from the site, and approximately ⅔ of the site was stripped in this fashion. The remaining spoil had to be retained on site, and was shifted around as need dictated. A cable trench was excavated immediately to the west of the site, and this was also monitored. What follows is a detailed summary of the main excavated features by phase; individual and more detailed context descriptions can be found in Appendix 3.

3.1 Excavation

As stated, what began as an evaluation proceeded directly to an open-area excavation once the character of the buried archaeological resource was established. Three evaluation trenches were opened and one section recorded, and these provide a valuable record of the upper levels of the horizontal stratigraphy across the site.

A significant depth of topsoil – over 1m – sealed the eastern end of the site, diminishing to *c*.0.4m at the western end of the site and in other areas where truncation had occurred. Most of the site was covered by two levels of topsoil: (100) was a thick (0.3-0.5m) dark layer of friable garden soil containing 19th century artefacts, overlying (101), a thick (0.3-0.5m) layer of mid greyish-brown loam containing 18th century artefacts. These deposits also contained a lesser amount of post-medieval material, and a relatively large assemblage of clay pipes, including one stem stamped 'UNDERHIL' on one side and ' OLLUMPTON'. Curiously, no Romano-British material was observed in the topsoil – any unstratified Romano-British material in the collection was retrieved from the top of features during the site strip – and we can only presume the tremendous depth of subsoil prevented Romano-British material being drawn up into the active topsoil. The natural undisturbed subsoil varied across the site. To the west it was comprised of compact rusty reddish-yellow well-sorted river gravels, overlain to the east by mid-brown mottled reddish-yellow clayey sand (155).

The removal of these thick topsoil and subsoil deposits revealed some Prehistoric features, a substantial part of a Romano-British settlement, and one small part of a probable cemetery. The Prehistoric features were restricted to a length of deep, steep-sided ditch that terminated within the site, and a series of irregular intercutting linear features in the north-west corner of the site. Unstratified Prehistoric finds from the rest of the site included struck flint and chert of Neolithic and Mesolithic date, a Mesolithic EPT, and a few stray sherds of Iron Age pottery. The 'cemetery' contained a single urned cremation of probable Flavian date, and undoubtedly associated with the Roman garrison nearby. The site was subsequently occupied by a large, multi-phase rural settlement occupied from the late 1st/early 2nd AD to late 3rd century AD, although the coin finds indicate activity continued into the late 4th century in some form. Surprisingly, very little structural evidence was encountered, and the few small and scattered postholes excavated did not conform to any coherent pattern.

It was clear that, despite the depth of topsoil, and despite the survival of Romano-British soil layers across parts of the site, some degree of truncation had occurred. This was most readily apparent at the centre of the site: between a series of 19th and 20th century linear features and a large 19th century pond bay [893], an additional 150-200mm of Roman stratigraphy survived, and this material produced the well-preserved coin of Decentius (AD 451-3). A related feature of note was that features of Romano-British date invariably contained large sub-rounded chert nodules, and these were very rarely encountered in earlier or later features.

There was a distinct lack of medieval features, the sole exception of a soil layer containing abraded medieval pottery. There were a few post-medieval features, and then a series of 18th

century linear features, probably related to management of the town leat system. A line of substantial postholes crossed the site from west to east, and might again be associated with water management (overhead launder). A large sub-rectangular pit was also uncovered; this contained a mass of burnt slate and glass waste, probably from one of the 18th century town fires in Cullompton. In the 19th century, a series of linear features were dug across the site, as well as a large sub-rectangular pond bay.

3.1.1 Prehistoric Features

The most significant Prehistoric feature to be excavated was Linear [864]. This feature was 21.2m long and crossed the site SSE to NNW. Its northern terminus lay within the site, and it extended beyond the edge of excavation to the south. It was up to 2m wide and 1.25m deep with an asymmetric profile (steeper to the east); the lower 0.4m was very narrow with nearly vertical sides. It contained a series of fills: the lower fills being comprised of coarse gravels, and the upper fills of fine clean grey or pinkish-grey sandy or clayey silts. This would appear to represent initial rapid erosion and infilling, followed by a prolonged period of gradual silting. Very few finds were recovered from this feature, and all from the uppermost fills: two fragments of worked chert (102g) and two fragments of worked flint (26g).

Given the scale of this feature, it seems probable that it defines one side of an enclosure, with the interior to the east. The profile of this feature is not dissimilar to one excavated on the nearby Tiverton Road site (SWARCH *forthcoming*). Six sections were excavated through this feature, but there did not appear to be any evidence for re-cutting or deliberate backfilling. Charcoal from a bulk soil sample taken from the northern terminus was submitted for dating and returned a date of 395-209 calBC (context (1518); SUERC 43010), indicating a date in the Middle Iron Age.

In the north-west corner of the site, a series of irregular intercutting linear features or pits were excavated [1585/143] [1587] [1589] [1594] [1592]. They were all *c*.0.4-0.6m wide and up to 0.55m deep, often with steep-sided profiles. Most contained very clean or entirely sterile greyish-brown sandy silts, although [1585/143] contained a clean, dense, slightly reddish-yellow silty sand (1586/144).

The only other possible Prehistoric features were a small fragment of curving gully [965] and a shallow posthole [967] that may have belonged to a structure, possibly a roundhouse. Both these features were heavily truncated by later features.

A small amount of Prehistoric pottery was found in later features. A single sherd (3g) of Early Neolithic pottery came from fill (259) of linear feature [131], 8 sherds (112g) of Late Bronze Age Plain Ware came from four contexts, mostly from posthole [889], and 4 sherds (42g) of Middle Iron Age South Western Decorated (SWD) ware came from four contexts. The Late Bronze Age material was derived from the Upper Greensands of the Blackdown Hills, whereas the SWD pottery was Gabbroic, that is, derived from a single source on the Lizard Peninsula in south-west Cornwall.

The lithic assemblage from the site contains only three dateable artefacts – two oblique arrowheads and a broken plano-convex knife – indicative of a Neolithic date. In addition, the use of chert, the presence of a single blade segment and an Elongate Pebble Tool (EPT), hint at Early Neolithic or Mesolithic activity in the vicinity. Most, if not all, lithics were residual in the contexts in which they were found.

Figure 8: Phase plan of all features.

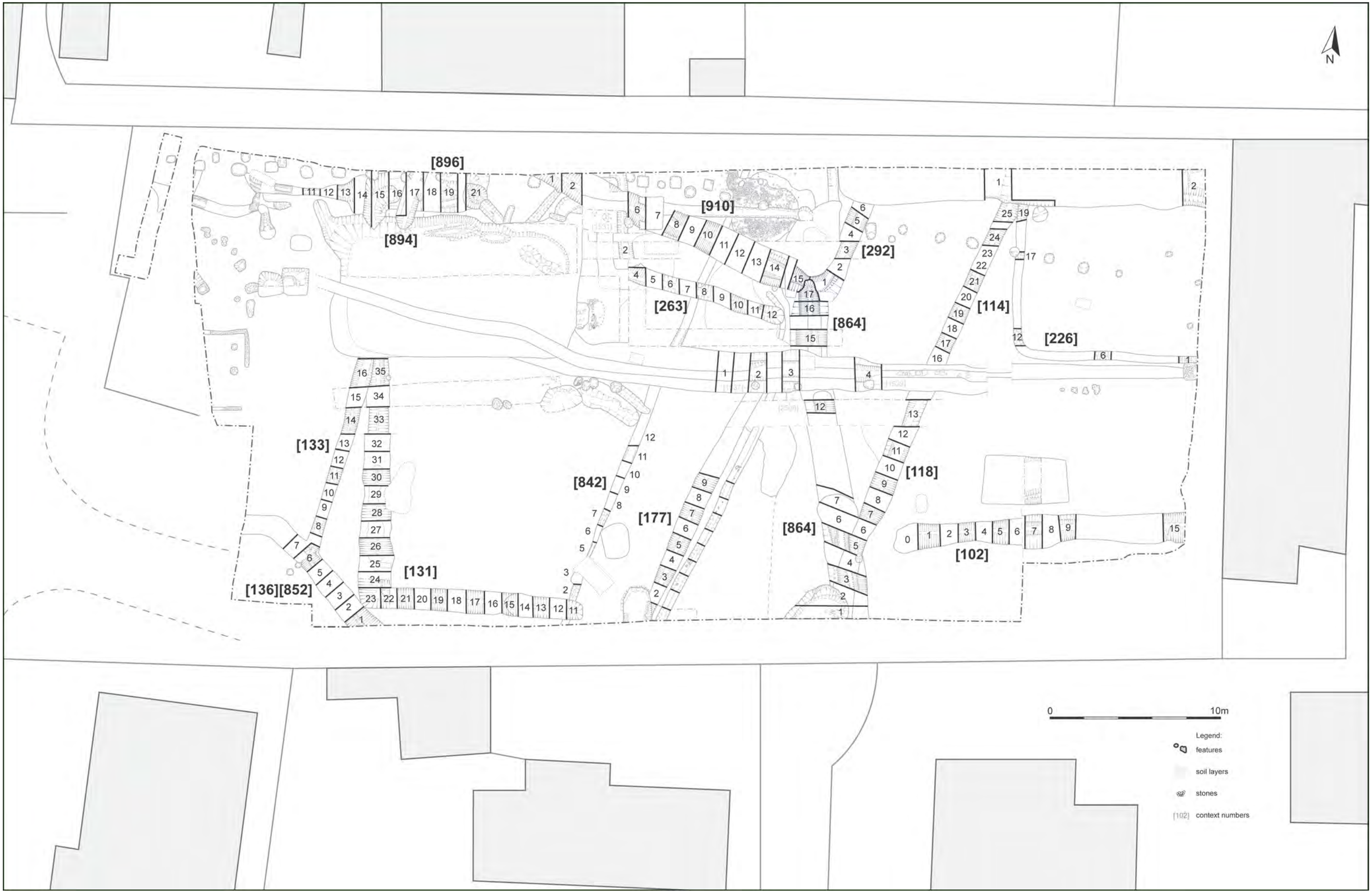


Figure 9: Excavated blocks though linear features.

Figure 10: All features, post-excavation.

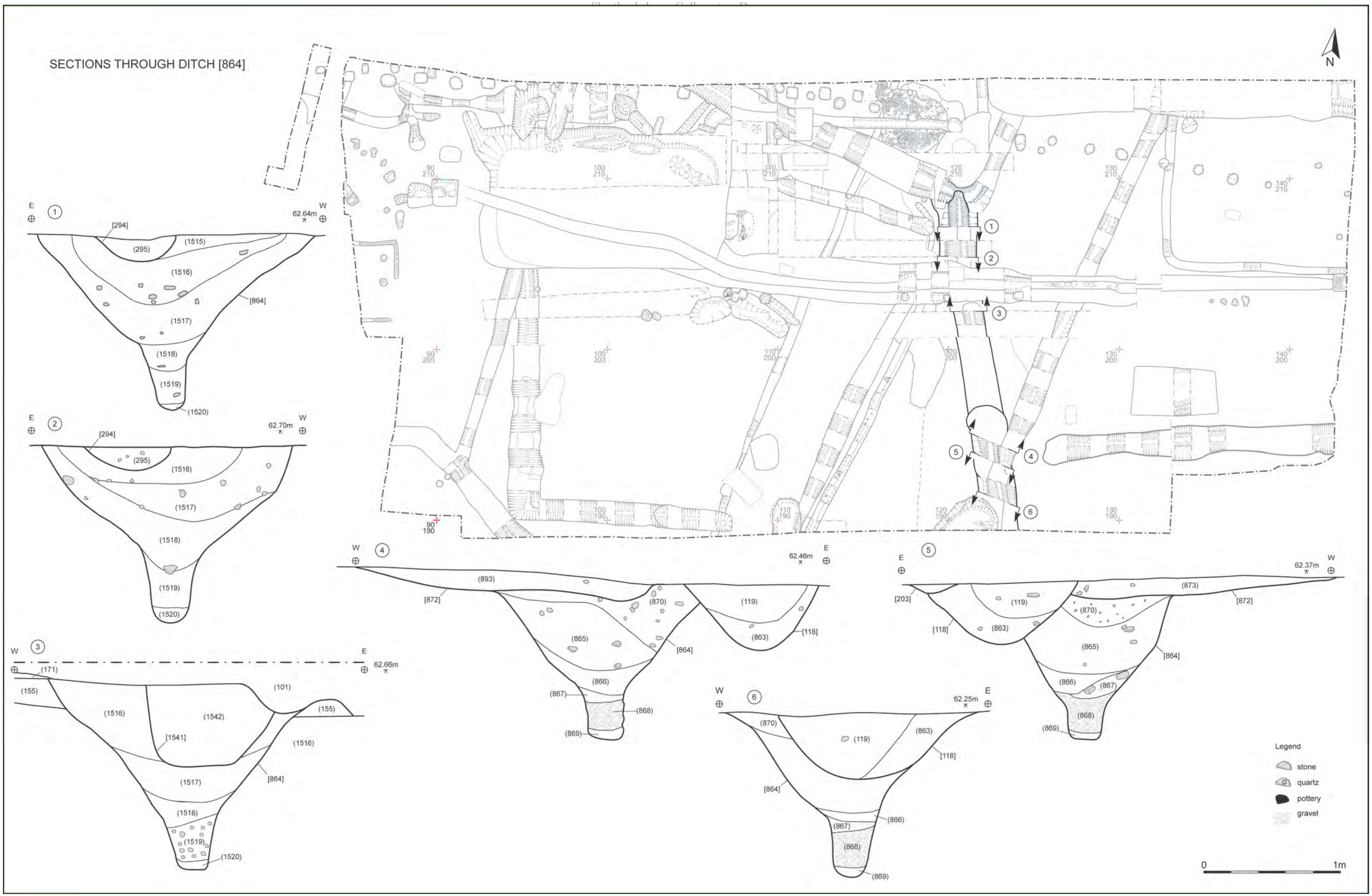


Figure 11: Prehistoric ditch [864].

SECTIONS THROUGH PREHISTORIC FEATURES

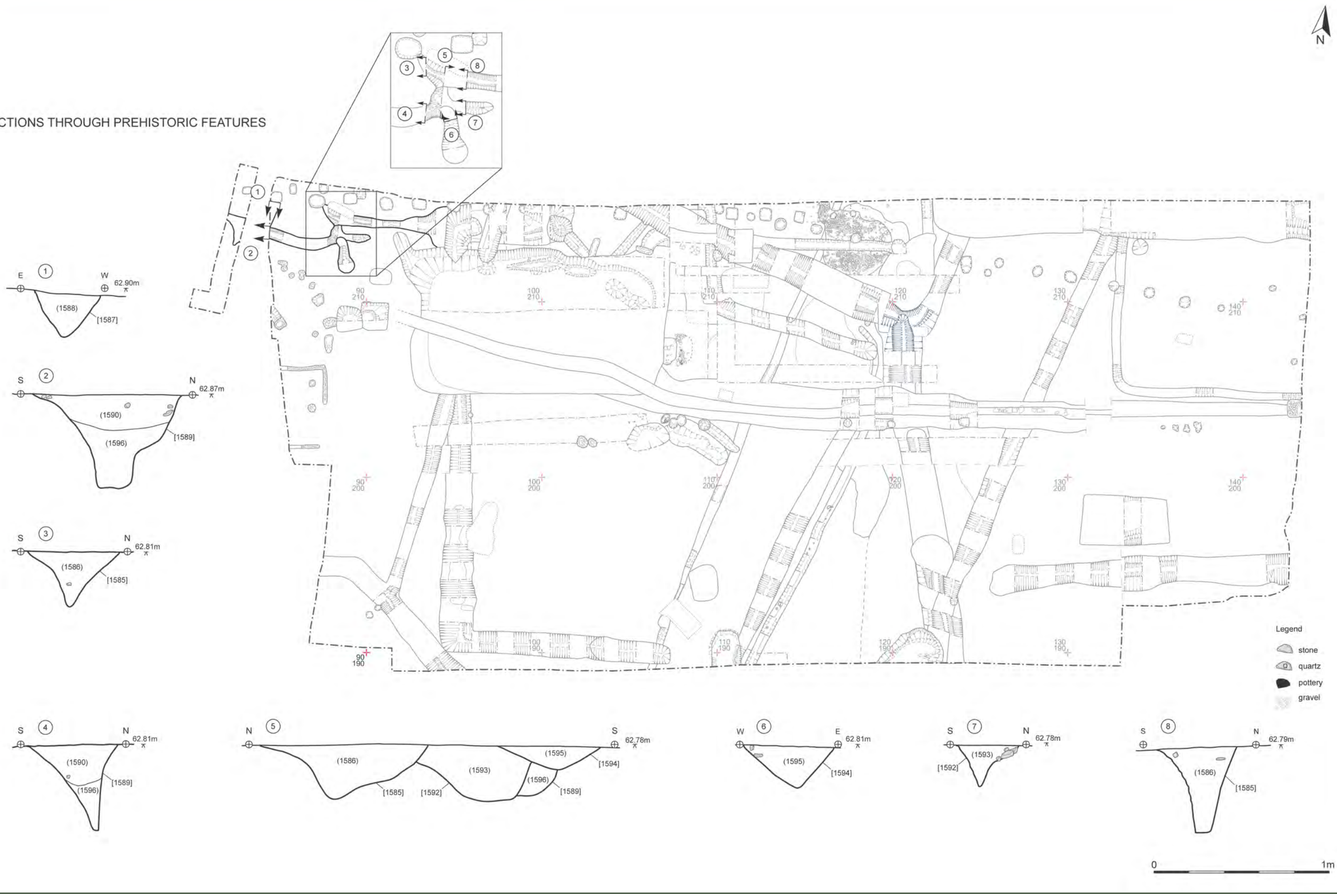


Figure 12: Other Prehistoric features.

Figure 13: The Prehistoric linear features in the north-west corner of the site; from the south (scale 2m).

3.1.2 The Early Roman Cemetery

On the western edge of the excavated area, a single Flavian urned cremation was excavated. This was comprised of a single small pit [953] with a very shallow linear scoop on the north-western side. The pit contained a large, unusual and intact imitation BB1 (probably a greyware) butt beaker, accompanied by a small greyware jar and covered by a large decorated shale board. A small amount of burnt bone was recovered from the fill (954) of the pit, together with a flint blade and a blob of melted glass. The imitation BB1 butt beaker, vessel #955, contained a mass of cremated remains and corroded iron nails, as well as the partly-melted neck of a glass unguent bottle. A fragment of butt beaker with roulette decoration was recovered from inside vessel #955, and a second fragment was recovered during the wet-sieving.

Following a severe frost, a series of other features were identified in this area. To the south of [954], part of a rectangular enclosure defined by two narrow linear features – [998] and [995] – was excavated. The linear features were both narrow (0.2-0.25m wide) and shallow (0.08-0.15m deep). The apparent enclosure they defined measured *c*.3×5m and extended beyond the edge of excavation to the west. Inside the enclosure were two shallow postholes, [1544] and [1546]. A single sherd of butt beaker was recovered from the fill of [998], a match for fragments found in [953]. Given the proximity of the cremation burial, it is probable these features represent the truncated remnant of a rectangular funerary enclosure, the closest parallel being the slight enclosure excavated at The Retreat in Topsham (Jarvis & Maxfield 1975), and with later and post-Roman examples at Mount Dinham (Passmore 2013) and Kenn (Weddell 2000).

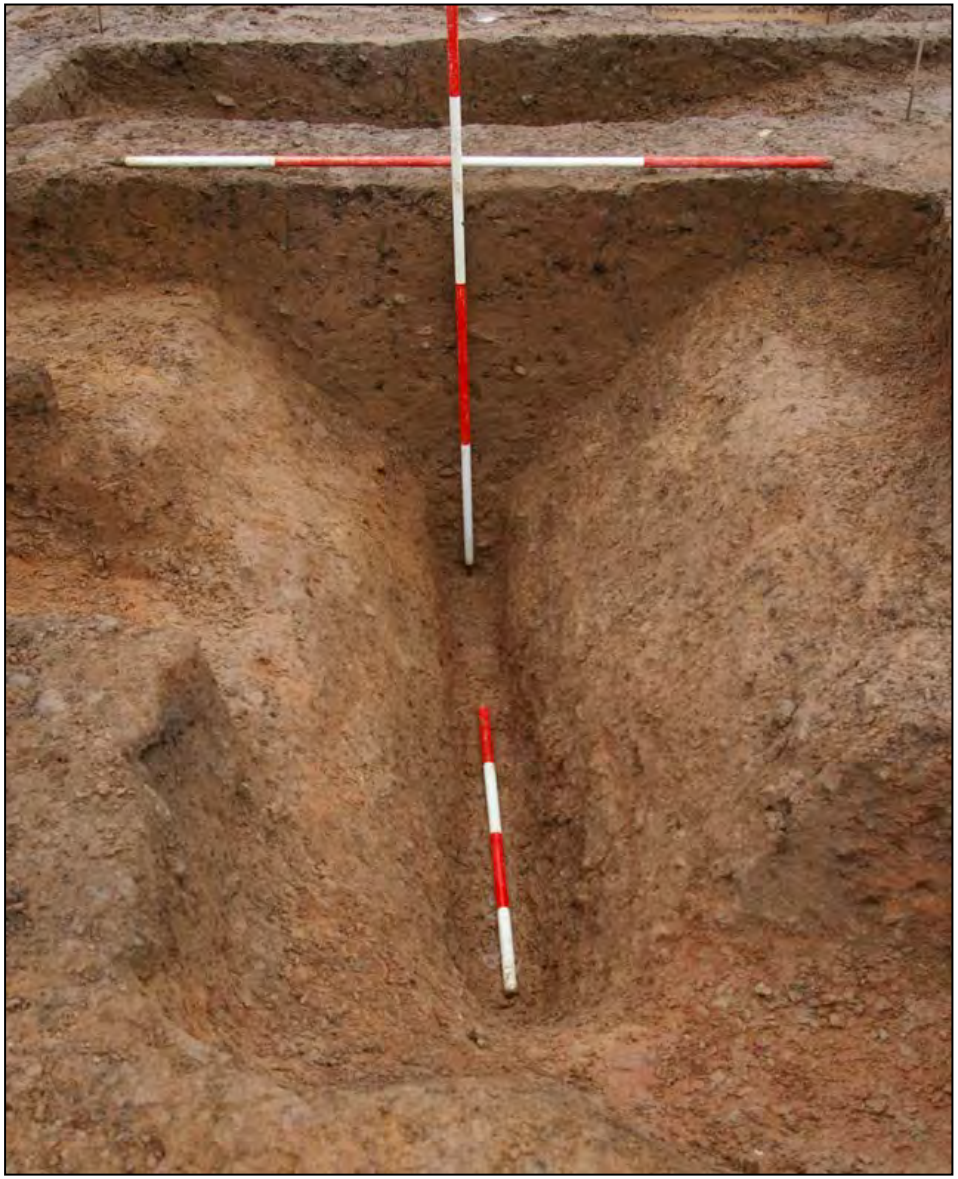


Figure 14: (left) The excavated terminus of Ditch [864], from the north-north-west. The corner of Ditch [292/910] is just visible in the foreground (scales 1m & 2m).
Figure 15: (right) The narrow rectangular Feature [998] adjacent to the cremation burial, showing up with the frost; from the south (scale 2m).

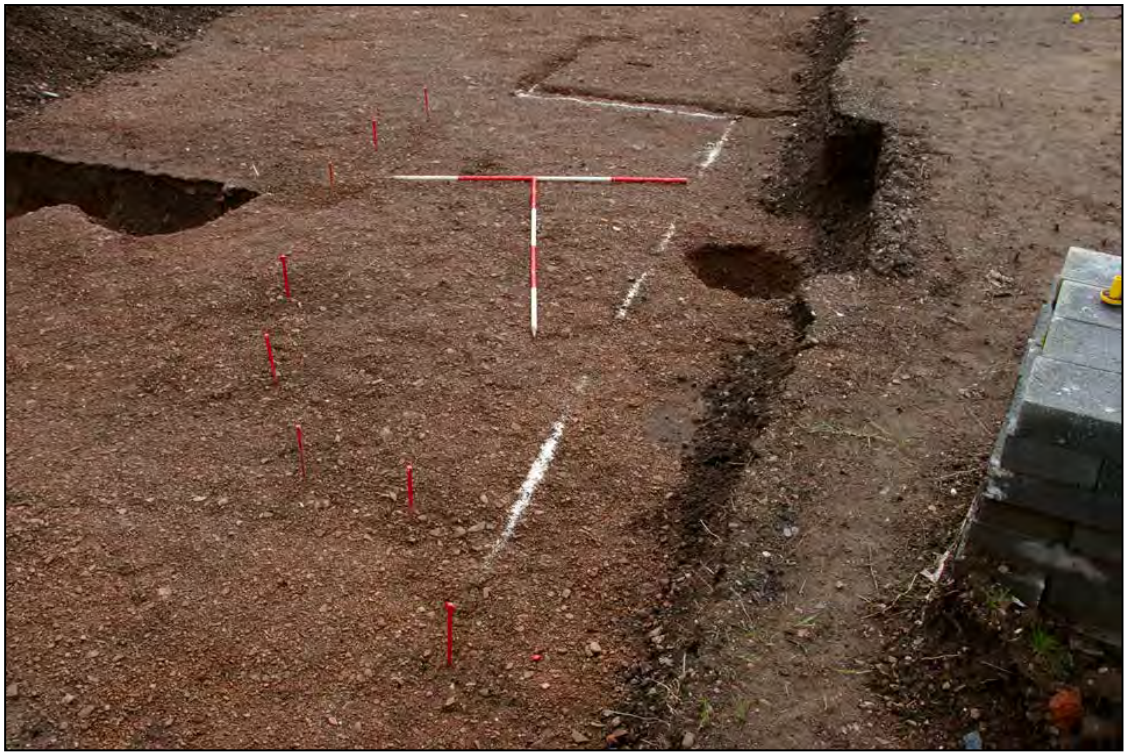


Figure 16: Pit [953] shown with its shallow arc of postholes (just visible as slightly darker patches and marked by red pegs); from the north-north-west. The white sand marks the footings of the block of flats (scale 2m).

The site remained open and exposed to the elements from December 2009 through to March 2010. When SWARCH personnel returned to the site to continue monitoring, an arc of very shallow small pits or postholes had become visible because of differential weathering [1551] [1553] [1555] [1557] [1559] [1561] [1563]. These postholes were very slight, all but one being *c*.0.04-0.12m deep, with gentle concave profiles. Two of the features [1559] [1563] had the appearance of two or more intercutting postholes. They had been filled by clean redeposited gravel subsoil, and were only revealed as the gravels around them weathered clean. They appear to describe an arc around the cremation burial [953], and may belong to a contemporary post-ring or structure associated with or marking the burial.

Dating

The vessel (#955) containing the cremated human remains is an unusual variant on the butt beaker, not closely paralleled in the Exeter corpus (see Appendix 8). It imprecisely mimics the form a Gaulish vessel type (Cam 113), and dates to the middle of the 1st century AD. The accessory vessel (#956), a Type 11.3 jar, is in a fabric common to military-period deposits in Exeter, although can date as late as the early 2nd century. The shale tray (#957) used as a lid has close parallels with a pair of Flavian burials at Winchester (Biddle 1967). The glass unguent bottle from inside the cremation vessel is of a type commonly encountered during the second half of the 1st century, but rarely thereafter. Finds are rare in Britain – with examples from Flavian-period cremations in Winchester and London – but common on the Continent, particularly in northern Italy. Finally, a bone fragment from the cremation was dated to 20-13 calBC and 1 calBC to 126 calAD (at 95% probability; SUERC 42600), with the highest peak at 50-65 calAD.

On balance, and given the parallels with sites elsewhere, this burial probably dates to the third quarter of the 1st century, perhaps 60-70 AD. Those parallels also indicate this was the burial of an individual in the Roman military, rather than a native.

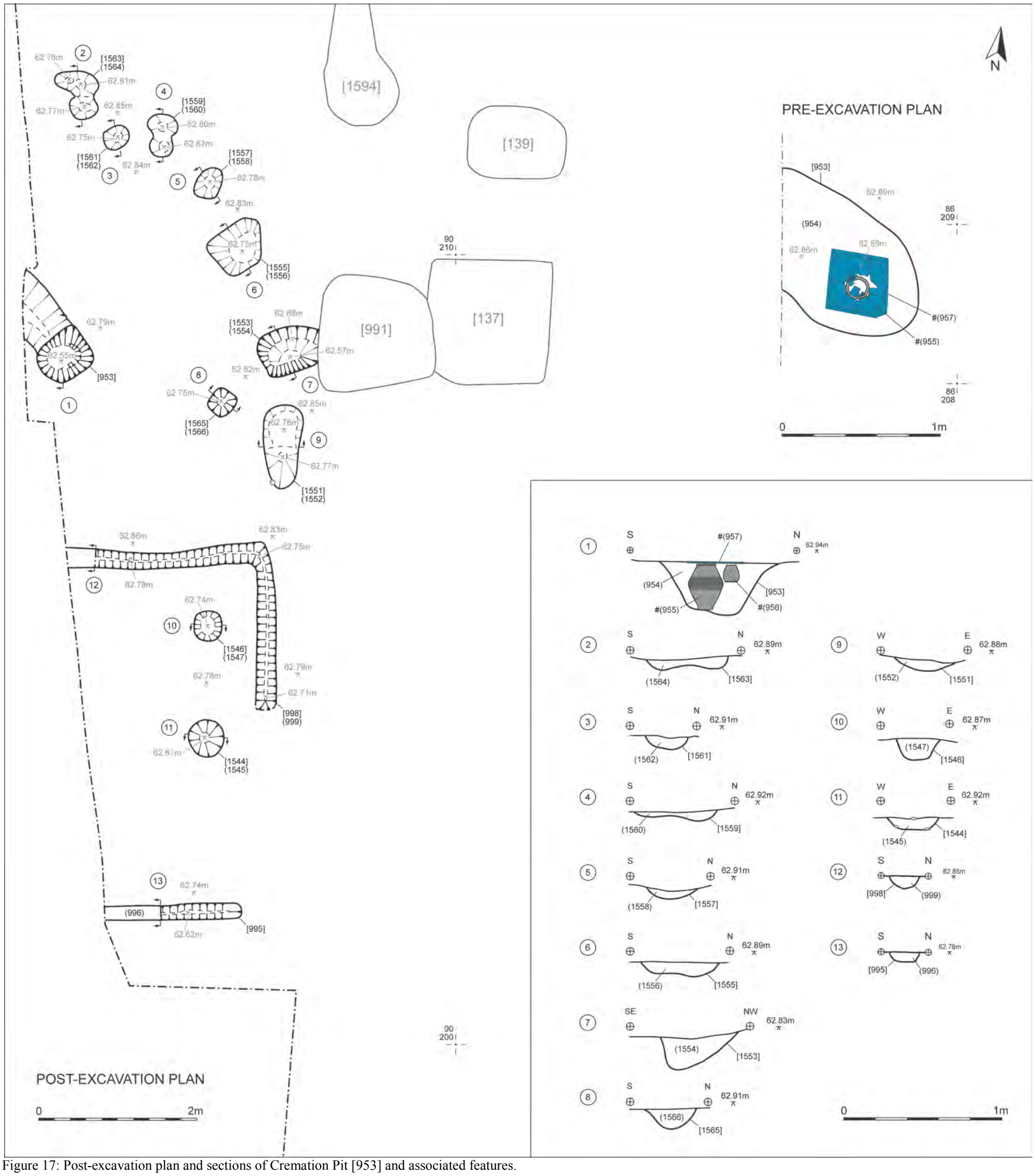


Figure 17: Post-excavation plan and sections of Cremation Pit [953] and associated features.

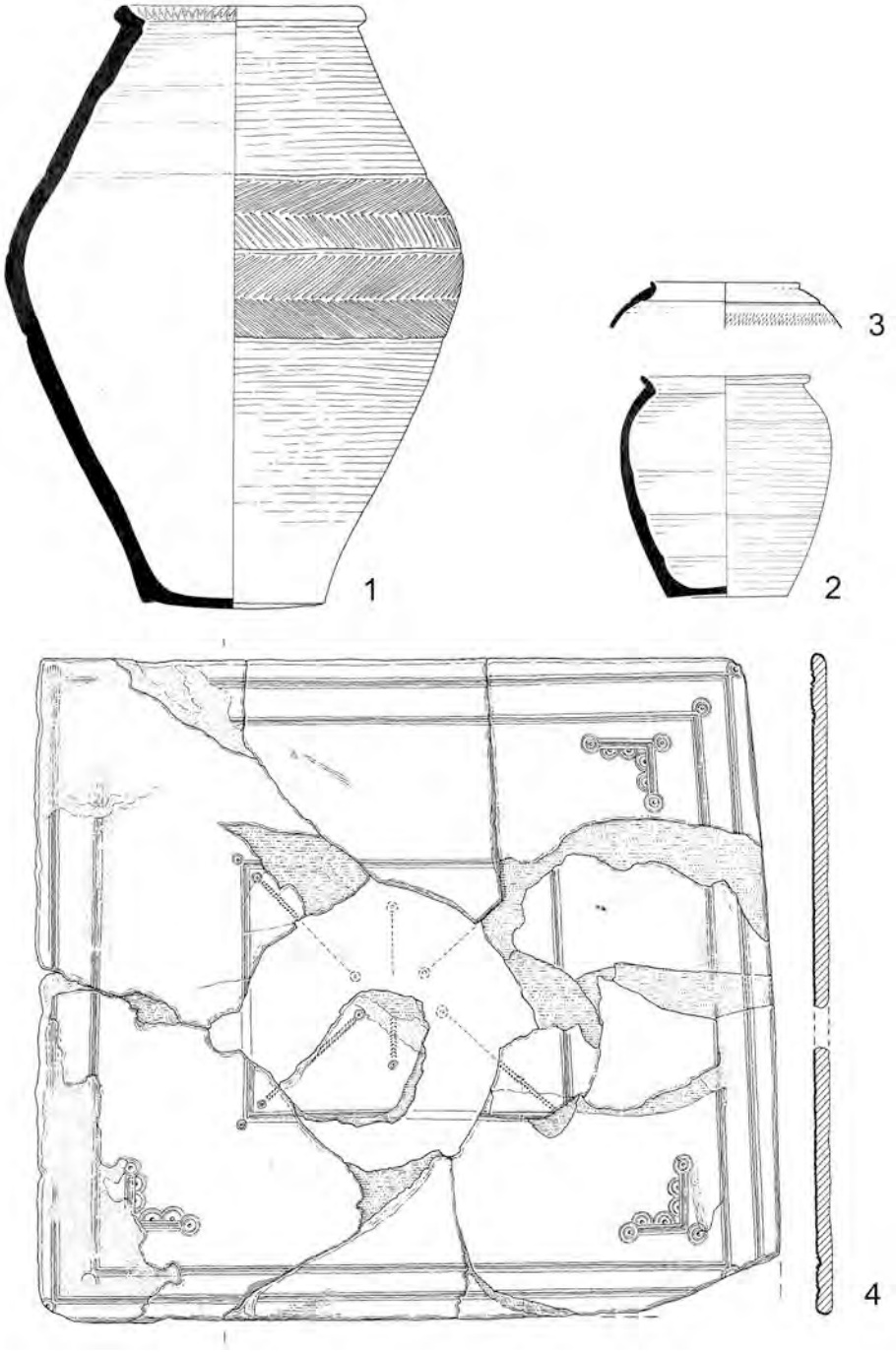


Figure 19: Butt beaker (1), greyware jar (2), butt beaker (3) and shale tray (4) (scale 1:4); illustrated by N Griffiths & T Hooper.

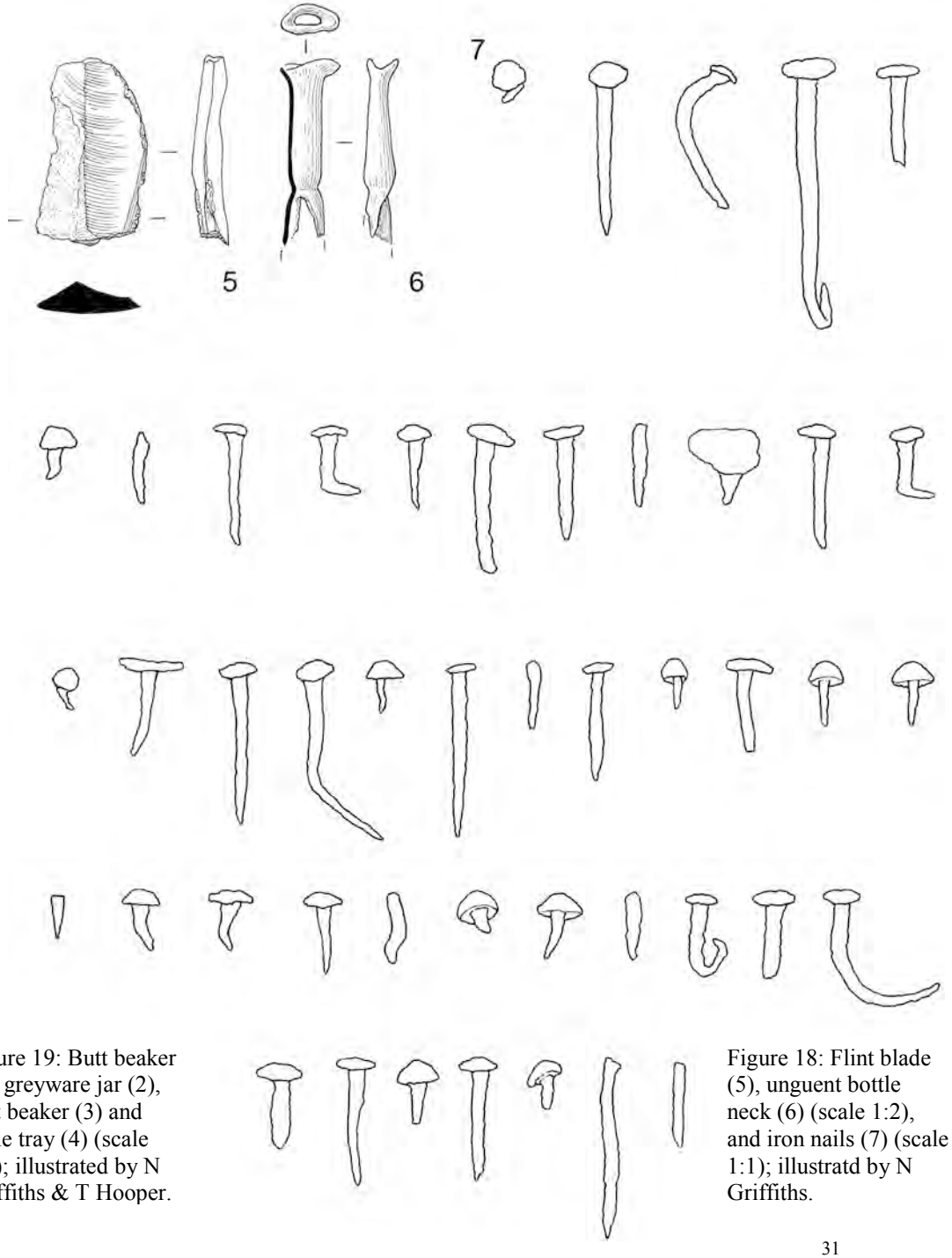


Figure 18: Flint blade (5), unguent bottle neck (6) (scale 1:2), and iron nails (7) (scale 1:1); illustratd by N Griffiths.

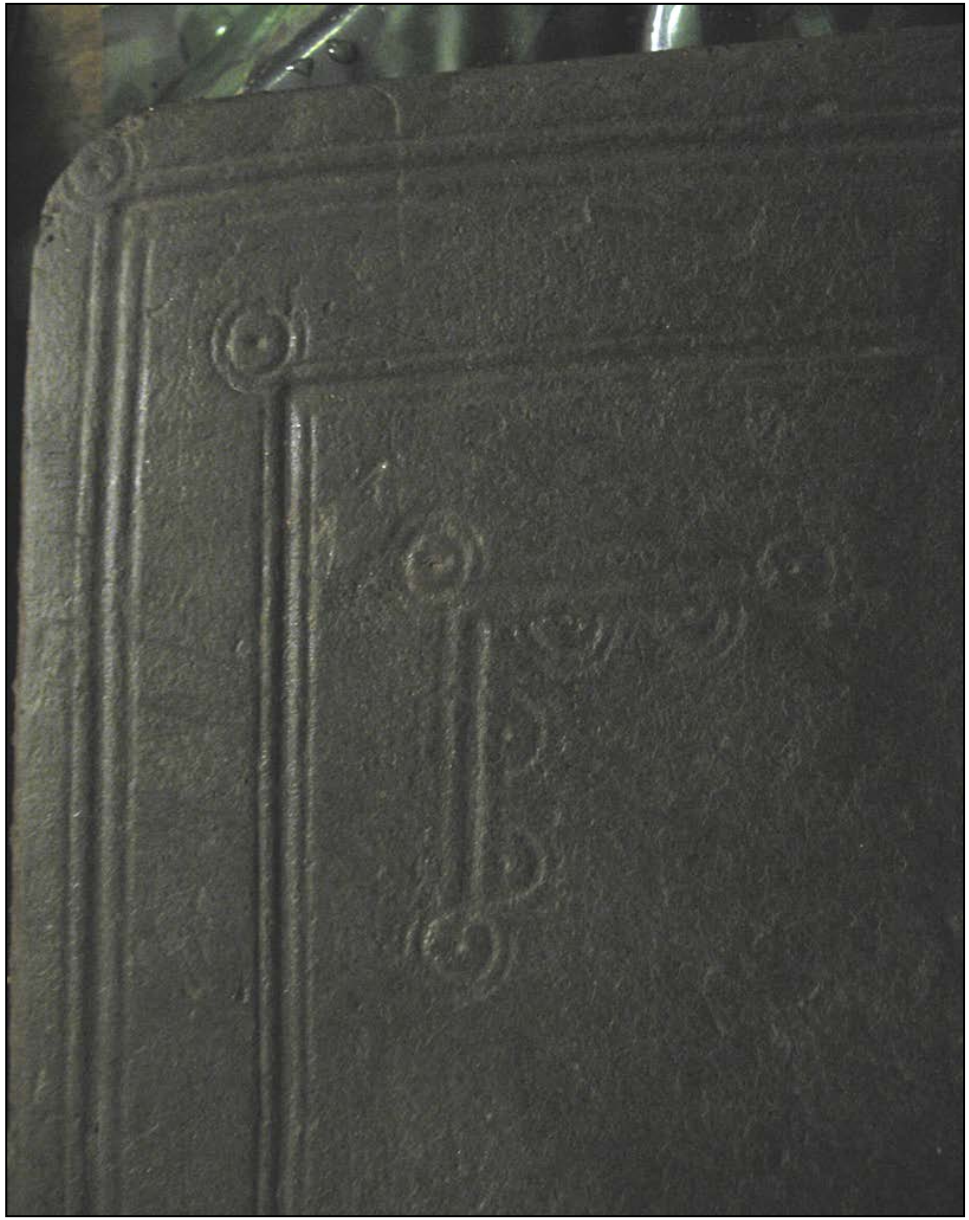


Figure 21: Detail of the decoration on the corner of the shale tray.

Figure 20: The imitation BB1 butt beaker used as a cremation vessel.

3.1.3 The Romano-British settlement: Phase 1

Three main groups of features can be attributed to Phase 1 of the Romano-British settlement.

Linear features [131] and [896] clearly form part of the same feature, even though they are separated by the large 19th century pond bay [893]. Together they describe three sides of a sub-rectangular enclosure, open on the western side. Both ditches were *c*.1.2m wide and up to 0.6m deep, although [131] had an irregular V-shaped profile, whereas [896] had a broader U-shaped profile. Both features contained a series of fills: the upper fills of both were soft greyish-brown loamy sandy silts (132) (897). These overlay cleaner orange-brown clayey silt sand or sandy silt (259) (926); which in turn overlay basal deposits of coarse gravel (807) or firm clean greyish-brown clayey sand (931). The fills of [131] at its eastern end were more complex, and included a discrete layer of greyware pottery *c*.3m in length (834). The eastern end of [131] was cut or re-cut by pit [196]. It was noteworthy that at the two corners of the posited enclosure, and within the fills of [131] and [896], were discrete (special?) deposits of charcoal-rich material, (933) and (840).

Between [102] and [131], and extending beneath the section, lay Pit [883]. This was a large, deep feature 3.6×2.7m across and *c*.1.1m deep. It may have served as a quarry pit, and was backfilled following an initial period of undisturbed silting (922) (923) with a series of stony deposits containing chert nodules (882), burnt clay (890) and charcoal (884), with an upper surface with possible *in situ* heating (860). This feature seems to have been used for the disposal of domestic and industrial waste, a conclusion supported by a micromorphological and chemical analysis of a monolith sample taken from the feature (see Appendix 22). It seems probable that these later deposits were made to level up the consolidating fills of the pit.

Figure 22: Phase 1 Ditch [131], partly excavated, with Ditch [133] in the foreground; from the north-west.

The final feature clearly belonging to Phase 1 was an irregular spread of stones between [131] and [102] and extending up to the centre of the site (171/184). It was most convincing as a true surface at its northern edge, where a pronounced camber was visible in the sub-rounded

gravels employed, and where the metalling was found in association with a thin layer of redeposited pinkish gravel. This spread of material may have served as a surface at the entrance to an enclosure defined by [131] and [102].

Figure 23: Layer of greyware pottery close to the base of Ditch [131]; from the north (scale 0.5m).

Figure 24: Pit [883], under excavation; from the north-east. Note the great depth of topsoil (scale 2m).

Dating

In terms of dating, the upper fill of Ditch [131] produced a stamped amphora handle dated to AD 150-210, and fill (833/834) produced a narrow-necked jar with a *terminus post quem* of

AD 160. Charcoal from one of the fills of Ditch [131], context (259), was dated to AD 90-210 (76-226 cal AD at 95% probability; SUERC 43000). This would suggest this phase can probably be dated to the later 2nd century AD.

3.1.4 Subsequent Romano-British Phases

Subsequent phases of occupation at the site are much more difficult to disentangle. On the basis of their stratigraphical relationships it is possible to discern four clear phases, and, by association, assign other features which share similar morphological characteristics or orientation to those phases. Inevitably, however, the artefacts and absolute dating indicate the situation is far more complex.

The ditches would have been maintained throughout their use-life i.e. they were, almost certainly, periodically cleaned out and the accumulated silts and artefacts dating to the creation and earliest use of the feature lost. Therefore, the material from these features date to periods where there was a lack of maintenance and, ultimately, to their abandonment.

There is also a taphonomic dimension to this situation. For most of the ditches on the site a disproportionate amount of the pottery recovered comes from the final fill, and each final-fill assemblage is extremely heterogeneous in comparison with that of the earlier fills. This would strongly indicate these features were deliberately backfilled, a phenomenon paralleled on other Romano-British Devon sites (see Discussion, below). This leads us to the rather unsurprising conclusion that this settlement grew organically and 'phasing' is for our convenience rather than a true reflection of change over time.

In terms of the dating, the pottery assemblage (Appendix 8) is interpreted to indicate the site goes out of use in the later third century AD. There certainly is a very high degree of residuality to contend with. However, the absolute dating would strongly suggest not only was it occupied into the 4th century, but that certain elements could have survived into the medieval period (see below). However, the C14 dating has problems of its own.

3.1.5 The Romano-British settlement: Phase 2

The Phase 1 enclosure appears to have been superseded by three parallel ditches features, [133/894], [842] and [114/118], which were orientated SSW-NNE and defined two long sub-rectangular enclosures. As Ditch [103] respects Ditch [114/118], it is likely this was also dug during this phase.

Given the shape and form of these enclosures, it is probable they were strung out along one side of a contemporary road and formed part of a larger scheme of land allotment. If so, the other ditches in that system would lie just beyond the edge of excavation to both the east and west. Again, very little structural evidence can be attributed to this phase, and it would appear the settlement focus and hypothetical road lay beyond the edge of excavation to the north. The southern end of Linear [133/896] was contemporary with, and discharged into, Linear [852], which appears to have defined the southern edge of these enclosures.

Ditches [114/118] and [133/894] were 0.9-1.1m across with U-shaped profiles up to 0.6m deep. They each contained a series of fills; the lower fills (278) (863) (892) tended to be cleaner and contained fewer artefacts, and in the case of (802) contained a high proportion of coarse gravel. The upper fills (134) (920) (115) (119) (858) (859) (861) (876) were generally soft greyish-brown sandy or clayey silts with varying quantities of charcoal; a substantial amount of pottery was recovered from the upper fills of Ditch [114/118].

Ditch [842] lay between and parallel to Ditches [133/896] and [114/118], but while similar in profile was variable in size across the site and contained only a single very clean light pinkish-brown clayey silt fill (843). Ditch [852] was contemporary with [133], but as this was a re-cut of an earlier Ditch [135/826] it implies both [133/896] and [114/118] were also re-cut.

Logically, these three ditches should be contemporaneous – they are almost parallel to one another, they are similar in profile, and they are spaced roughly 15m apart – but it is clear they had very different end-of-life experiences. The single fill of Ditch [842] was very clean, and is stratigraphically earlier than Ditch [263] and Ditch [910], implying it went out of use relatively quickly. The other two ditches were maintained and used, and Ditch [114/118] was almost certainly backfilled.

Ditch [135] lay to the east of these three ditches; the western segment was orientated east-west for *c*.4m before turning to the south-east, and in doing so missed the south-western corner of Ditch [131]. Ditch [135] contained a number of fills (284) (800) (801) (853), most of which were fairly coarse sediments or sandy-silts. The ditch was up to 1.4m wide and 0.7m deep, with a variable profile and a base that was irregular in places. This feature seems to have been re-cut at least once. The re-cut, Ditch [852], was contemporary with Ditch [133], lending credence to the theory these ditches were maintained and periodically emptied. It also suggests that Ditch [135] predated Ditch [133], as it avoided Ditch [131], whereas Ditch [133] cuts [131].

Ditch [102] lay at the eastern end of the site, extending beyond the edge of excavation to the east. It lay on the same orientation and line as the east-west part of Ditch [135]. It was 17.4m long by *c*.2m wide and up to 0.84m deep, with an irregular V-shaped profile. It contained a sequence of fills, with coarse clean basal fills (1530) (182) overlain by firm clean brown sandy silts (153) (154) and softer darker sandy silts (103). Ditch [102] was mirrored on the western part of the site by Ditch [135], a feature of similar size and shape.

Probably also in this phase, a deep pit [1568] was excavated through the western terminus of Ditch [896], and a single complete greyware vessel – an imitation Severn Valley narrow-necked jar – was deposited upside down in the base (vessel #928). Unlike vessel #955, this pot did not survive intact. The pot was removed entire and excavated by staff from the RAM Museum in Exeter, but was not found to contain anything of interest.

Dating

Charcoal from Ditch [114/118] context (876) dated to AD 50-90 (6-129 cal AD at 95% probability; SUERC 43006), but charcoal from Ditch [842] context (843) dated to AD 250-330 (231-386 cal AD at 95% probability; SUERC 43004) and charcoal from Ditch [135] context (284) dated to AD 240-330 (214-385 cal AD at 95% probability; SUERC 42999). This is difficult to reconcile unless charcoal from one is residual – which is not unlikely – and the others are intrusive. Charcoal from Ditch [102] context (103) dated to 140-240 AD (126-259 & 297-320 cal AD at 95% probability; SUERC 42998).

The diagnostic pottery from Ditch [114/118] included a stamped amphorae handle dated to 145-61 AD (119), a 2nd century bag beaker (119) (861) and mid 2nd-mid 3rd century jar (876) (892). Ditch [102] produced a carinated bowl of a form that emerged in Exeter after AD *c*.150 (103).

On balance, and despite the C14 dating, this phase should probably be dated to the late 2nd-early 3rd century AD.

Figure 25: (left) Ditch [131] under excavation; from the east (scales 0.5m & 1m).
Figure 26: (right) Ditch [842], partly excavated; from the south-south-west (scale 2m).

Figure 27: Vessel #(928) under excavation; from the east. Note the large angular stones in the base of linear feature [937], to the left.

3.1.6 The Romano-British settlement: Phase 3

The Phase 2 system of enclosures was adapted during this phase. Ditches [133/894] and [114/118] were probably maintained, and a new ditch [177], parallel to [114/118], was dug *c*.4m to the east of Ditch [842]. This feature was probably contemporary with Linear [263/961/1528], and together they appear to have formed a single boundary separated by a narrow *c*.3m wide gap.

Ditch [177] was 1.0m wide and up to 0.5m deep, with a V-shaped profile; it contained three fills. The lower fill (850) was a fairly clean soft pinkish-brown clayey-sand, but the upper two (178) (849) were soft greyish-brown sandy-silts, and both contained a large amount of pottery; context (849) also contained a high proportion of comminuated charcoal and fired clay with wattle impressions. Immediately to the east and parallel to Ditch [177] was a shallow gully [171], up to 0.6m wide by only 0.12m deep with a gentle concave profile. It contained two fills, one of which (172) contained possible packing stones, as if for a structure or fence.

Ditch [263/961/1528] was 0.9-1.1m wide and up to 0.44m deep, with a U-shaped profile, with a relatively clean basal fill of soft pinkish-brown clayey silts (970/987) (1529), by greyish-brown sandy or clayey contexts that contained a significant amount of charcoal and burnt clay (264/960).

Unlike [177], Linear [263/961/1528] was orientated WNW-ESE, dog-legging at its western end to the north, and then back again to the west. The eccentric layout appears to be designed to avoid a large spread of sub-rounded chert nodules {286}; this spread may have functioned as an exterior floor surface, but may possibly define the extent of a contemporary structure. When {286} was removed, it was possible to define two concealed postholes [1533] [1535], one of which [1533] was subsequently found to correspond with a gap in the chert nodules above. As the fill of that posthole (1534) contained large sub-rounded chert nodules, it seems

likely they post-date {286}, but it is possible they belonged to a post-built structure covering this area.

Also assigned to this phase is a curious group of features in the centre of the site. A shallow linear pit 4×1.2m and *c*.0.2m deep, mainly filled with sub-rounded chert nodules (123) partly overlain by clean redeposited pinkish-brown gravels (980) on which a fire had been set (126). This feature was subsequently partly re-cut by another shorter shallow linear [124] 2.5×0.6m and 0.14m deep. This lay just to the east and on the same alignment as [122] and cut the fill of Ditch [842]. The precise nature and function of these features is difficult to determine, but they lie towards the centre of the hypothetical enclosure defined on the west by Ditch [131/896].

Figure 28: Partly excavated section through Ditch [177], from the west. The dark, charcoal-rich fill (849) can be seen to contain burnt clay fragments, and lies beneath the buff-brown upper fill (178). Both fills contain a heterogeneous assemblage of Roman pottery, but (849) produced C14 dates in the medieval period (scale 0.5m & 1m).

Dating

The C14 dating is highly problematic for this phase. Charcoal from the upper fill of Ditch [263] context (264) dated to AD 20-60 (42-85 & 109-114 cal AD at 95% probability; SUERC 43205). This context also produced a coin of Faustina II dated to 161-75, a sherd from a South-Western mortarium dating to the 3rd century, and a large collection of coarsewares of early-mid 3rd century date. This would strongly suggest the dated charcoal was residual.

The charcoal-rich middle fill of Ditch [177] context (849) was selected for C14 dating. Two dates were obtained: AD 970-1020 and AD 1450-1490 (897-923 & 941-1024 cal AD at 95% probability; SUERC 43005; 1440-1522 cal AD at 95% probability; SUERC 44450), with the second date intended to validate the first. These dates are highly anomalous. It is almost inconceivable they could be correct if we accept the overwhelming artefactual and relational evidence that this is a Romano-British feature. However, they are not the only anomalous dates from the site, and unlike the other linear features at Shortlands Lane, Ditch [177] appears to

have been backfilled *twice*. The pottery in both (849) and (178) is characteristically varied, and found in relatively large amounts (223 sherds, 2.46kg and 147 sherds, 134kg, respectively).

On balance, the artefactual evidence would seem to be the most reliable guide to date in this instance. That would indicate a date for this phase in the mid 3rd century AD.

Figure 29: Ditch [177] and Gully [172], partly excavated; from the south-west (scales 1m & 2m).

Figure 30: Structure {286}, comprised of a spread of sub-rounded chert nodules, cut through by post-medieval leat [265]; from the north (scales 2m).

3.1.7 The Romano-British settlement: Phase 4

The main Phase 3 feature was the corner of a sub-rectangular enclosure extending beyond the edge of excavation to the north. The Phase 2 ditches still exerted an influence on the layout of this enclosure, as Ditch [292/910] conformed to the prevailing orientation of this landscape; it is possible [133/894] and [114/118] were still in use. However, Ditch [910] clearly superseded parts of the Phase 3 landscape, as it cut both Ditch [293/960/1528] and surface {286}.

The WNW-ESE section of the Ditch [910] was substantial, being up to 2m wide and up to 0.9m deep, with a steep-sided but variable profile and flat base. The SSW-NNE section of the enclosure ditch [292] was smaller, being only 1m wide and *c*.0.6m deep. The corner of the enclosure was heavily disturbed by a large but shallow post-medieval pit [296], and two modern and surprisingly deep animal burials. The basal fill of [910] was a coarse gravel (994), overlain by a series of relatively thin lenses of material, one of which (989) was a moist humic silt-clay. The greater part of the feature was filled by (911), a mid-to-dark brown sandy-silt that produced a single well-preserved coin of Marcus Aurelius (AD 161-80). The character of the pottery in (911) again indicates it was backfilled.

Ditch [292] contained similar fills, although at the corner of the posited enclosure a charcoal-rich deposit (1514/1521) was excavated that contained a small fragment of glass and a large melted/fused lump of copper alloy. Many of the fills in both sections contained sub-rounded chert nodules ultimately derived from {286}.

Dating

The uppermost fill of Ditch [910] context (911) produced a coin of Marcus Aurelius dating to 171-2. Context (989) produced a BB1 cooking pot with obtuse angle lattice with groove above dating to after the middle of the 3rd century, and context (911) produced a single sherd of *céramique à l'éponge*, dated no earlier than the last quarter of the 3rd century. A sample from

the charcoal-rich deposit at the corner of the posited enclosure, context (1521), dated to AD 330-390 (256-411 cal AD at 95% probability; SUERC 43009).

One of surviving elements of the Phase 2 layout, Ditch [852] context (283), produced a sherd from a flanged bowl dating to after AD *c*.270.

On this basis, Phase 4 can be broadly dated to the 4th century AD.

Figure 31: The corner of Ditch [292/910], where it meets the terminus of Ditch [864], and is cut by a wide shallow 19th century pit [294] and two 20th century sheep burials; from the east (scales 2m).

3.1.8 The Romano-British settlement: Phase 5

The final phase of the Romano-British settlement is marked by a small number of features on the northern edge of the site, a soil layer of highly restricted extent, and a shallow sub-rectangular pit.

Two short, narrow linear features [912] [937] on the northern edge of the site *may* form two sides of a rectangular structure, although a stratigraphical relationship between the two was destroyed by the 19th century pond bay [893]. Both features were 0.5-0.7m wide with broad concave profiles, filled with similar greyish-brown sandy silts (913) (927). Linear [937] contained a line of large flat angular stones, seemingly tipping in from the south-west, together with fragments of burnt clay.

Between [893] and Linear [293/960/1528] lay what could be the highly truncated foundation for a small square building approximately 3m across [949]. Only part of the western side of this foundation trench survived, and this was *c*.1.1m wide and up to 0.18m deep, with vertical sides and a flat base. It contained a single homogenous fill (950/984), a soft greyish-brown sandy clay-silt.

In the centre of the site, and adjacent to Pit [978], was the base of a very late soil layer (917). This represented the highest surviving Roman layer onsite, most probably because it had been preserved beneath a burgage plot boundary but had avoided truncation by wall-building or ditch-cutting. A single mid 4th century coin, a *nummus* of Decentius (AD 352-3), was recovered from this soil layer.

This soil layer appeared to be cut by a sub-rectangular pit [978] 2.4×1.4m across by up 0.4m deep. This contained a large and very varied assemblage of Roman pottery (396 sherds, 4.0kg), some of which appeared to represent large broken fragments, as well as some thin slates and angular sandstone blocks up to 0.25m across. Immediately adjacent to this pit were four large postholes [972] [974] [976] [982]; the fills of these features all contained Roman pottery, but [982] also contained a 17th century plain Delft-type cup base, so it is unclear whether any of the postholes are Roman in date.

Pit [195] has been assigned to this phase on the basis of its similarity to Pit [978], i.e. its loose and poorly consolidated fills produced a large heterogeneous collection of pottery (269 sherds, 2.5kg). This feature re-cut one of the termini of Ditch [131]; it was *c*.5×1.3m and 0.38m deep, with a shallow concave profile. Its upper fill (196) was a loose dark grey charcoal-rich fill with some burnt clay. It is possible this feature belongs to an earlier phase, as the survival of Ditch [131] as a visible feature seems unlikely.

Figure 32: The group of Roman features in the centre of the site: Pit [978] (on the left) and linear features [122] and [124] (to the right; marked by chert nodules); the east-west evaluation trench lies in the foreground. Viewed from the south-west (scales 1m & 2m).

Dating

The dating for this phase is largely relative – linear features [912] and [949] appeared to cut Ditch [910], and soil layer (917) produced a mid 4th century coin. Pit [978] contained a varied collection of pottery, including a diagnostic flanged bowl dating to after AD *c*.270 and very large cooking pots of 3rd or 4th century date.

Charcoal from linear feature [912] context (913) dated to AD 220-260 or 300-330 (137-342 cal AD at 95% probability; SUERC 43007), which could suggest the observed stratigraphic relationship with Ditch [910] was erroneous. Two charcoal samples from Pit [978] were dated, the second sample intended to validate the first. The samples dated as AD 1320-1370 (1298-1370 & 1380-1408 cal AD at 95% probability; SUERC 43008) and AD 130-220 (85-111 & 117-238 cal AD at 95% probability; SUERC 44449). The second date, given the artefactual evidence, would appear to be residual. The first dated sample should be intrusive, but as it is the second 'Roman' feature with a 'medieval' date it is possible this is a late or post-Roman feature.

On balance, Phase 5 should be later 4th century or perhaps even post-Roman in date.

3.1.9 The Medieval Features

A single medieval feature – soil layer (176) – was identified, and surprisingly little medieval material was recovered overall, implying the site was an under-utilised back plot or orchard for much of this period.

3.1.10 The Post-Medieval Features

Again, very few features could be positively assigned to this period: a single deep pit on the southern edge of excavation [179], and a shallow narrow gully [226].

Pit [179] was 2×1.8m across but extended beyond the edge of excavation to the south. It was 0.96m deep with vertical or undercut sides; it contained a single fill (180), a soft mid brown sandy loam with a single lens of more compact material (844) half way up the feature. This was probably a gravel quarry pit; the clay pipe bowls from the feature date it to 1660-1700 (nos. 1, 3, 5, 18, 22, and 44 in Appendix 18).

Gully [226] was *c*.0.6m across and 0.2m deep, with a V-shaped profile; the single fill (227) was a clean soft greyish-brown silty-sand, stony towards the northern end. It enclosed an area 10×10m across in the north-eastern corner of the site, and presumably marked a property boundary. This boundary can be dated to the 17th-18th century by the South Somerset bowl recovered from this feature.

The lowest fills of Ditch [106] context (117) (see below) produced a clay pipe bowl that can be dated to 1660-1690 (no. 4 in Appendix 18), which would suggest that feature originated in the post-medieval period.

3.1.11 The 18th Century Features

Most of the artefacts recovered during the topsoil strip dated to the 18th century, including a varied assemblage of South Somerset pottery and a large collection of clay pipe bowls. Most of the features assigned to this period were sealed by the topsoil (100), but it is possible some of them were cut through the lower levels of the topsoil (101).

Most of the features assigned to this period relate to property boundaries or water management. As noted above, Cullompton was granted a water supply in 1356 by the Abbot of Buckland. A leat carried water to a pool next to Shortlands House, from whence it was distributed across the town via a series of leats. Several short sections of shallow ditch [265] [294] cross the northern half of the site; they were both *c*.0.6m wide and *c*.0.2-0.3m deep, with concave profiles and

greyish-brown sandy silt or clay silt fills (266) (295). The relationship between Ditch [265] and Pond Bay [893] – which might suggest the presence of a sluice – indicates they were contemporaneous. However, the artefact assemblage from the backfill of [893] context (885) was dominated by 19th century material, and the water from [893] had probably been re-directed down the centre of the site. The clay pipe bowls from context (266) broadly dated to the later 17th century, but the latest example can be dated 1700-1740 (nos. 11, 27, 38, 40 and 43 in Appendix 18).

Adjacent to the northern boundary of the site at its eastern end, and flanking the New Cut, was a substantial ditch [106]. This was 2.1m+ wide but extended beyond the edge of excavation to the north, with an observed length of 21.5m. It was 1.0m deep, with steeply-sloping sides and a concave base. The primary humic fill of this feature (117) would indicate it was probably dug in the post-medieval period (see above), but it appears to have been backfilled in the 18th century, with clear tipping lines present in context (261). This feature probably relates to the town leat system – as it does run alongside the New Cut – and does not appear to have been backfilled in a single operation.

A line of 28+ substantial postholes were uncovered running the length of the site, from west to east [144] [183] [185] [187] [244] [251] [272] [287] [814] [898] [900] [902] [904] [906] [908] [1500] [1502] [1504] [1506] [1509] [1511] [1522] [1571] [1573] [1575] [1577] [1579] [1581] [1583]. Most of these were oval, although a few were sub-rectangular, and in the order of *c*.0.6m in diameter, and 0.2-0.6m deep. They all had vertical sides and flat bases, and very rarely retained any trace of a post-pipe, which would suggest any posts were removed rather than left to rot *in situ*. In two places pairs of postholes were noted, it was impossible to determine if they were contemporary or successive. Stratigraphical relationships were rare, although Posthole [251] cut the fill of Gully [226]. Individual finds were rare, but taken as a group were fairly consistent, indicating a date in the 18th century. The purpose and function of this line of postholes is open to question. The eastern end of the line is angled slightly to the south, and diverges from the dominant east-west axis, but the least speculative explanation is that they formed a temporary property boundary.

Figure 33: The eastern end of the line of postholes crossing the site; viewed from the north-north-west.

A single very large sub-rectangular pit [104] was identified in the south-eastern corner of the site. This was 4.95×2.85m across and up to 0.6m deep, with a sloping base. It contained two fills, the lower fill (260) was a soft reddish-brown sandy-silt that contained a large amount of highly fragmented pottery and clay pipe fragments (127 sherd, 1.04kg; 160 fragments, 0.51kg), suggestive of a rubbish pit but not the primary point of deposition. The upper fill (105) contained burnt stone and brick, slate, and charcoal in a matrix of brownish-red sandy-silt. It also contained a large dump of broken window glass, a small proportion of which appeared to be heat-affected. The pottery from the feature would indicate these fills date to the middle of the 18th century; the window glass has been subject to chemical analysis by English Heritage technicians (Girbal & Ford 2010) indicating it included both contemporary and older glass. Context (105) appears to be a dump of material, including glaziers waste, following a fire.

Figure 34: Section through Pit [104], from the east (scales 0.5m & 2m).

3.1.12 The 19th Century Features

Given the location of the site in relation to the town, Shortlands House, and the posited bell foundry on the New Cut, the 19th century had a surprisingly limited impact on the site as a whole. In general, the amount of 19th century artefactual material in the topsoil was fairly limited, and most of the unstratified 19th century pottery actually came from the machining of Pond Bay [893]. The 19th century features include the renewal of a property boundary down the centre of the site, as shown on the 2nd Edition Ordnance Survey map, the pond bay mentioned above, and a number of shallow sub-rectangular pits.

The single largest feature on the site was a sub-rectangular pit 14.5×8.0m across and up to 1.0m deep. It had sloping sides and a flat base, with a series of deeper linear depressions flanking the north edge. It seems most likely this was a pond bay, similar to other examples in the area (e.g. in the garden behind the Walronds), although how readily the bay would have retained water – given the fairly free-draining sand and gravel natural – without lining is difficult to quantify. The lower and partial fill of the feature, context (930), was a clean soft

pinkish-brown clay silt that contained the head of an iron shovel, and as the feature did not contain any of the expected primary humic silts, it may well be these dark nutrient-rich sediments were emptied out of the feature before with was backfilled. Most of the feature was filled with a single heterogeneous dump of material (885) that contained both domestic and industrial waste. Context (885) produced at least four smithying hearth bottoms and two crucibles – almost the only evidence for the Bilbie bell foundry encountered on site –19th century white refined earthenwares and South Somerset coarsewares.

At the very end of the 19th century, the plot was subdivided by a wall, for which the foundation trench [886], build {276} and robber cut [110] survive. This cut the fills of Pond Bay [893]. This wall divided the plot into two along its east-west axis, but it curved away to the north at its western end, fortuitously missing Pit [978] and its associated features. It was flanked by two shallow linear features, Ditches [248] and [812], but these also curved away to the north at their western ends, and thus should be close contemporaries.

Figure 35: West-facing section through Ditch [106], at the eastern end of the site (scales 2m).

SECTIONS THROUGH DITCHES [131/896] AND PIT [195]

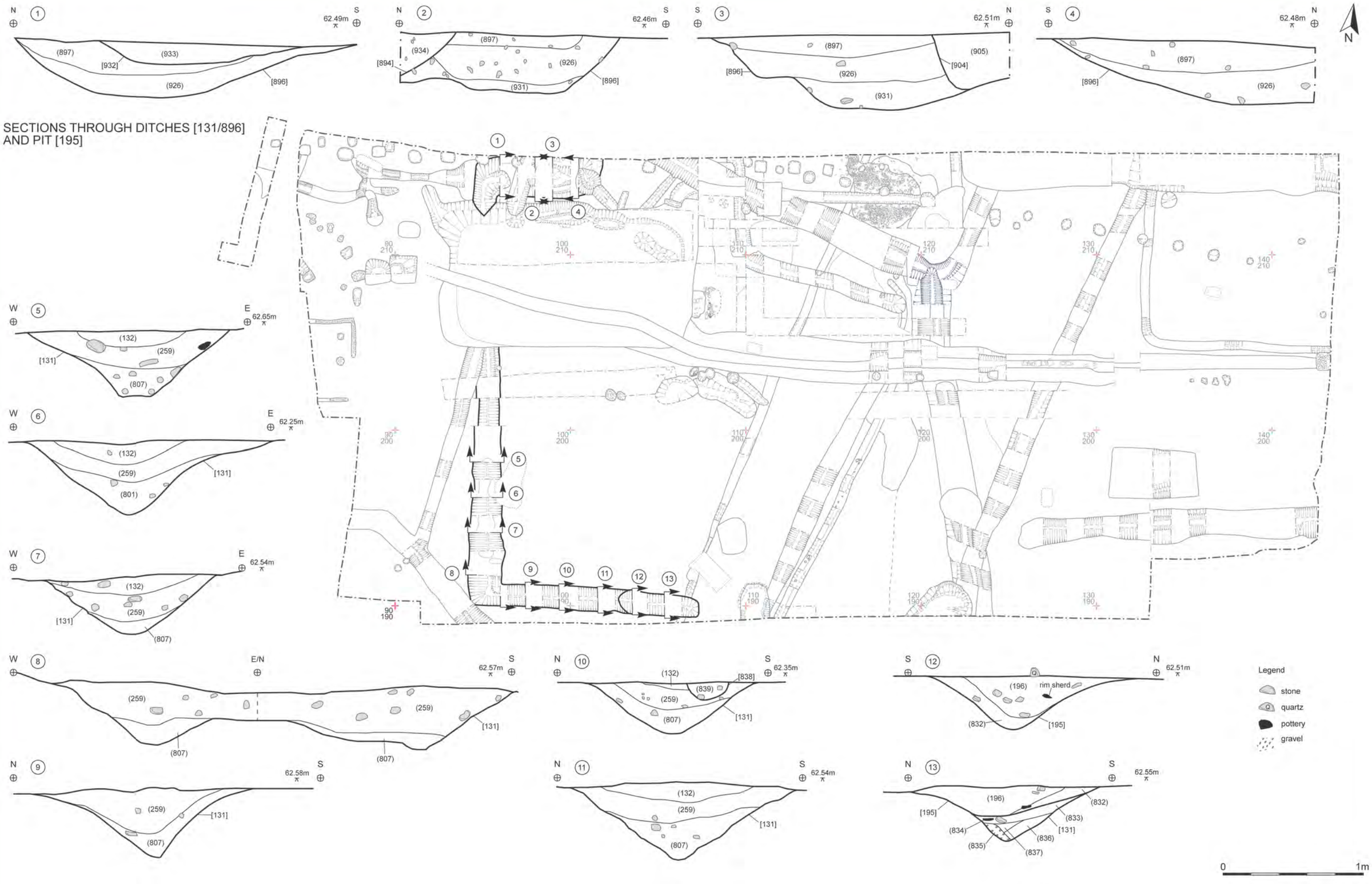
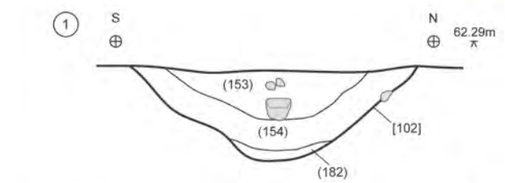
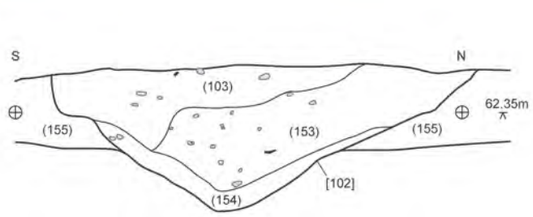
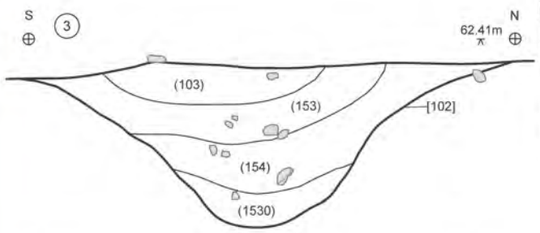


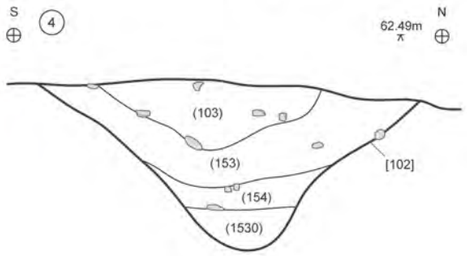
Figure 36: Phase 1 – Ditch [131/896].

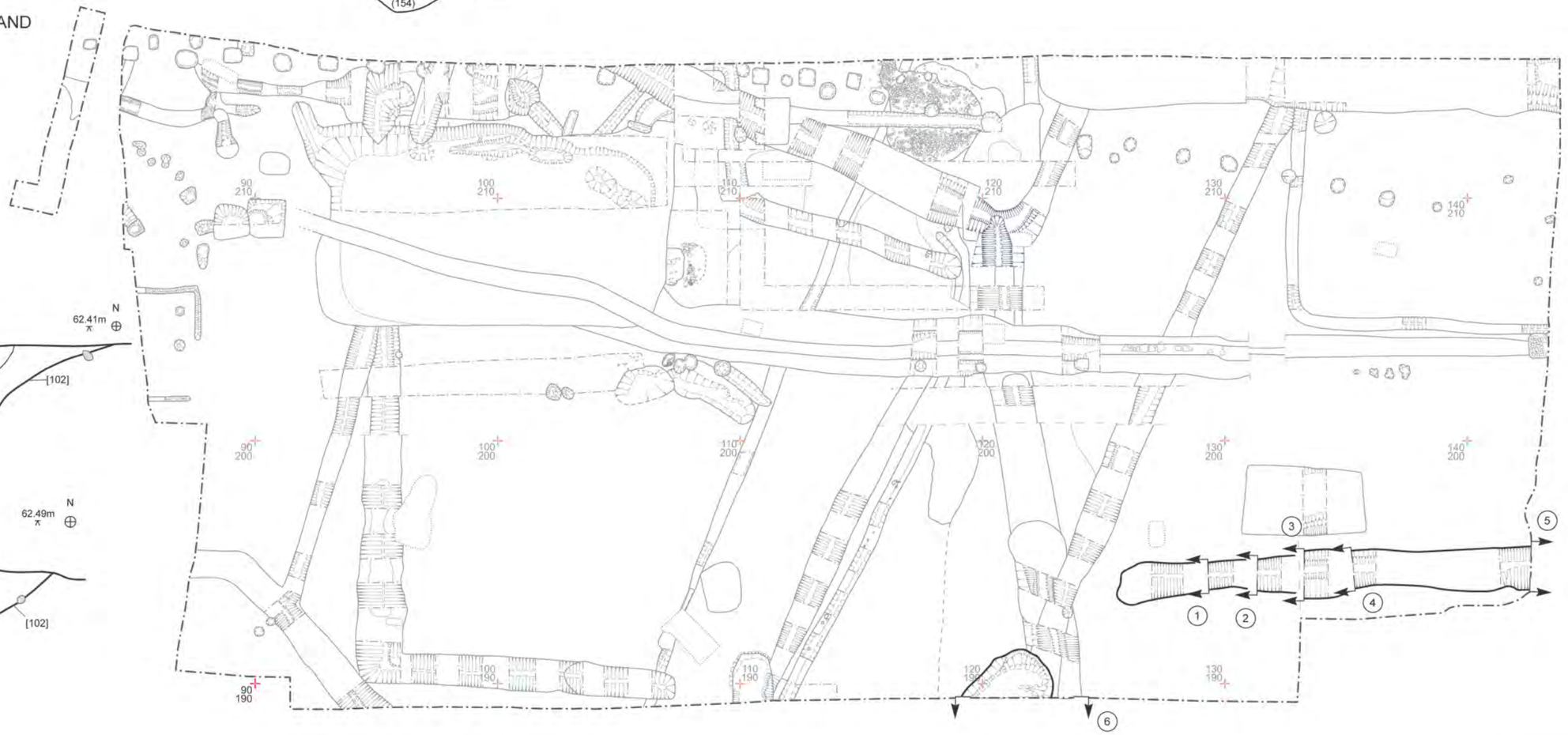


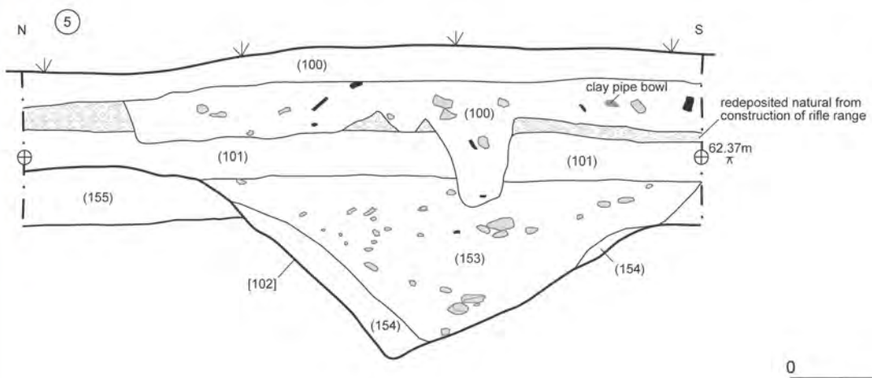


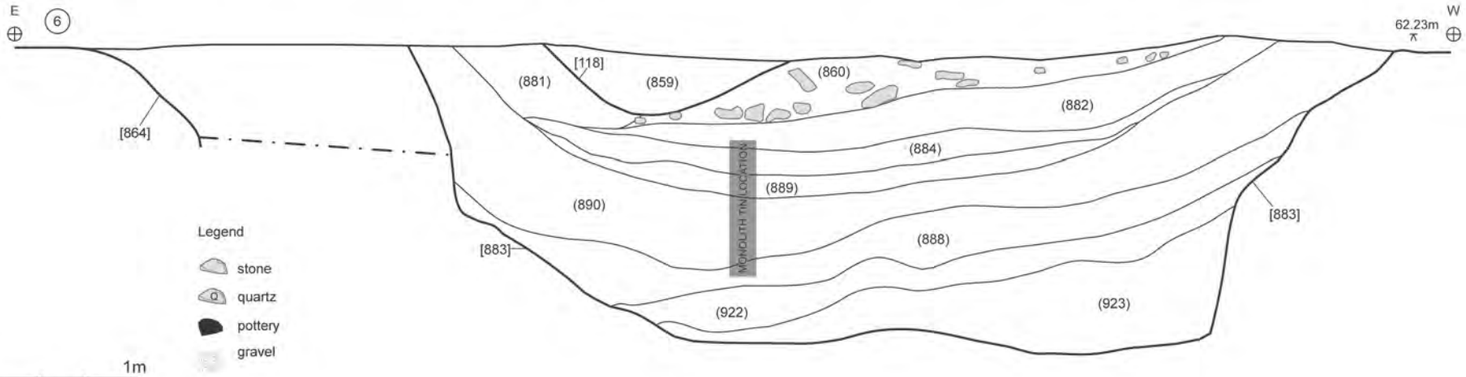
SECTIONS THROUGH DITCH [102] AND PIT [883]











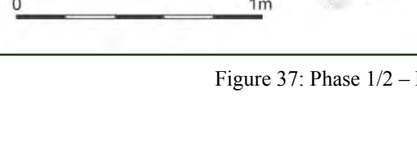


Figure 37: Phase 1/2 – Pit [883] and Ditch [102].

SECTIONS THROUGH DITCHES [133/894], [842], AND [114/118]

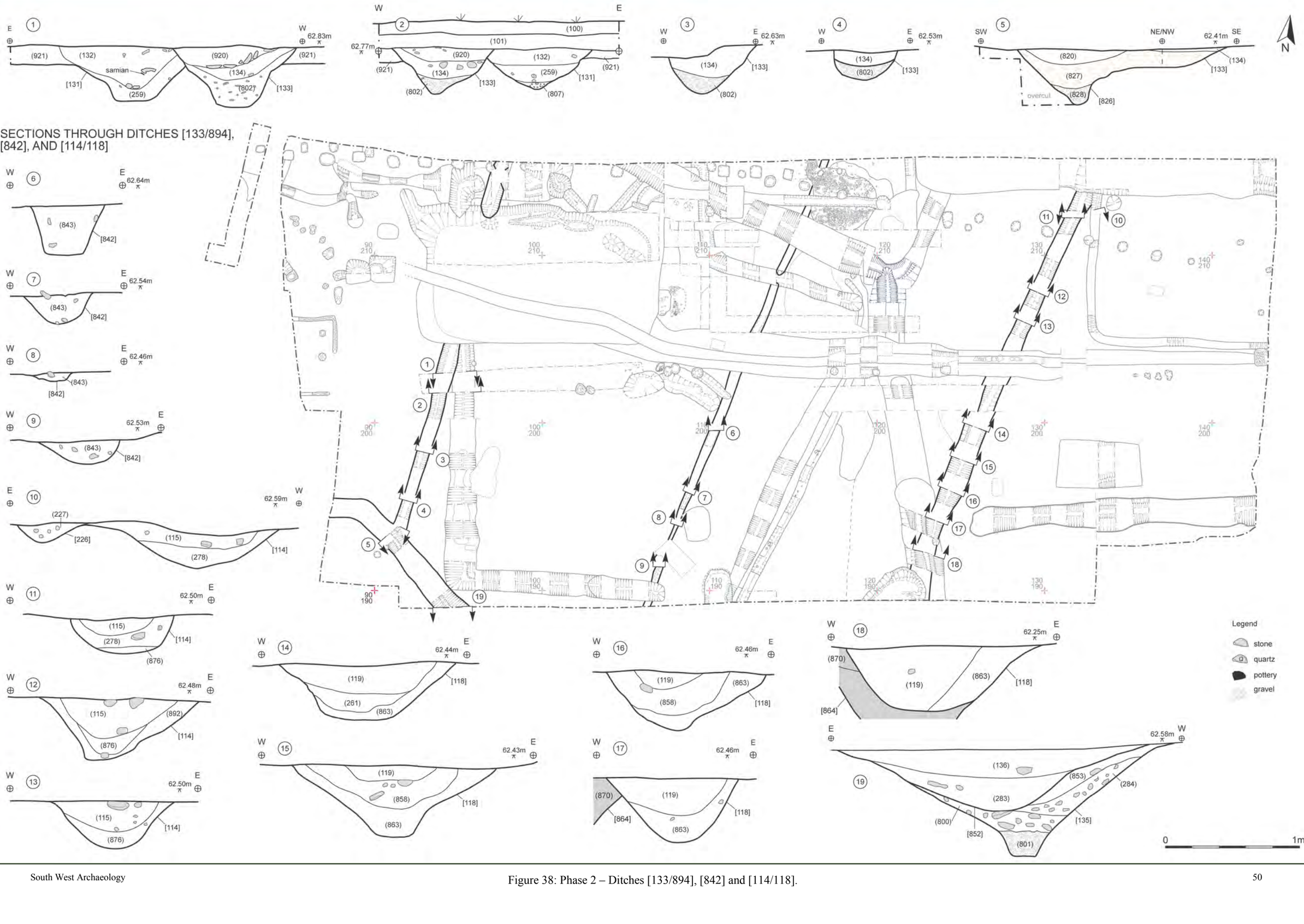
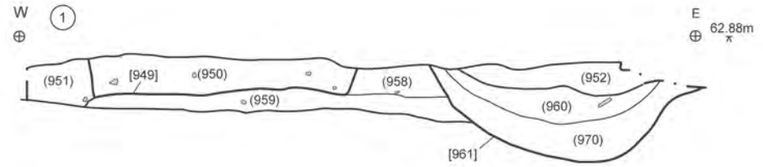
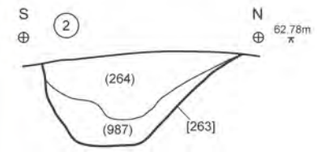
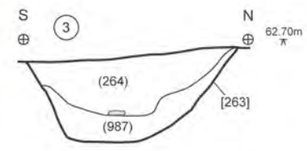


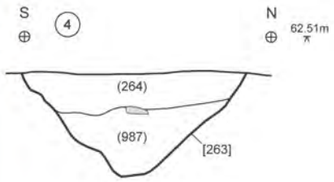
Figure 38: Phase 2 – Ditches [133/894], [842] and [114/118].

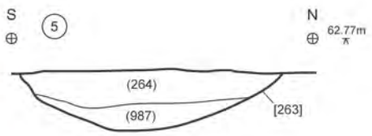
SECTIONS THROUGH DITCHES [177], [263/960/1528], [960] AND GULLY [172]

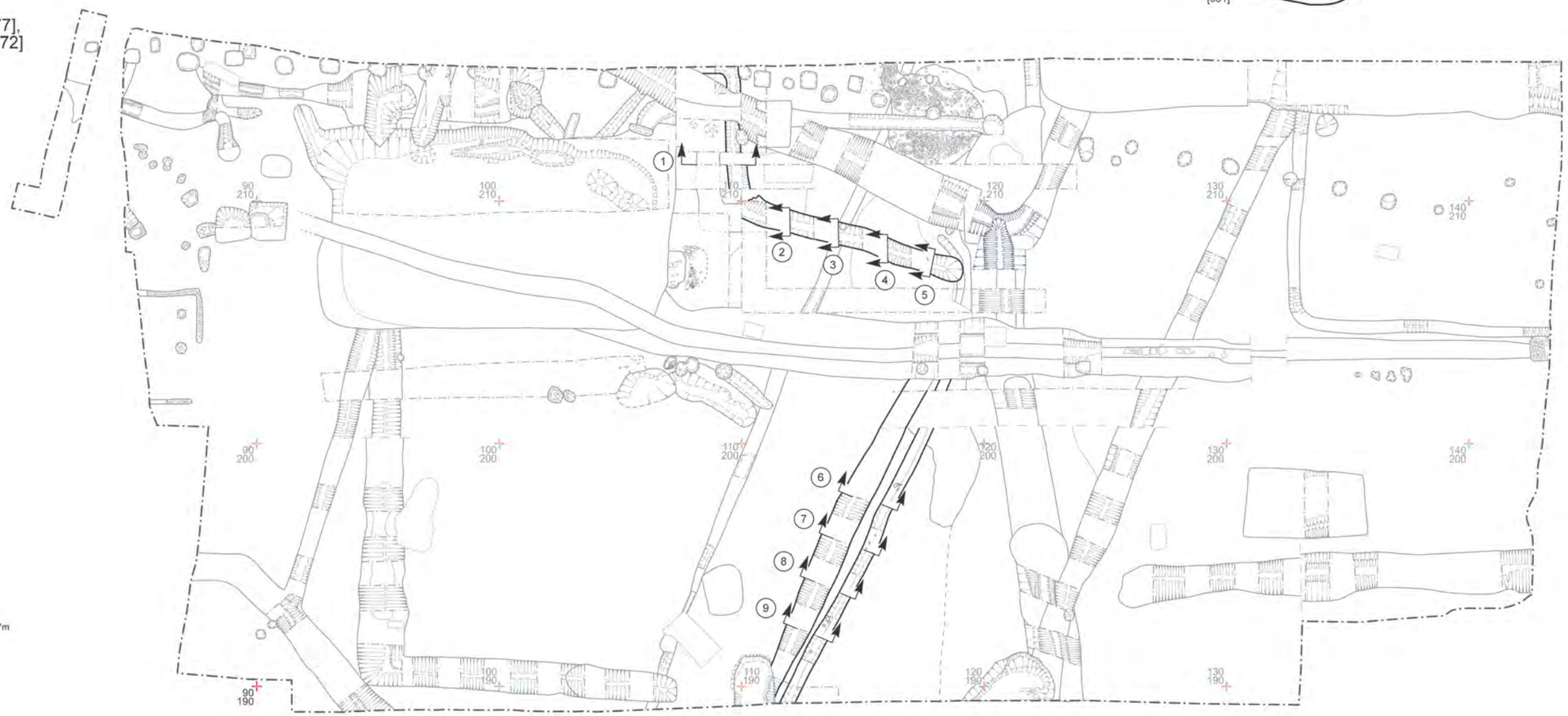


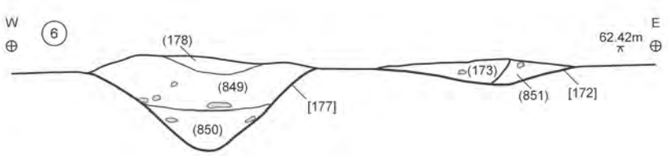


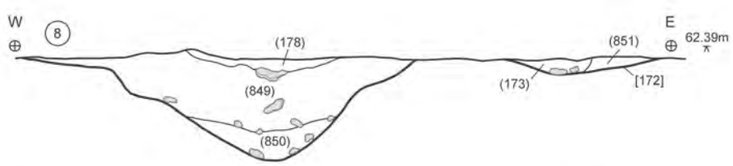


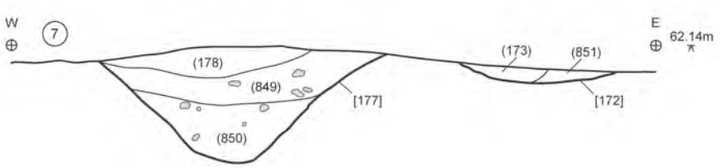












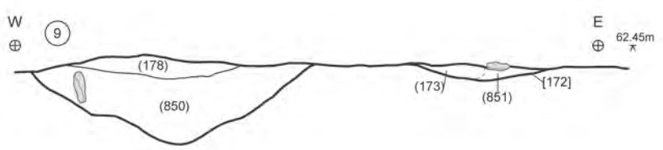


Figure 39: Phase 3 – Ditches [177] and [263/960/1528].

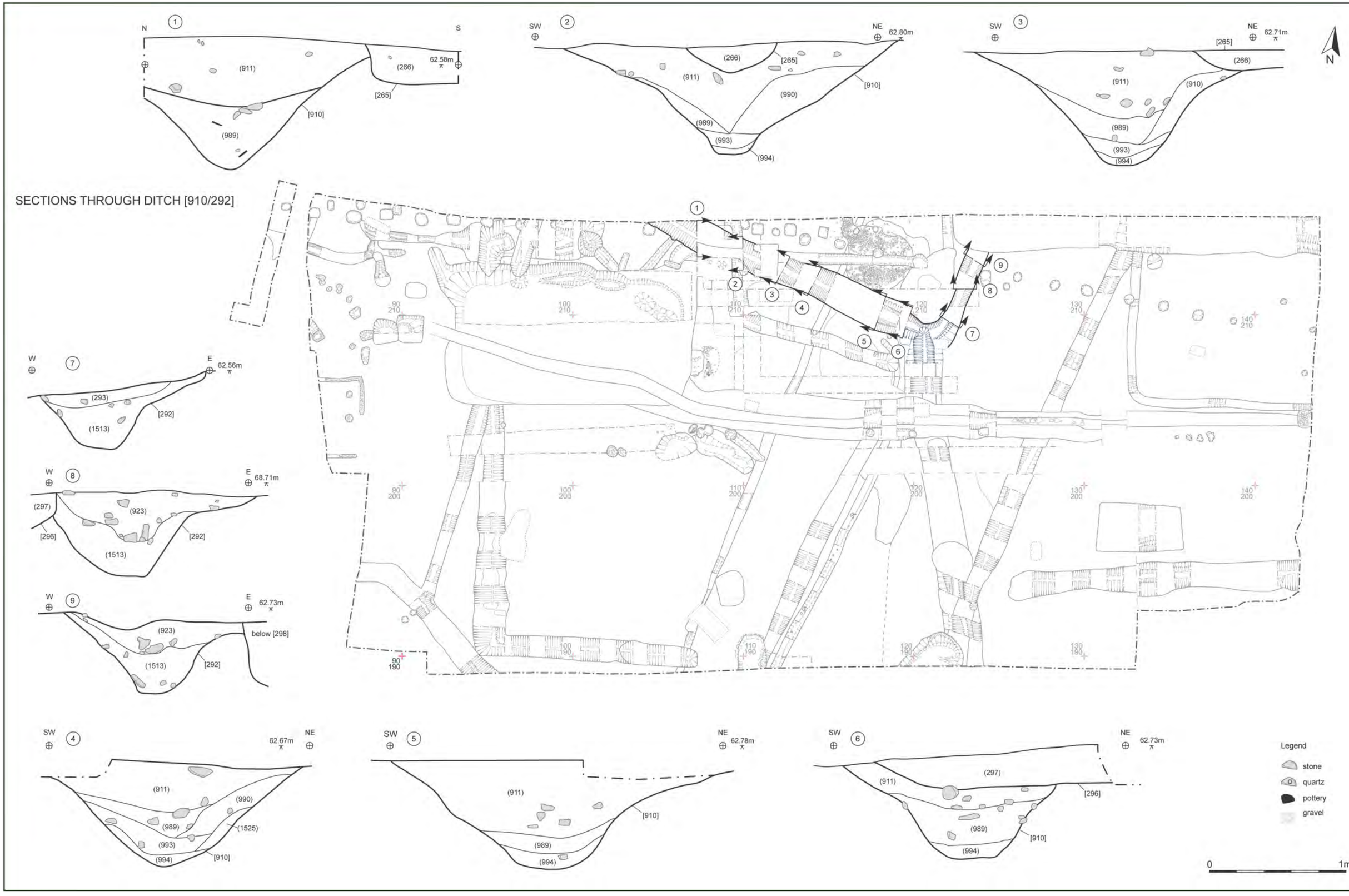


Figure 40: Phase 4 – Ditch [292/910].

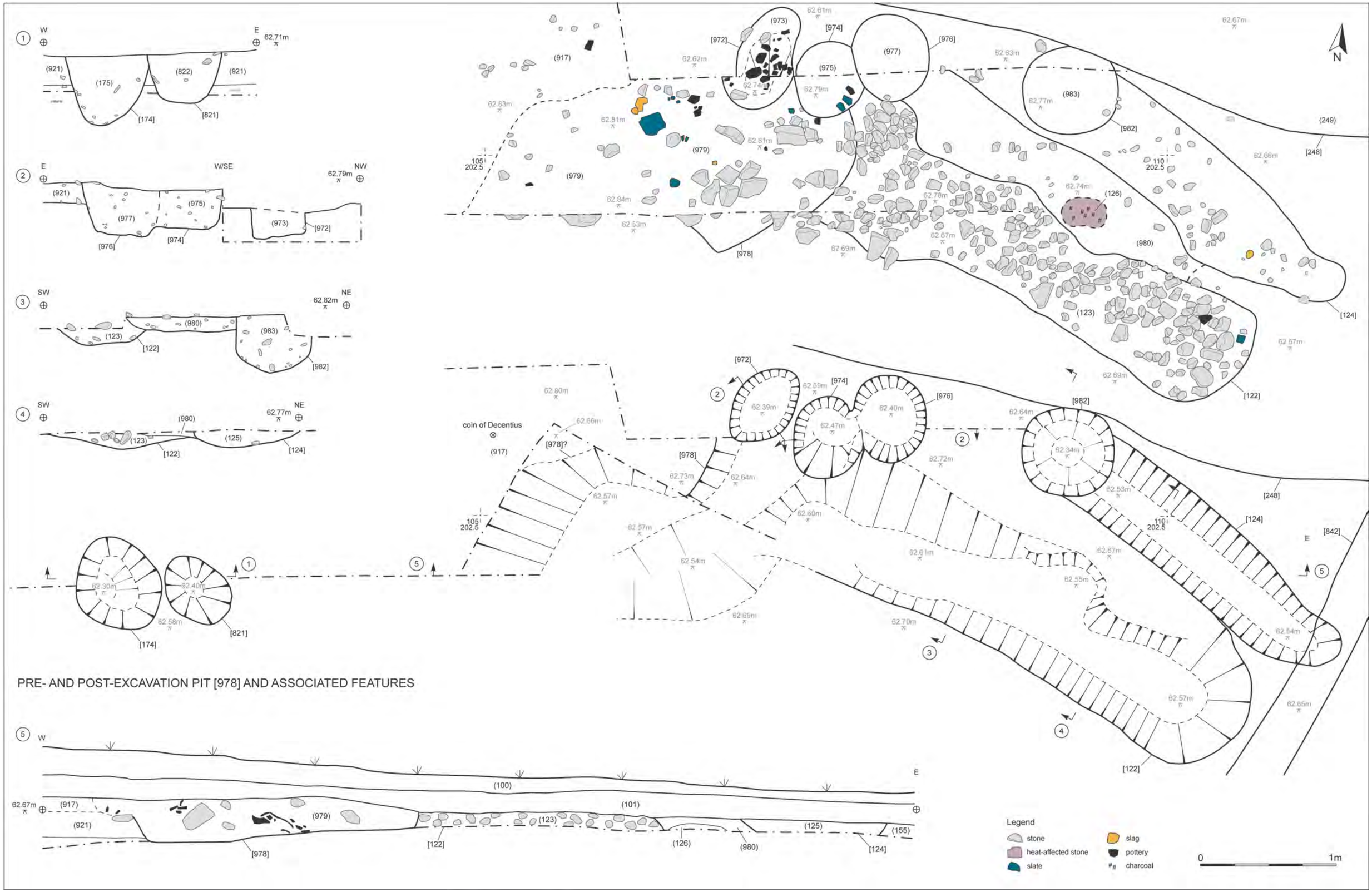


Figure 41: Phase 5 – Pit [978] and associated features.

SECTIONS MISCELLANEOUS FEATURES

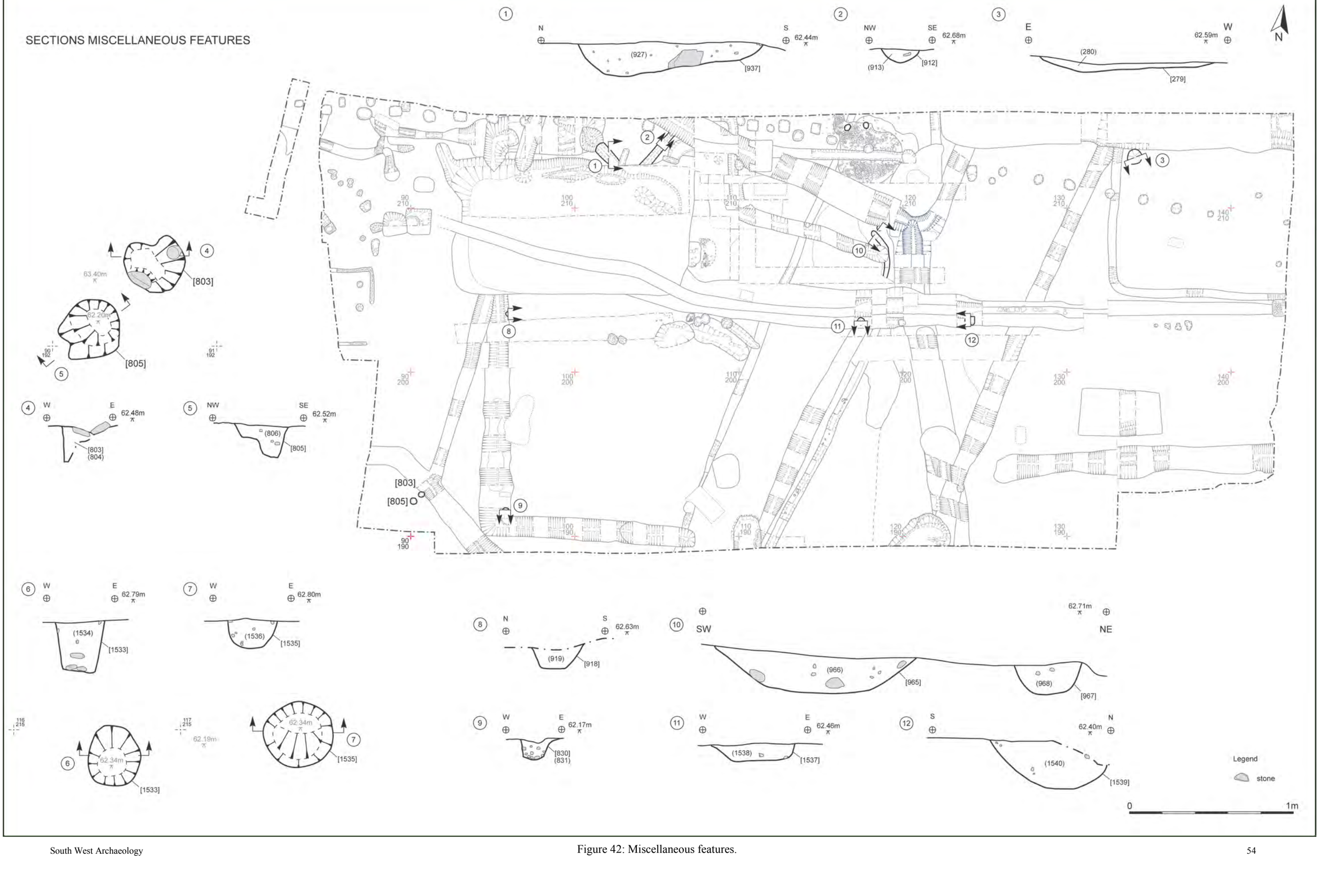


Figure 42: Miscellaneous features.

SECTIONS THROUGH
POST-MEDIEVAL POSTHOLES

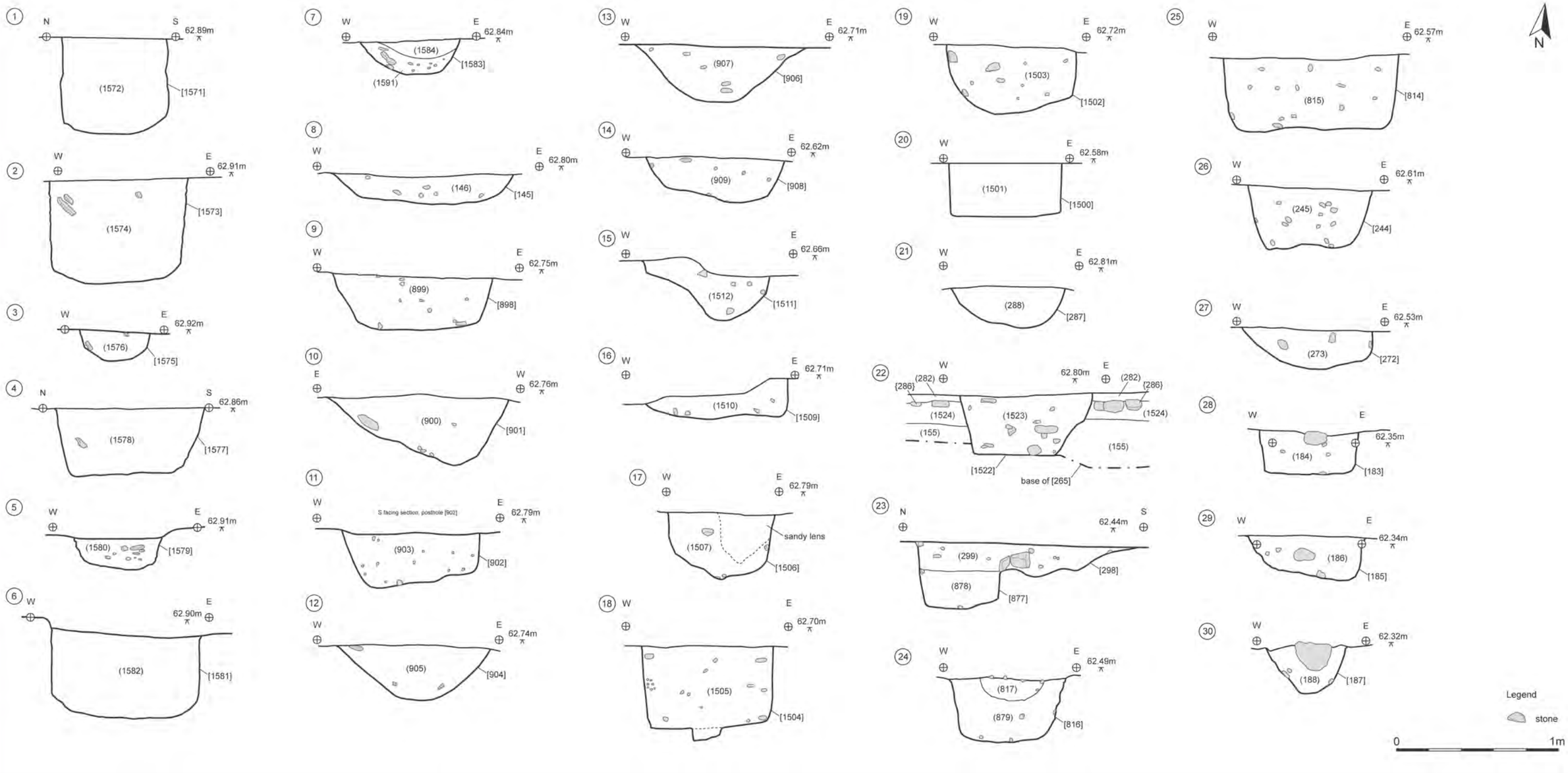


Figure 43: Post-medieval features – postholes.

SECTIONS THROUGH DITCHES [106], [226] AND PIT [180]

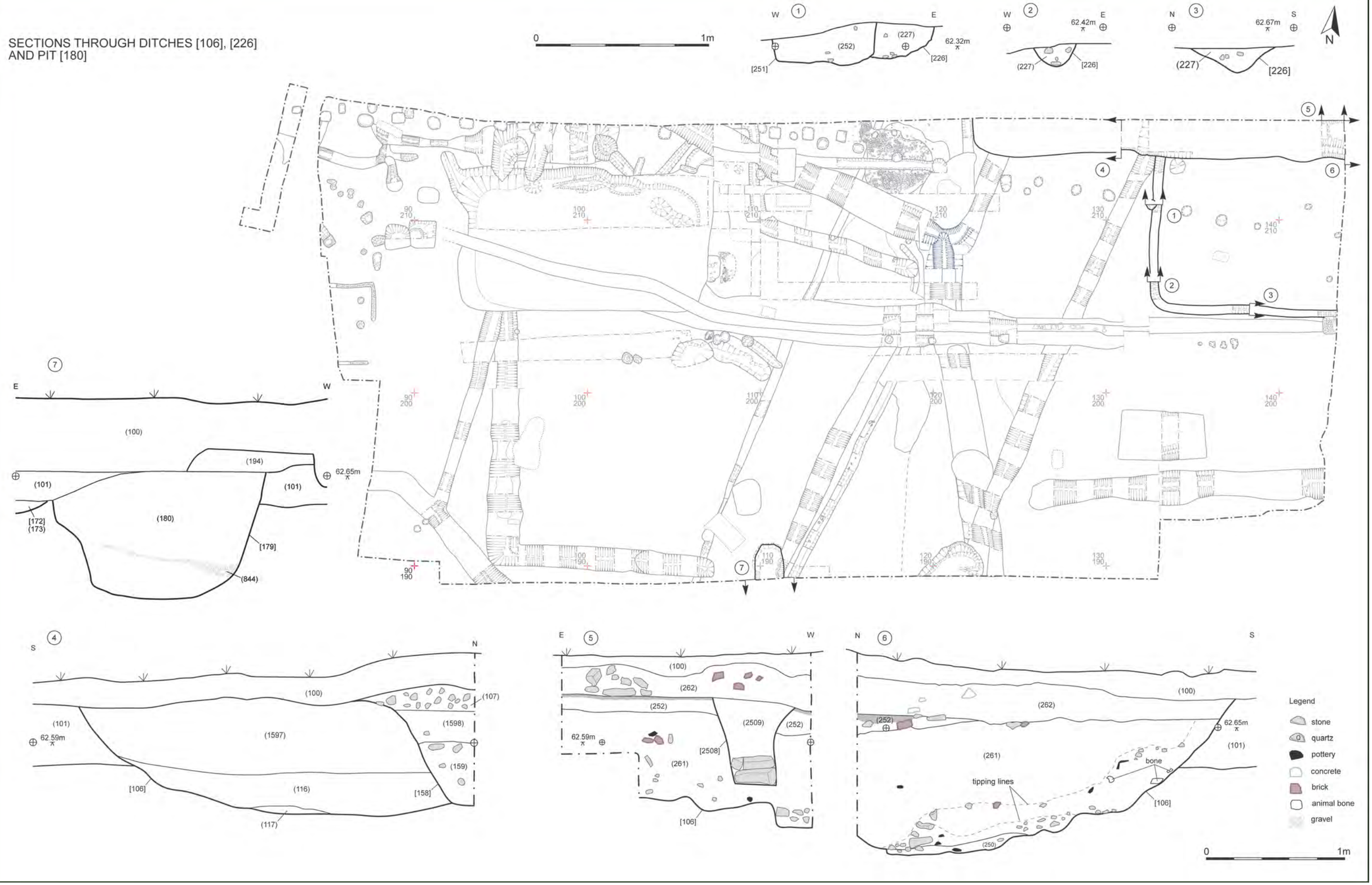


Figure 44: Post-medieval features – Ditch [106], Gully [226] and Pit [180].

SECTIONS THROUGH POST-MEDIEVAL FEATURES

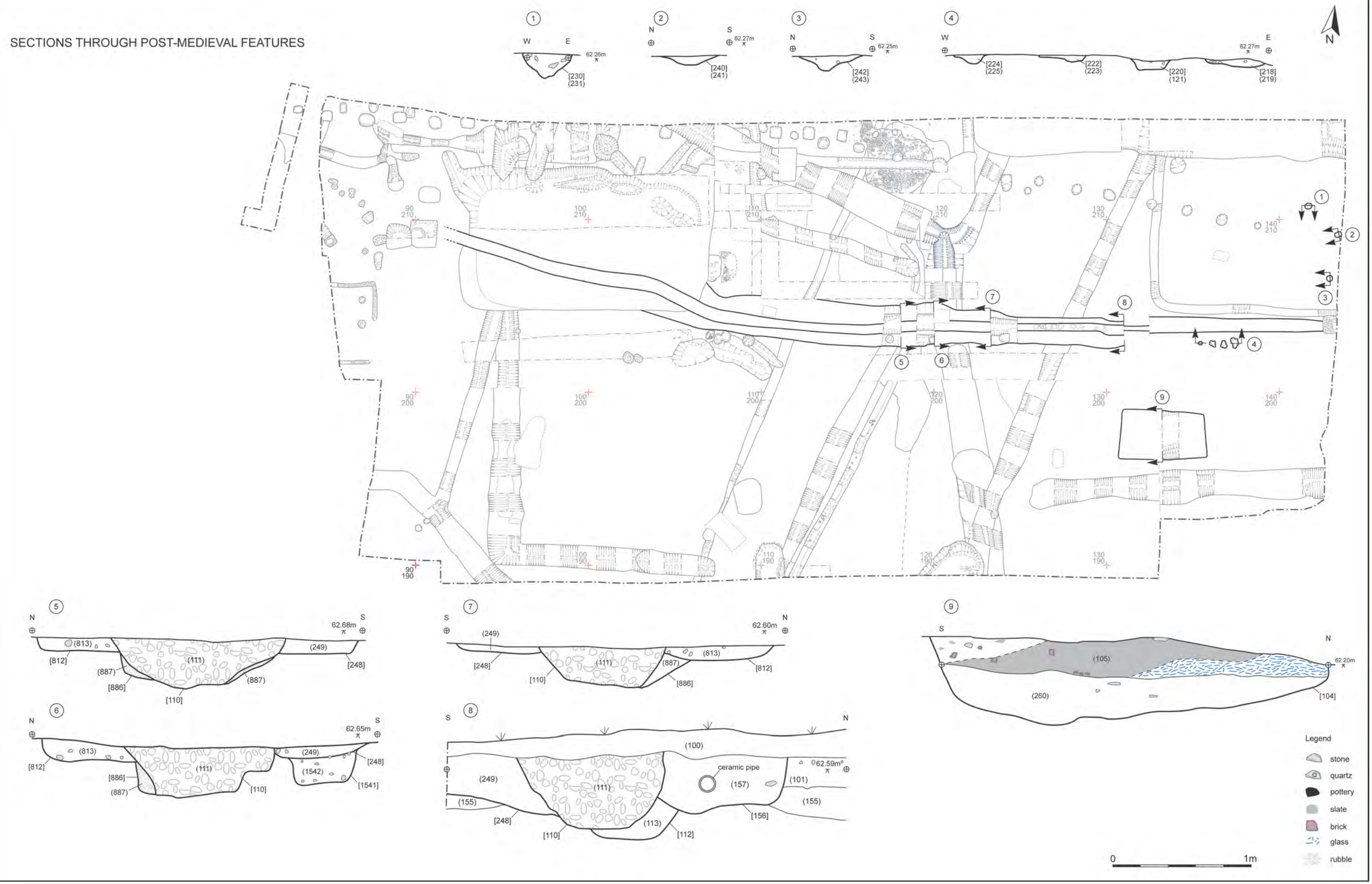


Figure 45: Post-medieval features – ditches and shallow postholes.

4.0 Finds Synopsis

The specialist reports on the worked stone, pottery and palaeoenvironmental remains can be found in Appendices 6-24, but an outline of the major points can be found below.

4.1 The Worked Flint, Chert and Quartz (see Appendix 6)

The site as a whole produced an assemblage of 138 pieces of worked stone weighing a total of 3.363kg; of this chert made up 56% by count and 83% by weight. Almost all of this material was residual in later features. Only three datable pieces of worked stone were recovered, all from the topsoil; these were two oblique arrowheads and a broken plano-convex knife. A single broken flint knife blade was recovered from the fill of the cremation burial (954).The high proportion of chert would suggest the bulk of this material dates to the Mesolithic or early Neolithic. Sixteen utilised stones were recovered, including one elongate pebble tool of probable Mesolithic date, and five possible whetstones of Roman date.

4.2 Prehistoric Pottery (see Appendix 7)

The excavations recovered 15 sherds of Prehistoric pottery weighing 174g. All of this material was residual in later contexts. The assemblage was comprised of 1 sherd (3g) of Neolithic pottery, 45 sherds (42g) of late Bronze Age pottery, and 9 sherds (116g) of middle Iron Age gabbroic South West Decorated ware.

4.3 Roman Pottery (see Appendix 8)

3702 stratified sherds of Roman pottery weighing 58.597kg were recovered, as well as 110 sherds (2.317kg) of unstratified material. The assemblage includes: 146 sherds (1.497kg) of Samian, 12 sherds (0.719kg) of mortaria, 153 sherds (13.536kg) of amphorae (including two stamped handles), and 3391 sherds (42.845kg) of other fine and coarse wares. The coarseware assemblage is dominated by greywares, of which South East Dorset Black Burnished ware 1 (SED BB1) and Greyware Fabric 1 (Taw Estuary?) are the most common. This is a very important assemblage, as it is the only site outside of Exeter with good stratified 2nd-3rd century deposits, and even Exeter lacks well stratified sequences. It is the third largest assemblage from Devon, after Pomeroy Wood (Fitzpatrick *et al.* 1999) and Aller Cross (AC Archaeology *forthcoming*) outside of Exeter, and both those sites were more extensively excavated. The preservation of the pottery is also very good, with little of the chemical abrasion seen at Pomeroy Wood. The pottery indicates the cemetery dates to the mid-late 1st century, but that civilian occupation did not start until the latter part of the 2nd century and ceased before the end of the 3rd century. However, there are a few late 3rd-early 4th century elements, and the scientific dating suggests occupation did continue into the 4th century.

4.4 Roman Coins (see Appendix 10)

Seven coins were recovered during the excavation, of which four were too badly corroded to identify. The other three were: a *sestertius* of Faustina II under Marcus Aurelius (161-75), a *sestertius* of Marcus Aurelius (171-2), and a *nummus* of Decentius (352-3).

4.5 Roman Glass (see Appendix 11)

A total of five pieces of Roman glass were recovered during the excavations. Two small melted blobs, one of which came from the fill of the cremation burial (954), two recognisable fragments of vessel glass, and the broken and partially melted neck of an unguent bottle from inside the cremation urn #955. The two vessel fragments came from a food storage vessel and the handle of a table jug, and date to the late 1st-mid 2nd century AD. The unguent bottle is an example of type commonly encountered in burials in the latter 1st century AD in northern Italy.

4.6 Romano-British Metalwork (see Appendix 12)

48 iron objects were submitted for analysis, of which most proved to be medium-sized timber nails and hobnails. The notable exceptions included a tanged arrowhead from context (136), a pair of shears from context (888), and an 'ox goad' from context (196). Tanged arrowheads are relatively rare finds, with most known examples coming from Housesteads Fort on Hadrian's Wall. The 'ox goad' is of particular interest as these artefacts have been interpreted as pen nibs, which would point to the inhabitants being literate. A single later iron object – an 11th-12th century horseshoe from above (103) was also indentified.

4.7 Cremated Bone (see Appendix 14)

The cremation urn #955 contained 1.586km of cremated bone, with a further 9.7g recovered from the fill (954) of the pit [953]. This total includes 0.223kg (14.1%) of animal bone, from a piglet, a sheep and at least four different domestic fowl. The presence of hand and feet bones indicates recovery was thorough, and the total weight represents almost 99% of the expected for a cremated adult, making it one of the most complete cremations handled by the specialist. The individual was probably male, aged 25-35, had evidence for cribotic *cribra orbitalia* indicative of childhood malnutrition, and skeletal evidence for a high-activity lifestyle. This is the only cremation burial of this date excavated in Devon outside of Exeter, and the only one to produce human bone.

4.8 Roman and Post-Medieval Archaeolometallurgical Debris (see Appendix 15)

332 fragments weighing 19.9kg were recovered, representing waste from copper alloy processing (19th century material relating to the bell foundry), 62 fragments of tap slag and 21 whole or partial smithying hearth bases. Most of the Roman smithying hearth bases came from Phase 1; most of the tap slag came from the later phases but does not indicate smelting took place on site.

4.9 Romano-British Quern Fragment (see Appendix 16)

Approximately ⅓ of a later Roman rotary quern was recovered from context (989). This fragment has a concave grinding surface with the remains of a collar around the eye; comparable examples are dated to the later Roman period. The stone is a silicified glauconitic sandstone from the Blackdown Hills, which would suggest the regional medieval whetstone industry was preceded by Romano-British exploitation of the same deposits.

4.10 Medieval and Post-Medieval Pottery (see Appendix 17)

An assemblage of 2340 sherds weighing 52.909kg was recovered during the excavation, the bulk of which (63% by weight) came from the topsoil strip. The number of contexts which produced good groups was very low, and the assemblage is dominated by a small number of large, late groups. Most of the pottery recovered (77% by weight) came from the South Somerset potteries, and was 17th or 18th century in date. Only a very few sherds of North Devon pottery were present, indicating pottery consumption in Cullompton was more akin to that of Exeter than Crediton. Most of the fine wares were imported, and included the ubiquitous Bristol/Staffordshire Yellow slipware, Westerwald stoneware, Mottled Ware, and Delft-type tin-glazed ware, with an emphasis on drinking vessels. A small number of exotics were noted, including part of a Saintonge chafing dish. The relative importance of Exeter Fabric 23 among the medieval sherds might indicate this material was produced in the Cullompton district. Only one tiny sherd of Upper Greensand-tempered pottery was recovered, and the rest of the medieval material dated to after the 12th century.

4.11 Clay Tobacco Pipes (see Appendix 18)

1010 fragments weighing (4.835kg) were recovered, comprising 758 stem fragments, 81 stem/heel fragments, 109 bowl fragments and 62 complete bowls; most of this material was unstratified. The majority of the complete bowls dated to the late 17th-early 18th century, and appear to be Exeter products. One stem was marked 'underhil' 'Ollumpton' suggesting the presence of a hitherto unknown pipemaker in the town in the 19th century. While the bulk of the material was unstratified, it remains a large and important collection from an inland Devon town with few comparanda.

4.12 Animal Bone (see Appendix 19)

361 fragments of animal bone were retained, mainly from 18th and 19th century deposits. Most of the bones came from cattle or sheep, and at least three complete modern or recent sheep burials were encountered on site. Many of the bones produced evidence for butchery and gnawing.

4.13 Wood Charcoal and Plant Macrofossils (see Appendices 20-21)

52 samples were examined, and the charcoal was generally well-preserved if highly fragmented. There was a relatively high taxonomic diversity, with six or more taxa recorded per sample; the diversity suggests non-focused fuel-wood collection for domestic use. Six samples were submitted for plant macrofossil analysis, and several different cereal crops were identified: spelt and bread wheat, barley and oats. The most interesting assemblage came from the fill of the cremation burial (954), which produced 15 grains of hulled barley, hulled and free-threshing wheat. It also produced seeds of elder and rose thorn.

4.14 Post-Medieval Glass from Pit [104] (see Appendix 23)

A single large sub-rectangular pit [104] contained a dump of glaziers waste. The window glass was subject to chemical analyses by English Heritage, which concluded the assemblage contained HLLA glass (*c*.1570-1700), kelp glass (1700-1830) and either a transitional product or an import. This is a useful addition to the known corpus.

4.15 Radiocarbon Determinants (see Appendix 24)

A total of 14 radiocarbon dates were obtained for the site, an initial 12 with two additional dates intended to test the original findings. One feature was dated to the middle Iron Age, but most of the rest of the features produced dates within the first four centuries AD. Three dates were highly anomalous, and dated two of the Roman features to the medieval period; some of the Roman dates were too early for the stratigraphy and the artefact dating. Clearly, the small and fragmented nature of the charcoal is factor, but while it is relatively easy to accept charcoal can be residual, it is more difficult to explain what must be intrusive without questioning the whole basis of the exercise.

5.0 Discussion

5.1 Prehistoric Cullompton

The number of features that could confidently be assigned to the Prehistoric period is fairly low. The group of short irregular linear features investigated in the north-western corner of the site contained sterile sandy fills and could easily be natural, possibly periglacial, features. The only other feature of any note was Ditch [864], which radiocarbon dated to the middle Iron Age. This was a substantial feature that would have been at least *c*.1.5m deep when first dug. It terminated within the site, and continued to the south at least as far as the adjacent house (local resident, *pers. comm*.). The fills indicate it silted-up naturally over an extended period of time.

Such a feature would normally be interpreted as an enclosure ditch, with the interior presumably to the west; however, a similar undated ditch was excavated by SWARCH at the Tiverton Road site (SWARCH *forthcoming*), which would suggest something a little more complex. If that example, Ditch [145], defined an enclosure then it followed a rather eccentric course in relation to the local topography, and changed in size and profile markedly over its observed length. At its eastern end it was very similar to Ditch [864], both in terms of size and profile, but at its western end it shrank to a slot little over 0.3m deep. If the two features were contemporary, and are related, then they would define an area centred on the shallow valley to the west, rather than higher ground to the north and east.

The location of the site itself – on a level or south-facing terrace overlooking the Culm – is entirely appropriate for settlement, in any period. The small amount of Prehistoric pottery and lithic material recovered – all residual – indicates a general background of settlement or utilisation from the Mesolithic onward. The character of that settlement or utilisation cannot be quantified, but the presence of middle Iron Age South West Decorated gabbroic pottery indicates the local inhabitants were part of contemporary exchange/social networks.

5.2 The Cremation Burial

The discovery of a well-preserved military-period burial is of very great importance. With the exception of four burials from Exeter, this is the only example to be excavated in the modern era in Devon and Cornwall, and the only one with surviving bone. Romano-British burials of any date are very rare, and this is an important addition to the meagre corpus. As this burial was located on the western edge of the site it is unclear whether it was an isolated burial or whether it formed part of a contemporary cemetery. Monitoring in advance of the construction of the adjacent bungalow did not identify any archaeological features (Bill Horner *pers. comm*.), but there *may* have been other finds in the immediate area (a pottery vessel dug up in the garden of the chapel on Shortlands Lane, local resident *pers. comm*.).

In terms of this burial, the various analyses that have been carried out allow us to reconstruct with some certainty the manner of the burial ritual and the identity of the deceased.

It has long been known that there are several Roman forts on St Andrews Hill. The evaluation undertaken in 1992 provisionally dated the larger fort to AD 50-70 (Simpson & Griffith 1993), and a number of factors make it highly likely the burial excavated at Shortlands Lane can be associated with the garrison at that fort. Firstly, the cremation has been radiocarbon dated to 20 calBC to 126 calAD (at 95% probability, SUERC 42600), with the highest peak at 50-65 calAD. Secondly, the inclusion of a shale board with the burial is paralleled by two Flavian-era burials in Winchester (Biddle 1967). Thirdly, the use of an imitation butt-beaker as the primary

cremation vessel is paralleled by the inclusion of a Colchester butt beaker in Pit VS 356 at Holloway Street in Exeter, dated to the Neronian period (AD 54-68) (Salvatore 2001). Lastly, and perhaps more convincingly, the character of the burial has certain parallels with several 1st century cemeteries in northern Italy and southern Gaul.

We know from the skeletal evidence that the deceased was probably a man in his prime, aged 25-35, who had led a very active life. He may not have come from wealth, as the cribotic *cribra orbitalia* would suggest childhood iron deficiency anaemia. The Schmorl's node on one of his thoracic vertebrae indicates he suffered from back pain, likely to have been caused by a stress-related trauma, and the enthesophytes on his right patella suggest he had a trick knee.

If, as seems probable, he was part of the garrison at St Andrews Hill, then he undoubtedly hailed from another part of the Roman Empire. The glass unguent bottle found in his grave has few parallels in Britannia, but close parallels with burial rites of southern Gaul and northern Italy.

If he came from a poor family, he was certainly treated with considerable respect when he died, which might suggest he was more than simply a common soldier. His skeletal remains give no indication of how he met his end, but the fact that his burial was a relatively complex affair, and the location of the burial appears to have been marked, might suggest disease rather than hostile enemy action was the cause.

He was laid on a pyre of oak, with lesser amounts of alder, hazel and willow. The species present are the same as those found on the later civilian settlement, so it seems likely the pyre was somewhere nearby. We can speculate he was anointed with perfumed oils, and the used unguent bottle was laid aside close to the pyre. The burnt hobnails in the urn indicate he was wearing his boots, so we may assume he was clothed, but no other brooches or fitments were collected. The pips from elder and rose may indicate flowers were laid on the body before it was burnt – which may indicate he died in the spring – and thus perhaps the presence of a wife or lover.

He was accompanied by a range of grave goods. The nails from the urn suggest at least three wooden items were burnt with him, one of which was probably a box, together with the presumed contents. The presence of charred wheat and barley, together with appropriate weed species, indicate a provision of grain was also made. The small butt beaker, and perhaps also the greyware jar, may have contained a liquid libation to accompany the grain.

Six animals – presumably selected parts rather than whole animals – were also consigned to the flames: a piglet, a sheep, and at least four domestic fowl. While animal sacrifices were a common part of contemporary burial, the number involved here (6+) is highly unusual, and presumably related to the perceived status of the deceased.

The overall high level of oxidation exhibited by the bones indicates the fire was carefully tended, and when it was allowed to go out, his remains were carefully gathered together by the mourners. They recovered almost 99% of the expected yield from an adult cremation, including many of the smaller finger and foot bones. The bones, many of the nails, the half-melted unguent bottle, and some burnt shards from the small butt beaker, were all deposited inside a tall BB1 butt beaker.

This butt beaker is still a striking vessel, and the base and rim show considerable signs of wear, so it was not a special commission and may well have been a personal possession. A deep narrow pit was dug, and the cremation urn was placed in the base. The pit was partially infilled and the greyware jar was placed next to the urn, upside down, with its base level with the top of the urn. The pit was then filled up to that level and a decorated shale tray was placed over both vessels. This tray bears faint cut marks on both the front and the back, indicating it, too,

may have been a personal possession. The pit was then fully back-filled, but the site of the burial was marked by a ring of posts, some of which appear to have been renewed at least once. The fact that the subsequent civilian settlement appears to avoid this area would imply it retained some special status long after the garrison had been withdrawn.

The care taken over this burial would strongly suggest an individual of some importance, but not perhaps important enough for his body to have been worthy of transport to a more civilised location. The use of butt beakers and unguent bottles (tabular unguentaria) has close parallels with the military-period burials in Exeter at Holloway Street (Salvatore 2001) and Mount Dinham (Passmore 2013), though these burials were larger and more ostentatious. However, the burial rite itself was, it seems, very different: the obvious care taken at Cullompton contrasts strongly with the deliberately smashed and scattered vessels in the Exeter examples. That contrast, together with the general absence of cremated remains within those graves, might lead one to question whether this was a deliberate rite (as discussed in Salvatore 2001), or the result of later disturbance, robbing or deliberate desecration.

Site	Evidence	Goods?	Bone?	Date	Reference
Shortlands Lane, Cullompton	×1 cremation	Yes	Yes	C1	This report
Holloway Street, Exeter	×3 cremations	Yes	No	C1	Salvatore 2001
Mount Dinham, Exeter	×1 cremation	Yes	No	C1	Passmore 2013
The Retreat, Topsham	×1 cremation	Yes	Yes	C1?	Jarvis & Maxfield 1975
Plymouth, near Mount Batten	×? inhumations	Yes	Yes	Early RB	Bate 1867 Cunliffe 1988
Mount Dinham, Exeter	×1 inhumation	No	No	C3	Passmore 2013
Higher Holcombe Farm, Uplyme	×2 infant burials	No	Yes	C3-C4	Pollard 1974
Hookhills, Paignton	×1 inhumation	?	Yes	C3-C4	Chandler 2008
Topsham School, Topsham	×13 inhumations	No	No	Late RB	Sage & Allan 2004
St Loyes College, Exeter	×5 inhumations	No	No	Late RB	Chapman *et al*. 2011
Ipplepen	×10+ inhumations	Yes	Yes	RB	Unpublished
Kenn	×111+ inhumations	No	No	Post-RB	Weddell 2000
Exeter Cathedral	×6 inhumations	No	Yes	C5(?)	Bidwell 1980

Table 1: Roman period burials in Devon.

5.3 The Civilian Settlement

After the withdrawal of the garrison on St Andrews Hill, and the presumed abandonment of the associated cemetery, there is no evidence the site was occupied until the second half of the 1st century AD. This makes it very unlikely it ever originated as a *vicus* associated with the fort(s), and the character and layout of the main structural elements would suggest it probably represents the remains of a prosperous rural settlement akin to cropmark examples excavated in the Exe valley, as at Thorveton (Uglow 2000), rather than to a small town or proto-urban settlement. However, it is also clear that only part of the settlement was excavated, and none of the features associated with settlements excavated elsewhere (e.g. the grain driers and wells at Pomeroy Wood; Fitzpatrick *et al*. 1999) were encountered on this site.

It is notable that the settlements at Pomeroy Wood and Great Woodbury were both established in the 2nd century, following a similar break in occupation. It is difficult to generalise on the basis of three sites, but it might suggest social or political conditions had become more permissive and settlement on these former military sites had become possible or desirable.

The Phase 1 settlement may have comprised a building(s) located within Ditch [131] and facing onto a yard, represented by Surface (171/874). It is possible the middle Iron Age Ditch [864] survived to define the eastern edge of this yard. The Phase 1 settlement was swept away when the Phase 2 settlement was laid out. This appears to have comprised two narrow plots with associated ditched boundaries. The orientation of these plots – north-north-east to south-

south-west – was to dictate the layout of all succeeding phases of settlement, as individual elements went out of use or were replaced. Phase 3 saw the creation of the most obvious 'structure' {286}, which was defined by its own enclosure ditch [263/960/1528]. There is a parallel for this 'structure' at Pomeroy Wood, in the form of 'working hollow' (4706), although that feature was set up to 0.85m below the contemporary ground surface (Fitzpatrick *et al.* 1999, 255)

Phase 4 witnessed the deliberate backfilling of Ditch [263/960/1528], and the creation of a new enclosure ditch [910/292]. This probably related to an enclosure of *c*.0.1ha in extent that lies mainly to the north, outside the area of investigation. The final phase, on stratigraphical grounds, is only represented by a small number of features, and would on that basis suggest a much lower level of activity.

The pottery analysis would indicate a 'short chronology' for the site: established in the mid 2nd century and abandoned in the late 3rd century. The C14 dating and the presence of certain 4th century artefacts would suggest a 'long chronology' stretching into the mid 4th century and this, on the basis of the complex stratigraphical development of the site, would seem more plausible.

In common with a number of investigated lowland enclosures in Devon (see below), none of these phases of occupation produced much structural evidence to indicate what buildings – if any – stood on the site. Isolated postholes were present, but could not be related to a single building or structure, and the possible foundation trenches [912] [937] identified for Phase 5 are dubious. A stronger candidate is the possible sub-rectangular Phase 5 structure [949], but if this does represent a foundation trench, it would have been a very small building with disproportionately thick walls. The spread of sub-rounded chert nodules that defined the Phase 3 'Structure' {286} is probably most convincing, but again there is no other evidence for the building that might have stood there.

The lack of obvious structural features makes it difficult to determine the nature and status of the settlement, and assess whether that changes over time. This general absence does, however, make it unlikely there was ever a *mansiones* or other official building here.

In terms of the ecofacts, the high taxanomic diversity is taken to indicate non-focused domestic fuelwood collection, presumably from mixed woodland or hedgerow shrubs. Macrofossil remains of spelt and bread wheat, barley and oats were present, but in such small quantities to make firm conclusions difficult. A contrast can, however, be drawn with Pomeroy Wood: that settlement produced 23 identifiable quern stones and 58 further fragments probably derived from quern stones (Fitzpatrick *et al.* 1999, 281); Shortlands Lane produced only single quern fragment, from Phase 4. While this activity could easily have taken place on another part of the settlement, it might indicate this was not a producer settlement. The lack of suitable material, despite extensive sampling, makes further discussion of the economic basis of the site difficult.

In terms of the artefacts, the most notable find was the 'ox goad' from context (196), which Mould (Appendix 12) suggests may have been a pen nib, and thus evidence for literacy. This could be taken to indicate a settlement of slightly elevated status, but *styli* have also been recovered from both Great Woodbury (Weddell *et al*. 1993, 77) and Pomeroy Wood (Fitzpatrick *et al.* 1999, 272). Given how few settlement excavations have taken place, and that evidence for literacy has been found on all three, it may well be the case that it was a widespread feature of Romano-British Devon (see also Evans 1987).

The bulk (57%) of the pottery from the site was comprised of reduced greywares, most of which were sourced from Exeter or to the west and south. Only 25% of the assemblage was composed of SED BB1, compared to a much higher proportions at Pomeroy Wood and Great Woodbury. This presumably demonstrates Shortlands Lane was tied into a different supply

network, but the general lack of material derived from kilns further to the east is of interest. The later contexts did contain a higher proportion of SED BB1 (see below), so perhaps this dichotomy is more apparent than real. The high number of sherds perforated for repair would suggest some of the residents were of limited means, or else there was a restricted supply. Lastly, the noted lack of *mortaria* contrasts with the number of amphora fragments, perhaps indicating the inhabitants were prioritising certain elements of Romanised eating culture over others.

The analysis of the archaeometallurgical debris provides the most interesting conclusion: smithying only took place in Phase 1, but finds of smelting waste (predominantly tap slag) were only found in Phase 2 and later features. The presence of tap slag does not indicate smelting took place on the site – as this process typically generates very large quantities of material – which would suggest it was brought to the site from elsewhere. Iron smelting took place on the Blackdown Hills during the Roman period, and also in the combes to the west of the town. A spread of slag at Gingerlands Farm 2.6km to the south-west was C14 dated to 130-410 calAD (at 95% probability; Waikato: 11551) (HER entry), and similar spreads of material have been noted near Combelands to the north (local resident, *pers. comm*.). The presence of tap slag at Shortlands Lane may therefore indicate the residents had a material interest in these metalworking activities. Alternatively, it has been noted that later Roman villa sites produce evidence for iron smelting (Webster 2007, 155), and it is possible iron production in the later Roman period did shift away from the hinterlands.

5.4 The Character of Occupation and the Cullompton Hinterland

Shortlands Lane is the largest and most important Roman settlement to be discovered and excavated in the Cullompton area, but it was clearly not the only settlement. Two early Roman settlements have been excavated at Willand Road (Hood 2010) and Knowle Lane (AC Archaeology *forthcoming*), and anecdotal evidence points to some form of occupation in the St George's Well area of the town (local resident, *pers. comm*.), where finds of Roman coins and a copper alloy statuette might point to the presence of a shrine. Slightly further afield, Roman iron smelting debris has been located 2.6km to the south-west at Gingerlands Farm, and there may be similar sites in the other combes west of the town (see above). Given the location of the Shortlands Lane site – near the base of the valley, probably at or near a crossroads by a ford (*Stoneyford*) over the Culm – this is both an advantageous and highly visible location, which would again point to a slightly elevated status. A 'high-status' site in a similar location has recently been discovered at Battens farm, Halbeton (Richardson 2013), *c*.6.3km to the north of Cullompton. Geophysical survey and fieldwalking undertaken by the Tiverton Archaeology Group has revealed a pair of enclosures associated with Roman pottery, iron slag and *tesserae*. This could imply such settlements were relatively common.

5.5 Roman Cullompton in Context

The place of the Shortlands Lane site in the wider Devon landscape is difficult to adequately quantify. The number of comparable Romano-British sites in Devon that have been subject to area excavation is pitifully small compared to the size and extent of the county. Over the last 30 years the number of known cropmark sites has grown considerably, but the number of investigated examples has remained very small, and the number of extensively excavated examples is even smaller. Indeed, many of the examples that continue to be cited were excavated unsatisfactorily at least 20 years ago, if not more than 50 years ago (see table 2). Our understanding of the Romano-British settlement pattern has not moved forward at all during this time, partly due to the apparent longevity of occupation displayed by the excavated examples, but mainly because the morphology and location of cropmark enclosures is held to be no guide to date (the disappointing conclusion of Limbert 2003).

The most interesting development in recent years concerns the discovery and investigation of a multi-period Prehistoric and Roman site south-east of Ipplepen, near Newton Abbot. Geophysical survey shows a complex and – in a Devon context – unprecedented series of interlinked enclosures and roundhouses with burials. This superficially looks akin to small roadside settlements (with quasi-urban elsewhere in the South West (e.g. Fosse Lane, Shepton Mallet; see Ellis & Leach 2001), although lacking the more highly-Romanised structures present on those sites.

	Site	ha	Structural Evidence	Date	Reference
			Romano-British Enclosures		
1960	Lower Well Fm, Stoke Gabriel	0.07	Occ. Postholes, oval 'hut' adjacent	Mid C2-C4	Masson-Phillips 1966
1938 1963	Milber Down, small camp	0.22	Occ. Postholes	C1	Fox 1950 Vachell 1964
1969	Clanacombe, Thurlestone	0.13	None	Mid C2-late C3	Greene & Greene 1970 Holbrook & Bidwell 1991
1971	Higher Holcombe Fm, Uplyme	0.11	Roundhouses; rect. Timber buildings; villa	IA-C4	Pollard 1974
1975	Pond Farm, Exminster	0.2	None; roof tile	Late C2	Jarvis 1976
1986	Overland, Thorverton	1.4	None; roof, box flue tile	C2-C3	Uglow 2000
1987	Hayes Fm, Clyst Honiton	0.1	None; roof tile	Late C3/C4	Simpson *et al.* 1989
1969 1978 1988 2012	Honeyditches, Seaton	0.35	Roundhouses; rect. Stone buildings; bath with hypocaust	Late IA-late C3?	Pollard 1974 Miles 1977 Silvester 1981 Holbrook 1987
1988	Turnspit, Rewe	0.1	None, roof tile	?late C2-mid C3	Uglow 2000
1989	Rudge Fm, Morchard Bishop	0.2	Roundhouse	C1	Todd 1998
1981 1990	Great Woodbury Fm, Axminster		Fort; large settlement; post-in-trench gullies	C3-C4	Silvester & Bidwell 1984 Weddell *et al.* 1993
1992	Rewe Cross, Rewe	0.1	None	C2-C3	Uglow 2000
1993	Butland Fm, Modbury	0.7	None	Roman	Horner 1993
1996	Brock Farm, Teigngrace [nb. a circular enclosure]	?	Postholes	C3-C4	Gent 1997
1999	Charlestown Barton, Charles	0.8?	None	C2-C4	Reed 1999
2002	Newland Mill, North Tawton	1.8	None	?C2-C3	Passmore 2005
2008	Welcome Farm, Charles	0.7	None	C1-mid C3	Cunningham 2009
2009	Shortlands Lane, Cullompton	?	Possible; box flue tile	Mid C2-early C4	This report
1914 2011	Membury Court, Membury	1.4	Villa	Roman	Langdon 1914 Smart *forthcoming*
2012	Land at Harepath/Colyford Rd, Seaton	?	Postholes; roof tile	C1-C4	Sims & Valentin 2012
2012 2013 2014	Ipplepen	???	IA roundhouse; roof slate	IA-C4	Unpublished
1993 2013	Aller Cross, Kingskerswell	0.3	Occ. postholes; roof tile	IA-C4	Hearne & Seager-Smith 1995 AC Archaeology *forthcoming*
2013	Battens Fm, Halbeton	?	Tesserae, fired clay	Roman	DAS newsletter 116
			Rural Structures		
1974	The Retreat, Topsham		Post-in-trench rect. building; 4 and 6 post structures	C1	Jarvis & Maxfield 1975
1993	Parsonage Cross, Littlehempston		Two 6 post structures	Roman	Reed & Turton 2005
1981	Crediton		Villa	Roman	Griffith 1988
1984	Bury Barton		Fort; none	C1 & C4	Todd 1984, 2002
1989	Otterton Point, Otterton		Rectangular stone building; roof tile	lateC2-C3	Brown & Holbrook 1989
1981 1990	Great Woodbury Fm, Axminster		Rectangular stone building – *mansiones*?	Roman	Silvester & Bidwell 1984 Weddell *et al.* 1993
1998 2004	Pomeroy Wood, Honiton		Fort; roundhouses; roof & box flue tile	C2-C4	Fitzpatrick *et al*. 1999 Salvatore 2011

2006	Willand Road, Cullompton	Roundhouses	IA-C1	Hood 2010
2010	Knowle Lane, Cullompton	Roundhouses	IA-C1	Hughes & Firth 2011
2011	Tiverton Road, Cullompton	Possible	C3	SWARCH *forthcoming*

Table 2: Excavated Romano-British enclosures in Devon, and other Romano-British rural structures. Area excavations are shown in red.

The situation with regard to the Roman military is, of course, very different. Not only have a number of new sites been discovered or confirmed (Calstock and Restormal in Cornwall; Pomeroy Wood and Topsham in Devon, Rainsbury in Somerset), but excavations in Exeter have uncovered the remains of two extra-mural depots, at St. Loyes and on Mount Dinham (Chapman *et al*. 2011; Passmore 2013). Roman military structures and construction techniques are now well-known, in marked contrast to their civilian counterparts. Most fort sites are presumed to have been abandoned following the withdrawal of the army in the 80s AD, but the reoccupation of a number of these sites (Pomeroy Wood, Great Woodbury, Bury Barton, arguably also North Tawton) indicates the situation is rather more complex.

The standard synthetic texts that have dealt with the Romano-British countryside in Devon have rarely progressed beyond an appreciation of the inherent difficulties, combined with a discussion of Exeter and the other main excavated examples (Fox 1974; Todd 1987; Pearce 1981; Kain & Ravenhill 1999; only Pearce 2004 addresses the broader landscape). All of these synthetic works draw on excavated evidence from outside Devon, and while this helps bulk out the discussion, it is ultimately misleading as it diminishes the very real contrasts between these areas. A comparison between excavated enclosures in Devon and Cornwall throws up more differences than similarities, and the rural landscapes of Somerset and Dorset are far more heavily Romanised than that of Devon.

Drawing together the evidence from older published excavations and more recent commercial investigations, it is now possible to make some tentative suggestions about the character of settlement in Romano-British 'lowland' Devon, and the place of Shortlands Lane in that settlement pattern.

5.5.1 Shortlands Lane and high-status settlement in Devon

With the exception of the as yet unquantified Ipplepen, it remains a truism that rural Devon lacks identified urban centres, there are hardly any recognisable villas, and excavated rural settlements of any kind are relatively rare. While it is clear that only part of a larger settlement was excavated at Shortlands Lane, it seems likely that Ditch [910/292] – and probably some of the earlier elements on the site – once formed part of a single or multi-vallate enclosure, the one settlement type Devon does seem to possess. Shortlands Lane produced very little structural evidence, a very small amount of tile – enough to suggest a Romanised building stood in the area – and a rather greater amount of burnt clay, some of which contained clear wattle impressions. This would indicate a home of very modest pretensions by contemporary Roman standards.

However, to date the best archaeological indication of status in Romano-British Devon is not the building, but the act of enclosure. Despite the methodological issues, and *contra* previous work (e.g. Limbert 2003), the limited amount of excavation that has taken place has tended to date many of the sub-rectangular and often multi-vallate cropmark enclosures identified by Frances Griffith and others to the Roman period.

Despite the undoubted caveats, there is sufficient evidence to show that enclosures of 0.1-0.2ha were relatively common, and the excavated examples show they could be inherited from Iron Age forebears, or newly laid out in the 2nd or 3rd century. Shortlands Lane appears to date from

the middle of the 2nd century, and we may imagine the presence of a resident family that exercised some degree of authority over the land immediately around Cullompton. The discovery of the 'ox goad' would suggest that family was literate, perhaps in response to the needs of estate management.

These enclosure complexes were rarely defensive in nature, but neither do they appear entirely practical or economic: they were clearly as much a psychological as a physical barrier, and the arguments of status through exclusion are well rehearsed. To argue that these were high-status settlements does, of course, presuppose the existence of a settlement hierarchy and a suitably large number of unenclosed low-status settlements, the evidence for which simply does not exist. However, in Cornwall – a county formerly dominated by the Round – extensive area excavations are beginning to reveal the presence of unenclosed settlements (Gossip 2005), so perhaps it is simply a matter of time (although see below).

In other parts of the country, the high-status component of the settlement hierarchy is relatively easy to identify: complexes of rectangular masonry buildings, often arranged around a courtyard. In Devon and also Cornwall, villas are notable in their absence, and this absence would appear to be real. The distribution of the known examples is largely restricted to the south-east corner of Devon where they might easily be ascribed to the influence of the neighbouring Durotrigean canton. Given current levels of public interest, the amount of development-led archaeological work in Devon, and the fact the known sites were discovered and investigated as early as the 19th century, it seems unlikely that many major new sites await discovery.

There are many reasons why villas might come to be constructed, but in essence it boils down to two factors: did social conditions allow estates and/or families to accrue the requisite wealth, and would the estate and/or family derive social cachet from building and living in a villa? In the past, the absence of such structures led some to suggest 'normal' provincial development had been stymied, perhaps by the presence of a *territorium* attached to Exeter (Pearce 1981, 158). In this scenario, the requisite wealth could not be accrued even if the leading families hungered for underfloor heating and mosaic pavements.

However, while villas are very rare, finds of Roman roof tile and even box flue tile – as at Shortlands Lane – are not uncommon (see Allan *et al.* 2008). A known tilery is located on Hatherleigh Moor (see Wheeler & Laing-Trengove 2006), and recent petrographic work has established the existence of at least 10 tilery sites around Devon, as well as the presence of imports from the Solent area (*ibid*; Allan *et al.* 2008). While geographically inappropriate, the example of Great Holts Farm, Boreham, Essex, provides a useful comparanda (Germany 2003). Excavation in advance of gravel extraction targeted a discrete concentration of Roman roof tile, which proved to overlie a pair of aisled timber buildings joined by a small bath house, all dated to the 3rd and 4th centuries AD. Despite the apparent modesty of the buildings, the finds assemblage indicated this was a rich household, with access to imported foods and unusually sturdy draft animals. This example is more appropriate for Devon than the stone-built villas of Somerset and the Cotswolds: houses on a more modest scale, perhaps with a small bath house, for which the label *villa* is unhelpful. The apposite discovery at Battens Farm in Halbeton would, on the basis of provisional findings, appear to represent a very similar settlement to Shortlands Lane (Richardson 2013).

We may, however, draw a distinction between settlements comprised of a single enclosure – whether it be univallate or multivallate – and those comprised of multiple distinct or linked enclosures. The ongoing *Roman Rural Settlement Project* (see *References*) terms these latter examples *complex farms*, comprising a series of conjoined enclosures with subdivided internal areas with trackways and associated fieldsystems. While these farmsteads lack villa-type structures, the artefactual and ecofactual evidence from these sites is more akin to excavated villa sites than it is to more impoverished category of *enclosed farms*. Sites identified as

complex farms are found in a wide belt stretching from Someset to the Wash, in lowland valley areas. Under these criteria, the Shortlands Lane site may well fall into the category of complex farm, and thus represent – presumably – a successful farm business on the edge of the known distribution.

It may not be entirely inappropriate to note in this context that the medieval and post-medieval history of Devon is dominated by its great number of minor gentry families and their modest homes (see Hoskins 1954, 74-5). Thus the absence of wealth could easily be the main factor in the dearth of large stone-built villa complexes. However, the absence of inclination – and the archaeology of Devon in both preceding and subsequent periods is quite different to that of Cornwall, Somerset and Dorset – cannot be ruled out.

5.5.2 Later Romano-British buildings

If we accept that 'high-status' Romano-British buildings in Devon are not likely to conform to the established model, this cannot account for the more general absence of, in particular, later Romano-British structural evidence outside of Exeter. This has been noted before, and while it is very clear truncation is an issue on most sites, the structural remains of – presumably – just as ephemeral Prehistoric buildings do survive and have been excavated. It is difficult to argue the earthfast buildings of the Roman period could be any more vulnerable to destruction than the slight roundhouse drip gullies of the Iron Age, and on that basis we should perhaps accept the fact that during the later Roman period structures with earthfast foundations were the exception and not the rule. The evidence from most of the excavated examples is equivocal, and Shortlands Lane is no exception.

A key consideration in this debate is the transition from roundhouses to rectangular structures, as Prehistoric and early Roman roundhouses are relatively common, whereas late and post-Roman rectangular structures are very rare. In much of lowland Britain rectangular structures came to dominate by the 3rd century AD, yet roundhouses continued to be built in Cornwall throughout the Roman period and into the 6th century (Nowakowski 2011). The evidence from Devon is, however, very limited. Near Cullompton, at both Willand Road (Hood 2010) and Knowle Lane (Hughes & Firth 2011), slight penannular gullies were identified and dated to the late Iron Age or early Roman period. At The Retreat, in Topsham, the 1st century rectangular 'farmhouse' is thusfar unparalleled (Jarvis & Maxfield 1975), but could easily be an outlier of the military establishments at Exeter or Topsham. The excavation at Lower Well Farm, Stoke Gabriel, uncovered part of a sub-oval 'hut' associated with 4th century pottery, but the character of excavation fifty years ago, and the limited investigation of that building, makes definite conclusions difficult. Finally, parts of two sub-oval post-Roman structures were excavated at Mothecombe (Agate *et al*. 2012).

Inevitably, the extensively excavated Pomeroy Wood site provides the best evidence. Here a series of penannular roundhouses gullies were excavated, which were accompanied by several four-post structures (Fitzpatrick *et al.* 1999, 401-2). Further (undated) penannular gullies were exposed in 2004 north of the A30 (Salvatore 2011). All the identified civilian structures were assigned to Phase 4i (2nd perhaps 3rd century AD), but the volume of unabraded pottery assigned to Phase 4ii was similar to that of Phase 4i. No Phase 4ii structures were identified and Fitzpatrick *et al.* (1999, 263) suggested the focus of the settlement had shifted elsewhere. However, and *contra* this suggestion, Phase 4ii might easily mark the shift from earthfast roundhouses to non-earthfast structures on this site.

On this highly restricted evidential basis it would seem that some of the Dumnonii changed the nature of their built environment in the later 2nd/3rd century. We may presume – and there is no clear evidence outside of Exeter – that this meant a shift to rectangular buildings.

The character of these late Roman buildings may explain why they remain so elusive: box-framed timber buildings would not require earthfast foundations, and nor would cob buildings. It is a notable feature of the medieval and post-medieval Devon vernacular that even quite substantial cob buildings often have very slight foundations, or even none at all. Neither timber nor cob would leave much to excavate, and decayed buildings would effectively be obliterated once brought under the plough. This may well mean we will never encounter late Roman rural buildings in the 'lowland' Devon context, and might go some way to explaining why early medieval structures are so very elusive as well.

5.5.3 Change and taphonomy

The excavation at Shortlands Lane demonstrates how the layout of these settlements can change and evolve over time, and how cropmarks provide no clear guide as to phasing and contemporaneity. At Shortlands Lane, the Phase 1 settlement appears to have been swept away, but the Phase 2 layout evolved as individual elements went out of use or were replaced. It is clear from the levels of abrasion on the pottery from Ditch [263/960/1528] that this feature was deliberately backfilled before Ditch [910/292] was created, but the character of the final fills in all the excavated ditches hint that this might have been a more general practice.

The key to this argument is the site at Hayes Farm (Simpson *et al.* 1989). The interior of the sub-rectangular enclosure produced little structural evidence, and most of the finds came from Ditch [312]. The bulk of the pottery (84%) came from two dumps of midden material in the ditch either side of the entrance, but whereas the primary silts contained pottery dated to after AD *c*.270 (SED BB1 flanged bowls), the midden waste dated to mid 2nd-mid 3rd century AD. The inverted dating led the excavators to speculate the site was occupied before the enclosure ditch was dug, and that midden waste from that phase of occupation was later collected up and dumped in the ditch.

At Shortlands Lane, a clear inverted dating relationship was not evident, but all the features post-dating Phase 1 contained a large amount of residual material, and the final fills of all the ditches contained not only the greatest volume of pottery, but also the most heterogeneous assemblages (see Table 3 and Figures 45-46). This is mirrored at the Aller Cross site in Kingskerswell (Hearne & Seager-Smith 1995; AC Archaeology *forthcoming*); here the final fill of the latest enclosure ditch [1529] produced the bulk of the pottery from the site, and again, this comprised a very heterogeneous assemblage.

At Pomeroy Wood, Gittisham Forge and Great Woodbury, 'midden deposits' were encountered that sealed or filled later Roman features, and contained a large proportion of the pottery on each site. At Great Woodbury, the bulk of the 'military period' pottery came from this layer (660), which could otherwise be dated to the later 3rd or 4th century. At Pomeroy Wood, a similar layer characterised the Phase 4ii settlement, sealing the Phase 4i settlement and filling 'working hollow' (4706). At Gittisham Forge, layer (837) sealed all the earlier Roman features, and again produced the bulk of the pottery from the site. On all of these sites the 'midden deposits' contained a large amount of residual material.

The character of these 'midden deposits' is of very great interest, primarily because of the taphonomic implications. Firstly, we need to question whether these are indeed 'midden deposits', as that would appear to run contrary to the accepted wisdom that middens were generated on settlements and periodically collected and spread on the fields to enhance fertility. Secondly, we need to determine whether they were deliberately used to infill open ditches and pits – as seems to be the case at Shortlands lane – or whether they formed continuous occupation layers, as appears to have been the case at Great Woodbury and Gittisham Forge. Had these layers been encountered in a Roman town or city, it is possible they would be interpreted as 'dark earth' deposits. Rather than indicating abandonment, those

humic deposits are now seen to indicate settlement and use beyond the traditional 'end' of these Roman settlements (e.g. McPhail 2010). Such an interpretation has clear implications for our understanding of these Devon sites and the end of their uselife, and makes clear these deposits cannot simply be taken at face value.

At Shortlands Lane, and with the single exception of Ditch [263/960/1528], the pottery from most features was well-preserved and unabraded. This would suggest that if these final fills were not primary midden deposits, then they had only moved once, and that these ditches had been deliberately erased towards the end of their uselife. Such a practice has very great implications for our understanding of such settlements, as it does not simply mark casual abandonment, *it marks an active interest in abandonment*. Such an interest might arise for practical economic reasons – to dispose of a midden or to return the site to agricultural use – but either suggestion seems unlikely unless land is in very great demand. The psychological or political implications of the activity are more profound: the erasure of a settlement – perhaps mirrored by the fall of its family – implies the landscape equivalent of *damnatio memoriae*.

The character of the pottery assemblage raises some further questions. On the basis of the pottery analysis, Shortlands Lane and the sites investigated by Uglow (2000) in the Exe valley appear to be abandoned after *c*.270 AD. At Shortlands Lane a very small amount of later pottery and one coin could be dated to the 4th century, but the C14 sequence indicates occupation well into the 4th century. Therefore while Shortlands Lane lacks the diagnostically late pottery types evidenced at Pomeroy Wood and elsewhere, this may simply underscore a general lack of understanding of supply and demand in the late Roman period, rather than *necessarily* indicating cessation of occupation. Indeed, this may hint that parts of Devon were becoming aceramic well before the end of Roman rule, or that late Roman assemblages look rather different in different areas of the county.

5.5.4 The Romano-British settlement at Shortlands Lane in context

With these factors in mind, the site at Shortlands Lane probably represented the home of a prosperous literate minor 'gentry' family, with limited political influence and modest wealth. This family was similar to many found in this part of Devon and further to the east, who expressed their modest wealth in the form a timber-framed homestead surrounded by banks and ditches. Their wealth was derived from agricultural surpluses and perhaps control of local iron production. The family saw their fortunes take a turn for the worst in the later 3rd or early 4th century, and this could be related to economic factors, or perhaps national political events.

5.6 Medieval Cullompton

Surprisingly little material dating to the medieval period was recovered during the excavation, and very few features. Only one tiny abraded and undiagnostic sherd of Upper Greensand-tempered ware (*c*.950-1300) was recovered, and the rest of the medieval pottery dates to the 13th century or later, giving no indication of a settlement that should date back at least as far as the *c*.880s AD. Indeed, there would be little to distinguish the excavated finds assemblage from a manuring scatter recovered during fieldwalking.

The common open fields of Cullompton were enclosed around the end of the medieval period (see SWARCH *forthcoming*), and it is possible that older burgage properties may have been extended across an area of former open field at that date (hence *shortlands*?). Certainly the 1633 map of the town (Figure 4) does not depict an orderly system of narrow townplots, with the necessary caveat it was not intended to do so. The 1633 map does, however, show a series

of orchards, and these are a notable feature of the early Ordnance Survey maps (Figure 6), so it is possible the land at the end of the plot was simply under-utilised.

The anomalous radiocarbon dates are extremely interesting. Pit [978] and Ditch [177] date, apparently, to the medieval period, despite the overwhelming evidence that they are, in fact, Romano-British. While it is relatively easy to explain early dates via residuality, the unexpectedly late dates are more difficult to rationalise. Some very small amounts of medieval and post-medieval pottery were recovered from a number of Romano-British contexts, so contamination is clearly a factor. The lack of consistency would also point to contamination: these features were dated twice, and the dates were different in both instances. However, it was the second and not the final fill of Ditch [177], charcoal-rich context (849), that was sampled and dated, and that should have minimised the risk of contamination. Ultimately, the likelihood that these were medieval features, or were open and backfilled during the medieval period, must be very low, but the anomalous C14 dates leaves a question mark over precisely what was happening and when.

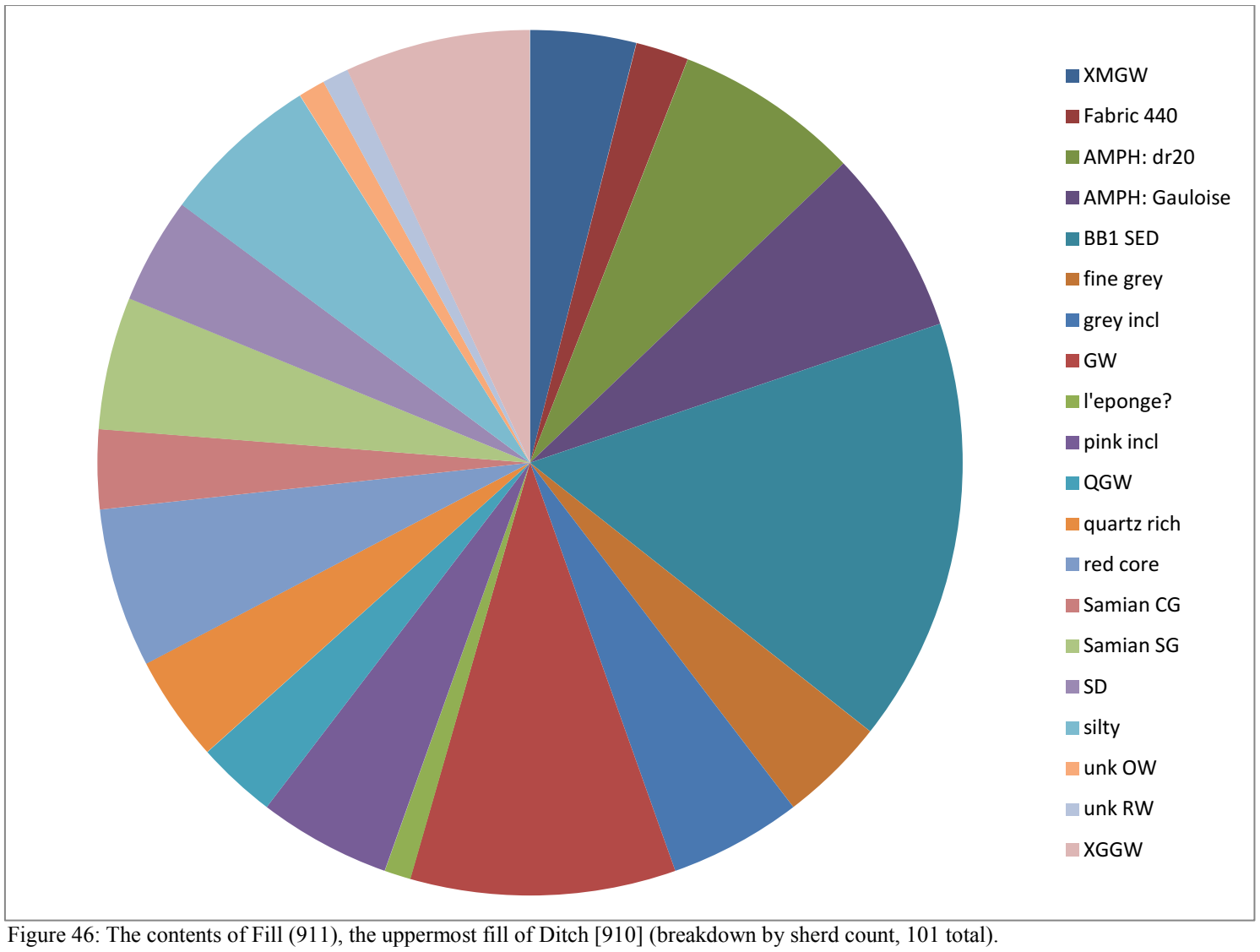


Figure 46: The contents of Fill (911), the uppermost fill of Ditch [910] (breakdown by sherd count, 101 total).

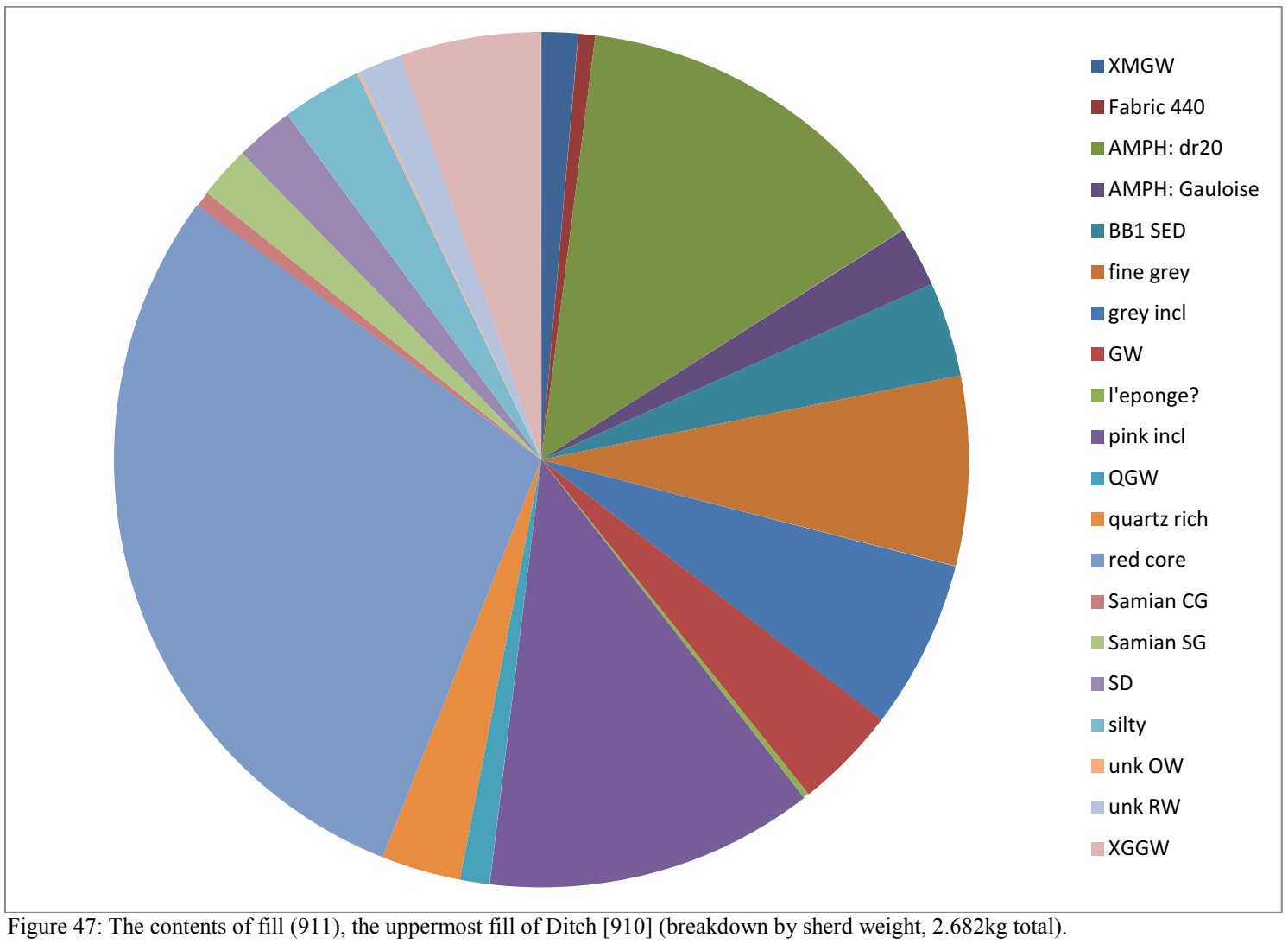


Figure 47: The contents of fill (911), the uppermost fill of Ditch [910] (breakdown by sherd weight, 2.682kg total).

Fabric Type	Count	Wgt.	Fabric Type	Count	Wgt.
XMGW	4	0.037	QGW	3	0.03
Fabric 440	2	0.017	quartz rich	4	0.08
AMPH: dr20	7	0.375	red core	6	0.78
AMPH: Gauloise	7	0.061	Samian CG	3	0.016
BB1 SED	16	0.096	Samian SG	5	0.053
fine grey	4	0.192	SD	4	0.059
grey incl	5	0.171	silty	6	0.081
GW	10	0.104	unk OW	1	0.002
l'eponge?	1	0.006	unk RW	1	0.045
pink incl	5	0.334	XGGW	7	0.143

Table 3: Breakdown of the pottery types in fill (911) in Ditch [910].

5.7 The Workhouse Garden

The post-medieval development of the site is rather less challenging. It is crossed by a series of leats/ditches – a legacy of the water supply granted to the town in 1356 – a line of substantial posts and a couple of large pits. The leats appear to respect a large sub-rectangular feature interpreted as a pond bay, but when this feature was excavated it was found to contain largely 19th century material. However, it seems probable the pond had been drained and emptied of silts – which were notably absent – before it was backfilled. Similar leats and ponds were a feature of the adjacent backplots into the 20th century (see Figure 6), and are not unexpected.

The line of postholes is more difficult to interpret. If they had consistently occurred in pairs, it might have been possible to argue they belonged to an overhead launder. The presence of a double line of posts in two places would indicate there had been repairs/replacements, and the lack of post-pipes indicates it was dismantled. As the line diverges from the dominant east-west axis of the burgage boundaries, it is an unlikely candidate for a property boundary, but this remains the most likely explanation.

Almost all of these features went out of use, or conceivably could have gone out of use, by the middle of the 18th century when the parish Workhouse was built. The bulk of the clay pipes and the pottery date to the later 17th and 18th century and there is a definite emphasis on tankards and other drinking vessels in the later 18th century, which the uncharitable might correlate with the presence of the deserving Poor. This was also the period in which the Bilbie bell foundry was operating; this probably operated from or very close to the Workhouse, yet very few of the artefacts recovered could confidently be ascribed to the foundry.

The subsequent history of the site is fairly straightforward. It had been a garden attached to one of the Workhouse properties when William Upcott bought it in 1841, and it continued in use as a garden or tiny smallholding into the 1990s, when the then owner died and it was subsequently sold for development.

6.0 Conclusion

The excavation at Shortlands Lane revealed a later 1st century military cremation burial and a Romano-British civilian settlement occupied from the mid 2nd century through to the early 4th century AD. A small amount of earlier material was also encountered, along with a large middle Iron Age ditch. Surprisingly few medieval features or artefacts were uncovered, and most of the later features related to water management.

The Roman cremation burial is the first undisturbed burial of its kind to be excavated in Devon in recent times, and the only one to produce human bone. The deceased was probably a man aged 25-35 who had led an active life. He was cremated along with a surprising array of animals, as well as a number of personal possessions. The inclusion of a small glass unguent bottle has parallels with examples from Exeter, and burial rites in southern Gaul and northern Italy. His cremated remains were carefully collected and interred within a large and striking imitation BB1 butt beaker, and a decorated shale tray was laid over his grave. The location of the grave was marked by a ring of posts, and would have been highly visible. The care and attention paid to his burial would suggest a ranked soldier, almost certainly belonging to the garrison on St Andrews Hill.

The civilian settlement was established in the mid 2nd century AD, possibly up to a century after our soldier was interred. According to the pottery, this settlement appears to have gone out of use in the late 3rd century AD, but the C14 dating indicates it was occupied into the 4th century. This raises interesting questions about the nature of archaeological deposits on this settlement, and the implications this has for our interpretation of this and other sites.

The later phases at Shortlands Lane appear to have belonged to a type of site now classed as a *complex farm*. These are sites that, despite lacking obvious Romanised structures, are more akin in material terms to villa settlements, and appear to have been large prosperous farms. The finds from the site suggest it was occupied by a literate family of modest means, who may well have had an interest in the iron smelting taking place in the combes to the west. The final phase of the Roman site is poorly understood, and it may well have been slighted. This might have occurred when the resident family fell from grace, but it is possible the ground was being prepared for something that no longer survives and left no material evidence.

Later occupation on the site was limited. There were no medieval features, and medieval finds were correspondingly rare. However, some of the Roman features were radiocarbon dated to the medieval period, which raises some interesting questions. In the post-medieval period a large pond bay was created, relating to the various leats that crossed the site. It formed part of the garden of the Workhouse in Cullompton, built in 1738 and sold to William Upcott of Shortlands House in 1841. There was little evidence of the Bilbie bell foundry, and anecdotal evidence suggests it might be located within the grounds of the cottages to the north.

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Map of Bradninch and Cullompton 1633, Wyndham Coll. DD/WY

Appendix 1

BRIEF FOR ARCHAEOLOGICAL EVALUATION

Location: Land at NGR 301917 107216, Shortlands Lane
Parish: Cullompton
District: Mid Devon
County: Devon
NGR: 301916.107217
Planning Application no: 08/00762/MFUL
Proposal: Erection of 11 apartments and 2 dwellings with associated parking facilities (Revised scheme)
Historic Environment Service ref: Arch/dc/md/13572

1. INTRODUCTION AND ARCHAEOLOGICAL BACKGROUND

1.1 This brief has been prepared by the Devon County Council Historic Environment Service (HES), at the request of Erika Smith, of Millwood Homes, with regard to the archaeological works required as a condition of planning consent for the above works.

1.2 In accordance with PPG16 (1990) Archaeology and Planning Policy, and the Local Development Framework Policy on archaeology, consent has been granted, conditional upon a programme of archaeological work being undertaken. This condition requires that:

'No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Local Planning Authority.' The development shall be carried out at all times in strict accordance with the approved scheme, or such other details as may be subsequently agreed in writing by the Local Planning Authority.

1.3 The principal objective of the programme shall be to evaluate the survival of below-ground archaeological deposits across the proposed development site. The results will allow the nature, extent, and date of any surviving archaeological deposits within the application area to be understood, these investigations therefore represent the *first stage* of a programme of archaeological mitigation.

The information gained will enable the requirement for any further investigations to be determined and - if required - the scope of any subsequent programme of archaeological work undertaken in mitigation for the impact of the proposed development upon the archaeological resource, see section 6 below.

1.4 The proposed development occupies the rear part of a long narrow plot aligned on Fore Street - these types of plots typically date from the medieval period and may contain evidence of small scale industrial activity. They also frequently contain rubbish pits from this period, which can provide significant information on diet and economy from that period. In addition, a late Saxon or early Norman stirrup mount was recovered from a spoil heap in garden to the south of the proposed development. It is possible that groundworks for this development will expose and destroy archaeological deposits or artefacts associated with the early settlement in Cullompton.

1.5 This Brief covers the application area as defined in the plans submitted in support of this application.

2. WRITTEN SCHEME OF INVESTIGATION

2.1 This document sets out the scope of the works required to record the extent and character of any surviving archaeological deposits within the application area and will form the basis of the *Written Scheme of Investigatio*n (WSI) to be prepared by the archaeological consultant and approved by the HES and the Local Planning Authority (LPA).

2.2 The Written Scheme of Investigation must be submitted by the applicant or on their behalf by their agent or archaeological consultant and approved by the HES and the Local Planning Authority *prior* to any development commencing on site.

3. CONTENT OF PROGRAMME

3.1 *Desk-based assessment*

The programme of work shall include a desk-based *appraisal* of the site to place the development area into its historic and archaeological context. This work will consist of map regression based on the Ordnance Survey maps and the Tithe Map(s) and Apportionments. An examination will also be made of records and aerial photographs held by the HER. The reporting requirements for the deskbased work will be confirmed in consultation with the HES. The results of the assessment should be discussed with the HES and based on this consultation may determine the positioning of the evaluative excavations. If a full report is prepared then this information will be presented as part of the final report along with the results of the fieldwork.

3.2 *Evaluation of the site*

A series of trenches will be excavated across the proposed development area. The location of these excavations will be determined in consideration of the results of the desk-based assessment, the below-ground impact of the proposed development and the site topography. These excavations should investigate 5-10% of the area affected by the proposed development.

3.2.1 Details of the strategy for positioning trenches must be agreed with the HES. Trenches should be excavated by a 360o tracked or JCB-type machine - fitted with a toothless grading bucket - to the surface of archaeological deposits or *in situ* natural ground - whichever is highest in the stratigraphic sequence. Exposed archaeological features and deposits will be cleaned and excavated by hand and fully recorded by context as per Institute for Field Archaeologists' *Standard and Guidance for Archaeological Field Evaluation* (1994 - revised 2008). All features shall be recorded in plan and section at scales of 1:10, 1:20 or 1:50. All scale drawing shall be drawn at a scale appropriate to the complexity of the deposit/feature and to allow accurate depiction and interpretation.

3.2.2 All archaeological features should be investigated and as a minimum:

i) small discrete features will be fully excavated;
ii) larger discrete features will be half-sectioned (50% excavated); and
iii) long linear features will be sample excavated along their length - with investigative excavations distributed along the exposed length of any such feature and to investigate terminals, junctions and relationships with other features.
iv) one long face of each trench will be cleaned by hand to allow the site stratigraphy to be understood and for the identification of archaeological features.

Should the above percentage excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined full excavation of such features/deposits will be required. Additional excavation may also be required for the taking of palaeoenvironmental samples and recovery of artefacts

Any variation of the above will be undertaken in agreement with the HES.

3.2.3 The full depth of archaeological deposits must be assessed. This need not require excavation to natural deposits if it is clear that complex and deep stratigraphy will be encountered.

3.2.4 Should deposits be exposed that contain palaeoenvironmental or datable elements appropriate sampling and post-excavation analysis strategies will be initiated. The project will be organised so that specialist consultants who might be required to conserve or report on finds or advise or report on other aspects of the investigation (e.g. palaeoenvironmental analysis) can be called upon and undertake assessment and analysis of such deposits - if required.

3.2.5 The photographic record shall be made in B/W print supplemented by digital or colour transparency. If digital imagery is to be the sole photographic record then suitably archivable prints must be made of the digital images by a photographic laboratory. Laser or inkjet prints of digital images, while acceptable for inclusion in the report, are not an acceptable medium for archives. The drawn and written record will be on an appropriately archivable medium.

3.2.6 Human remains must initially be left in-situ, covered and protected. Removal can only take place under appropriate Ministry of Justice and environmental health regulations. Such removal must be in compliance with the relevant primary legislation.

3.2.7 Any finds identified as treasure or potential treasure, including precious metals, groups of coins or prehistoric metalwork, must be dealt with according to the Treasure Act 1996 Code of Practice (2nd Revision) (Dept for Culture Media and Sport). Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

4. MONITORING

4.1 The archaeological consultant shall agree monitoring arrangements with the County Historic Environment Service and give two weeks notice, unless a shorter period is agreed with the HES, of commencement of the fieldwork. Details will be agreed of any monitoring points where decisions on options within the programme are to be made.

4.2 Monitoring will continue until the deposition of the site archive and finds, and the satisfactory completion of an OASIS report - see 5.4 below.

5. REPORTING

5.1 Upon completion of this stage of fieldwork the archaeological contractor will supply the HES with a *statement of impact* of the proposed development upon the archaeological resource that contains sufficient detail to allow the HES to determine the scope of further archaeological work that may be required.

If the evaluative investigations represent the only archaeological works undertaken the results will be presented to the HES in an appropriately illustrated and detailed formal report. If subsequent archaeological mitigation work is undertaken the results of both stages of work (evaluation and mitigation) will be presented in a full, illustrated report.

The full report - if required - will collate the written, graphic, visible and recorded information outlined in section 4 above. The report shall include plans and reports of all documentary and other research, and of the trenches, features, deposits and artefacts together with their interpretation. The report will also include an overall plan showing the boundaries of the site, the location of the evaluative trenches and any other areas subject to archaeological investigation in relation to those boundaries and all exposed archaeological features and deposits.

In both cases the report shall demonstrate the archaeological potential of the site and the impact upon it of the proposed development. The report may in appropriate cases make suggestions as to appropriate mitigation of the archaeological impact of the proposal, but these will be subject to review by the HES, who will make final recommendations to the Local Planning Authority.

5.2 The HES would normally expect to receive the report within three months of completion of fieldwork - dependent upon the provision of specialist reports, radiocarbon dating results etc the production of which may exceed this period. If a substantial delay is anticipated then an interim report will be produced. A copy of this brief shall be included in the report.

5.3 On completion of the report, in addition to copies required by the Client, hard copies of the report shall be supplied to the HES on the understanding that one of these copies will be deposited for public reference in the HER. In addition to the hard copies of the report, one copy shall be provided to the County Historic Environment Service in digital format - in a format to be agreed in advance with the HES - on the understanding that it may in future be made available to researchers via a web-based version of the Historic Environment Record.

5.4 The archaeological consultant shall complete an online OASIS (*Online AccesS to the Index of archaeological investigationS*) form in respect of the archaeological work. This will include a digital version of the report. **The report or short entry to the Historic Environment Record will also include the OASIS ID number.**

5.5 *Publication*

Should particularly significant remains, finds and/or deposits be encountered, then these, because of their importance, are likely to merit wider publication in line with government planning guidance. If such remains are encountered, the publication requirements – including any further analysis that may be necessary – will be confirmed with the HES. If further archaeological works are undertaken, then the results of these initial evaluative investigations will be incorporated into the publication text resulting from further works.

6. FURTHER WORK

In the light of the results of the archaeological evaluation it will be possible to identify what further work, (e.g. further evaluative work to clarify the site stratigraphy, area excavation, etc), if any, is needed as mitigation for the impact of the proposed development on the archaeological resource. *The broad scope of any further work(s) that may be required will be detailed within the Written Scheme of Investigation.* Should the site be demonstrated to be archaeologically sterile then there would be no requirement for further archaeological works.

7. PERSONNEL

7.1 The work shall be carried out by a recognised archaeological consultant, agreed with the DCHES. Staff must be suitably qualified and experienced for their project roles. All work should be carried out under the control of a specified Member of the Institute for Field Archaeologists (MIFA), or by a specified person of equivalent standing and expertise. The Written Scheme of Investigation will contain details of key project staff and specialists who may contribute during the course of the works - excavation and post-excavation.

7.2 Health and Safety matters, including site security, are matters for the consultant. However, adherence to all relevant regulations will be required.

7.3 The work shall be carried out in accordance with *IFA Standard and Guidance for Archaeological Field Evaluation (1994),* as amended *(2008)*.

8. DEPOSITION OF ARCHIVE AND FINDS

8.1 The archaeological consultant shall contact the museum that will receive the site archive to obtain an accession number and agree conditions for deposition. *The accession number will be quoted in the Written Scheme of Investigation.*

8.2 The artefact discard policy must be set out in the Written Scheme of Investigation.

8.3 Archaeological finds resulting from the investigation (which are the property of the landowner), should be deposited with the appropriate museum - in a format to be agreed with the museum, and within a timetable to be agreed with the HES. The museum's guidelines for the deposition of archives for long-term storage should be adhered to. If ownership of all or any of the finds is to remain with the landowner, provision and agreement must be made for the time-limited retention of the material and its full analysis and recording, by appropriate specialists.

8.4 The condition placed upon this development will not be regarded as discharged until the report has been produced and submitted to the HES and the LPA, the site archive deposited and the OASIS form submitted.

9. CONTACT NAME AND ADDRESS

Helen Rance, Archaeological Officer, Devon County Council, Environment, Economy and Culture Directorate, Matford Offices, County Hall, Exeter EX2 4QW Tel: 01392-381223 Fax: 01392-383011 E-mail: helen.rance@devon.gov.uk 10/08/09

Appendix 2

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION AT LAND AT SHORTLANDS LANE, CULLOMPTON, DEVON.

Location: Land at Shortlands Lane
Parish: Cullompton
District: Mid Devon
County: Devon
NGR: 301916.107217
Planning Application no: 08/00762/MFUL
Proposal: Erection of 11 apartments and 2 dwellings with associated parking facilities (Revised scheme)
DCHES ref: Arch/dc/md/13572

1.0 INTRODUCTION

1.1 This document forms a Written Scheme of Investigation (WSI) and details the proposed scheme and methodology for archaeological evaluation to be undertaken prior to the development of land at Shortlands Lane, Cullompton, Devon. It has been drawn up by South West Archaeology (SWARCH) at the request of Alistair Salt of Millwood Homes (the Client) with regard to the archaeological works required as a condition of planning consent for the above works. The WSI and the schedule of work it proposes conforms to a brief as supplied by the Devon County Historic Environment Service (DCHES) (Helen Rance, 10.08.09).

In accordance with PPG16 (1990) Archaeology and Planning Policy, and the Local Development Framework Policy on archaeology, consent has been granted, conditional upon a programme of archaeological work being undertaken. This condition requires that:

'No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Local Planning Authority.' The development shall be carried out at all times in strict accordance with the approved scheme, or such other details as may be subsequently agreed in writing by the Local Planning Authority.'

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 The proposed development occupies the rear part of a long narrow plot aligned on Fore Street - these types of plots typically date from the medieval period and may contain evidence of small scale industrial activity. They also frequently contain rubbish pits from this period, which can provide significant information on diet and economy from that period. In addition, a late Saxon or early Norman stirrup mount was recovered from a spoil heap in garden to the south of the proposed development.

3.0 AIMS

3.1 To evaluate the survival of below-ground archaeological deposits across the proposed development area to inform as to the requirement for any further investigations in mitigation for the impact of the proposed development upon the archaeological resource.

3.2 To undertake further archaeological investigations as appropriate based on the results of the evaluation.

3.3 Analyse and report on the results of the project as appropriate.

4.0 METHOD

4.1 Desk-based assessment:

The programme of work shall include a desk-based *appraisal* of the site to place the development area into its historic and archaeological context. This work will consist of map regression based on the Ordnance Survey maps and the Tithe Map(s) and Apportionments. An examination will also be made of records and aerial photographs held by the HER. The reporting requirements for the desk-based work will be confirmed in consultation with the HES.

The results of the assessment will be discussed with the HES and based on this consultation may determine the positioning of the evaluative excavations.

4.2 Evaluation excavations:

A series of trenches will be excavated across the proposed development area. The locations of these excavations will be determined in consideration of the below-ground impact of the proposed development, the site topography and the results of the desk-based assessment. The excavation will investigate 5-10% of the area affected by the proposed development.

Details of the strategy for positioning the trenches will be agreed with the DCHES.

4.2.1 The archaeological work will be carried out in accordance with the *Institute of Field Archaeologists Standard and Guidance for Archaeological Field Evaluation 1994 (revised 2001 & 2008)* and *Standard and Guidance for an Archaeological Watching Brief 1994 (revised 2001 & 2008).*

4.2.2 The evaluation trenches will be opened by a mechanical excavator fitted with a toothless grading bucket under the direct control of the site archaeologist to the depth of formation, the surface of *in situ* subsoil/weathered natural or archaeological deposits whichever is highest in the stratigraphic sequence.

4.2.3 Spoil will be examined for the recovery of artefacts.

4.2.4 Once the level of the archaeology has been reached all archaeological material will be excavated by hand down to the depth of the archaeology, although this need not require excavation to natural deposits if it is clear that complex and deep stratigraphy will be encountered.

4.2.5 All excavation of exposed archaeological features shall be carried out by hand, stratigraphically, and fully recorded by context to IFA guidelines.

4.2.6 If archaeological features are exposed, then *as a minimum*:

i) small discrete features will be fully excavated;

ii) larger discrete features will be half-sectioned (50% excavated);

iii) long linear features will be sample excavated along their length - with investigative excavations distributed along the exposed length of any such feature and to investigate terminals, junctions and relationships with other features;

iv) one long face of each trench will be cleaned by hand to allow the site stratigraphy to be understood and for the identification of archaeological features.

4.2.7 Should the above percentage excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined, full excavation of such features/deposits will be required. Additional excavation may also be required for the taking of palaeoenvironmental samples and recovery of artefacts.
Any variation of the above or decisions regarding expansion will be considered in consultation with DCHES.

4.2.8 In exceptional circumstances where materials of a particularly compact nature are encountered, these may be removed with a toothed bucket, subject to agreement with archaeological staff on site.

4.2.9 Should archaeological or palaeoenvironmental remains be exposed, the site archaeologist will investigate, record and sample such deposits.

4.2.10 Human remains must be left *in-situ*, covered and protected. Removal can only take place under appropriate Ministry of Justice and environmental health regulations. Such removal must be in compliance with the relevant primary legislation.

4.2.11 Any finds identified as treasure or potential treasure, including precious metals, groups of coins or prehistoric metalwork, must be dealt with according to the Treasure Act 1996 Code of Practice (2nd Revision) (Dept for Culture Media and Sport). Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

4.3 The Client will provide SWARCH with details of the location of existing services and of proposed groundworks within the site area, and of the proposed construction programme.

4.4 Health and Safety requirements will be observed at all times by any archaeological staff working on site, particularly when working with machinery. As a minimum: high-visibility jackets, safety helmets and protective footwear will be worn.

4.4.1 Appropriate PPE will be employed at all times.

4.4.2 The site archaeologist will undertake any site safety induction course provided by the Client.

4.4.3 If the depth of trenching exceeds 1.2 metres the trench sides will need to be shored or stepped to enable the archaeologist to examine and if appropriate record the section of the trench. The provision of such measures will be the responsibility of the client.

SWARCH shall agree monitoring arrangements with the DCHES and give two weeks notice, unless a shorter period is agreed with the DCHES, of commencement of the fieldwork. Details will be agreed of any monitoring points where decisions on options within the programme are to be made.

The DCHES shall inspect the site and monitor the fieldwork being undertaken by SWARCH. This monitoring will include examination of excavated areas as well as the primary site record (context sheets, drawings, sample record sheets etc). No areas subject to archaeological work will be regarded as completed and available for construction without such monitoring and upon confirmation from the HES that the agreed works in those areas have been satisfactorily completed.

Monitoring will continue until the deposition of the site archive and finds, and the satisfactory completion of an OASIS report.

5.0 ARCHAEOLOGICAL RECORDING

5.1 This will be based on IFA guidelines and those advised by DCHES and will consist of:

5.1.1 Standardised single context recording sheets, survey drawings in plan, section and profile at 1:10, 1:20, 1: 50 and 1:100 as appropriate and digital and black & white photography.

5.1.2 Survey and location of features.

5.1.3 Labelling and bagging of finds on site, post-1800 unstratified pottery may be discarded on site after a representative sample has been retained.

Any variation of the above shall be agreed in consultation with the DCHES.

5.2 Should suitable deposits be exposed (e.g. palaeoenvironmental) then scientific assessment/ analysis/dating techniques will be applied to further understand their nature/date and to establish appropriate sampling procedures. The project will be organised so that specialist consultants who might be required to conserve or report on other aspects of the investigations can be called upon.

6.0 FURTHER WORK

6.1 The evaluation excavation represents the first stage of the archaeological investigation of the site and further archaeological intervention may be required if deposits or features are exposed that are considered by DCHES to be archaeologically important.

6.2 If no archaeological deposits are exposed by the evaluation it may be decided by DCHES that no further archaeological works will be required.

6.3 The need for further archaeological work and the means of investigation (monitoring and recording, trenching or open area excavation) will be determined in consultation with DCHES and the Client once the results of the evaluation is known. Subsequent work will be carried out in accordance with the above specification (4.0 and 5.0).

6.4 The development shall not proceed until the requirement for further archaeological intervention has been established by the DCHES.

7.0 ARCHIVE AND REPORT

7.1 An ordered and integrated site archive will be prepared in accordance with *The Management of Archaeological Projects* (English Heritage, 1991 2nd edition) upon completion of the entire project. This will include relevant correspondence together with context sheets, field drawings, and environmental, artefactual and photographic records. The archive and finds will be deposited with the Royal Albert Memorial Museum, Exeter under accession number 348/2009. The museum's guidelines for the deposition of archives for long-term storage will be adhered to.

7.2 Archaeological finds resulting from the investigation (which are the property of the landowner), will also be deposited with the above museum (under the accession number above) in a format to be agreed with the museum, and within a timetable to be agreed with the DCHES. The museum's guidelines for the deposition of archives for long-term storage will be adhered to and any sampling procedures will be carried out prior to deposition and in consultation with the museum. If ownership of all or any of the finds is to remain with the landowner, provision and agreement must be made for the time-limited retention of the material and its full analysis and recording, by appropriate specialists.

7.3 Upon completion of this stage of fieldwork SWARCH will supply the DCHES with a *statement of impact* of the proposed development upon the archaeological resource that contains sufficient detail to allow the HES to determine the scope of further archaeological work that may be required.

7.4 If the evaluative investigations represent the only archaeological works undertaken the results will be presented to the DCHES in an appropriately illustrated and detailed formal report. If subsequent archaeological mitigation work is undertaken the results of both stages of work (evaluation and mitigation) will be presented in a full, illustrated report.

An illustrated summary report will be produced as soon as possible following completion of fieldwork, specialist reports allowing. A draft report will be submitted to the HES for comment prior to its formal submission to the Local Planning Authority. Copies of the report will be provided to the DCHES as well as the Client. If few or no archaeological deposits are exposed then, with advance agreement with the DCHES, the submission of a short HER entry will be acceptable.

7.6 The report will include the following elements:

7.6.1 A report number, date, version number and the OASIS record number;

7.6.2 A copy of the DCHES brief and this WSI;

7.6.3 A location plan and overall site plan including the boundaries of the site, the location of the evaluative trenches in relation to those boundaries and all exposed archaeological features and deposits;

7.6.4 Plans and sections of significant features or deposits at a relevant scale;

7.6.5 A description of any remains and deposits identified including an interpretation of their character and significance;

7.6.6 An assessment of significant artefacts, historical and/or architectural features, environmental and scientific samples together with recommendations for further analysis;

7.6.7 Any specialist reports commissioned;

7.6.8 Discussion of the archaeological deposits encountered and their context.

7.7 DCCHES will receive the report within three months of completion of fieldwork, dependant on the provision of specialist reports, radiocarbon dating results etc, the production of which may exceed this period. If a substantial delay is anticipated then an interim report will be produced. The report will be supplied to the HES on the understanding that one of these copies will be deposited for public reference in the HER. In addition to the hard copies of the report, one copy will be provided to the HES in digital format, in a format to be agreed in advance with the HES, on the understanding that it may in future be made available to researchers via a web-based version of the HER.

7.8 Should particularly significant features, below-ground remains or finds be encountered, then these, because of their importance, are likely to merit wider publication in line with government planning guidance. If such remains are encountered, the publication requirements –including any further analysis that may be necessary – will be confirmed with the HES.

7.9 A copy of the report detailing the results of these investigations will be submitted to the OASIS (*Online AccesS to the Index of archaeological investigationS*) database under OASIS record number southwes1-63643.

8.0 PERSONNEL

The project will be managed by Colin Humphreys; the excavation work will be undertaken by SWARCH personnel directed by Brynmor Morris. Relevant staff of the DCHES will be consulted as appropriate. Where necessary appropriate specialist advice will be sought, (see list of consultant specialists in Appendix 1 below).

Deb Laing-Trengove
South West Archaeology Ltd
The Old Dairy, Hacche Lane Business Park, Pathfields Business Park, South Molton, Devon EX36 3LH
Telephone: 01769 573555 email: deblt@swarch.net 26.08.2009

List of specialists

Building recording

Robert Waterhouse : 13 Mill Meadow, Ashburton TQ13 7RN Tel: 01364 652963

Richard Parker: Exeter Archaeology, Custom House, The Quay, Exeter, EX2 4AN; Tel: 01392 665521; exeter.arch@exeter.gov.uk

Conservation

Richard and Helena Jaeschke: 2 Bydown Cottages, Swimbridge, Barnstaple EX32 0QD; Tel: 01271 830891

Curatorial

Alison Mills: The Museum of Barnstaple and North Devon, The Square, Barnstaple, North Devon. EX32 8LN; Tel: 01271 346747

Thomas Cadbury: Curator of Antiquities, Royal Albert Memorial Museum, Bradninch Offices, Bradninch Place, Gandy Street, Exeter EX4 3LS; Tel: 01392 665356

Fiona Pitt: Plymouth City Museum, Drake Circus, Plymouth, PL4 8AJ; Tel: 01752 204766

Geophysical Survey

GSB Prospection Ltd.: Cowburn Farm, Market Street, Thornton, Bradford, West Yorkshire, BD13 3HW ; Tel: 01274 835016 gsb@gsbprospection.com

Human Bones

Louise Lou: Head of Heritage Burial Services, Oxford Arch., Janus House, Osney Mead, Oxford, OX2 OES; Tel: 01865 263 800

Lithics

Martin Tingle: Higher Brownston, Brownston, Modbury, Devon, PL21 OSQ; Tel: 01548 821038

Metallurgy

Sarah Paynter: Centre for Archaeology, Fort Cumberland, Fort Cumberland Road, Eastney, Portsmouth PO4 9LD; Tel: 02392 856700; sarah.paynter@english-heritage.org.

Palaeoenvironmental/Organic

Vanessa Straker: EH, 29 Queen Square, Bristol BS1 4ND; Tel: 0117 9287961; vanessa.straker@english-heritage.org.uk

Dana Challinor (charcoal): Lavender Cottage, Little Lane, Aynho, Oxfordshire OX17 3BJ; Tel: 01869 810150

Julie Jones (plant macro-fossils): juliedjones@blueyonder.co.uk

Heather Tinsley (pollen analysis): heathertinsley@aol.com

Ralph Fyffe (pollen analysis): University of Plymouth

Pottery

John Allen: Exeter Archaeology, Custom House, The Quay, Exeter, EX2 4AN; Tel: 01392 665918

Henrietta Quinnell: 39 Polsloe Road, Exeter EX1 2DN; Tel: 01392 433214

Timber Conservation

Liz Goodman: Specialist Services, Conservation Museum of London, 150 London Wall, London EC2Y 5HN; Tel: 0207 8145646; lgoodman@museumoflondon.org.uk

Appendix 3

Context List

Notes:
Numbers shown as (101) represent layers or fills; numbers shown as [102] represent cuts; numbers shown as {286} represent structures; numbers shown as <189> represent group contexts.

Context	Description		Relationships	Depth/Thickness	Spot Date
(100)	*Topsoil*	Upper level of topsoil; dark friable greyish brown loam; abundant roots, small sub-angular stones <60mm; frequent post-med pottery, clay pipes	Overlies everything	0.30-40m	C19-C20
(101)	*Subsoil*	Lower level of topsoil; mid greyish-brown loam; occasional small sub-angular stones <60mm; as (100) but denser and slightly more sandy	Cut by [228]	0.15-0.6m	C18
[102]	*Cut*	Linear feature; V-shaped ditch *c.*2.0m wide and up to 0.84m deep; observed length *c.*17.4m; orientated east-west; extends beyond EoE to east	Contains (103)(153)(154)(182)(1530)	0.62-0.84m	RB
(103)	*Fill*	Upper fill of [102]; loose mid brownish-red sandy-silt; frequent charcoal flecks; frequent well-rounded stones <50mm; occasional burnt clay <2mm, slag, fire-cracked quartz pebbles	Fill of [103]; overlies (153); cut by {213}	0.18m	
[104]	*Cut*	Large sub-angular pit; 4.95×2.85m by *c.*0.6m deep; steep sides and sloping base; orientated east-west	Contains (105)(260)	0.61m	Late C18
(105)	*Fill*	Upper fill of [104]; demolition material; reddish-brown silty-sand, possible evidence of *ex situ* burnt soil; abundant window glass (C17-C18); frequent roof slate, brick fragments, lime mortar fragments and flecks, sub-angular stones <120mm	Fill of [104]; overlies (260)	0.30m	
[106]	*Cut*	Large linear feature; 21.5m long; steep sides and flat, slightly undulating base *c.*1.4m across; observed width 2.1m but probably nearer 3m, by *c.*1.0m deep; orientated east-west; extends beyond EoE to north and east	Cuts (101); contains (116)(117)(250)(257)(261)(262)	*c.*1.0m	C17-C19
(107)	*Fill*	Upper fill of [158]; discrete lens sub-angular stony rubble in a friable mid brown loam matrix, individual stones up to *c.*80mm	Fill of [158]; overlies (1598); overlain by (100)	*c.*0.18m	
[108]	*VOID*	*VOID*	*VOID*	*VOID*	
(109)	*VOID*	*VOID*	*VOID*	*VOID*	
[110]	*Cut*	Linear feature; re-cut and robber trench for wall {276}; irregular U-shaped cut 1.04m wide; at least 60m long; orientated east-west; follows boundary wall as shown on C19 OS maps	Cuts (885)(887)(1570); contains (111)	0.54m	C20
(111)	*Fill*	Fill of [111]; dark greyish-brown loam similar to (100); frequent to abundant stone rubble, brick and tile; demolition deposit from removal of wall {276}		0.54m	
[112]	*Cut*	Linear feature; 0.3m wide; shallow concave profile; orientated east-west beneath [110]; visible only in ETrench #1	Contains (113)	*c.*0.15	C19
(113)	*Fill*	Fill of [112]; greyish-brown clay-sand	Fill of [112]; cut by [156]	*c.*0.15	
[114]	*Cut*	Linear feature; U-shaped cut; up to 1.18m wide; orientated NE-SW; sloping sides and concave base; northern half of [118]	Same as [118]; contains (115)(278)(876)(892)	0.25-0.45m	RB
(115)	*Fill*	Upper fill of [114]; soft-to-firm mid-to-dark greyish-brown sandy clay-silt; frequent charcoal flecks; common sub-rounded chert cobbles, sub-angular to sub-rounded pebbles <40mm; occasional charcoal fragments	Fill of [114]; overlies (278)	0.12-0.28m	
(116)	*Fill*	Fill of [106] in Blk2; soft mid greyish-brown sandy-silt; frequent small sub-angular to sub-rounded pebbles <30mm, occasional larger rounded cobbles up to 120mm; common charcoal flecks, C18-C19 pottery; occasional charcoal fragments, animal bone, corroded metalwork	Fill of [106]; overlies (117); overlain by (1597)	0.3m	
(117)	*Fill*	Fill of [106] in Blk2; thin band of dark/black humic clayey loam lens	Fill of [106]; overlies (250); overlain by (116)	0.06m	
[118]	*Cut*	Linear feature; 26.3m long by U-shaped cut orientated NNE-SSW; sloping sides and concave	Same as [114] (southern part); cuts (870)	0.35-0.5m	RB

		base; extends beyond EoE to south	(873); contains (119)(858)(859) (861)(863)		
(119)	*Fill*	Upper fill of [118]; firm mid greyish-brown clayey-silt; common sub-angular to sub-rounded stones, usually platey, up to 80mm; common charcoal flecks, fragments of burnt clay, RB pottery; occasional sub-rounded chert nodules, slag	Fill of [118]; overlies (261)(858); cut by [203]	0.14-0.22m	
[120]	*Cut*	*Same as [872]*	*Same as [872]*		
(121)	*Fill*	*Same as (873)*	*Same as (873)*		
[122]	*Cut*	Linear pit; irregular and shallow cut; approx. 4.0×1.2m; orientated NW-SE; base of cut slightly crunchy texture, as if heat-affected	Contains (123)(126)(980)	*c.* 0.11m	RB
(123)	*Fill*	Lower fill of [122]; abundant sub-rounded chert nodules 60-200mm in size, occasional angular sandstone fragments; in a matrix of soft greyish-brown sandy-silt; occasional charcoal flecks; formerly extended 0.6m further to the south-west [removed during machining of ETrench #2]	Fill of [122]; overlain by (980)	0.20m	
[124]	*Cut*	Linear pit; 2.5× 0.60m; orientated NW-SE and parallel to [122], cutting the upper fill of that feature	Cuts (843)(980); contains (125)	0.14m	RB
(125)	*Fill*	Fill of linear [124]; soft-to-firm gritty greyish-brown clay-silt; common sub-angular to sub-rounded chert nodules up to 100mm; occasional rounded quartz pebbles up to 40mm; occasional charcoal fragments	Fill of [124]; cut by [248][982]	0.14m	
(126)	*Fill*	Part of upper fill of [122]; lens of burnt material within (980), on top of a fragment of heat-affected sandstone/conglomerate	Fill of [122]; part of (980)	0.05m	
[127]	*VOID*	*VOID*	*VOID*	*VOID*	
(128)	*VOID*	*VOID*	*VOID*	*VOID*	
[129]	*VOID*	*VOID*	*VOID*	*VOID*	
(130)	*VOID*	*VOID*	*VOID*	*VOID*	
[131]	*Cut*	Linear feature; irregular V-shaped steep-sided cut with undulating or flat base; *c.*1.2m wide; orientated 12m north-south and *c.*13m east-west with 90° corner; truncated by [893]	Same as [896]; cuts (921); contains (132) (259)(807)(833)(834)(835)(836)(837)	0.50-0.62m	RB
(132)	*Fill*	Upper fill of [131]; soft mid-to-dark greyish-brown sandy-silt; common sub-rounded stones <30mm, RB pottery; occasional charcoal fragments	Fill of [131]; overlies (259); cut by [195] [133][893]	0.40-0.35m	
[133]	*Cut*	Linear feature; 11m long 0.9m wide; U-shaped cut, orientated NE-SW; truncated by [893]; probably continues north of [893] as [894]; appear to turn slightly at junction with [135]	Same as [894]; cuts (921)(132); abuts [135]; contains (134)(802)(920)	0.6m	RB
(134)	*Fill*	Fill of [133]; soft clean mid greyish-brown clayey-sand; common small sub-rounded to rounded stones <60mm; occasional large sub-rounded chert nodules towards the top; occasional charcoal fragments, RB pottery	Fill of [133]; same as (820)?; overlies (802)	0.13m	
[135]	*Cut*	Linear feature; 10m long, up to 1.8m wide; variable profile, from a V-shape with flat base at the south, to an irregular U-shape in the north; cut orientated NW-SE with 45° corner at northern end; extends beyond EoE to south and west	Contains (284)(800)(801)(853); same as [826]	0.7m	RB
(136)	*Fill*	Upper fill of [852]; soft dark grey silty-sand; occasional sub-rounded stones 20-60mm	Fill of [852]; overlies (283); cut by [845][847]	0.21m	
[137]	*Cut*	Pit; sub-rectangular; 1.6×1.6m; steep sides and sloping base, with a deeper section 0.7m across	Contains (138)	0.8m	C19
(138)	*Fill*	Fill of [137]; firm brown silty-sand; frequent poorly-sorted sub-angular stones 20-60mm	Fill of [137]; cut by [991]	0.8m	
[139]	*Cut*	Pit; sub-rectangular; 1.2×0.70m	Contains (140)	0.07m	C19
(140)	*Fill*	Fill of [139]; friable dark brown/black charcoal-rich loam overlying a layer of handmade bricks lining the base	Fill of [139]	0.07m	
[141]	*VOID*	*VOID*	*VOID*	*VOID*	*VOID*
(142)	*VOID*	*VOID*	*VOID*	*VOID*	*VOID*
[143]	*Cut*	Linear feature; *c.*9m long and 0.35-1.1m wide; irregular profile; orientated east-west	Contains (144); same as [1585];	0.5m	Prehistoric
(144)	*Fill*	Fill of [143]; very clean firm yellowish-orange slightly silty-sand	Fill of [143]; same as (1586); cut by [896]	0.5m	
[145]	*Cut*	Posthole; oval; 0.72×0.58m diameter; sloping sides with a flat base	Part of <189>; contains (146)	0.15m	C18
(146)	*Fill*	Fill of [146]; firm light brown sandy-silt; abundant sub-angular to sub-rounded stones <50mm	Fill of [145]	0.15m	
[147]	*VOID*	*VOID*	*VOID*	*VOID*	*VOID*
(148)	*VOID*	*VOID*	*VOID*	*VOID*	*VOID*
[149]	*VOID*	*VOID*	*VOID*	*VOID*	*VOID*
(150)	*VOID*	*VOID*	*VOID*	*VOID*	*VOID*

[151]	*VOID*	*VOID*	*VOID*	*VOID*	*VOID*
(152)	*VOID*	*VOID*	*VOID*	*VOID*	*VOID*
(153)	*Fill*	Fill of [102]; soft reddish-brown sandy-silt; occasional sub-rounded to rounded chert and quartz stones 30-100mm; occasional charcoal flecks	Fill of [103]; overlies (154); overlain by (103)	0.30m	
(154)	*Fill*	Fill of [102]; soft light yellowish-red sandy-silt; occasional sub-angular stones 40-80mm; occasional rounded fractured quartz stones <60mm	Fill of [103]; overlies (182)(1530); overlain by (153)	0.12m	
(155)	*Layer*	Top of weathered subsoil; soft mid-brown/mottled orange clayey-sand		-	
[156]	*Cut*	Linear feature; steep sides and concave base; 0.85m wide; orientated east-west; likely part of, or extensively re-cuts, linear [812]	Cuts (113); contains (157)	0.4m	C19-C20
(157)	*Fill*	Fill of [156]; firm greyish-brown silty-sand; contains 4" clay (sewer) pipe	Fill of [156]; cut by (110)	0.4m	
[158]	*Cut*	Pit or re-cut of Linear [106]; extended beyond EoE to north; steep-sided profile	Cuts (1597); contains (107)(159)(1598)	0.8m+	C19
(159)	*Fill*	Fill of [158]; friable mid reddish-brown silty-clay	Fill of [158]; overlain by (1598)	0.46m+	
(160)	*VOID*	*VOID*	*VOID*	*VOID*	
[161]	*Cut*	Possible linear gully or posthole; 0.4m wide; steep sides and flat base	Contains (101); cuts (155)	0.18m	C20
[162]	*Cut*	Possible linear gully or posthole; 0.28m wide; concave profile	Contains (101); cuts (155)	0.14m	C20
[163]	*Cut*	Posthole; modern; 0.22m diameter with a tapering base	Cuts (101); contains (164)	0.42m	C20
(164)	*Fill*	Fill of [163]; friable dark-brown silty loam; modern finds	Fill of [163]	0.42m	
[165]	*VOID*	*VOID*	*VOID*	*VOID*	
(166)	*VOID*	*VOID*	*VOID*	*VOID*	
[167]	*VOID*	*VOID*	*VOID*	*VOID*	
(168)	*VOID*	*VOID*	*VOID*	*VOID*	
[169]	*VOID*	*VOID*	*VOID*	*VOID*	
(170)	*VOID*	*VOID*	*VOID*	*VOID*	
(171)	*Layer*	Layer of loose mid pinkish-red sandy-silt below (101); its irregular area 6×2m in extent largely a product of topsoil stripping; more compact metalling below and to south is (874); probably surface	Same as (874); overlies (155)(1516); cut by [172]	0.04-0.1m	
[172]	*Cut*	Linear feature; narrow and shallow gully *c.*15m long by 0.6m wide; orientated NE-SW parallel to [177]; possibly continued by [965]	Cuts (171)(175); contains (173)(851)	0.06-0.12m	RB
(173)	*Fill*	Fill of [172]; frequent sub-rounded stones 40-100mm set in a mid reddish-brown stony sandy-silt matrix; common larger sub-angular to sub-rounded stones, including chert nodules, up to 200mm	Fill of [172]; overlies (851)	0.06-0.12m	
[174]	*Cut*	Posthole; 0.5m diameter; steep sides and tapering base	Contains (175); cuts (921)	0.5m	RB?
(175)	*Fill*	Fill of [174]; soft mid greyish-brown sandy-silt; common sub-angular to sub-rounded stones <40mm	Fill of [174]; cut by [821]	0.5m	
(176)	*Layer*	Medieval soil layer; covers an area of approx 11×11m to a maximum depth of 0.25m; soft-to-firm dark grey sandy-silt; frequent sub-angular to sub-rounded stones <40mm; occasional charcoal fragments; appears to be a soil layer that developed at the expense of RB soils (921) to the north and (181) to the east, defined by the burgage boundary to the north and bank (194) to the east	Overlies (181)(921)	0.25m	
[177]	*Cut*	Linear feature; 15.8m long by *c.*1.0m wide; V-shaped profile; orientated NNE-SSW, parallel to [172]; terminates beneath [110]	Cuts (175); contains (178)(849)(850)	0.4-0.5m	RB
(178)	*Fill*	Upper fill of [177]; soft mid-to-dark greyish-brown sandy-silt; common charcoal flecks; common sub-angular to sub-rounded stones <60mm; occasional sub-rounded chert nodules up to 150mm; common RB pottery and burnt clay	Fill of [177]; overlies (849); cut by [179]	0.06-0.08m	
[179]	*Cut*	Pit; irregular shape and profile; 2.0×1.8m; undercut profile on northern sides; gravel quarry pit?	Contains (180)(844); cuts (178)	0.96m	C17
(180)	*Fill*	Fill of [179]; soft mid-brown sandy-silt loam; occasional charcoal fragments	Fill of [179]; overlain by (194)	0.8-0.9m	
(181)	*Layer*	Base of RB soil layer; firm-to-soft mid mottled greyish-brown clayey-sand; common sub-angular to sub-rounded stones <30mm; (as (215)(921)(969))	Cut by [177]; overlain by (194)	0.15m	
(182)	*Fill*	Basal fill of [102] in Blk3; soft light buff-brown sandy-silt; occasional sub-angular stones <30mm	Fill of [103]; overlain by (154)	0.06m	
[183]	*Cut*	Posthole; sub-circular 0.58×0.55m; vertical sides and flat base	Part of <189>; contains (184)	0.21m	C18
(184)	*Fill*	Fill of [183]; soft mid greyish-brown clayey-sand; rare sub-angular stones <20mm, ×2 larger sub-rounded stones 200mm	Fill of [183]	0.21m	

[185]	*Cut*	Posthole; sub-circular 0.56×0.52m; vertical sides and flat base	Part of <189>; contains (186)	0.23m	C18
(186)	*Fill*	Fill of [185]; soft mid greyish-brown clayey-sand; occasional sub-angular to sub-rounded stones <60mm	Fill of [185]	0.23m	
[187]	*Cut*	Posthole; sub-circular 0.40×0.38m; steeply sloping sides and concave base	Part of <189>; contains (188)	0.26m	C18
(188)	*Fill*	Fill of [187]; soft mid greyish-brown clayey-sand; occasional sub-angular to sub-rounded stones <30mm, one large sub-angular stone in the top of the fill *c.*150mm square	Fill of [187]	0.26m	
<189>	*Group*	Group context: Postholes [145][183][185][187][230][244][251][272][287][814][816][877][898][900] [902][904][906][908][1500][1502][1504][1506][1509][1511][1522][1571][1573][1575][1577][1579] [1581][1583] [2504]. Line of postholes running WNW-ESE across the northern part of the site. Generally comparable sizes, but range of forms from sub-circular to sub-rectangular. Phasing is apparent, with two short stretches of double postholes.			C18
[190]	Cut	Modern geotechnical pit	Cut from surface	0.73m	C21
(191)	Fill	Fill of [190]	Fill of [190]		
[192]	*VOID*	*VOID*	*VOID*	*VOID*	
(193)	*VOID*	*VOID*	*VOID*	*VOID*	
(194)	*Deposit*	Curving shallow bank; 2m wide and *c.*12m long; orientated NE-SW; composed of firm mid greyish-brown slightly clayey sandy-silt; possibly marks an earlier (C18) subdivision of the site	Overlies (180) (181)	0.16m	
[195]	*Cut*	Short linear cut; *c.*4.95m long by 1.3m wide; gently concave profile; re-cut of terminus of [131]	Cuts (259) ?(843); contains (196)(832)	0.38m	RB
(196)	*Fill*	Upper fill of [195]; soft dark grey sandy-silt; frequent fragments burnt clay; common charcoal fragments; common sub-angular to sub-rounded stones <60mm; common abraded RB pottery	Fill of [195]; overlies (832)	0.25m	
[197]	*VOID*	*VOID*	*VOID*	*VOID*	
(198)	*VOID*	*VOID*	*VOID*	*VOID*	
[199]	*VOID*	*VOID*	*VOID*	*VOID*	
(200)	*VOID*	*VOID*	*VOID*	*VOID*	
[201]	*VOID*	*VOID*	*VOID*	*VOID*	
(202)	*VOID*	*VOID*	*VOID*	*VOID*	
[203]	*Cut*	Posthole; sub-circular; 0.5×0.4m; asymmetric sloping profile	Cuts (119); contains (204)	0.15m	C18
(204)	*Fill*	Fill of [203]; soft dirty dark greyish-brown clayey-silt; common sub-angular to sub-rounded stones <40mm; occasional charcoal fragments and flecks	Fill of [203]	0.15m	
[205]	*Cut*	Pit; sub-rectangular; *c.*1.1×0.9m; highly truncated, flat base	Part of <213>; cuts (101); contains (206)	0.06m	C18-C19
(206)	*Fill*	Fill of [205]; mid greyish-brown loam	Fill of [205]	0.06m	
[207]	*Cut*	Pit; sub-rectangular; *c.*1.1×0.9m; highly truncated, flat base	Part of <213>; cuts (101); contains (208)	0.06m	C18-C19
(208)	*Fill*	Fill of [207]; mid greyish-brown loam	Fill of [207]	0.06m	
[209]	*Cut*	Pit; sub-rectangular; *c.*1.1×0.9m; highly truncated, flat base	Part of <213>; cuts (101); contains (210)	0.06m	C18-C19
(210)	*Fill*	Fill of [209]; mid greyish-brown loam	Fill of [209]	0.06m	
[211]	*Cut*	Pit; sub-rectangular; *c.*1.1×0.9m; highly truncated, flat base	Part of <213>; cuts (101); contains (212)	0.06m	C18-C19
(212)	*Fill*	Fill of [211]; mid greyish-brown loam	Fill of (212)	0.06m	
<213>	*Group*	Group context: Pits [205][207][209][211] Group of four sub-rectangular pits aligned in a group along the south-east edge of the site. Only the very base of the features survived, and they appeared to be filled with redeposited topsoil.			C18-C19
[214]	*VOID*	*VOID*	*VOID*	*VOID*	
(215)	*Layer*	Base of RB soil layer; firm to soft mid orange-brown slightly clayey loam; common sub-angular to sub-rounded stones <30mm, occasional larger stones up to 100mm; grades into (155); south-east corner of site (as (181)(921)(969))	Cut by [118]		
[216]	*Cut*	Pit; sub-rectangular; 1.10×0.65m; recent sheep burial	Cuts (101); contains (217)	0.2+ m	C20
(217)	*Fill*	Fill of [216]; mid greyish-brown loam; contains full sheep skeleton	Fill of [216]	0.2+ m	
[218]	*Cut*	Posthole; irregular shape; 0.54×0.45m; shallow concave profile	Contains (219)	0.12m	C18-C19
(219)	*Fill*	Fill of [218]; soft friable greyish-brown sandy-silt	Fill of [218]	0.12m	
[220]	*Cut*	Posthole; irregular shape; 0.36×0.33m; shallow concave profile	Contains (221)	0.1m	C18-C19

(221)	*Fill*	Fill of [220]; soft friable greyish-brown sandy-silt	Fill of [220]	0.1m	
[222]	*Cut*	Posthole; irregular shape; 0.38×0.3m; shallow concave profile	Contains (223)	0.08m	C18-C19
(223)	*Fill*	Fill of [222]; soft friable greyish-brown sandy-silt	Fill of [222]	0.08m	
[224]	*Cut*	Posthole; circular; 0.18×0.14m; shallow concave profile	Contains (225)	0.1m	C18-C19
(225)	*Fill*	Fill of [224]; soft friable greyish-brown sandy-silt	Fill of [224]	0.1m	
[226]	*Cut*	Linear feature; up to 0.6m wide; orientated 8.8m north-south and 10.7m east-west with 90° corner; narrow cut with V-shaped profile; would extend beyond EoE to east and north	Contains (227); cuts (115)	0.2m	C17-C18
(227)	*Fill*	Fill of [226]; clean soft mid greyish-brown silt-sand; occasional sub-angular to sub-rounded stones <40mm; noted concentration of sub-angular stones up to 100mm at northern end, together with common charcoal fragments	Fill of [226]; cut by [106][251][818]	0.2m	
[228]	*Cut*	Small sub-rectangular pit 0.8×0.5m for recent animal burial; highly truncated during stripping	Cuts (101); contains (229)	Unexcavated	C20
(229)	*Fill*	Fill of [228]; friable light brown sandy-silt; contains partial sheep skeleton	Fill of [228]	Unexcavated	
[230]	*Cut*	Posthole; sub-circular 0.37m diameter; concave profile	Part of <189>; contains (231)	0.18m	C18
(231)	*Fill*	Fill of [230]; mid greyish-brown sandy-clay; occasional sub-angular to sub-rounded stones <60mm	Fill of [230]	0.18m	
[232]	*Cut*	Modern pit; irregular shape; 3.0×1.6m; irregular profile	Cuts (259); contains (233)	*c*.0.5m	C20
(233)	*Fill*	Fill of [232]; mid greyish-brown friable loam (redeposited (100/101); frequent modern brick, slate; occasional chicken wire	Fill of [232]	*c*.0.5m	
[234]	*Cut*	Shallow oval pit cut into fills of Linear [131]; sub-circular; 0.4m diameter; shallow concave profile	Cuts (259); contains (235)		RB
(235)	*Fill*	Fill of [234]; soft light pinkish-brown silty-sand; common sub-rounded stones 20-40mm	Fill of [234]		
[236]	*VOID*	*VOID*	*VOID*	*VOID*	
(237)	*VOID*	*VOID*	*VOID*	*VOID*	
[238]	*VOID*	*VOID*	*VOID*	*VOID*	
(239)	*VOID*	*VOID*	*VOID*	*VOID*	
[240]	*Cut*	Posthole; sub-circular; 0.4×0.28m; concave profile with flat base	Contains (241)	0.06m	C18-C19
(241)	*Fill*	Fill of [240]; soft greyish-brown sandy-silt	Fill of [240]	0.06m	
[242]	*Cut*	Posthole; sub-circular; 0.35×0.3m; concave profile	Contains (243)	0.15m	C18-C19
(243)	*Fill*	Fill of [242]; soft greyish-brown sandy-silt; occasional charcoal fragments	Fill of [242]	0.15m	
[244]	*Cut*	Posthole; oval; 0.58×0.56m in diameter; steep sides and flat base	Part of <189>; contains (245)	0.3m	C18
(245)	*Fill*	Fill of [244]; soft moist mid greyish-brown clayey-silt; common sub-angular to sub-rounded stones <10mm; occasional larger stones up to 60mm; occasional charcoal fragments	Fill of [244]	0.3m	
[246]	*VOID*	*VOID*	*VOID*	*VOID*	
(247)	*VOID*	*VOID*	*VOID*	*VOID*	
[248]	*Cut*	Linear feature; *c*.25m long, up to 0.7m wide; shallow concave profile; orientated east-west parallel/south of [110]; extends beyond EoE to east	Cuts (125)(983)(1542); contains (249)	0.1m	?post Med
(249)	*Fill*	Fill of [248]; soft and friable dark greyish-brown slightly clayey silty-sand; common sub-rounded stones <40mm; occasional charcoal flecks	Cut by [893][110]	0.1m	
(250)	*Fill*	Basal fill of [106] in Blk2; soft moist mid grey-brown silty-sand; rare small sub-rounded stones <40mm	Fill of [106]; overlain by (117)	0.1m	
[251]	*Cut*	Posthole; sub-ovoid 0.63×0.53m; steep, nearly vertical sides and flat base	Part of <189>; cuts (227); contains (252)	0.24m	C18
(252)	*Fill*	Fill of [251]; soft mid greyish-brown silty-sand; occasional small rounded stones <30mm	Fill of [251]	0.24m	
[253]	*VOID*	*VOID*	*VOID*	*VOID*	
(254)	*VOID*	*VOID*	*VOID*	*VOID*	
[255]	*Cut*	Sub-rectangular pit; 2.0×1.8m; very shallow with flat base	Cuts (843); contains (256)	0.07m	RB?
(256)	*Fill*	Fill of [255]; firm reddish-brown silty-clay; occasional sub-angular blocky stones up to 300mm, occasional charcoal flecks	Fill of [255]	0.07m	
(257)	*Fill*	Basal fill of [106] in Blk1; coarse and compact pinkish-grey gravel; redeposited natural	Fill of [106]; overlain by (261)	0.08m	
[258]	*VOID*	*VOID*	*VOID*	*VOID*	
(259)	*Fill*	Fill of [131]; soft mid orange-brown slightly clayey sandy-silt; common sub-angular to sub-rounded stones <50mm; occasional sub-rounded and rounded chert and quartz nodules up to 120mm	Fill of [131]; same as (285); overlies (807); overlain by (132)	0.15m	

(260)	*Fill*	Basal fill of [104]; firm dark greyish-brown sandy-silt; occasional charcoal fragments, burnt clay, animal bone, pottery, slag; mixed rubbish deposit		0.40m	
(261)	*Fill*	Fill of [106] in Blk1; soft-to-firm mid greyish-brown sandy-silt; distinct lenses of material spilling down the southern side; frequent sub-angular to sub-rounded stones 10-20mm; common larger sub-angular to sub-rounded stones up to 150mm; frequent charcoal fragments and flecks; clear tipping lines in section from south side of cut	Fill of [106]; overlies (257); overlain by (262)	0.6-0.85m	
(262)	*Fill*	Upper fill of [106] in Blk1; compact mixed greyish-brown silty-sand; possible floor surface within demolished structure, overlying C19 wall foundations (north wall of structure survives as boundary wall of site	Overlies (261); overlain by (100)	0.26m	
[263]	*Cut*	Linear feature; 0.9-1.1m wide; U-shaped concave profile; orientated NW-SE; terminates/peters out before reaching [864]	Part of <2506>; same as [961][1528]; cuts (969)(966); contains (264)(987)(988)(952)	0.22-0.4m	RB
(264)	*Fill*	Fill of [263]; soft-to-firm mid-to-dark greyish-brown clayey-silt; occasional sub-rounded stones <60mm, occasionally larger sub-rounded chert nodules up to 100mm; common charcoal fragments and flecks; occasional flecks burnt clay	Fill of [263]; overlies (988); overlain by (952)	0.12-0.28m	
[265]	*Cut*	Linear feature; 9.5m long and *c.*0.6m wide; profile varies from: steep-sided with a flat base at the west end, to: irregular concave profile at the east end; orientated east-west; relates to water-management through/from [893] into [106] or [294]	Cuts {286}(282)	0.1-0.3m	C18
(266)	*Fill*	Fill of [265]; soft slightly gritty greyish-brown sandy-silt; common sub-angular to sub-rounded stones <50mm; occasional larger stones up to 100mm; occasional charcoal flecks; occasional mortar flecks	Cut by [296][1522][2504]	0.1-0.3m	
[267]	*VOID*	*VOID*	*VOID*	*VOID*	
(268)	*Layer*	*Cleaning between {286} and west end of [106]*	*VOID*	*VOID*	
(269)	*Layer*	Layer of mid-brown sandy-silt in the centre of the site, overlying [263][910](969) etc – before features could be differentiated			
[270]	*Cut*	Same as [910]	Same as [910]		
(271)	*Fill*	Same as (911)	Same as (911)		
[272]	*Cut*	Posthole; sub-ovoid; 0.65×0.6m; nearly vertical sides and sloping base	Part of {189}; contains (273)	0.2m	C18
(273)	*Fill*	Fill of [272]; soft mid greyish-brown silty-clay; occasional rounded stones <40mm	Fill of [272]	0.2m	
{274}	*structure*	Same as {819}	Same as {819}		
[275]	*Cut*	Same as [818]	Same as [818]		
{276}	*Structure*	Remnant of robbed stone wall; apparent width *c.*0.4-0.5m; constructed of blocky sub-angular stones 300-400mm; surviving length *c.*6.0m; clear south face, no clear north face	Set in (887)	0.2m	C19-C20
(277)	*Fill*	Fill of [887]; loose pale brown sandy mortar, very decayed	Fill of [886]	0.36m	
(278)	*Fill*	Fill of [114]; soft reddish-brown clayey-silt; occasional small sub-rounded stones <50mm; occasional charcoal flecks	Fill of [114]; overlies (876); overlain by (115)	0.1m	
[279]	*Cut*	Shallow oval pit; *c.*1.0m diameter; gentle sloping sides and concave base	Contains (280)	0.1m	post Roman
(280)	*Fill*	Fill of [279]; soft mid greyish-brown sandy-silt; occasional sub-angular to sub-rounded stones <40mm; occasional tiny slate fragments; occasional charcoal flecks; occasional lighter sandy patches	Fill of [279]; cut by [106]	0.1m	
[281]	*Void*	*Void*	*Void*	*Void*	
(282)	*Layer*	Layer of soft greyish-brown clayey-silt overlying {286}; common sub-angular to sub-rounded stones <30mm; probable remnant soil or surface filth overlying metalling {286}	Overlies {286}	0.05m	
(283)	*Fill*	Lower fill of [852]; soft light pinkish-grey silty-sand; occasional sub-rounded stones 40-80mm toward base	Fill of [852]; same as (820); overlain by (136)	0.21m	
(284)	*Fill*	Fill of [135]; firm light pinkish-brown silty-sand; common sub-angular to sub-rounded stones 20-60mm, probably redeposited natural	Fill of [135]; overlies (800); overlain by (853)	0.18m	
(285)	*Fill*	Same as (259)	Same as (259)		
{286}	*Structure?*	Oval area of large sub-angular chert nodules; 3.80×4.0m; slight dip in the centre filled by (282); chert nodules arranged in such a way to hint at post-settings, but very ephemeral; narrow extension to the north 0.8m wide extending beyond EoE; linear group <2506> appears to go	Overlies (1524); overlain by (282); cut by [265][910][1522], probably [296]	0.05-0.10m	

		around this spread of chert - possible floor to a structure/activity area?			
[287]	*Cut*	Posthole; sub-circular; 0.56m diameter; steep sides and concave base	Part of <189>; Contains (288)	0.22m	C18
(288)	*Fill*	Fill of [287]; soft greyish-brown slightly clayey sandy-silt; common sub-angular to sub-rounded stones <20mm; occasional larger sub-rounded stones up to 80mm	Fill of [287]	0.22m	
[289]	*VOID*	*VOID*	*VOID*	*VOID*	
(290)	*VOID*	*VOID*	*VOID*	*VOID*	
(291)	*VOID*	Same as (979)	Same as (979)		
[292]	*Cut*	Linear feature; 5.5m long, *c.*1.0m wide; U-shaped profile; orientated NE-SE; forming one part of enclosure with [910]	Part of <1599>; same as [910]; contains (293)(1513)(1514)		RB
(293)	*Fill*	Upper fill of [292]; soft light brown silty-sand; common sub-rounded chert nodules 80-100mm, probably derived from {286}; common smaller sub-rounded stones <50mm; occasional charcoal flecks	Fill of [292]; overlies (1513); cut by [296]	0.25-0.3m	
[294]	*Cut*	Linear feature; *c.*3.5m long and 0.64m wide; gently sloping sides and flat base; orientated north-south; heavily truncated	Contains (295); possibly a continuation of [1526]	0.18m	C18
(295)	*Fill*	Fill of [294]; soft-to-firm mid-to-dark slightly reddish brown slightly sandy clay-silt; common sub-angular to sub-rounded stones <30mm; possible extension of [265]?	Fill of [294; cut by [296][812]	0.18m	
[296]	*Cut*	Large pit; sub-rectangular with irregular northern extension; 4.5×3.05m (up to 4.5m); gently sloping sides and flat base	Cuts {286}(295); contains (297)(2503)	0.3m	C18-C19
(297)	*Fill*	Lower fill of [296]; homogenous soft slightly gritty greyish-brown clayey-silt; common sub-angular to sub-rounded stones <30mm; occasional larger stones up to 100mm; occasional tiny slate fragments; occasional charcoal fragments; occasional mortar flecks; northern extension (listed as (810) and (811)) more clayey and higher proportion of stones	Fill of [296]; overlain by (2503)	0.3m	
[298]	*Cut*	Shallow irregular scoop; 1.05×0.5m; irregular profile and base	Cuts (878); contains (299)	0.15m	C18-C19
(299)	*Fill*	Fill of [298]; soft-to-firm gritty slightly reddish-brown clayey-silt; common sub-angular to sub-rounded stones 40-50mm; rare larger sub-rounded stones up to 80mm, including slate; common charcoal flecks	Fill of [298]	0.15m	
(800)	*Fill*	Fill of [135]; soft pinkish-brown sandy-silt matrix; frequent coarse sub-angular to sub-rounded stones 20-60mm; redeposited natural	Fill of [135]; overlies (801); overlain by (284)	0.12m	
(801)	*Fill*	Basal fill of [135]; reddish-brown silty-sand; frequent poorly-sorted sub-angular to sub-rounded stones 20-60mm; initial silting of [135]	Fill of [135]; overlain by (800)	0.18m	
(802)	*Fill*	Basal fill of [133]; soft, dull reddish-brown slightly clayey silty-sand matrix; abundant sub-rounded to rounded stones <50mm; extends into [135] as (827)	Fill of [133]; same as (827)	0.3m	
[803]	*Cut*	Posthole; sub-circular; 0.34m diameter	Contains (804)	0.22m	RB?
(804)	*Fill*	Fill of [803]; soft light-grey sandy-silt	Fill of [803]	0.22m	
[805]	*Cut*	Posthole; sub-circular; 0.34m diameter	Contains (806)	0.18m	RB?
(806)	*Fill*	Fill of [805]; soft light-grey sandy-silt; rare well-sorted sub-rounded stones 20-60mm	Fill of [805]	0.18m	
(807)	*Fill*	Lower fill of [131]; poorly-sorted sub-angular to sub-rounded stones <60mm set in a moist orange-brown sandy-clay matrix	Fill of [131]; overlain by (259)	0.08m	
(808)	*Layer*	Spread of mid greyish-brown slightly clayey sandy-silt adjacent to {286}; common sub-angular to sub-rounded stones <30mm; occasional larger sub-rounded stones up to 80mm	Extension of (282)?	0.05m	
[809]	*VOID*	*VOID*	*VOID*	*VOID*	
(810)	*VOID*	*VOID*	*VOID*	*VOID*	
(811)	*VOID*	*VOID*	*VOID*	*VOID*	
[812]	*Cut*	Shallow linear feature; *c.*16m long, up to 1.3m wide; shallow sloping sides; orientated east-west north of [110]; former boundary along the burgage plot	Cuts (887); contains (813)	0.16m	C18-C19?
(813)	*Fill*	Fill of [812]; friable but firm dark greyish-brown sandy-silt; common charcoal flecks, occasional fragments; common sub-rounded stones <40mm	Cut by [110][893]	0.16m	
[814]	*Cut*	Posthole; sub-oval; 0.80×0.58m diameter; vertical or nearly vertical sides and flat base	Part of <189>; contains (815)	0.4m	C18
(815)	*Fill*	Fill of [814]; soft-to-firm mid greyish-brown clayey-silt; occasional sub-angular to sub-rounded stones <40mm; occasional charcoal flecks	Fill of [814]	0.4m	

[816]	*Cut*	Posthole; oval; 0.68×0.58m diameter; steep or vertical sides and flat base	Part of <189>; contains (817)	0.3m	C18
(817)	*Fill*	Upper fill of [816]; soft mid greyish-brown silty-clay; common sub-angular to sub-rounded stones <20mm; common charcoal flecks	Fill of [816]; overlies (879)	0.1m	
[818]	*Cut*	Sub-rectangular pit; 1.0×0.8m; probably a drain relating to the adjacent Rifle Range	Filled by {819}	0.40m	C19-C20
{819}	*Structure*	Structure within [818]; single layer of sub-angular stones and brick 80-120mm; base of a drain	Set within [818]	0.15m	
(820)	*Fill*	Upper fill of [826]; soft light grey sandy silt; occasional well-sorted stones <20mm	Fill of [826]; same as (283); overlies (827)	0.14m	
[821]	*Cut*	Posthole; oval; 0.7×0.50m; sloping sides and concave base	Contains (822); cuts (175)(921)	0.37m	RB?
(822)	*Fill*	Same as (823)	Same as (823)		
(823)	*Fill*	Fill of [821]; mid greyish-brown slightly clayey sandy-silt; common sub-angular to sub-rounded stones <40mm; occasional larger angular stones up to 80-100mm; occasional charcoal fragments	Fill of [821]	0.37m	
[824]	*Cut*	Same as [978]	Same as [978]		
(825)	*Fill*	Same as (979)	Same as (979)		
[826]	*Cut*	Linear feature; northern extension of [135]; 1.08m wide; sloping sides to flat base; contemporary with [133] – fills (807) and (827) being the same/contiguous	Same as [135]	0.5m	RB
(827)	*Fill*	Fill of [826]; soft light pinkish-grey slightly clayey sandy-silt; common to abundant poorly-sorted sub-angular to sub-rounded stones 20-60mm; highly truncated by [852]; occasional charcoal fragments and flecks	Fill of [826]; same as (853)(807); overlies (828); cut by [852]	0.22	
(828)	*Fill*	Basal fill of [826]; firm light pinkish-brown silty-sand; common sub-angular to sub-rounded stones 20-60mm, probably redeposited natural	Fill of [826]; overlain by (827); same as (284), also (802)	0.15	
(829)	*Layer*	Layer of reddish-yellow soft sandy-silt natural (though see (144) etc.)	Cut by [803][805]	0.1m+	
[830]	*Cut*	Posthole; oval; 0.25×0.22; sloping sides and concave base	Cuts [259]; contains (831)	0.18m	RB?
(831)	*Fill*	Fill of [830]; soft dark pinkish-brown silty-sand; common sub-angular to sub-rounded stones 20-40mm, moderately sorted, tending to poorly sorted towards the base	Fill of [830]	0.18m	
(832)	*Fill*	Basal fill of [195]; soft light brown sandy-silt; light brown mottling, perhaps due to presence of poorly-fired burnt clay; occasional sub-rounded to rounded stones <60mm	Fill of [195]; overlain by (196)	0.10m	
(833)	*Fill*	Fill of [131] Blk15-17; soft mid-to-dark brown sandy-silt; light brown mottling, perhaps due to presence of poorly-fired burnt clay; common RB pottery; occasional sub-rounded chert nodules <100mm; occasional fragments burnt clay; occasional charcoal fragments	Fill of [131]; overlies (834); overlain by (259)	0.08m	
(834)	*Fill*	Fill of [131] Blk15-17; layer of pottery (greyware) in a matrix of dark brown sandy-silt at base of (833)	Fill of [131]; overlies (837); overlain by (833)	0.05m	
(835)	*Fill*	Basal fill of [131] Blk15-17; coarse gravel, sub-rounded to rounded <40mm, a soft mid greyish-brown sandy-silt	Fill of [131]; overlies (835); overlain by (836)	c.0.1m	
(836)	*Fill*	Fill of [131] Blk15-17; soft light brown moist sandy-silt; common sub-rounded to rounded stones <30mm; spills down south side of cut	Fill of [131]; overlies (835); overlain by (837)	c.0.1m	
(837)	*Fill*	Fill of [131] Blk15-17; soft clean mid-to-dark grey sandy-silt	Fill of [131]; overlies (836); overlain by (834)	0.08m	
[838]	*Cut*	Posthole; sub-circular; *c.*0.26m diameter; sloping sides and flat base	Cuts [259]; contains (839)	0.12m	RB?
(839)	*Fill*	Fill of [838]; soft mid grey clayey-sand; common sub-rounded stones <60mm	Fill of [838]	0.12m	
(840)	*Fill*	Fill of [841]; soft mid pinkish-grey sandy-silt; frequent sub-rounded stones <20mm; occasional charcoal fragments; occasional sub-rounded quartz pebbles 20-60mm	Fill of [841]; overlain by (259)	0.05m	
[841]	*Cut*	Sub-ovoid hollow; 0.46×0.42m; gentle concave profile	Cuts (807); contains (840)	0.05m	RB
[842]	*Cut*	Linear feature; 28.8m long, up to 1.0m wide; profile varies between U to V-shape; orientated NE-SW parallel to [133][172][177][114/118]	Contains (843)	0.06-0.42m	RB
(843)	*Fill*	Fill of [842]; soft clean light pinkish-brown clayey-silt, rare stones, slightly stonier towards base	Fill of [842]; overlain by (181)(969); cut by [124][195][263][266] [910][1533]	0.06-0.42m	
(844)	*Fill*	Fill of [179]; compact lens of sandy-clay within (180); abundant poorly-sorted sub-rounded stones, occasionally angular, up to 100mm; possibly a consolidated step within the feature?	Within (180)	0.1m	
[845]	*Cut*	Irregular hollow; 1.34×0.74m; gentle undulating profile; cut within fills of [135]	Cuts (283); contains (846)	0.16m	RB
(846)	*Fill*	Fill of [845]; mid brownish-grey silty-sand; frequent sub-angular to sub-rounded stones 20-60mm	Fill of [845]; overlain by (136)	0.16m	
[847]	*Cut*	Narrow linear feature; 0.64m long by 0.11m wide; cut within fills of [135]	Cuts (283); abutting [845]; contains (848)	0.1m	RB

(848)	*Fill*	Fill of [847]; mid brownish-grey silty-sand; frequent sub-angular to sub-rounded stones 20-60mm	Fill of [847]	0.1m	
(849)	*Fill*	Fill of [177]; soft dark grey slightly clayey sandy-silt; slightly crunchy texture, possible *ex situ* heating; common sub-angular to sub-rounded stones 40-60mm, occasional larger sub-rounded chert nodules; abundant charcoal flecks, occasional charcoal flecks; frequent flecks and common fragments of burnt clay, of two kinds, bright red and dull yellow; common RB pottery; one fragment of box flue tile	Fill of [177]; overlies (850); overlain by (178)	0.28-0.30m	
(850)	*Fill*	Basal fill of [177]; moist, soft pinkish-grey/brown clayey-sand, separated from base of feature by lens of small rounded grits <5mm; occasional sub-rounded stones up to 100mm; constitutes the whole fill of linear [177] at the northern end	Fill of [177]; overlain by (849); cut by [110]	0.12-0.15m	
(851)	*Fill*	Fill of [172]; soft reddish-brown slightly clayey sandy-silt; common sub-angular to sub-rounded stones 20-40mm	Fill of [172]; overlain by (173)	0.06-0.12m	
[852]	*Cut*	Linear feature; re-cut of linear [135]; 10m long; varies in depth and width between (east) 0.6m wide and 0.25m deep and (west) 0.3m wide and 0.15m deep; concave profile	Cuts (853); contains (136)(283)(820)	0.42m	RB
(853)	*Fill*	Fill of [135]; soft light pinkish-grey slightly clayey sandy-silt; common to abundant sub-angular to sub-rounded stones 20-100mm; highly truncated by [852]	Fill of [135]; same as (827); overlies (284); cut by [852]	0.1m	
[854]	*Cut*	Posthole; sub-circular; *c*.0.4×0.3m; sloping sides and concave base	Contains (856)	0.1m	RB?
(855)	*VOID*	*VOID*	*VOID*	*VOID*	
(856)	*Fill*	Fill of [854]; soft light pinkish-grey silty-sand; sub-rounded stones 20-40mm at base	Fill of [854]	0.1m	
(857)	*Fill*	Fill of [862]; friable dark-brown humic sandy-silt; common sub-angular to sub-rounded stones <40mm; occasional charcoal flecks	Fill of [862]		
(858)	*Fill*	Fill of [118]; firm-to-soft dark greyish-brown clayey-silt; common charcoal flecks; common fragments burnt clay; common sub-angular to sub-rounded stones <30mm; occasional sub-rounded stones, including chert nodules, up to 100mm	Fill of [118]; overlies (863); overlain by (119)	0.22m	
(859)	*Fill*	Fill of [118] in Blk 1; soft dark brown silty-clay; occasional sub-angular to sub-rounded stones <50mm; occasional slag; occasional burnt clay, including a single fragile lump 200mm	Same as (119)		
(860)	*Fill*	Upper fill of [883]; yellowish- to reddish-brown sandy-gravel, possibly heat-affected; abundant sub-rounded stones, mainly chert nodules, up to 200mm but usually 50-100mm	Fill of [883]; overlies (882); overlain by (881); cut by [118]	0.24m	
(861)	*Fill*	Fill of [118] in Blk 11; soft dark greyish-brown clayey-silt; frequent charcoal flecks makes context appear darker; common fragments burnt clay; common sub-rounded stones <50mm; occasional large sub-rounded stones, inc. chert, up to 120mm	Fill of [118]; overlies (863); overlain by (119)	0.13m	
[862]	*Cut*	Irregular tree-throw cut into the top of [118]; 0.8×0.6m; numerous root hollows	Cuts (119); contains (857)		C19-C20
(863)	*Fill*	Basal fill of [118]; soft dirty mid orange-brown clayey-sand; occasional sub-rounded chert nodules 50-100mm; largely found on east side of cut; similar to (155), and probably redeposited material from bank	Fill of [118]; overlain by (261)(858)	0.1-0.2m	
[864]	*Cut*	Linear feature; 21.2m long by 2.0m wide; asymmetric profile, eastern side steeper than the west, with the lower 0.4m nearly vertical slot 0.3m wide; orientated SSE-NNW; terminates within the site below [297] but extends beyond EoE to south	Contains (865)(866)(867)(868)(869)(870)(871)(1515)(1516)(1517)(1518)(1519)(1520)	1.25m	Prehistoric
(865)	*Fill*	Fill of [864] (south); firm clean light grey sandy-silt; common sub-angular to sub-rounded stones up to 80mm; occasional charcoal fragments; thickest deposit on west side of cut	Fill of [864]; overlies (866); overlain by (870)	c.0.05m	
(866)	*Fill*	Fill of [864] (south); firm clean light grey silty-sand; common small sub-rounded stones <60mm	Fill of [864]; overlies (867); overlain by (865)	0.18m	
(867)	*Fill*	Fill of [864] (south); firm lens of firm pinkish-red gravel on west side of cut; sub-angular to rounded gravels *c*.10mm	Fill of [864]; overlies (868); overlain by (866)	0.12m	
(868)	*Fill*	Fill of [864] (south); poorly-sorted coarse pinkish gravel, sub-angular to rounded *c*.50mm; primary silting from sides of ditch	Fill of [864]; overlies (869); overlain by (867)	0.3m	
(869)	*Fill*	Basal fill of [864] (south); moist pinkish-brown gritty gravel	Fill of [864]; overlain by (868)	0.08m	
(870)	*Fill*	Upper fill of [864] (south); firm clean light pinkish-brown clayey-silt; occasional sub-rounded stones <30mm	Fill of [864]; overlies (871); cut by [872]	0.22-0.5m	
(871)	*Fill*	Fill of [864] (south); mid-to-dark gritty greyish-brown clayey-sand; common to frequent sub-angular to sub-rounded stones <60mm	Fill of [864]; overlies (865); overlain by (870)	0.25m	

[872]	*Cut*	Shallow pit; *c.*2.5×2m; wide shallow profile with concave base	Cuts (870); contains (873)	0.22m	RB
(873)	*Fill*	Fill of [872]; firm gritty dirty mid greyish-brown slightly clayey sandy-silt; common small sub-rounded stones <30mm; rare charcoal flecks	Fill of [872]; cut by [118]	0.22m	
(874)	*Surface*	Irregular metalled surface, forming the less well-defined element of (171); sub-angular to rounded stones up to 100mm, mostly 50-80mm	Cut by [177]; overlain by (875)	0.16m	
(875)	*Layer*	Layer of firm dirty grey clayey-silt; common sub-angular to rounded stones <40mm; remnant soil or surface filth overlying metalling (874)	Overlies (874); cut by [177][172]		
(876)	*Fill*	Fill of [114]; gritty greyish-brown sandy-silt; heterogeneous, containing lumps of redeposited material (pale banded sand); common charcoal fragments; occasional small sub-rounded stones <50mm; possible evidence of burning	Fill of [114]; overlies (892); overlain by (278)	0.1m	
[877]	*Cut*	Posthole; ovoid; 0.7×0.53; vertical sides and concave base	Part of <189>; contains (878)	0.35m	C18
(878)	*Fill*	Fill of [877]; soft pinkish-brown clayey-silt; occasional sub-rounded stones <40mm; occasional charcoal flecks	Fill of [877]; cut by [298]	0.35m	
(879)	*Fill*	Lower fill of [816]; soft dirty mid reddish-brown sandy-silt; occasional sub-angular to sub-rounded stones <35mm; rare charcoal flecks	Fill of [816]; overlain by (817)	0.2m	
(880)	*VOID*	*VOID*	*VOID*	*VOID*	
(881)	*Fill*	Fill of [883]; firm greyish-brown silty-clay, yellowish mottling in places; common sub-angular to sub-rounded stones up to 150mm	Fill of [883]; overlies (860); cut by [118]	0.31m	
(882)	*Fill*	Fill of [883]; reddish-buff brown gravelly sandy-clay containing common to abundant sub-rounded chert nodules and other stones, 50-100mm; possibly heat-affected; possible surface?	Fill of [883]; overlies (884); overlain by (860)	0.18m	
[883]	*Cut*	Large pit; sub-rectangular? approx.3.60×2.70m; vertical or steep-sided with irregular base; extends beyond EoE to south	Cuts (870); contains (860)(881)(882)(884)(888)(889)(890)(922)(923)	c.1.1m	RB
(884)	*Fill*	Fill of [883]; dark greyish-brown silty-clay; abundant charcoal fragments	Fill of [883]; overlies (889); overlain by (882)	0.1m	
(885)	*Fill*	Upper fill of [893]; soft mid-to-dark brown clayey-silt; frequent sub-angular to sub-rounded stones <40mm; common larger sub-rounded stones up to 150mm, in discrete patches; proportion of stone increases with depth; frequent C19 rubbish: pottery, Fe slag, clay pipe stems; deliberate backfill with industrial and domestic waste	Fill of [893]; overlies (930); cut by [110]	0.45m	
[886]	*Cut*	Linear feature; construction trench for wall {276}; up to 1.10m wide; steep or vertical sides with flat base; orientated east-west	Cuts (249)(813); contains (887){276}(277)	0.36m	C19-C20
(887)	*Fill*	Fill of [887]; compact stony greyish-brown clay silt; abundant sub-rounded stones <40mm; highly truncated by [110]	Fill of [886]; cut by [812]	c.0.25m	
(888)	*Fill*	Fill of [883]; orange-brown silty-clay; frequent to abundant sub-angular to sub-rounded stones 20-30mm; rare slag	Fill of [883]; overlies (922); overlain by (890)	0.22m	
(889)	*Fill*	Fill of [883]; greyish-brown silty-clay; frequent charcoal flecks and fragments; occasional sub-angular to sub-rounded stones <80mm	Fill of [883]; overlies (890); overlain by (884)	0.08m	
(890)	*Fill*	Fill of [883]; grey clay-silt; occasional to common charcoal fragments, burnt clay	Fill of [883]; overlies (888); overlain by (889)	0.32m	
<891>	*Group*	Group context: fills (884)(889)(890) in pit [883]			RB
(892)	*Fill*	Basal fill of [114] Blks 19&21; soft pinkish greyish-brown slightly clayey sandy-silt; common sub-angular to sub-rounded stones <40mm	Fill of [114]; overlain by (876)	0.12m	
[893]	*Cut*	Large pit; sub-rectangular; 14.5×8.0m; largely flat base by marked linear depressions at the base of the NE edge; shallow linear depression leads out of the NW corner; possible pond bay or gathering tank related to industrial processes or the leat system in the town	Cuts (101), contains 885	0.6-0.7m	C18-C19
[894]	*Cut*	Linear feature; surviving length 3.5m by 1.1m wide; orientated SW-NE; extends beyond EoE to north; probably northern extension of Linear [133]	Same as [133]; cuts (926); contains (895)(934)	0.45m	RB
(895)	*Fill*	Upper fill of [894]; soft-to-firm dark greyish-brown sandy-silt; common sub-angular to sub-rounded stones 50-100mm; occasional charcoal fragments and flecks	Fill of [894]; overlies (934); overlain by (914); cut by [893][902]	0.15m	
[896]	*Cut*	Linear feature; *c.*10m long, up to 1.96m wide; broad U-shaped profile with wide concave base; orientated east-west, with 90° corner (to south) at western end; probably northern extension of	Same as [131]; contains (897)(926)(931)	0.52m	RB

		Linear [131]			
(897)	*Fill*	Upper fill of [896]; soft greyish-brown slightly clayey sandy-silt; common sub-angular to sub-rounded stones <60mm, some larger sub-rounded and rounded stones <100mm; occasional charcoal fragments and flecks	Fill of [896]; overlies (926); cut by [894] [932][937][1568]	0.10-0.22m	
[898]	*Cut*	Posthole; sub-rectangular; 0.86×0.52m in diameter; vertical sides and flat base; extends beyond EoE to north	Part of <189>; cuts (914); contains (899)	0.33m	C18
(899)	*Fill*	Fill of [898]; soft-to-firm greyish-brown slightly sandy clayey-silt; frequent to abundant sub-angular to sub-rounded stones <50mm; occasional charcoal flecks	Fill of [898]; overlain by (101)	0.33m	
[900]	*Cut*	Posthole; sub-rectangular; 0.88×0.43+ m in diameter; steep western side and sloping base; extends beyond EoE to north	Part of <189>; cuts (914); contains (901)	0.36m	C18
(901)	*Fill*	Fill of [900]; soft-to-firm mid greyish-brown clayey-silt; common sub-angular to sub-rounded stones <80mm, proportion increases towards the base; occasional sub-rounded chert nodules <100mm; rare charcoal fragments	Fill of [900]; overlain by (101)	0.36m	
[902]	*Cut*	Posthole; ovoid; 0.66×0.55m in diameter; vertical sides and irregular base; extends beyond EoE to north	Part of <189>; cuts (914); contains (903)	0.48m	C18
(903)	*Fill*	Fill of [902]; soft greyish-brown slightly clayey sandy-silt; common charcoal fragments; occasional sub-angular to sub-rounded stones <20mm	Fill of [902]; overlain by (101)	0.48m	
[904]	*Cut*	Posthole; ovoid; 0.8×0.54+ m in diameter; steep sides and concave base; extends beyond EoE to north	Part of <189>; cuts (914); contains (905);	0.32-0.4m	C18
(905)	*Fill*	Fill of [904]; soft-to-firm greyish-brown slightly sandy clayey-silt; occasional sub-angular to sub-rounded stones <20mm; occasional charcoal fragments	Fill of [904]; overlain by (101)	0.32-0.4m	
[906]	*Cut*	Posthole; ovoid; 0.7×0.57+ m in diameter; steep sides to flat base; extends beyond EoE to north	Part of <189>; cuts (914); contains (907)	0.52m	C18
(907)	*Fill*	Fill of [906]; soft-to-firm greyish-brown sandy-silt; common small sub-rounded stones <50mm, occasional larger sub-rounded stones <200mm; rare charcoal fragments	Fill of [906]; overlain by (101)	0.52m	
[908]	*Cut*	Posthole; sub-circular; 0.70×0.64m; concave sloping sides and concave base; sub-rectangular socket in the base 0.42×0.16m and 0.08m deep, flat base sloping to the east	Part of <189>; cuts (914); contains (909)	0.34m	C18
(909)	*Fill*	Fill of [908]; soft brown silty-sand; common sub-rounded stones <40mm, occasional larger stones <80mm; rare charcoal fragments; possible animal burrow disturbance	Fill of [908]; overlain by (101)	0.34m	
[910]	*Cut*	Linear feature; c.17m long; variable steep U- or V-shaped profile; up to 2m wide at top, variable base up to 0.48m wide; orientated NW-SE; forming one part of enclosure with [292]; extends beyond EoE to north	Part of <1599>; same as [292]; contains (911)(989)(990)(993)(994)(1525)	0.6-0.9m	RB
(911)	*Fill*	Upper fill of [910]; friable mid to dark brown sandy-silt; common sub-rounded stones <40mm; occasional sub-rounded chert nodules up to 200mm; occasional charcoal fragments and flecks; occasional fragments burnt clay	Fill of [910]; overlies (989); cut by [912] [942][296]	0.3-0.56m	
[912]	*Cut*	Narrow linear feature; 3.5+ m long by up to 0.5m wide; broad concave profile; orientated NE-SW; runs at 90º to [937] and may form one side of a rectangular structure; truncated by [893] to south	Cuts (911); contains (913)	0.16m	RB
(913)	*Fill*	Fill of [912]; loose greyish-brown slightly clayey sandy-silt; common charcoal flecks, occasional charcoal fragments; common sub-rounded stones up to 100mm, mostly <50mm; occasional large angular stones, up to 150mm, mainly at north end of cut	Fill of [912]; cut by [893]	0.16m	
(914)	*Layer*	Layer of buff-brown sandy-silt overlying linears [894][896][910] and associated features north of [893]; with the exception of postholes in group <929>, no other cuts visible, indicating (914) consists of the weathered and mixed upper fills of these RB features – possible base of later RB soil layer?	Cut by [893]<929>	0.22m	
[915]	*Cut*	Post socket; sub-rectangular; 1.1×0.48m; steep sides and concave base	Cuts (927); contains (916)	0.24m	RB?
(916)	*Fill*	Fill of [915]; firm-to-stiff mottled greyish-brown slightly clayey sandy-silt; common sub-angular stones <40mm; occasional charcoal fragments	Fill of [915]; cut by [893]	0.24m	
(917)	*Layer*	Layer of soft buff brownish-grey slightly sandy clayey-silt overlying (921) and (979); possible base of later soil layer	Overlies (921)(979)	0.05m	
[918]	*Cut*	Posthole; sub-circular; 0.3m diameter; sloping sides and flat base; highly truncated	Cuts (132); contains (919)	0.22m	RB?
(919)	*Fill*	Fill of [919]; gritty greyish-brown clayey-silt; abundant sub-angular to sub-rounded stones <30mm	Fill of [918]	0.22m	

(920)	*Fill*	Upper fill of [133]; soft dark greyish-brown silty-clay; common sub-rounded chert nodules up to 150mm; occasional charcoal flecks	Fill of [133]; overlies (134); cut by [893]	0.17m	
(921)	*Layer*	Layer of fine and firm light greyish-brown slightly sandy silt; remnant soil layer in centre of site (along earlier burgage boundary), highly truncated; common sub-rounded chert nodules up to 150mm; occasional rounded quartz pebbles; common sub-angular to sub-rounded stones <40mm	Overlain by (917); cut by [131][133][175] [821][978]	*c.*0.2m	
(922)	*Fill*	Fill of [883]; homogenous orange-brown clay-silt; common small stones <20mm; occasional charcoal fragments and flecks	Fill of [883]; overlies (923); overlain by (888)	0.16m	
(923)	*Fill*	Basal fill of [883]; loose poorly-sorted gravel *c.*20-40mm in greyish-orange silty-sand matrix; primary silting of feature	Fill of [883]; overlain by (922)	0.18-0.38m	
[924]	*Cut*	Same as [883]	Same as [883]		
(925)	*VOID*	*VOID*	*VOID*	*VOID*	
(926)	*Fill*	Fill of [896]; soft greyish-brown silty-sand; common small sub-angular to sub-rounded stones <50mm; common to occasional angular stones <120mm	Fill of [896]; overlies (931); overlain by (897)	0.22-0.3m	
(927)	*Fill*	Fill of [937]; soft-to-firm light buff-brown sandy-silt; a line of flat angular stones in the base of the feature, tipping in from the SW, max. dimensions 380×280×50mm, but all at least 300×200×50mm; common to frequent burnt clay fragments; possible structural?	Fill of [937]; cut by [915][893]	0.2m	
{928}	*Vessel*	Romano-British pottery vessel buried neck-down in (1569)	Within [1568]	-	RB C2-C3
<929>	*Group*	Group context: postholes [145][898][900][902][904][906][908]; superseded by <189>	See <189>	0.1-0.42m	C18
(930)	*Fill*	Basal fill of [893], on west side only; firm-to-soft pinkish-brown clayey-silt; frequent sub-angular to sub-rounded stones <40mm; fairly clean	Fill of [893]; overlain by (885)	0.15m	
(931)	*Fill*	Basal fill of [896]; firm uniform greyish-brown clayey-sand; common sub-rounded stones <30mm; occasional sub-rounded stones up to 80mm; occasional charcoal flecks and fragments	Fill of [896]; overlain by (926)	0.10-0.2m	
[932]	*Cut*	Shallow ovoid pit; 1.47×1.06m; shallow, sloping concave profile; located at corner of [896]	Cuts (897); contains (933)	0.14m	RB
(933)	*Fill*	Fill of [932]; very soft greyish-brown slightly clayey-silt; occasional charcoal flecks and fragments; rare small stones	Fill of [932]	0.14m	
(934)	*Fill*	Basal fill of [894]; soft mid-to-dark greyish-brown silty-sand; common sub-angular to sub-rounded platey stones <40mm; occasional sub-angular chert stones 60-100m; occasional charcoal flecks and fragments	Fill of [894]; overlain by (895)	0.3-0.52m	
[935]	*Cut*	Sub-rectangular curved slot, at junction of [265] and [893]; 1.32×0.4m; steep sides to flat or slightly concave base; presence of larger packing stones at west end suggests possible ?sluice base for loosing water along [265] from [893]	Part of, or adjoins [265]; contains (936)	*c.*0.2m	C19
(936)	*Fill*	Fill of [935]; soft dirty greyish-brown clayey-silt; some large sub-angular to sub-rounded packing stones at west end; common small sub-rounded stones <50mm	Fill of [935]	*c.*0.2m	
[937]	*Cut*	Narrow linear feature; 2.5+ m long by up to 0.7m wide; broad concave profile, depth increases to north; orientated SE-NW; runs at 90º to [912] and may form one side of a rectangular structure	Cuts (897)(1569); contains (927)	0.2m	RB
[938]	*Cut*	Posthole; circular; 0.46m diameter; concave profile	Cuts [921]; contains (939)	0.16m	?
(939)	*Fill*	Fill of [938]; soft mid-brown sandy-silt; common small sub-angular to sub-rounded stones <40mm, occasional larger angular stones up to 80mm; occasional charcoal fragments	Fill of [938]	0.16m	
[940]	*Cut*	?Linear or Pit; c.1m long and *c.*1m long by *c.*1m wide; orientated ?NW-SE; sloping sides and flat base; extends beyond EoE to north	Cuts (155); contains (941)	0.42m	RB
(941)	*Fill*	Fill of [940]; soft-to-firm slightly pinkish mid-brown sandy silt; common small sub-angular to sub-rounded stones <40mm; occasional charcoal flecks but essentially clean	Fill of [940]; cut by [896]	0.42m	
[942]	*Cut*	Rectangular pit; 1.9×1.4m; vertical sides and flat base (not fully excavated)	Cuts (266); contains (943)	0.5m	C19
(943)	*Fill*	Fill of [942]; soft dark brown sandy-silt; common small sub-angular to sub-rounded stones <50mm	Fill of [942]	0.5m	
[944]	*Cut*	Pit; sub-rectangular; *c.*2.3×1.4m; only flat base survived	Cuts [264]; contains (945)	0.05m	C19
(945)	*Fill*	Fill of [944]; dark-brown friable sandy-silt; common sub-angular to sub-rounded stones <50mm, C18-C19 pottery	Fill of [944]	0.05m	
{946}	*Structure?*	Loose linear band of stones/pottery with no bonding; c.1.80×0.60m; orientated north-south; comprised of sub-angular stones 150-200mm in size, up to 360mm long; includes large amphorae sherds; no bonding or real coherent placement; possibly part of a floor surface, or edge of an	Overlies (947)		RB

		activity area?			
(947)	*Layer*	Layer of soft greyish-brown clayey silt-sand; remnant soil layer, highly truncated	Same as (951); cut by [949]; abutted by {946}		
(948)	*VOID*	*VOID*	*VOID*	*VOID*	
[949]	*Cut*	Linear feature; possible re-cut and extension of [263]; 1.1m wide; shallow, vertical sides and flat base; extends to the west beyond the south-west corner of [263] some 1.3m, then turns 90° to the north for 3m, and appears to turn 90° to the east, heavily truncated at that point; possible structural foundation?	Cuts (947)(951)(958); contains (950) (984)	0.10-0.18m	RB
(950)	*Fill*	Fill of [949]; soft greyish-brown sandy clay-silt; occasional common sub-angular to sub-rounded stones 20-60mm; common charcoal flecks	Fill of [949]; same as (984); cut by [910]	0.12m	
(951)	*Layer*	Layer of firm greyish-brown clayey silt-sand; remnant soil layer, highly truncated	Same as (947); cut by [949][265]	0.18m	
(952)	*Fill*	Upper fill of [263]; soft greyish-brown clayey silt-sand; remnant soil layer, highly truncated	Fill of [263]; overlies (264); cut by [910] and modern pit	0.12-0.16m	
[953]	*Cut*	Sub-circular Pit; 0.45m diameter; steep sides and shallow sloping base; shallow depression at NE lip extends beyond EoE	Contains (954)(955)(956)(957)	0.38m	RB C1
(954)	*Fill*	Fill of [953]; firm light-to-mid brown sandy-silt; abundant sub-angular to sub-rounded stones <30mm; one patch of highly fragmented bone; cremation urn and associated material	Fill of [953]; contains (955)(956)(957)	0.38m	
(955)	*Vessel*	Cremation urn, within [953]	Vessel in [953]	-	RB C1
(956)	*Vessel*	Accessory vessel to cremation, within [953]	Vessel in [953]	-	RB C1-C2
(957)	*Board*	Shale board on top of cremation urn (955), within [953]	Lid over vessels in [953]	-	RB C1-C2
(958)	*Layer*	Layer of firm greyish-brown clayey silt-sand; frequent sub-rounded stones 20-60mm; highly truncated soil layer, possible extension of (947)(951)	Overlies (959); cut by [949][910]	0.14m	
(959)	*Layer*	Layer of soft pinkish-brown silty-sand; occasional charcoal flecks; possible remnant early or pre-Roman soil layer	Overlain by (958); cut by [949][961]	0.08m	
(960)	*Fill*	Fill of [961]; soft dark greyish-brown clayey silt-sand; common charcoal flecks; occasional sub-rounded stones <60mm, occasionally larger	Fill of [961]; same as (264); overlies (970); overlain by (952); cut by [1531]	0.15m	
[961]	*Cut*	Linear feature; 3.0m long by up to 1.1m wide; orientated NE-SW; concave profile; joins [263] at southern end, truncated by [910] to north	Part of <2506>; same as [263][1528]; contains (960)(970)	0.4m	RB
[962]	*Cut*	Posthole; sub-circular; *c*.0.6m diameter; gentle concave profile	Contains (963)	*c*.0.1m	?
(963)	*Fill*	Fill of [962]; mottled yellowish-to-greyish brown clayey-silt; occasional sub-rounded stones <40mm	Fill of [962]	*c*.0.1m	
(964)	*Fill*	Fill of [263]; clear lens of soft mixed yellowish-brown mottled redeposited sand; common burnt clay, slag fragments	Fill of [263]; overlies (987); overlain by (264)	*c*.0.04m	
[965]	*Cut*	Heavily truncated curving linear feature; *c*.2.2m long, originally 0.30-0.35m wide; shallow concave profile; possible continuation of [172]	Cuts (969); contains (966)	0.1m	RB
(966)	*Fill*	Fill of [965]; soft-to-firm gritty mid-brown sandy-silt; common sub-angular to sub-rounded stones <40mm	Fill of [965]; cut by [812][263]	0.1m	
[967]	*Cut*	Posthole; sub-circular; 0.28m diameter; gentle concave profile	Contains (968)	*c*.0.1m	RB
(968)	*Fill*	Fill of [967]; soft gritty pinkish-brown silty-sand; common sub-angular to sub-rounded stones <40mm	Fill of [967]; cut by [910]	*c*.0.1m	
(969)	*Layer*	Layer of friable mid-brown sandy-silt, grading to natural; early or pre-Roman soil layer south of {286} (as (181)(215)(921)); common sub-angular to sub-rounded stones <40mm; occasional charcoal flecks	Overlies (155); cut by [263]	0.05-0.15m	
(970)	*Fill*	Basal fill of [961]; soft pinkish-brown silty-sand; occasional sub-rounded stones <60mm, occasional larger	Fill of [961]; same as (987); overlain by (960)	0.15-0.18m	
<971>	*Group*	Group context: Postholes [972][974][976][982]		0.2-0.45m	
[972]	*Cut*	Posthole; sub-ovoid; 0.55×0.35m; steep sides and flat base	Part of <971>; cuts (979); contains (973)	0.2m	RB?
(973)	*Fill*	Fill of [972]; mid reddish-brown sandy-silt; occasional sub-rounded chert nodules up to 150mm; common sub-angular to sub-rounded stones <10mm; post-packing in the form of two large angular slabs of igneous rock e.g. 200×200×50mm; common RB pottery	Fill of [972]	0.2m	
[974]	*Cut*	Posthole; ovoid; 0.55m diameter; steep sides and sloping base	Part of <971>; cuts (979); contains (975)	0.35m	RB?

(975)	*Fill*	Fill of [974]; soft moist grey sandy-silt; common sub-angular to sub-rounded stones <40mm	Fill of [974]; cut by [976]	0.35m	
[976]	*Cut*	Posthole; ovoid; 0.72×0.52m diameter; steep sides and concave base	Part of <971>; cuts (980)(975); contains (977)	0.4m	RB?
(977)	*Fill*	Fill of [976]; soft grey slightly clayey sandy-silt; frequent sub-angular to sub-rounded stones <50mm; rare tiny slate fragments	Fill of [976]	0.4m	
[978]	*Cut*	Shallow sub-rectangular pit; approx. 2.40×1.40m; sloping sides and flat base	Cuts (123)	0.25m	RB
(979)	*Fill*	Fill of [978]; soft dark grey clayey-silt; rare large sub-rounded chert nodules up to 200mm; apparent clusters of angular sandstone blocks, generally platey, e.g. 250×150×50mm; frequent RB pottery in distinct concentrations/broken vessels; occasional charcoal flecks and fragments, roof slate fragments, slag	Fill of [978]	0.25m	
(980)	*Fill*	Upper fill of [122]; clean redeposited natural pinkish-yellow gravel	Fill of [122]; overlies (123); cut by [978][124]	0.04m	
(981)	*Layer*	Layer of mottled light greyish-brown and yellow-orange silty sand grading to natural, similar to (155); common small sub-angular to sub-rounded stones <40mm; probable base of RB topsoil	Cut by [978][972]; overlain by (194)	*c*.0.1m	
[982]	*Cut*	Posthole; sub-circular; 0.68×0.64m diameter; steep sides and concave base	Part of <971>; cuts (125)	0.45m	C17
(983)	*Fill*	Fill of [982]; soft mid brown slightly clayey sandy-silt; frequent sub-rounded chert nodules up to 100mm; Common sub-angular to sub-rounded stones up to 50mm; rare quartz; rare tiny slate fragments	Fill of [982]	0.45m	
(984)	*Fill*	Fill of [949]; soft dark brownish-grey sandy clay-silt; occasional common sub-angular to sub-rounded stones <40mm; common charcoal flecks	Fill of [949]; same as (950)	0.12m	
(985)	*VOID*	*VOID*	*VOID*	*VOID*	
(986)	*Layer*	Layer of soft light greyish-brown clay-silt; common sub-angular to sub-rounded stones <50mm; two larger angular platey stones 200×200×20mm across	Abuts {946}(947)		
(987)	*Fill*	Basal fill of [263]; soft gritty pinkish-brown silty-sand; occasional sub-angular to sub-rounded stones <30mm; occasional charcoal fragments, flecks	Fill of [263]; overlain by (988)	0.1-0.28m	
(988)	*Fill*	Fill of [263]; lens of charcoal in a dark brown clay-silt matrix; common burnt clay fragments	Fill of [263]; overlies (987); overlain by (264)	0.05m	
(989)	*Fill*	Fill of [910]; soft-to-firm dirty mid greyish-brown silty-clay; high humic component toward the base; common large sub-rounded chert nodules up to 200mm (derived from {286}?); common charcoal flecks; occasional charcoal fragments	Fill of [910]; overlies (990); overlain by (911)	0.14-0.26m	
(990)	*Fill*	Fill of [910]; soft-to-firm mid greyish-brown silty-sand; occasional small sub-rounded stones <50mm	Fill of [910]; overlies (993); overlain by (989)	0.05-0.28m	
[991]	*Cut*	Pit; sub-rectangular; 1.50×1.50m; gentle concave profile	Cuts (138); contains (992)	0.5m	C19
(992)	*Fill*	fill of [991]; soft brown silty-sand; common sub-rounded stones 40-60mm	Fill of [991]	0.5m	
(993)	*Fill*	Fill of [910]; stiff brownish-grey silty-clay; occasional stone inclusions but otherwise clean	Fill of [910]; overlies (1525)(994); overlain by (990)	0.15m	
(994)	*Fill*	Basal fill of [910]; firm clean brownish-orange silty-clay; abundant sub-angular to sub-rounded stones <40mm; primary silting deposit	Fill of [910]; overlain by (1525)(994)	0.06-0.12m	
[995]	*Cut*	Narrow linear feature; 1.75m long by 0.2m wide; steep sides and flat base; orientated east-west; Forms part of a rectangular enclosure or structure with [998]	Part of <2502>; contains (996)	0.06-0.08m	RB ?C1
(996)	*Fill*	Fill of [995]; greyish-brown clay-silt; common sub-rounded stones <30mm	Fill of [995]	0.06m	
(997)	*Layer*	Thin layer of soft mid greyish-brown sandy-silt; restricted extent to west of [978]; common sub-angular to sub-rounded stones <40mm; occasional abraded RB pottery, slate fragments	Cut by or abuts [978]/(979)	0.06-0.1m	
[998]	*Cut*	Linear feature; broad V-shaped profile; orientated east-west for 2.4m, before turning south for 2.0m, with 90° corner, 0.25m wide; forms part of a rectangular enclosure or structure with [995]	Part of <2502>; contains (999)	0.15m	RB ?C1
(999)	*Fill*	Fill of [998]; orange-grey clay-silt; occasional sub-rounded stones <40mm	Fill of [998]	0.15m	
[1500]	*Cut*	Posthole; sub-rectangular; 0.64×0.54m; steep sides and flat base	Part of <189>; contains (1501)	0.25m	C18
(1501)	*Fill*	Fill of [1500]; soft mid greyish-brown sandy-silt; common small sub-angular to sub-rounded stones <50mm, occasional larger stones up to 80mm	Fill of [1500]	0.25m	
[1502]	*Cut*	Posthole; sub-circular; 0.68×0.66m; vertical sides and concave base	Part of <189>; contains (1503)	0.32m	C18

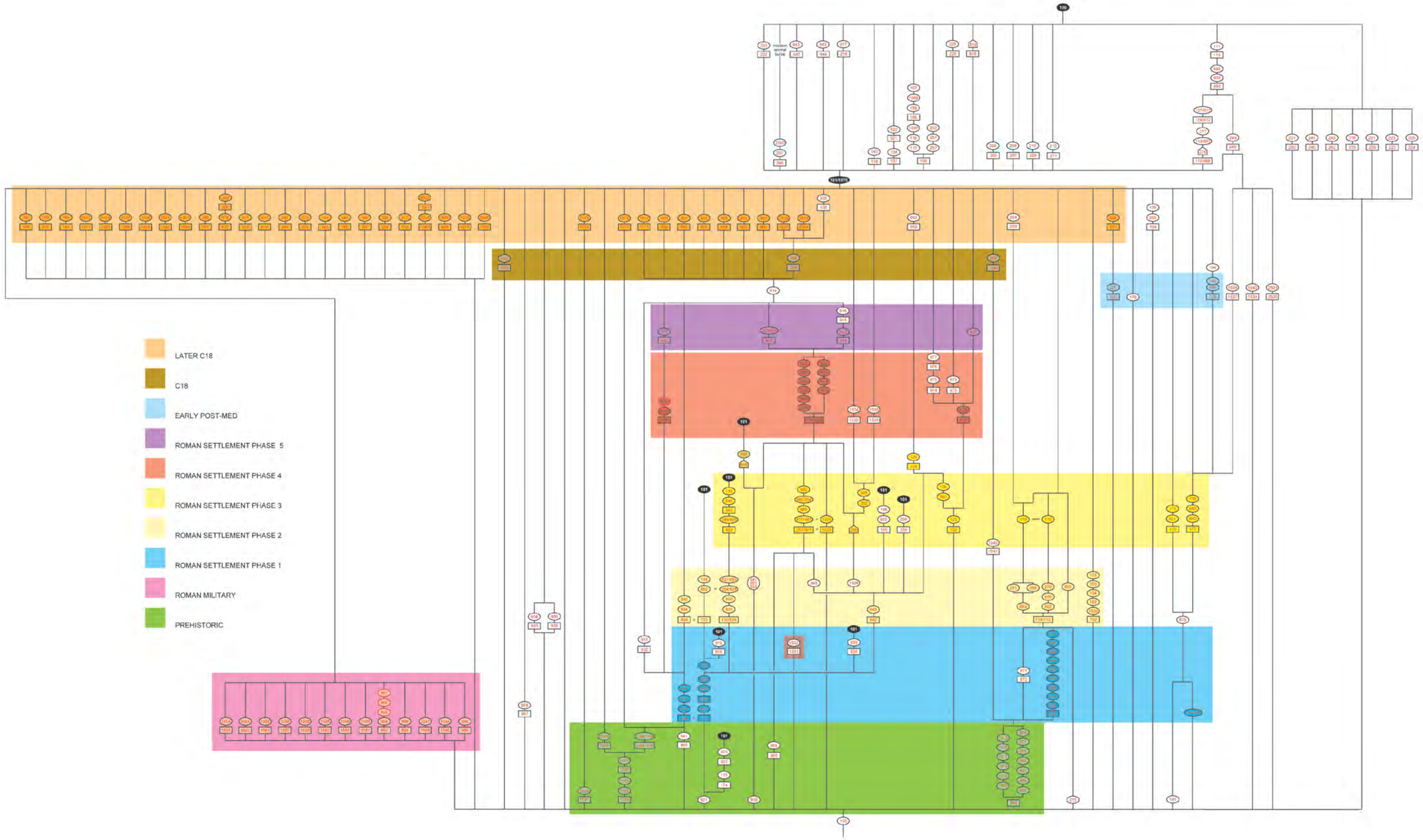
(1503)	*Fill*	Fill of [1502]; soft mid-greyish slightly clayey sandy-silt; some mottling suggestive of redeposited natural, but no sign of a post-pipe; common small sub-rounded stones <20mm; occasional sub-angular to sub-rounded stones up to 60mm	Fill of [1502]	0.32m	
[1504]	*Cut*	Posthole; sub-rectangular; 0.72×0.64m; steep sides and flat base with a slight sub-rectangular depression in the middle 0.15×0.12m and 0.04m deep	Part of <189>; contains (1505)	0.40-0.45m	C18
(1505)	*Fill*	Fill of [1504]; firm-to-stiff mottled mid-to-light greyish-brown sandy-silt; common small sub-angular to sub-rounded stones <40mm	Fill of [1504]	0.45-0.45m	
[1506]	*Cut*	Posthole; sub-circular; 0.50×0.54m diameter; steep sides and concave base	Part of <189>; contains (1507)	0.28m	C18
(1507)	*Fill*	Fill of [1506]; soft mid greyish-brown sandy-silt; distinct lens of lighter sandy material on eastern side; common small sub-angular to sub-rounded stones <60mm	Fill of [1506]	0.28m	
(1508)	*VOID*	*VOID*	*VOID*	*VOID*	
[1509]	*Cut*	Posthole; sub-rectangular; 0.72×0.65m; vertical sides and concave base	Part of <189>; contains (1510)	0.22m	C18
(1510)	*Fill*	Fill of [1509]; soft mid grey sandy-silt; common small sub-angular to sub-rounded stones <60mm	Fill of [1509]	0.22m	
[1511]	*Cut*	Posthole; ovoid; 0.60×0.48m; irregular sloping sides and concave base	Part of <189>; cuts (1529); contains (1512)	0.36m	C18
(1512)	*Fill*	Fill of [1511]; soft mid-to-dark greyish-brown sandy-silt; common small sub-angular to sub-rounded stones <80mm	Fill of [1511]	0.36m	
(1513)	*Fill*	Basal fill of [292]; soft greyish-brown slightly clayey silty-sand; occasional sub-rounded chert nodules up to 150mm; common small sub-angular to sub-rounded stones <30mm; occasional charcoal flecks	Fill of [292]; with (1521); contains (1514); overlain by (293)	0.25-0.32m	
(1514)	*Fill*	Fill of [292]; discrete lens of burnt material within (1513) at corner of {1599}; c.0.4m in diameter by 0.04m thick; possibly *in situ* but if so not intense burning	Fill of [292]; within (1513)	0.04m	
(1515)	*Fill*	Upper fill of [864] (north); soft clean light greyish-brown clay-silt; common small sub-angular to sub-rounded stones <40mm	Fill of [864]; overlies (1516); cut by [294] [297]	0.15m	
(1516)	*Fill*	Fill of [864] (north); stiff clean pinkish-brown clay-silt; occasional small sub-angular to sub-rounded stones 40-60mm	Fill of [864]; overlies (1517); overlain by (1515)	0.30-0.32m	
(1517)	*Fill*	Fill of [864] (north); firm-to-stiff mottled grey silty-clay; occasional small sub-angular to sub-rounded stones <50mm	Fill of [864]; overlies (1518); overlain by (1516)	0.30-0.4m	
(1518)	*Fill*	Fill of [864] (north); stiff clean mid grey very clayey silt; occasional small sub-angular to sub-rounded stones <80mm	Fill of [864]; overlies (1519); overlain by (1517)	0.36m	
(1519)	*Fill*	Fill of [864] (north); coarse gravel infill; abundant sub-angular to sub-rounded stones <40mm; soft moist pinkish-grey clayey-silt matrix	Fill of [864]; overlies (1520); overlain by (1518)	0.25m	
(1520)	*Fill*	Basal fill of [864] (north); soft wet pinkish-grey sandy-silt; occasional small sub-angular to sub-rounded stones <20mm	Fill of [864]; overlain by (1519)	0.06m	
(1521)	*Fill*	Fill of [292]; component part of (1513) with a far greater amount of charcoal, predominantly flecks	Fill of [292]; part of (1513)		
[1522]	*Cut*	Posthole; circular; 0.64m diameter; steep sides and flat base	Part of <189>; Cuts (282); probably cuts (266); contains (1523)	0.28m	C18
(1523)	*Fill*	Fill of [1522]; fairly soft light greyish-brown sandy-silt; common sub-angular to sub-rounded stones up to 60mm; occasional larger stones, including sub-rounded chert nodules (from {286}) up to 120mm; occasional charcoal flecks	Fill of [1522]	0.28m	
(1524)	*Layer*	Layer of mixed light brownish-grey sandy-silt beneath {286}	Overlain by {286}	0.06-0.1m	
(1525)	*Fill*	Fill of [910] in Blk10; thin lens on north side; soft clean light yellowish-grey sand (redeposited natural)	Fill of [910]; overlies (994); overlain by (993)	0.05m	
[1526]	*Cut*	Narrow linear feature; heavily truncated; surviving length 2.1m, 0.55m wide; orientated north-south; extends beyond EoE to north	Contains (1527)	0.21m	C17-C18
(1527)	*Fill*	Fill of [1526]; soft light greyish-brown clayey-sand; common small stones <20mm, occasional sub-angular to sub-rounded stones <50mm	Fill of [1526]; cut by [296]; abutted by [106]	0.21m	
[1528]	*Cut*	Linear feature; heavily truncated; 1.5m long by 0.6m wide; gentle concave profile; initially orientated north-south then turns 90° corner to west; extends beyond EoE to north-west	Part of <2506>; same as [263]; contains (1529)	0.23m	RB
(1529)	*Fill*	Fill of [1528]; firm-to-soft clean pinkish-brown slightly clayey sandy-silt; common sub-angular to	Fill of [1528]; cut by [910]	0.23m	

		sub-rounded stones <30mm			
(1530)	*Fill*	Basal fill of [102] in Blk7 and Blk9; coarse gravels from initial silting, sub-angular to sub-rounded gravels 20-100mm; matrix of fine rusty-brown sandy-silt	Fill of [103]; overlain by (154)	0.15m	
[1531]	*Cut*	Sub-oval hollow; 0.65×0.48m; concave profile; feature possibly heat-affected *in-situ*	Cuts (952); contains (1532)	0.1m	RB?
(1532)	*Fill*	fill of [1531]; firm pinkish-brown sandy-silt; frequent charcoal flecks and fragments; occasional sandstone cobbles up to 150mm, heated affected	Fill of [1531]; overlain by (952)	0.1m	
[1533]	*Cut*	Posthole; sub-circular; c.0.3m diameter; vertical sides and flat base	Cuts (282); contains (1536)	0.31m	RB?
(1534)	*Fill*	Fill of [1533]; grey clayey-silt; occasional sub-angular to sub-rounded stones <50mm; occasional slag fragments; occasional sub-rounded chert nodules up to 100mm, probably derived from {286} and used as post-packing	Fill of [1543]	0.31m	
[1535]	*Cut*	Posthole; sub-circular; c.0.3m diameter; vertical sides and sloping base	Cuts (282); contains (1536)	0.17m	RB?
(1536)	*Fill*	Fill of [1535]; mottled greyish-brown clayey-silt; frequent small sub-rounded to sub-angular stones <15mm; occasional slag fragments	Fill of (1535)	0.17m	
[1537]	*Cut*	Posthole; sub-ovoid; 0.48m diameter; steep sides and concave base	Part of <2507>; cuts (850); contains (1538)	0.1m	post Roman
(1538)	*Fill*	Fill of [1537]; soft mid greyish-brown sandy-silt; occasional sub-rounded to sub-angular stones <50mm	Fill of [1537]; cut by [248]	0.1m	
[1539]	*Cut*	Posthole; heavily truncated; sub-circular; *c.*0.6m diameter; sloping sides and concave base	Part of <2507>; contains (1540)	0.3m	post Roman
(1540)	*Fill*	Fill of [1539]; soft brown sandy-silt; common sub-rounded stones <40mm (nb. entirely frozen during excavation)	Fill of [1539]; cut by [248][886] modern machine trench	0.3m	
[1541]	*Cut*	Posthole or small pit; sub-circular?; 1.0m across; steep sides and flat base; visible only in section	Cuts (1516); contains (1542)	0.4m	RB
(1542)	*Fill*	fill of [1541]; soft pale yellowish-brown slightly clayey sandy-silt; common small sub-angular to sub-rounded stones <50mm	Fill of [1541]; cut by [248]	0.4m	
[1543]	*Cut*	Same as [1533]	Same as [1533]		
[1544]	*Cut*	Posthole, sub-circular; 0.44m diameter; concave profile	Part of <2502>; contains (1545)	0.1m	RB ?C1
(1545)	*Fill*	Fill of [1544]; firm grey clay-silt; occasional small stones <50mm	Fill of [1544]	0.1m	
[1546]	*Cut*	Posthole; sub-circular; 0.38×0.38m diameter; vertical sides and flat base	Part of <2502>; contains (1547)	0.15m	RB ?C1
(1547)	*Fill*	Fill of [1546]; firm grey clay-silt; common small stones <20mm	Fill of [1546]	0.15m	
(1548)	*Fill*	Same as (1534)	Same as (1534)		
[1549]	*Cut*	Shallow linear depression; 4.3×0.50m; orientated north-south across <2502>	Overlies (999); contains (1548)	0.05m	RB ?C1
(1550)	*Fill*	Fill of [1549]; firm mid-to-light brown sandy-silt; occasional sub-angular to sub-rounded stones 40-80mm; common smaller stones	Fill of [1549]	0.05m	
[1551]	*Cut*	Posthole or pit; ovoid; 1.02×0.46m; gentle sloping profile	Part of <1657>; contains (1552)	0.06m	RB ?C1
(1552)	*Fill*	Fill of [1551]; soft mid brown slightly gritty clay-silt; common sub-angular to sub-rounded stones 40mm	Fill of [1551]	0.06m	
[1553]	*Cut*	Posthole; irregular ovoid; 0.80×0.57m; asymmetric concave profile; truncated by [991]	Part of <1657>; contains (1554)	0.2m	RB ?C1
(1554)	*Fill*	Fill of [1553]; soft orange-brown sandy-silt; common sub-angular to sub-rounded stones <30mm	Fill of [1553]; cut by [991]	0.2m	
[1555]	*Cut*	Posthole; sub-rectangular; 0.62×0.58m; shallow concave profile	Part of <1657>; contains (1556)	0.1m	RB ?C1
(1556)	*Fill*	Fill of [1555]; soft greyish-brown clay-silt; common sub-angular to sub-rounded stones 30-50mm; occasional charcoal flecks	Fill of [1555]	0.1m	
[1557]	*Cut*	Posthole; sub-circular; 0.40×0.32m diameter; concave profile	Part of <1657>; contains (1558)	0.06m	RB ?C1
(1558)	*Fill*	Fill of [1557]; soft greyish-brown clay-silt; common sub-angular to sub-rounded stones 30-50mm; occasional charcoal flecks	Fill of [1557]	0.06m	
[1559]	*Cut*	Posthole, possibly two linked postholes; sub-ovoid; 0.56×0.35m; gentle sides and concave base	Part of <1657>; contains (1560)	0.04m	RB ?C1
(1560)	*Fill*	Fill of [1559]; soft greyish-brown clay-silt; common sub-angular to sub-rounded stones 30-50mm; occasional charcoal flecks	Fill of [1559]	0.04m	
[1561]	*Cut*	Posthole; sub-circular; 0.32×0.28m; shallow concave profile	Part of <1657>; contains (1560)	0.06m	RB ?C1
(1562)	*Fill*	Fill of [1561]; soft mottled mid-brown gritty clay-silt; common sub-angular to sub-rounded stones up to 40mm	Fill of [1561]	0.06m	

[1563]	*Cut*	Irregular elongated pit, probably 2 linked postholes; 0.61×0.40m; very shallow with gentle concave profiles	Part of <1657>; contains (1564); part of <1567>	0.08m	RB ?C1
(1564)	*Fill*	Fill of [1563]; soft mottled mid-brown slightly gritty clay-silt; common sub-angular to sub-rounded stones <40mm	Fill of [1563]	0.08m	
[1565]	*Cut*	Posthole; sub-rectangular; 0.30×0.30m; concave profile	Contains (1566)	0.12m	?RB
(1566)	*Fill*	Fill of [1565]; soft dark greyish-brown clay-silt; common sub-angular to sub-rounded stones <30mm; occasional slag, charcoal fragments and flecks	Fill of [1565]	0.12m	
<1567>	*Group*	Group context: pits/post-holes [1551][1553][1555][1557][1559][1561] and [1563]. Postholes appear to form a shallow arc around Cremation [953], possibly relating to marking the grave. They also appear to respect <2502>			RB ?C1
[1568]	*Cut*	Ovoid pit; c.1.0m diameter; sloping sides and flat base	Cuts (897); contains (1569)	*c.*0.5m	C18
(1569)	*Fill*	Fill of [1568]; stiff brownish-grey clayey-silt; contains Vessel (928)	Fill of [1568]; cut by [936]	*c.*0.5m	
(1570)	*Layer*	Layer of reddish buff-brown sandy-silt below (100) in Cable Trench; common sub-angular to sub-rounded stones 30-60mm; occasional charcoal fragments	Cut by [110]; overlain by (100)	0.35-0.48m	C18-C19
[1571]	*Cut*	Posthole; sub-rectangular; 0.68×0.54m; nearly vertical sides and slightly sloping base	Part of <189>; contains (1572)	0.5m	C18
(1572)	*Fill*	Fill of [1572]; soft and clean grey clayey-silt; increasingly firm and stony with depth; stones sub-angular to sub-rounded 40-60mm	Fill of [1571]	0.5m	
[1573]	*Cut*	Posthole; sub-rectangular; 0.68×0.60m; vertical sides and slightly concave base	Part of <189>; cuts (1588); contains (1574)	0.52m	C18
(1574)	*Fill*	Fill of [1573]; moist soft mid grey slightly clayey sandy-silt; common sub-angular to sub-rounded stones 30-40mm; occasional charcoal flecks; occasional sub-rounded chert nodules up to 80mm	Fill of [1573]	0.52m	
[1575]	*Cut*	Posthole; sub-rectangular; 0.60×0.38m; steep sides and undulating base	Part of <189>; contains (1576)	0.14m	C18
(1576)	*Fill*	Fill of [1575]; soft mid greyish-brown slightly clayey sandy-silt; common to frequent sub-angular to sub-rounded stones 30-40mm	Fill of [1575]	0.14m	
[1577]	*Cut*	Posthole; sub-rectangular; 0.94×0.78m; nearly vertical sides and concave base	Part of <189>; cuts (1586); contains (1578)	0.32m	C18
(1578)	*Fill*	Fill of [1577]; soft mid greyish-brown slightly clayey sandy-silt; common to frequent sub-angular to sub-rounded stones 30-40mm; occasional charcoal flecks	Fill of [1577]	0.32m	
[1579]	*Cut*	Posthole; ovoid; 0.52×0.52m; concave profile; extends beyond EoE to north	Part of <189>; contains (1580)	0.25m	C18
(1580)	*Fill*	Fill of [1579]; soft mid buff grey-brown slightly clayey sandy-silt; frequent to abundant sub-angular to sub-rounded stones 30-40mm	Fill of [1579]	0.25m	
[1581]	*Cut*	Posthole; sub-rectangular; 0.78×0.62m; vertical sides and concave base	Part of <189>; contains (1582)	0.5m	C18
(1582)	*Fill*	Fill of [1581]; soft mid greyish-brown slightly clayey sandy-silt; common sub-angular to sub-rounded stones 30-40mm; occasional sub-rounded chert nodules 80-100mm; occasional charcoal fragments	Fill of [1581]	0.5m	
[1583]	*Cut*	Posthole; sub-rectangular; 0.58×0.52m; sloping sides and flat base; extends beyond EoE to north	Part of <189>; contains (1584)(1591)	0.18m	C18
(1584)	*Fill*	Upper fill of [1583]; soft mottled grey-brown slightly clayey sandy-silt; common small sub-rounded gravel <10mm	Fill of [1583]; overlies (1591)	0.09m	
[1585]	*Cut*	Curving linear feature; 7.2m long, variable width 0.6-1.2m; steep but irregular profile	Same as [143]; cuts (1593)	0.55m	?Prehistoric
(1586)	*Fill*	Fill of [1585]; firm-to-soft clean orange-yellow slightly silty sand; occasional sub-rounded stones 30-40mm; very rare charcoal flecks	Same as [144]; fill of [1585]; cut by [1577] [896]	0.55m	
[1587]	*Cut*	Narrow linear feature; 1.50×0.4m; V-shaped profile; orientated SSW-NNE	Contains (1588)	0.22m	?Prehistoric
(1588)	*Fill*	Fill of [1587]; buff greyish-brown sandy-silt	Cut by [1573]	0.22m	
[1589]	*Cut*	Narrow linear feature; observed length *c.*4.0m but visible in cable trench to west, 0.64m wide; steep sides and flat base; orientated east-west	Contains (1590)(1596)	0.5m	?Prehistoric
(1590)	*Fill*	Upper fill of [1589]; firm buff greyish-brown sandy-silt; common sub-angular stones 30-60mm; very rare charcoal flecks	Fill of [1589]; overlies (1596); cut by [1592][1594]	0.2m	
(1591)	*Fill*	Basal fill of [1583]; abundant sub-rounded stones 30-50mm; matrix of greyish-brown sandy-silt	Fill of [1583]; overlain by (1584)	0.09m	
[1592]	*Cut*	Linear pit; 2.25×0.4m; V-shaped profile; orientated east-west parallel to [1585]	Cuts (1590); contains (1593)	0.3m	?Prehistoric
(1593)	*Fill*	Fill of [1592]; firm buff greyish-brown sandy-silt; common sub-rounded stones 30-60mm	Fill of [1592]; cut by [1594][1585]	0.3m	

[1594]	*Cut*	Irregular linear pit; 2.1m long by 0.50-0.90m wide; steep sides concave base	Cuts (1590)(1593); contains (1595)	0.25m	?Prehistoric
(1595)	*Fill*	Fill of [1594]; buff greyish-brown sandy-silt; common sub-rounded stones 30-60mm	Fill of [1594]	0.25m	
(1596)	*Fill*	Basal fill of [1589]; clean orange-yellow silty-sand; no inclusions	Fill of [1589]; overlain by (1590)	0.33m	
(1597)	*Fill*	Upper fill of [106] in Blk2; loose friable mid-brown loam; common sub-angular to sub-rounded stones 30-40mm, occasionally larger, C18-C19 pottery	Fill of [106]; overlies (116); overlain by (100); cut by [158]	0.55m	
(1598)	*Fill*	Fill of [158]; friable mid brown loam	Fill of [158]; overlies (159); overlain by (107)	0.22m	
<1599>	*Group*	Group context: Linears [292] and [910]. These two linears form the south-east corner of a posited enclosure extending beyond EoE to the north-east. The form and character of the two linears is slightly different.			RB
[2500]	*Cut*	Posthole; sub-circular; 0.48m diameter; steep sides and concave base	Part of <2507>; contains (2501)	0.2m	
(2501)	*Fill*	Fill of [2500]; soft brown sandy-silt; common sub-rounded stones <40mm	Fill of [2500]; cut by [248]	0.2m	
<2502>	*Group*	Group context: Linears [995] and [998], Postholes [1544] and [1546]. The linears form part of a rectangular structure or enclosure 4.5m long by at least 3m wide, that extends beyond EoE to the west. Building foundation trench with association postholes, or possibly funerary enclosure related to [953].			RB C1?
(2503)	*Fill*	Upper fill of [296]; light brown slightly sandy clay-silt; common sub-angular to sub-rounded stones 30-60mm; common charcoal flecks	Fill of [296]; overlies (297); cut by modern sheep burial		
[2504]	*Cut*	Posthole; sub-circular; *c*.0.6m diameter; sloping sides and concave base	Part of <189>; cuts (266); contains (2505)	*c*.0.4m	C18
(2505)	*Fill*	Fill of [2504]; firm greyish-brown clayey silt; common sub-angular to sub-rounded stones <40mm	Fill of [2504]	*c*.0.4m	
<2506>	*Group*	Group context: Linears [263], [961] and [1528]. An extended linear feature that turns two 90° corners, perhaps to avoid the ?structure represented by {286}. Appears to terminate before reaching Linear [864], and respecting the terminus of Linear [177], suggesting that they were contemporary, and there was a gateway at this point.			RB
<2507>	*Group*	Group context: Postholes [1537], [1539] and [2500]. A group of similar postholes lying beneath [248], on the line of the posited burgage boundary.			?
[2508]	*Cut*	Robber trench, visible only in section in Block 2 of [106]; up to 0.5m across and 0.65m deep; steep or vertical sides with flat base.	Cuts (252); contains (2509)	0.65m	C19
(2509)	*Fill*	Fill of [2508]; firm greyish-brown sandy silt; common small sub-angular stones <30mm; several larger sub-angular stones forming a remnant of build, up to 400mm across and 100mm thick; frequent mortar fragments.	Fill of [2508]; overlain by (262)	0.65m	C19

Appendix 4: Stratigraphical Matrix



Appendix 5: Finds Concordance

Context	Prehistoric Pot		Roman Pot		Medieval Pot		Post-Med Pot		Clay Tobacco Pipes					Flint & Chert		Utilised Stone		Animal Bone		Slag		Fe objects		Glass		CBM		Other		Notes
	Count	Wgt.	Count	Wgt.	Count	Wgt.	Count	Wgt.	Stems	Stem/Heel	Bowl Frags.	Bowls	Wgt.	Count	Wgt.	Count	Wgt.	Count	Wgt.	Count	Wgt.	Count	Wgt.	Count	Wgt.	Count	Wgt.	Count	Wgt.	
Topsoil	1	7	15	198	14	214	1362	33210	488				2075	29	547	1	6	125		5	449	26	3763	132	4188	10	608	14	203	3x Slate Fragments, 3x Oyster shell, Cu pipe, spoon, button, buckle, lead window beading
100									26	59	51	47	1244			4	2029							1	109	12	5065	5	40	1x Clay Pigeon, 1x graphite stylus, 2x Burnt Clay, toothbrush
101							4	30	2				4					1									1	3	RB playing counter
103	1	13	126	2205	3	11								14	245					8	812	1	56			49	859			
105							37	190	22	4	5	2	13					13		1	108	1	5	1365	7454	18	1838	2	54	slate
107							7	45	1		1		9					4		1	19							1	5	mortar
109			1	10																									
111					1	5	191	3113	17		1	1	80	2	3			4		7	760			16	355			2	33	modern tile, coal
113							61	438	7		1		44							1	4			5	55	1	76	2	95	1x Coal, 1x Bone knife handle
115			95	2379	1	1	8	97						1	12											2	115			
116									2			1	26																	
117												1	12							1	10									
119	1	2	155	2513										4	59			1		9	2284	1	117	3	22	7	147	1	1	shale bracelet fragment
123			11	239										1	8							1	44					1	252	limestone
125			52	557	1	2								2	4					7	402	1	21							
126																														
132			283	3632	1	6														7	1549					12	577			
134			11	225			7	80												2	7									
136			18	843										1	5					5	198	1	11			2	54	7	146	slate
138									2				4																	
146							3	15																						
153			80	1380										1	27					1	3							1	115	limestone
154			15	131																										
171			2	6																										
173			2	33																						1	11			
176	1	8												9	113					6	457	1	30			5	28	1	42	limestone
178			147	1337										1	2	1	67			1	66	1	6					50	557	49x Burnt Clay, 1x Coal
180							13	239	10			6	91	2	24			18								4	182	2	46	slate, copper thimble
181			10	59										1	8					6	203					1	9			
182																														
186																1	37					1	112					1	17	slate
188																				1	2									
194					2	6												2		2	67									
196			269	2505										6	176					3	325					30	239			
202			4	31																										
204					1	10	6	35																				1	2	slate
206																								2	72					
215														1	1							1	8							
217							9	20	1				2					33		1	135			1	6					
219							8	102	1				1													1	78	1	1	carbonised material?
221							2	26			1		22																	
223																								1	1					
225							1	1																						
227					2	9	8	375			3		3	1	1			13		7	452	1	19			16	411	3	219	floor tile, slate
233							1	7	2				4	1	27							2	36							
241							2	54																						
243																												1	2	slate
245							1	131												3	183									
250							1	27																						
256			5	179																						1	69			
259	2	7	10	25										1	6					4										
260							123	1027	115	10	34	1	511					55		4	46	6	66	15	115			4	17	1x Coal, 1x charcoal (roundwood), oyster shells

261							79	3174	6				33				38				2	659			2	242	coal, copper alloy							
264			324	6471			1	8						2	65			11	271	4	105													
266					1	2	52	916	26	3	4	2	258				17	2	331			1	5	1	9	2	61	stone						
269			8	235														1	18														
278			9	1139														1	51														
280																	1																
282			10	135	1	6	1	9										2	53														
283			14	391																													
284			1	2														1															
285	1	6	165	1866														1	270														
286			9	167																1	26												
293			1	5										1	0.5			3	30						1	19	stone						
297							5	144	2				24																				
299							17	176	7	2	3		30				6	2	78						1	8	lime						
442														1	6																		
800			1	9														1	15														
802			3	27										1	1			4	191														
806			1	13																													
807			4	233																													
808			42	276														12	249														
810														2	34																		
815														1	2			2	42														
820			2	150																													
822			2	55																													
825			4	13														2	71														
832			35	618										2	2			4	51														
833			120	1367																													
834			98	1266																													
835			1	8																													
843	1	3	3	13										2	919			1	5														
846			13	161														1															
848			3	56																													
849			223	2462	1	2	1	5						2	25		3	8	813	4	66												
850			5	167														2	14														
855									18	2	4		141																				
858			7	49										2	31																		
859			12	363																													
860			1	12																													
861			63	600										2	79																		
863			4	74										1	6																		
865														2	79																		
870														2	49																		
874																				7	199												
876			8	265														1	1														
877																		1	72														
878																		1	10														
881			8	144																													
882																		2	312														
884			19	521														4	966	1	28												
885							200	7175	15		3		103	1	3		10	12	4571	2	2364			1	49									
887							6	258																									
888																				1	88												
889	1	16	6	82																													
890	5	103	16	342														2	192														
891			1	8														5	16														
892			7	119																													
895			23	429																													
897			42	470										1	2	1	90	2	7														
901							3	19																									
903																															1	48	holed slate
905							1	9																									

909					1	1	1	26	1				2													2	17	slate fragments
911			101	1980	1	9	2	12						7	56	1	12		6	103							1	6	oyster shell
913			41	806														10	3	307	1	8							
914																													
916					1	2								4	17				3	101							1	11	stone
917			49	320	2	1										2	17		2	7									
919																													
920			12	168										1	414												4	236	stone
921			5	59	1	1	1	30						1	5														
922																													
923																													
926			23	491										4	102	2	86		1		1	914							
927			5	17															2	15									
928			44	2648																									
931			3	101														2											
933			4	101															2	7									
934																			2	4									
943							42	1003	3		1		19					1					6	145	1	15	1	161	pantile
945							5	22	2	1			29										2	6	1	7			
946			51	1327	1	5	1	4						1	11	2	7								3	254	1	1	coal
947			10	151																									
950			31	1407			2	3						2	5				1	4					3	40			
951			2	86																									
952			21	1029			2	36						1	6				1	33					2	118			
954			15	2587															2	15									
958			19	513															1	7					3	60			
959			4	36															1	30					1	4			
960			4	60										1	31				2	305					1	10			
963														1	1														
964																			3	392									
968																													
969			7	325										4	128				4	308							1	3	plaster
970			5	79															1	17									
973			12	79															1	12									
975	1	2			2	7								1	1														
976																			2	5									
977			48	1017	1	6													2	21									
979			395	3997	1	5								6	31	4	516		4	47	1	22					1	357	holed slate
983			11	57			2	18																					
984			21	633																									
986			2	142																									
987			5	26			1	13											1	6									
989			35	536										1	130	1	2749	3	3	254									
990																													
992							4	134	5				15								4	604	2	47					
993			11	241																									
999			1	6										2	16				2	27									
1501																			2	34									
1505					3	9						1	17						2	110									
1507							2	8											2	73					1	6			
1512							1	7																					
1513														1	1				3	14									
1514																			2	9							1	324	Cu fused lump SF#9
1515			3	152																									
1518																			2										
1521			7	236										1	2				3	135									
1523					1	2													1	5							3	12	slate
1527							2	34						1	64								1	24					
1529			91	880										3	47										1	36			
1565																			1	245									
1566																			5	361									

1572						1	14																					
1574						1	14																				2	207	×1 slate; ×1 pantile
1576								1				4																
1578						4	25	1				4						1	113									
1582								1				1	1	23														
TOTAL	15	167	3727	61563	44	322	2295	52558	784	81	112	62	4825	147	3663	20	5616	360	0	260	20367	72	8718	1555	13263	191	10974	126	3563

Appendix 6

The Worked Flint, Chert and Stone, *by Dr Martin Tingle*

Introduction
The assemblage is composed of 138 pieces weighing 3363g, of which chert made up 56% of the numbers and 83% of the weight. This latter discrepancy is characteristic of East Devon where natural chert occurs in thick bands while flint is found as relatively small nodules in occasional outcrops of upper Middle Chalk.

Raw Materials
The underlying geology around Shortlands Lane comprises Lower Permian Exeter Group Sandstone overlain by superficial deposits of Flandrian Alluvium, which suggests that all of the worked stone from the site was imported (British Geological Survey 2010). Apart from a single piece of Portland type, the chert comprises grey, brown and orange examples which probably derive from the Blackdown hills. This is also likely to be the source for most of the flint, as flint-bearing deposits of upper zone Middle Chalk have been noted at Sutton Quarry near Ofwell, approximately 20km east of Cullompton (Newbury, 2002,11). There are also 10 examples of brown and red flints that are likely to be derived from gravel flint or from deposits of clay with flints that also occur on the Blackdown Hills. It is notable (See Table 1), that although chert is slightly more numerous than flint in the assemblage as a whole, all but one of the retouched tools are made from flint.

Composition and Technology

Find	**No. Chert**	**Weight (g)**	**No. Flint**	**Weight (g)**
Primary Flake	5	447	1	8
Secondary Flake	12	307	5	63
Tertiary Flake	15	228	12	69
Uncorticated Flake	21	163	7	49
Broken Flake	14	87	19	123
Blade Segment	2	3	2	3
Core Fragment	4	335	4	76
Unsystematic Core	3	1136	1	64
Systematic Core	1	68		
Arrowhead			2	4
Retouched Flake			1	2
Plano Convex Knife			1	8
Notched Flake	**1**	**4**		
Scraper			3	49
Burnt unworked	1	22	1	45
Total	**79**	**2800**	**59**	**563**

Table 4: The composition of the flint assemblage

The flake and core assemblages show a slight variation between flint and chert, suggesting that the latter may have been worked *in situ* while the former was brought in as either partially worked cores or finished tools. This, and the preponderance of flint as the raw material for retouched tools, may simply reflect two episodes of stone working possibly separated by millennia are represented in this assemblage

While it is likely that the assemblage represents prehistoric activity one further possibility might be considered. During the excavation of a "corn drying oven" at Membury in East Devon, chert primary flakes were recovered from within the slot cut for the construction of the flue (Tingle, 2002 14). These were assumed to be residual prehistoric finds until it was noticed that they could be re-fitted onto blocks of chert that had been used to construct the flue, demonstrating that they were a by-product of Roman construction work. While there may be no evidence for Roman stone working at Shortlands Lane, such a possibility should still be considered.

Distribution
The worked flint and chert derived from 55 separate contexts of which only five contained more than 5 pieces. Context 103 had the greatest concentration of 13 pieces. It is assumed that most of the assemblage is redeposited within Roman or later features although a single ditch [864] may be Prehistoric. On the southern side of the site two fills of 864 produced a flint and a chert core fragment (865) and a broken chert flake with an uncorticated flint flake (870). The various fills of the ditch on the northern side of the site (1515-20) produced no worked flint

Dating
There are three datable pieces from the assemblage: two oblique arrowheads and a single broken plano-convex knife which date from the late Neolithic. All three were found in the topsoil. There is possibly an earlier element to the assemblage hinted at by the presence of worked chert itself. The prehistoric use of chert seems to die out in the South West after the early Neolithic. The chert assemblage includes a single blade segment from (215), which clearly derives from a small systematically reduced blade core characteristic of the Mesolithic/early Neolithic. There is also what appears to be an elongated pebble tool with abrasion damage at one end, recovered from the topsoil (see below)

Conclusion
The assemblage of flint and chert is comparatively small and therefore little can be said of the Prehistoric activity that it is likely to represent. Most, if not all of this assemblage is redeposited within later features or is unstratified within the topsoil. Its datable components indicate a late Neolithic date but it is possible that an earlier element may exist within it.

The Broken Flint Knife from Cremation [953]
The knife is made from a large flake (19g) of an unpatinated, mottled grey/black chalk-derived flint which closely resembles Type 4 at Beer Head, although it could have come from one of the other inland chalk deposits in Devon (Tingle 1998, 89; Newberry 2002). There are clear traces of wear gloss on the ventral cutting edge, as well as evidence of more robust usage in the form of two small flake scars on the lower edge. The base of the knife is broken in two distinct detachments, one of which exhibits a hinge fracture with a point of percussion, visible in the dorsal cortex. Breakage would therefore appear to have been effected when that the knife was struck at least twice on its dorsal face, although whether this took place in Prehistory or the Roman period cannot be determined. The piece shows no evidence of burning and was therefore not part of the cremation. It could conceivably have been accidently incorporated when the cremated remains were collected up and placed in the vessel, but it seems likely that its inclusion was deliberate.

Prehistoric artefacts found on Roman sites are routinely assumed to residual, but there are numerous examples of an association between Prehistoric stone tools and Romano-Celtic ritual sites. This is particularly notable in Northern France and Brittany, perhaps the best example being the sanctuary at Essart (Seine Maritime) which produced a collection of 70 Palaeolithic and Neolithic axes. The evidence is less clear cut in Britain, and Dark (1993) has sought to characterise Romano-British activity at Prehistoric sites as a consequence of superstition rather than formal religious practice. However, at least 20 polished axes have been found on Romano-British sites and there is at least one example, from Winchester, of a piece of flint making up part of the grave goods in a bag with beads and a ring (Adkins & Adkins, 1985; Alcock, 2011). Precisely how Prehistoric stone artefacts were regarded by the Romano-British is a matter of speculation. Their antiquity may well have been appreciated and it seems likely that their function may also have been recognised. Evidence of the production of flakes and flaked tools has been noted on broken fragments of Roman glassware. Handles, neck and base fragments were utilised to make tools resembling scrapers at Colchester and further examples are noted from Exeter, Wilcote, York and Wroxeter (Cool n/d)

Terminology
Throughout this analysis the term 'cortex' refers to the natural weathered exterior surface of a piece of flint while 'patination' denotes the colouration of the flaked surfaces exposed by human or natural agency. Following Andrevsky (1998, 104) dorsal cortex is divided into four categories; the term primary flake refers to those with cortex covering 100% of the dorsal face while secondary flakes have cortex on between 50% to 99% of the dorsal face. Tertiary flakes have cortex on 1% to 49% of the dorsal face while flakes with no dorsal cortex are referred to as non-cortical

A blade is defined as an elongated flake whose length is at least twice as great as its breadth. These often have parallel dorsal flake scars, a feature that can assist in the identification of broken blades that, by definition, have an indeterminate length/breadth ratio.

Stone Artefacts

Several examples of water-rolled pebbles were retained during the excavation because they appeared to be non-local and could possibly function as whetstones, rubbing stones or have some other use.

Two examples, a rounded pebble from (293) and an unstratified ?EPT (Elongated pebble tool) both have single flake detachments suggesting possible use as a hammer. The broken cobble from (849) could also represent part of a shattered hammer. There are also 5 examples of possible whetstones, all of which are characterised by being elongated pebbles with a flattened or bevelled edge. Perhaps the most convincing of these is a broken piece from (808)

Part of a pebble from (286) may be part of a rubbing stone. Two beach pebbles exhibiting wear polish were found in a Roman pit at Membury, 25km west of Cullompton and it was suggested, based on comparisons with a villa excavation at Piddington (Northants), that these may have been used in the production of textiles.

Context	Find	Weight (g)	Stone
103	Flat Stone	302	Quartzite?
132	Pebble	342	Quartzite?
136	Flat Stone	116	
282	?Whetstone(broken)	182	Quartzite?
286	Rubbing Stone ?	308	Quartzite?
293	Pebble (end damage)	588	Quartzite?
808	Whetstone?	444	Quartzite?
849	Cobble (broken)	254	
917	Whetstone?	184	Quartzite?
920	Pebble	476	Quartzite?
960	Pebble Fragment	74	Quartzite?
969	Whetstone?	186	Quartzite?
979	Whetstone?	238	Quartzite?
US	EPT (end damage)	678	Quartzite?
US	Flat Stone	302	Quartzite?
US	Pebble Fragment	192	Quartzite?

Table 5: The stone artefacts

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Appendix 7

The Prehistoric Pottery, *by Henrietta Quinnell with Roger Taylor*

A small quantity of mainly residual Prehistoric pottery was recovered during the excavation.

Context	Early Neolithic		Late Bronze Age		Middle Iron Age		uncertain	
	No.	Wgt. (g)	No.	Wgt. (g)	No.	Wgt. (g)	No.	Wgt. (g)
100					1	4		
103							1	13
119			1	2				
176			1	8				
259	1	3			1	4		
285			1	16				
843					1	3		
889			1	16				
890					5	103		
975					1	2		
Total	**1**	**3**	**4**	**42**	**9**	**116**	**1**	**13**

Table 6: Details of the Prehistoric sherds.

Early Neolithic
One small moderately-abraded body sherd from (259) may be of this date. It is oxidised 5YR 6/6 reddish yellow and contains common coarse vein quartz inclusions. Its petrology is comparable to that of vein quartz fabrics which have Early Neolithic characteristics, especially the material from the causewayed enclosure at Raddon (Quinnell 1999).

Petrology:
Vein quartz – translucent to opaque white sharply-angular grains, 1-4.2mm;
Quartz – translucent greyish sub-angular grains, 0.1-1.2mm.
Matrix – finely micaceous finely sandy silty clay with fine sand tending to be brown stained, also sparse grains of white feldspar.
Comment – the vein quartz has probably been deliberately crushed. The greyish quartz may be an original constituent of the clay. The matrix clay contains components that are likely to have been derived from the local Permian rocks.

A small group of Early Neolithic body sherds with vein quartz inclusions came from a deposit in a tree throw at Willand Road, Cullompton (ST021082) (Quinnnell & Taylor 2010). The fabric of these sherds was rather more complex, with the main constituents deriving from Carboniferous deposits whose nearest outcrops lay two kilometres to the south. The clay and inclusion constituents appear to have been brought to the Cullompton area to be mixed with material from a more local, Permian, source.

The second small abraded sherd from (259) is of Upper Greensand derived fabric and may be of Iron Age date. Both sherds are residual in (259).

Late Bronze Age Plain Ware
The small group of sherds from (890), very abraded, almost certainly come from a Late Bronze Age Plain Ware vessel. The fabric is *c.*10mm thick but well made, with sparse coarse inclusions. It is generally reduced, 5YR 5/1 gray to 6/2 pinkish gray. The vessel was distinctly biconical in shape, with a pointed rim *c.*200mm in diameter. The fabric of the (890) vessel is Upper Greensand derived; the other Upper Greensand derived sherds have slight differences in their fabrics and could be of any date within the Late Bronze Age or Iron Age. Upper Greensand rocks occur some ten kilometres to the east of Cullompton.

Petrology
Quartz – transparent to translucent colourless to white, occasionally brown, angular to rounded grains, 0.05-1mm, rare polished grains;
Feldspar– white variably altered sub-angular to rounded grains, 0.1-1mm;
Sandstone – buff sub-angular fragments, variably silicified, 1-4.5 mm;
Mica – muscovite, a scatter of cleavage flakes up to 0.1mm;

Chert – rare grey angular and sub-angular fragments, 0.8 and 4mm;
Tourmaline – one black sub-rounded, polished grain, 0.1mm.
Matrix – finely sandy/silty clay.
Comment – an Upper Greensand derived fabric.

The ring gullies at Willand Road produced a range of radiocarbon determinations on undiagnostic charcoal (Hood 2010, 79); the associated features produced very few ceramics, none with petrology comparable with the sherds from (890). One date would, however, [SUERC-14651, calibrated to 1190-920 BC (95% probability)] be appropriate for the (890) vessel.

Late Bronze Age Plain Ware is now being recognised in Devon and the publication of the groups from hut circles on Beacon Hill, Lundy, reviews the current evidence (Quinnell 2010, 55-6). The (890) vessel, although better made and more obviously biconical, is broadly comparable in shape to P17 and P26-29 from Beacon Hill. The Beacon Hill report draws attention to the assemblage from Hayne Lane, Honiton (Fitzpatrick *et al.* 1999, 108-112) which contains many more Late Bronze Age vessels than the report indicated, supported by appropriate radiocarbon dates. In the west of Devon a quantity of Late Bronze Age Plain Ware is present in the midden deposits at Mount Batten (Cunliffe 1988, fig. 25), with P98 closely similar in shape to the (890) vessel, although larger.

Middle Iron Age South Western Decorated Ware
Four contexts – (119), (176), (285) and (889) – produced fairly fresh gabbroic sherds sourced to the Lizard in Cornwall. Sherds are generally reduced, 5YR 4/1 dark grey.

Petrology of (176) sherd
Feldspar – variably altered white to greyish-white angular grains, some showing cleavage surfaces, 0.05-2mm;
Amphibole – a scatter of grey fibrous elongated and cleaved grains, 0.5-1.5mm;
Magnetite – a scatter of black glossy angular to sub-angular magnetic grains, 0.1-0.3mm;
Quartz – sparse translucent colourless to white sub-angular to sub-rounded grains, 0.8- 2.5mm
Matrix – finely sandy/silty clay.
Comment – a standard gabbroic fabric.

The sherd from (176), from neck and shoulder, has a slashed neck cordon above a zone of decoration tooled in the distinctive style of South Western Decorated (SWD) ware. The sherd from (285) also has this decoration but the other sherds are plain. One of the dates from Willand Road (Hood 2010, 79) would be broadly appropriate, SUERC-14643 calibrating to 380-180 BC (95% probability). SWD now generally appears to date from the late 4th century to somewhere in the 1st century BC (Quinnell 2011, 176, 180).

Small quantities of gabbroic SWD have been found on a few sites in East Devon, e.g. at Hembury Hillfort and at the Blackhorse enclosure just east of Exeter (Quinnell 2011, Table 7.5 with refs) and at the Donkey Sanctuary, Salcombe Regis (Gillard and Quinnell *forthcoming*). It is possible that the sherd of uncertain source from (103) is also SWD. Given the small size of the assemblage, no significance can be attached to the proportion of gabbroic fabrics present.

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Appendix 8

The Roman Pottery, *by Alex Croom & Paul Bidwell; mortaria by K.F. Hartley*

Introduction
Excluding the vessels from the cremation burial, the site produced 3702 sherds of stratified Roman pottery weighing 58.597kg. There were 110 sherds (2.317kg) of unstratified material, which was scanned for sherds of interest but not catalogued.

Samian ware
There were a total of 146 sherds of samian weighing 1.497kg. Approximately half (68 sherds) were decorated, but most of these were small and in very poor condition.

Form	**%**
Plain	
Form 18/31 or 31	26
Form 31	6
Form 33	10
Decorated	
Form 30	12
Form 37	46
Totals	**263**

Table 7: Stratified samian ware by form, shown as a percentage of EVEs.

There was a single South Gaulish Form 15/17 rim sherd (not included in Table 7 as it was unstratified), and two very small sherds of Form 29 (contexts (119) and (178)). Other possible vessel forms present but not represented by a rim include single sherds of a Form 31R base (173), a Form 36 (846) and a Form 38 with its flange removed (103). There was also a sherd from a beaker with cut-glass decoration (196). The assemblage mainly consisted of bowls and dishes, with cups making up only 10%. Apart from the beaker, all the drinking vessels were Form 33s. There were a maximum of eight vessels with drilled holes for repairs, three of which came from the linear feature [263]. Apart from a single Form 18/31, all the repaired vessels were Form 37 decorated bowls.

The absence of any examples of Form 27s and the paucity of other early types, combined with the character of the decorated ware, suggests that the assemblage is generally Antonine and later. The majority of the material was Central Gaulish, with only two or three sherds of East Gaulish wares.

Stamp
There was a single, incomplete stamp from a Central Gaulish Form 18/31, reading]**R I .** from context (849).

Mortaria *Fabric identifications by K. F. Hartley*
Mortaria were very poorly represented on the site, making up less than 2% of the pottery (excluding amphorae) by weight. There were 12 sherds weighing 0.719kg from nine different vessels, four of which were represented only by scraps. Vessels from Continental sources made up 87% and those from Britain (two vessels, both produced locally), 13%.

Fabric	**fabric codes**	**date**	**wt%**	**sh%**	**EVE%**
Rhineland	RHL WH	150-250+	56.9	50.0	37.8
North Gaulish	NOG WH 4	late 1st-2nd century	1.1	8.3	
Lyon	CNG OX	50-85	0.7	8.3	
Import		Antonine	28.1	16.7	62.2
Local	Exeter FB13	3rd century	13.2	16.7	
Total			**0.719kg**	**12 sh**	**37%**

Table 8: The mortaria, shown as a percentage. Fabric codes as per the National Roman Fabric Reference Collection (NRFRC) (Tomber & Dore 1998). For a description of the Antonine import, see no. 29, Figure 50 (below).

Amphorae

The excavations produced 153 sherds, weighing 13.536kg, which makes up 23% of the stratified Roman pottery. There was a single rim sherd, from a Dressel 20.

Fabric	**NRFRC**	**wt%**	**sherd %**
Baetican	BAT AM 2	98.7	92.8
Cadiz	CAD AM	0.1	0.7
Gaulish	GAL AM	0.8	5.2
Unknown		0.4	1.3
Total		**13.536kg**	**153 sherds**

Table 9: Amphorae by type, shown as a percentage by weight and sherd count. Fabric codes as per the National Roman Fabric Reference Collection (NRFRC) (Tomber & Dore 1998).

Most of the Batetican sherds are from Dressel 20s, but there are also some thin-walled sherds which could come from the smaller Dressel 23 of the later Roman period. There was also one vessel with the neck removed and edges carefully trimmed, and a total of seven complete or incomplete drilled holes on sherds from four different contexts.

Stamps (see Figure 47)

Both stamps are on the handles of Dressel 20 amphorae.

1. C.AP.F **C.AP.F** Funari 40c, CEIPAC 15628
   This stamp has been found in contexts dated to AD 179-80 in Rome and AD 150-210 elsewhere (Funari 1996, no. 40). Phase 1, context (132).
2. S E. R **S. E. R** Funari 232, CEIPAC 16979, 16980
   An example from Rome comes from a context dated AD 145-61 (Funari 1996, no. 232). Phase 3, context (119).

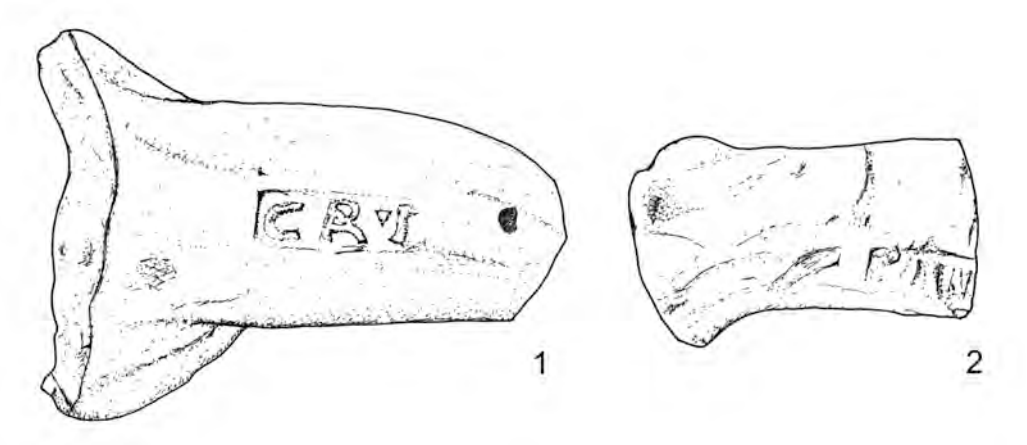

Figure 48: Stamped amphora handles. Scale 1:2, illustrated by T. Hooper.

Coarse wares

Fabric	**NRFRC or Exeter fabric series**	**wt (kg %)**	**sh no %**	**EVE %**
Samian		3.3	4.1	6.0
Mortaria		1.6	0.3	0.8
Fine wares				
Argonne	ARG CC	0.1	0.3	0.7
Cologne	KOL CC	0.0	0.1	

Central Gaulish Black	CNG BS	0.0	0.1	
Céramique à l'éponge?	EPO MA?	0.0	0.0	1.3
Unclassified		0.3	0.3	1.3
Coarse wares				
North Gaulish flagon		0.1	0.1	
Unclassified oxidised		0.9	1.4	1.3
Grey ware 1		17.6	19.4	17.0
South-east Dorset BB1	DOR BB 1	18.3	21.2	17.2
South-Western BB1	SOW BB 1	4.8	5.5	9.4
Fine SW BB1	Exeter Fabric 60	0.1	0.3	0.2
Micaceous grey	Exeter Fabric 125	3.2	3.9	6.1
Sandy Grey	Exeter Fabric 151	5.6	8.8	10.8
Gritty Grey	Exeter Fabric 101	4.7	4.1	3.3
South Devon	SOD RE	0.6	0.8	0.2
Miscellaneous gritty grey		6.9	2.1	0.6
Storage jar fabric 1		6.2	2.2	0.4
Storage jar fabric 2		6.1	2.0	0.7
Storage jar fabric 3		3.0	0.5	1.0
Storage jar fabric 4		1.6	0.7	
Reduced ware 1		3.7	6.6	8.3
Reduced ware with red core		1.7	2.9	3.2
Reduced ware 2		1.7	1.7	2.0
Reduced ware 3		1.0	1.2	1.8
Reduced ware 4		0.6	0.9	0.3
Reduced ware with white margins		0.5	0.5	0.2
Black-slipped		0.3	1.2	1.0
Unclassified reduced		5.2	6.8	4.7
Total		**45.061kg**	**3549sh**	**4410%**

Table 10: Assemblage by fabric (excluding amphorae), shown as a percentage. Additional fabrics found in unstratified material but not represented in the stratified include a sherd of North Gaulish pipe clay flagon and a sherd of Moselle fine ware. Fabric codes as per the National Roman Fabric Reference Collection (NRFRC) (Tomber & Dore 1998) and the Exeter Fabric Series (Holbrook & Bidwell 1991).

Fabrics
Descriptions are included only for those fabrics not already described in the National Roman Fabric Reference Collection (Tomber and Dore 1998) or the Exeter fabric series (Holbrook and Bidwell 1991). See Appendix 8 for a report on the petrographic analysis of selected fabrics.

?Argonne ware
Beaker: 30

?Céramique à l'éponge? [EPO MA]
Flagon: 50

Unclassified fine wares
Beaker: 32, 1

North Gaulish flagon fabric
First-century white ware. See Bidwell *forthcoming*.

Grey ware 1
Slightly sandy light grey fabric, with very fine black inclusions and occasional quartz grains. Slightly micaceous. Where the soil conditions have not affected the surfaces, it can have a darker grey finish. A coarser version of the fabric has larger inclusions up to 1mm across. Petrographic analysis suggests a possible source in the lower reaches of the River Taw.
Beaker: 33, 41
Narrow-mouthed jar: 20, 21
Storage jar: 19, 5
Cooking pot: 22, 25, 44

Bowl/dish: 27, 37

South-east Dorset BB1 (DOR BB 1)
Narrow-mouthed jar: 49
Cooking pot: 9, 11, 26, 52, 54
Bowl: 55

South-Western BB1 (SOW BB 1)
Butt beaker imitation: 1

Fine South-Western BB1
Beaker: 42

Micaceous grey (Exeter fabric 125)
Beaker: 16, 17
Carinated bowl: 15
Dish: 40, 46

Sandy grey (Exeter fabric 151)
Cooking pot: 2, 23, 24
Bowl: 7, 45
Lid: 39, 47

Gritty grey (Exeter fabric 101)
Petrographic analysis suggests similarities with Exeter fabric 125 and reduced ware fabric 2, with a source in the Lustleigh/Bovey Tracey area.
Narrow-mouthed jar: 10

Storage jar fabric 1
South-western grey storage jar fabric (Holbrook and Bidwell 1991, 175).
Used for thin-walled storage jars, which often have thumb impressed decoration on the body and under the rim, which is everted, crudely formed and without the mouldings typical of storage jar fabrics 2 and 3 (see Holbrook and Bidwell 1991, fig. 68, no. 1.1). Buff or orange fabric with mixed inclusions: small quartz, grey and soft black. Of note are angular, opaque pink inclusions and some soft red inclusions *c*.1mm in size. Petrographic analysis indicates a possible source in East Devon, although no specific source can be suggested.
Storage jar: 4

Storage jar fabric 2
Used for storage jars, usually thick-walled. Can have thumb impressed decoration, although there are no examples with impressions on the interior of the rim as seen elsewhere. Light grey fabric with fine black inclusions visible in the section, while angular opaque white and grey inclusions up to 2mm are visible on the surface, especially if it is eroded. A few rare inclusions up to 4mm. Petrographic analysis suggests a provenance near Dartmoor, perhaps in the area of the river Taw.
Storage jar: 18, 35

Storage jar fabric 3
Used for storage jars, usually thick-walled. Thumb impressed decoration not used. A gritty fabric like storage jar fabric 1, with plentiful angular inclusions of slate, black and various shades of grey, plus a few rare rounded white quartz pieces. A source on the Devon/Somerset border is suggested by petrographic analysis.
Storage jar: 31

Storage jar fabric 4
Not common, and possibly represented by a single vessel. Grey fabric with a wide black core.

Reduced ware 1
Dark grey fabric, usually with buff or brown core. Fine matrix with sparse, fine inclusions and rare, rounded soft red inclusions up to 2mm across. Micaceous. Mainly used for cooking pots and small jars, and less

commonly for bowls or dishes. Petrographic analysis suggests quartz might have been added as well as grog as tempering. Probable East Devon source.
Small jar: 48
Dish: 6

Reduced ware with red core
Pomeroy Wood fabric Q105 (Seager-Smith 1999, 310). Hard micaceous fabric with black surfaces and wide red core. Fine quartz and red and black inclusions. Petrographic analysis indicates this is similar to Exeter fabric 151, with a source close to Exeter.
Beaker: 53
Small jar: 34, 40, 51

Reduced ware 2
Hard, dark grey fabric with fine pink and white quartz inclusions and rounded soft pink inclusions. Petrographic analysis suggests this is similar to the gritty grey fabric and Exeter fabric 125, with a source in the Lustleigh/Bovey Tracey area.

Reduced ware 3
Soft grey fabric with powdery buff surfaces, some fine black inclusions. Possibly grey ware badly affected by soil conditions.

Reduced ware 4
Soft, dark grey fabric with some angular hard opaque white inclusions, as well as soft rounded black and rounded white and colourless quartz inclusions. Silver mica plates visible. Most of the sherds have been adversely affected by the soil conditions.

Reduced ware with white margins
Fine black fabric with few inclusions, very well defined white margins and grey surfaces which can be either light or dark.

Black-slipped ware
Fine pink or light grey fabric with fine quartz inclusions, with a black slip on the exterior that has a fine smooth, glossy finish. Used mainly for cornice-rimmed beakers, but vessels in this fabric also include an indented beaker with lattice decoration (Fig. 00, no. 28).
Beaker: 14, 28

Unclassified oxidised and reduced wares
A range of fabrics, each represented by less than ten sherds.
Small jar: 43
Storage jar: 8
Cooking pot: 36
Lid: 12

Catalogue
The 'Types' refer to Holbrook & Bidwell 1991.

Military (see Figure 18 and Figure 19)

1. Butt beaker imitation used as cremation urn. The rim is slightly cupped and has a zig-zag line in the cupped area. The body is decorated with two zones of burnished lines in a herring-bone pattern, divided by horizontal grooves; this is an attempt to imitate the rouletted decoration on butt-beakers as Cam 113 (for a complete example of one of these vessels, now known to have been imports from northern Gaul, see Holbrook and Bidwell 1991, fig. 74, no. 1, from a cremation at Exeter described in Salvatore 2002). Immediately above the base is a groove, recalling the slight projection at the base of the Exeter Cam 113; there is another groove on the underside of the base at its outer edge. SOW BB 1, Type 6 (cf. Type 2.1). Although not properly represented in the Exeter type series, close parallels to the Cullompton vessel from elsewhere in Dorset and the South-West are cited under Type 6. Cam 113 is pre-Flavian, and it is unlikely that the imitations in BB1 continued in production for very long after their prototype disappeared. The base and rim show considerable signs of wear. Context (955).

2. Cooking pot used as an accessory vessel. Sandy grey, Type 11.3. This is the commonest type in this fabric in military-period deposits at Exeter and elsewhere in the South-West, but it continued in production until the early second century. Context (956).

3. Butt beaker imitation with routletted decoration; burnt, fragments from the same or similar vessel from (955) and (999). Context (954).

Miscellaneous Contexts (see Figure 48)

4. Storage jar, with deep thumb impression under the rim, cf. no. 29. Storage jar 1. Context (196).

5. Storage jar. Traces of dark grey slip surviving on interior of rim. Grey ware 1. Context (286).

6. Flat-rimmed dish. Reduced ware 1. Context (196).

7. Flat-rimmed bowl, sooted. Interior surface has flaked off. Sandy grey. Context (196).

8. Storage jar. Light grey fabric with fine black inclusions, buff margins and mid-grey surfaces. Context (984).

9. Cooking pot with obtuse-angle lattice defined above by a groove. DOR BB 1. Context (950).

10. Narrow-mouthed jar. Almost complete vessel, found buried upside down in a pit. This is probably another imitation of a jar in Severn Valley ware, as nos. 20-1, but its rim is not bifid. Gritty grey. Context (928).

11. Large cooking pot. DOR BB 1. Context (973).

12. Lid. Micaceous, slightly soapy orange fabric, with multi-coloured inclusions. Burnt. Context (913).

13. Beaker. Highly fired, very fine grey fabric, with minute black inclusions. Exterior smoothed in horizontal facets below the grooves. Unstratified.

14. Beaker, with glossy black slip over the exterior and the rim, but extending only a short distance down the interior; a copy of Type 11, South-western BB1. Black-slipped. Contexts (103) (153).

15. Carinated bowl with beaded rim; small cordon below bead and above lattice decoration, its lower edge defined by a groove just above the carination. This is an example of the gritty grey ware Type 15, and the first complete profile of the larger Type 15.2 (cf. Seager-Smith 1999, fig. 161, no. 23, another example of Type 15.2, not Type 16). This is the first example noted in micaceous grey ware, but it also occurs in Norton Fitzwarren ware. The type is common in later second- and third-century deposits, and the evidence from Exeter suggests it emerged after *c*. AD 150. Some sooting near the base. Micaceous grey. Context (103).

Settlement Phase 1 (see Figure 49)

16. Small jar, smoothed on shoulder. Sooting on rim. Micaceous grey, cf. Type 18. Context (881).

17. Beaker, with groove on shoulder. Smoothed on shoulder and interior of rim. Micaceous grey, Type 7?; the base (not illustrated) is defined by an irregular groove just above its junction with the wall of the vessel. Context (884).

18. Storage jar. Cf. gritty grey, Type 13.1, a single example from Exeter from an unstratified context (Holbrook and Bidwell 1991, fig. 66). The diameter of the rim is much smaller than that of the standard type South-Western storage jar, and the present example represents an earlier type, perhaps with a high shoulder as no.19, below. Storage jar 2. Context (926).

19. Storage jar with slight offset at junction of neck and body. Patchy dark grey slip over a pale grey body. A variant of no. 18, again representing an early type of storage jar. Grey ware 1 with many quartz inclusions. Context (884).

20. Narrow-mouthed jar. Grey ware 1. Contexts (832) (833) (834).

21. Narrow-mouthed jar, smoothed on shoulder and with traces of acute-angle lattice on the body. Grey ware 1. Context (285).

22. Cooking pot. Smoothed on shoulder and on exterior and interior of rim. Sooted. Grey ware 1. Context (285).

23. Cooking pot. Burnished on shoulder and on exterior and interior of rim. Sandy grey, Type 11. Context (285).

24. Cooking pot with groove on shoulder and slightly cupped rim. Sooted. Sandy grey. Context (285).

25. Cooking pot. Grey ware 1. Context (132).

26. Large cooking-pot, with acute-angle lattice. DOR BB 1, Type 14.1. Context (890).

27. Flat-rimmed dish. Grey ware 1. Context (132).

28. Indented beaker. Highly fragmented, but the body sherds clearly slow lattice decoration. Black-slipped, burnished on exterior. Cf. no. 32. Context (132).

Ditch [114/118] (see Figure 50)

29. Mortarium. Gillam 1970, Type 255, Antonine. Orange fabric with cream exterior surface, in poor condition. Fine fabric with plentiful angular black inclusions, many linear, and some soft orange inclusions, as well as small voids. No trituration grits survive. Context (859).

30. Bag-shaped beaker, with upright rim, possibly a poorly-formed cornice rim. Micaceous, fine orange fabric with thick mid-grey core towards the base and occasional black inclusions. Matt black colour coat and sparse clay particle rough-cast decoration. Probably Argonne colour-coated ware, which occasionally included this type of beaker with sparse rough-casting and no shoulder groove (Anderson 1980, fig. 11, no. 3). Second-century. Contexts (119) (861).

31. Storage jar. Cf. Holbrook and Bidwell 1991 fig. 66, gritty grey ware Type 12. Storage jar 3. Context (278).

32. Thick-walled indented beaker with sparse clay-particle rough-casting. Fine orange fabric with occasional rounded white inclusions, with self-coloured slip fired black in patches. Probably a South-Western imitation of a second-century fine-ware beaker. Context (119).

33. Beaker. Burnished in horizontal bands on the exterior. Grey ware 1. Context (119).

34. Small jar, cf. no. 40. Reduced ware with red core. Context (115).

35. Storage jar, with thumb-impression decoration under the rim. Holbrook and Bidwell 1991, fig. 68, no. 1.1. Storage jar 2. Context (115).

36. Cooking pot with acute-angle lattice. Highly fired, micaceous grey ware with occasional 1mm white quartz inclusions. Context (115).

37. Triangular-rim dish. Grey ware 1. (119).

38. Bowl, ledge inside rim presumably serving as a lid seating. Highly micaceous with a silky finish where preserved; burnished in bands on exterior. This is probably a simplified version of Gillam (1970), Type

301, essentially a Flavian-Trajanic type, with many examples published in recent decades from sites in northern England and the Midlands, such as Baginton, Ilkley, Castleford, Doncaster, York and Carlisle. At Cullompton, it is likely to be later than the military occupation and can be associated with occupation in the late first or early second century. Micaceous grey. Context (115).

39. Lid with internal and external groove. Sooted along the outer edge of the rim. Sandy grey. Context (119).

40. Small jar. Dark grey exterior surface and light grey interior. Burnished on shoulder and exterior and interior of rim. Reduced ware with red core. Cf. gritty grey ware, Type 10.1, probably mid second- to mid third-century. Contexts (876) (892).

Ditch [177] (see Figure 51)

41. Beaker. Imitation of a cornice-rim fine-ware beaker, as Type 5.1 in micaceous grey ware. Grey ware 1. Context (849).

42. Beaker. Fine South-Western BB1, Type 3. Context (849).

43. Small jar with shallow cordon on neck. Sandy fabric with plentiful silver mica plates, dark grey core, buff margins and buff/brown surfaces. The fabric and type cannot be paralleled in the South-West, but it is likely to be a first-century vessel associated with the military occupation. Context (849).

44. Cooking pot, with traces of acute angle lattice. Grey ware 1. Context (849).

45. Rounded-rim bowl. Interior surface has flaked off. Sandy grey. Context (850).

46. Rounded-rim dish. Micaceous grey. Context (849).

47. Lid. Sooted on rim. Sandy grey. Context (849).

Ditch [263] (see Figure 51)

48. Small jar with groove on shoulder. Cf. no. 40. Reduced ware 1. Context (264).

49. Narrow-mouthed jar, similar to SOW BB 1 Type 39.1-2, although it has a slightly cupped rim instead of a groove. Body sherds show acute-angle lattice. DOR BB 1. Context (1529).

Ditch [910] (see Figure 51)

50. Flagon, with patchy mid-orange colour-coat on both exterior and interior. Soft, light orange fabric with plentiful soft orange inclusions and less common opaque white inclusions. This seems to be a vessel in *céramique à l'éponge* from a source in Western France, probably to the south of the Loire Valley. At Exeter, most examples of this ware are bowls with large flanges imitating samian Form 38. Late third- and fourth-century. EPO MA? Context (911).

51. Small jar. Reduced ware with red core. Context (911).

52. Cooking pot with obtuse-line lattice and groove. DOR BB 1, cf. Types 20.1g-h and 20.3. With its markedly over-sailing rim, this is a distinct type of late cooking-pot which emerged in the late third century. Context (989).

Pit [978] (see Figure 51)

53. Beaker, imitation of a fine-ware cornice-rim beaker. Reduced ware with red core. Context (979).

54. Large cooking pot. DOR BB 1. Context (979).

55. Flanged bowl. DOR BB 1, Type 45. Context (979).

Notes:

Nos. 7 and 45 are imitations of BB1 bowls that do not appear in the Exeter type series for sandy grey ware. This suggests either that the kilns making this ware had a more restricted distribution area later in their history which included Cullompton but excluded Exeter, or that at least some of the sandy grey ware at Cullompton is from a different source from that at Exeter, even though the fabrics are not distinguishable macroscopically.

Nos. 11 & 54 are large cooking-pots of third- or fourth-century date, with rim diameters in excess of 25cm, which perhaps functioned as storage-jars, are not represented in the Exeter type series of DOR BB 1, though Types 13 and 14 (cf. Seeger-Smith and Davies 1993, fig. 122, Type 2) show that jars of this size were also made in the later first and second centuries.

Nos. 20 and 21 represent examples of a type which has not previously been recorded in the South-West. The rims terminate in bifid mouldings and the bodies have zones of lattice decoration (only faintly visible on no. 20) defined on the shoulder by one or two grooves. Rims of this type appear on Severn Valley ware jars, which are usually in an oxidised fabric, but they belong to a class of vessel which is dated to the third and fourth centuries (Webster 1977a, fig. 3, nos. 10-13). A useful *terminus post quem* of *c*. AD 160 for the type is provided by examples of this ware exported to the Antonine Wall which do not include jars with bifid rims (Webster 1977; they are also absent from assemblages from the Antonine Wall published subsequently). The zone of lattice decoration on the shoulder is not a standard feature of Severn Valley ware jars, but it occurs commonly on narrow-mouthed jars in northern Britain. Severn Valley ware is very rare in East Devon and at Exeter. If these two jars are imitations of prototypes in this ware, they might well have been the work of a potter who had worked in the Severn Valley industry and who had then moved on to the South-West. Cf. no. 10, for another possible imitation of a jar in Severn Valley ware.

Discussion

The assemblage from Cullompton is important not only for the study of Roman pottery in East Devon but of pottery supply in the South-West more generally. It is the only site in the region, apart from Exeter, with distinct phases of occupation which span the later part of the second century and third century, providing a clearer picture of changes in the sources of pottery. Even at Exeter, with its complex urban sequences, there is a lack of well-dated contexts, apart from the late second-century levelling of the long-abandoned fortress defences which presumably preceded the construction of the larger circuit of defences which protected the town.

The cremation burial consists of a first-century BB1 butt-beaker imitation with a sandy grey ware accessory vessel, with scraps from an oxidised butt-beaker imitation. It was almost certainly associated with the occupation of the fort, and is the first example of a cremation of this period in the South-West apart from those connected with the legionary occupation at Exeter. Other than this burial, there is only a little pottery dating to the military period: a sherd from a samian Form 15/17 and the handle of a North Gaulish flagon (both unstratified), a scrap of Lyon mortarium (897) and a jar with a cord on its neck which is perhaps a first-century Gaulish import (Figure 51, no. 44).

The general character of the pottery in Phase 1 suggests the civil occupation of the site did not start on any substantial scale until at least the middle of the second century. The only vessel which is probably of late first- or early second-century date is a micaceous grey-ware bowl (Figure 50, no. 39). There are no samian Form 27s and none of the early BB1 types – such as reeded-rimmed and bead-rimmed bowls – which emerged in the post-military period, while the nature of the decorated samian and the presence of a worn Form 38 samian bowl would suggest a date in the second half of the second century for Phase 1. A similar date is also indicated by the coarse wares; narrow-mouthed jars (Figure 49, nos. 20-1), a mid to late second-century jar in SOW BB 1 (132), and another such jar with square to obtuse-angled lattice which should be late second-century, while the stamped Dr 20 amphora handle is likely to be of late second-century date (see stamp no. 1, above).

Pottery from the later phases contains much material which could be re-deposited from the earlier phases of activity. Thus, Phase 2 produced pottery of a similar date to Phase 1, including an Antonine mortarium (Figure 50, no. 30), though Phase 3 included pottery of the early to mid third century. There is a BB1 cooking pot with obtuse-angle lattice that dates to after *c.*220 (196), and a sherd of third-century local South-Western mortarium (264) associated with a large group of coarse wares of early to mid third-century date. There is also a Rhineland mortarium which, while its overall date-range is *c.*150-250, is typical of early to mid-third century contexts at Exeter (283).

Occupation of the site continued into the second half of the third century. A BB1 cooking pot with obtuse-angle lattice and a groove above, dating to after the middle of the third century comes from context (950) (Phase 3 or 4; Figure 48, no. 9). Phase 4 produced a second cooking pot of this type (989), as well as a flagon probably in *céramique à l'éponge* and, if so, not earlier than the last quarter of the third century. The final phase of Roman occupation (Phase 5) produced a reasonable amount of pottery, most of which came from Pit [978], this feature produced a flanged bowl dating to after *c.*270 (979; Figure 51, 55).

The flanged bowl is only one of three examples from the whole site, indicating that occupation cannot have continued long after *c.*270. The pottery is marked by the absence or scarcity of wares that would be usually be found in a fourth-century assemblage, such as Oxford and New Forest colour-coated wares. At the settlement at Pomeroy Wood, occupied from the first century to sometime in the fourth, these two wares made up over 2% of the overall site assemblage (Seager-Smith 1999, 299), while they are not present at all at Cullompton.

Substantial occupation of the site seems to be limited to the second half of the second century to the late third century, with no evidence of much if any activity in the fourth century.

Supply

Reduced wares, and especially grey ware 1, make up 57% of the coarse wares at the site, while BB1 only makes up 25%. This is very different from the pottery at Pomeroy Wood, where reduced wares make up 26% in the second- to third-century phase and 18% in the third to fourth century (Seager-Smith 1999, table 81, phases 4i-4ii; fig. 167), or the fourth-century pond deposit at Woodbury, where BB1 makes up 80% of the coarse wares and reduced wares 5% (Silvester and Bidwell 1984, table 1, group 3). Other than grey ware 1, a further 13 reduced ware fabrics were identified, although most provided only small amounts of the coarse wares. Of these, three of the most important types could be paralleled at Exeter (Table 1), and another four of the fabrics were used exclusively for large storage jars. Although production of storage jars has been identified at Woodbury, it is likely there were a number of different sources for them in the region (Holbrook 1993, 97).

The petrographic analysis of a number of sherds (see Appendix 9) suggests that Cullompton received most of its coarse wares from sites to the west, near Exeter and beyond. The one fabric that can be shown to have come from a more local source to Cullompton was one of the storage jar fabrics (3), probably from the area of the Dorset/Somerset border. A possible source is a kiln site in this area, at Cade's Farm, Wellington, that is thought to have principally produced storage jars (Somerset HER 16991). However, storage jar fabric 3 was only a minor source of supply, with a source near Dartmoor and another in an unspecified location in East Devon (fabrics 1 and 2) providing the majority of the storage jars used at Cullompton.

Many of the fabric categories from Exeter such as sandy grey, micaceous grey and gritty grey wares were catch-all groups, incorporating a range of sub-fabrics. At Pomeroy Wood some of these categories have been sub-divided (Seager-Smith 1999, 307, 310, 311), although only one of these can be tentatively identified at Cullompton, which has produced its own range of grey and reduced ware fabrics. Morphologically, the range of types made in these various fabrics is very similar, being in the main BB1 imitations, but with interesting variants such as the small jars (rare in BB1) and a range of beakers. The significance of the fabric sub-divisions at Cullompton and Pomeroy Wood need to be tested by petrographic studies to see if they are significant or not, as it may be that the sources of these grey wares are fewer than the numerous fabric divisions suggest.

South Devon ware was a minor source of supply at the site, making up less than 1% of the assemblage. The ware made up 25% of the very latest deposits at Exeter (Holbrook and Bidwell 1991, 178), and although the site at Cullompton did not last into the fourth century, the low proportion of South Devon ware from the site seems to be typical of East Devon sites. At Pomeroy Wood it makes up only 4% of coarse wares in late third and fourth century contexts (Seager-Smith 1991, 307), and at Woodbury less than 1%

both in the fourth-century deposit in the civilian settlement (Great Close) and in the third- to fourth-century pond deposit (Holbrook 1993, 97; Silvester and Bidwell 1984, Table 1).

Vessel types

Type	**%**
Flagon	1.3
Beaker/cup	9.5
Small jar	12.6
Cooking pot	46.2
Storage jar	3.6
Large storage jar	5.5
Bowl/dish	19.7
Mortarium	0.8
Lid	0.6
Indeterminate	0.1
Total	**4410**

Table 11: The assemblage (excluding amphorae and the cremation vessels) by vessel type as measured by EVES, shown as a percentage. Small jar: cooking pot style vessel with rim diameter of 110mm and less; storage jar: includes lug-handles jars and narrow-mouthed jars; large storage jar: very large vessels with large diameter rims.

Flagons were poorly represented, with only nine sherds from possibly six vessels amongst the stratified material, and a handle from a first-century North Gaulish flagon amongst the unstratified. Most of the drinking vessels were in reduced wares such as grey ware 1 and sandy grey ware, with colour-coated wares only making up 19% of the total of drinking vessels by weight and samian 4%. Samian was mainly used for providing bowls and dishes (27%), with BB1 at 24% and the rest made in a range of reduced wares. A common vessel type on the site was the small jar (rim less than 110mm in diameter) in reduced wares, often with a groove on the shoulder. They were made in a number of the reduced ware fabrics but most in grey ware 1 (nearly 30% by EVEs), while BB1 provided only 6%.

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Online Resources

CEIPAC Corpus database of amphora stamps (http://ceipac.gh.ub.es/corpus).

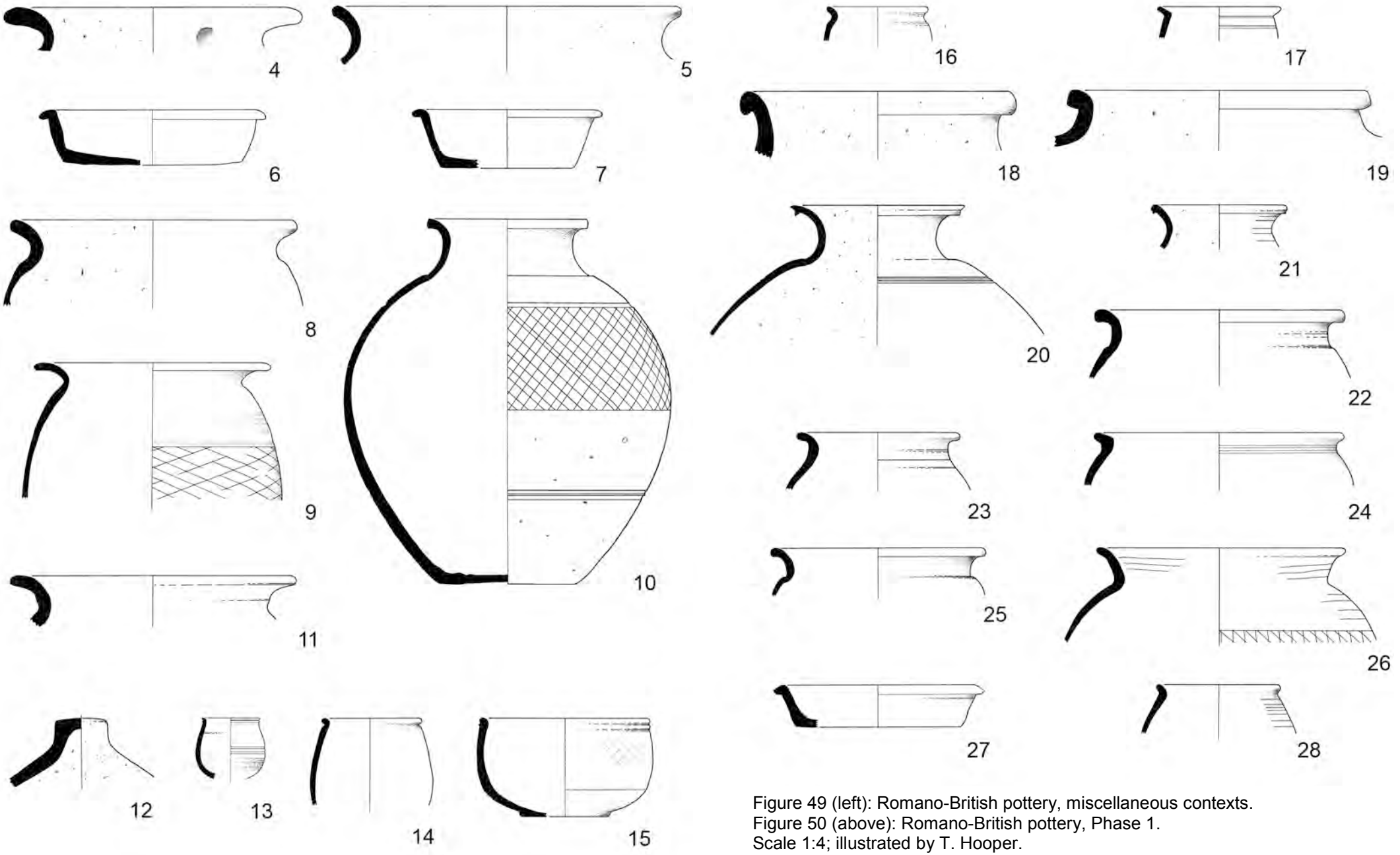

Figure 49 (left): Romano-British pottery, miscellaneous contexts.
Figure 50 (above): Romano-British pottery, Phase 1.
Scale 1:4; illustrated by T. Hooper.

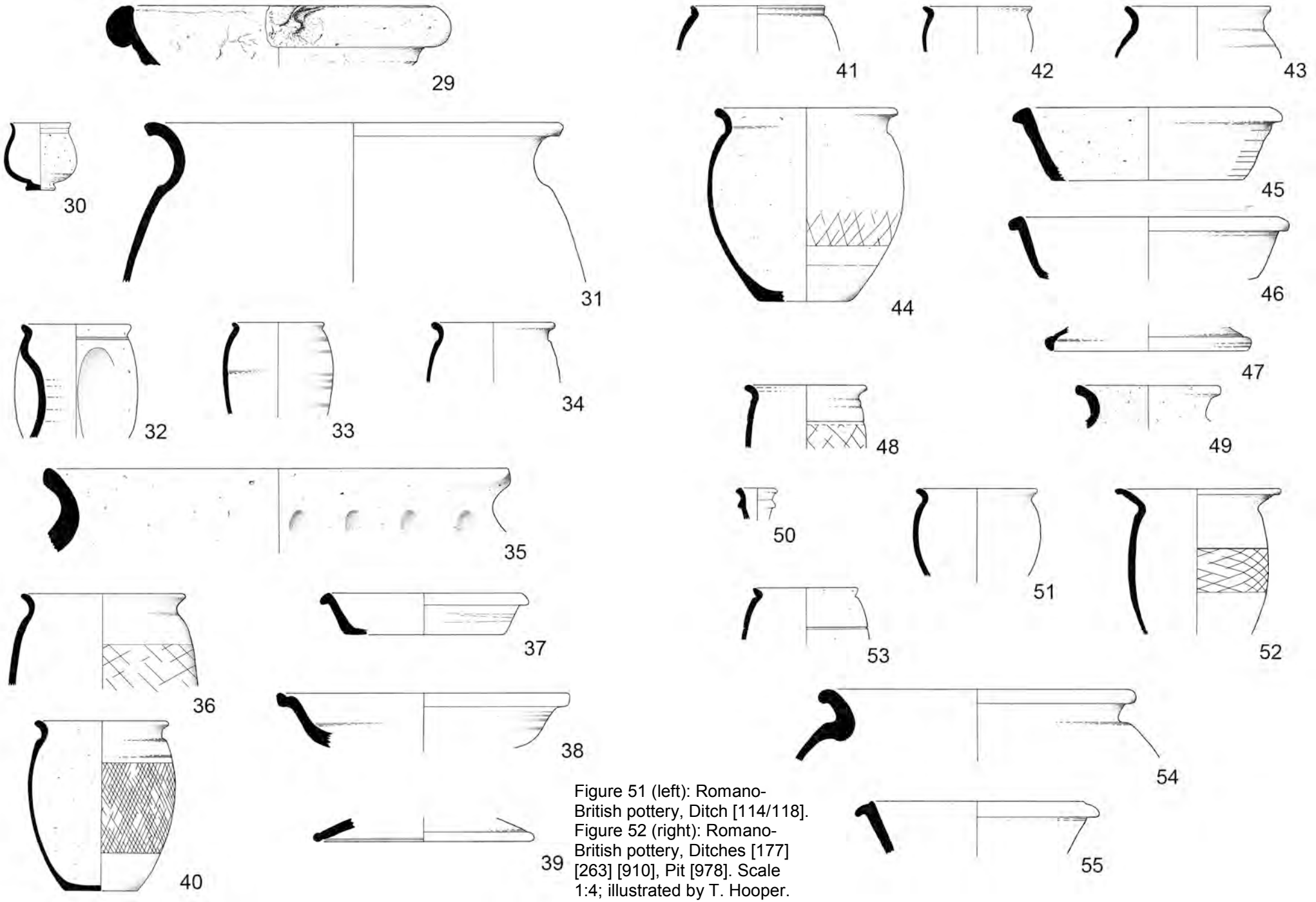

Figure 51 (left): Romano-British pottery, Ditch [114/118]. Figure 52 (right): Romano-British pottery, Ditches [177] [263] [910], Pit [978]. Scale 1:4; illustrated by T. Hooper.

Fill	Cut	Block	Notes	Count	Weight	Sherd Type	Ware	vessel	Type	Diam	EVE	Description	Phase	Dwg.
u/s						rim	unk RW	beak					u/s	13
						rim	BB1 SED	bowl	flanged				u/s	
						handle	white ware	flag	N. Gaulish C1				u/s	
						rim	SAMIAN SG	dish	Dr 15/17				u/s	
			topsoil			base	SAMIAN EG	cup	Dr 33				u/s	
						base	FW: Moselle	beak					u/s	
103	102		cleaning	3	0.013	bshh	125	cp					2	
				4	0.037	bshh	pink incl	stor jar					2	
				2	0.014	rim, bsh	BB1 SW	cp	everted		8		2	
				10	0.443	base, bshh	pink incl	stor jar				burnt on int	2	
				11	0.097		BB1 SED	stor jar	everted, 24.3			thick-walled stor jar	2	
				2	0.027	rim, bshh	GW	cp	everted				2	
				2	0.009	bshh	unk GW	cp					2	
				1	0.013	rim	SD	b/d	plain rim, 17		5		2	
				2	0.009	rim, bsh	QGW	cp	everted		7	black polished surfaces	2	
				6	0.084	cop	125	bowl	bead rim carin, cf 27	15	11		2	15
				1	0.002	bsh	BB1 SED	cp					2	
				4	0.12	rim, bshh	BB1 SED	jar			41	no good para for rim;	2	
				3	0.018	bshh	BB1 SW	cp					2	
				2	0.009	bshh	FW: Argonne	beak	indented			red fab, bl cc	2	
				1	0.002	bsh	FW: CGBS	beak				roulette dec	2	
				2	0.024	base, bsh	unk OW	bowl				gritty orange; footring burnt	2	
				1	0.069	base	XGGW	bowl					2	
			<400>	3	0.004	rim, scraps	unk RW	beak	everted		7		2	
				1	0.027	bsh	SAMIAN CG	bowl	dr 38			abraded; flange trimmed away	2	
				1	0.003	bsh	FW: Koln	beak	r/c				2	
		B1		1	0.002	bsh	unk RW	indet				red core	2	
				1	0.002	bsh	fine black	beak					2	
				1	0.012	bsh	prehist SWD?	jar					2	
				10	0.122	rim, bshh, base	125	b/d	flat rim, 55		13	HM almost rounded base	2	
				1	0.012	bsh	SAMIAN EG	b/d					2	
				3	0.092	base, bshh	BB1 SED	cp					2	
				2	0.007	bshh	BB1 SW	cp					2	
				1	0.045	bsh	pink incl	stor jar				burnt int; thumb dec	2	
				1	0.017	rim	XGGW	cp	everted		11		2	
		B2		1	0.095	base	BB1 SED	cp					2	
		B5		1	0.001	bsh	BB1 SED	cp					2	
				6	0.026	bshh	unk RW	indet					2	
				6	0.049	bshh, base	BB1 SW	cp					2	

				1	0.022	rim	SAMIAN SG	bowl	Dr 37		2	DECORATED	2	
				1	0.295	bsh	AMPH: dr 20	amph	dr 20				2	
				13	0.112	rim, bshh	XGGW	cp	10		36		2	
		B7		1	0.017	rim	BB1 SW	dish	plain-rim		6		2	
				2	0.074	base, bsh	pink incl	stor jar					2	
				1	0.05	rim	GW	bowl	flat rim		11		2	
				1	0.002	bsh	BB1 SED	cp					2	
				1	0.006	rim	FW: Argonne	beak	cornice		20	fine black colour coated	2	
				1	0.014	rim	SAMIAN CG	bowl	dr 37		5		2	
				1	0.011	bsh	SAMIAN CG	bowl	dr 37			decorated	2	
		B8		1	0.018	base	BB1 SW	cp					2	
				1	0.009	bsh	GW	bowl				cordon	2	
		B9		1	0.009	rim	fine black	beak	imit cornice		3	imiti cornice rim; black slip border visible on int; more in 153	2	14
				1	0.014	bsh	QGW	cp				lattice dec	2	
				1	0.012	bsh	AMPH: unk	amph					2	
				1	0.034	rim	GW	bowl	flat rim		12	near cop	2	
109	108		near 103	1	0.01	bsh	BB1 SED	cp					2	
				19	0.455	base, bshh	black core	stor jar					2	
				1	0.004	bsh	GW	cp					2	
				1	0.043	rim	BB1 SED	bowl	flat rim, 38-41		15	sooted; dec unclear	2	
		B17		1	0.037	rim	unk GW	cp			4	overfired	2	36
				1	0.019	bsh	GW	cp				FINE	2	
				1	0.018	bsh	pink incl	stor jar					2	
				2	0.007	bshh	BB1 SW	indet					2	
		B18		1	0.065	rim	125	dish	flat rim		12	flat rim turned up at end	2	38
				1	0.002	bsh	red core	cp					2	
				2	0.018	bshh	XGGW	cp					2	
115	114	B19		1	0.01	rim	BB1 SW	dish	plain rim, 92		4		2	
				3	0.007	bshh	unk RW	cp				fine grey soft	2	
				1	0.01	bsh	BB1 SED	cp					2	
		B20		1	0.005	bsh	XGGW	cp					2	
		B21		2	0.028	rim	red core	small jar	everted w shoulder		19		2	34
				1	0.035	base	125	cp					2	
		B22/B23		1	0.003	base	BB1 SW	cp					2	
		B24		47	1.533	rim, base, bshh	fine grey	stor jar	large everted		8	thumb impression dec	2	35
				1	0.005	rim	BB1 SW	small jar			8		2	
				6	0.063	rim, bshh	125	small jar	everted, 12.2		29	soft (wm) grey burnished fine ware	2	
		B25		1	0.012	bsh	BB1 SED	cp					2	
119	118		cleaning	1	0.019	base	FW: unk	beak	bag shaped			joins sh in B9, c-c	2	30

		1	0.001	scrap	SAMIAN SG	indet					2	
		1	0.021	rim	GW	cp	squared everted		11		2	
		8	0.037	handle, bshh	white incl	jar	lug handle			frag of lug handle	2	
		2	0.018	bsh	unk RW	cp					2	
		5	0.018	bshh	unk RW	cp					2	
		1	0.009	base	151	bowl				footring	2	
		1	0.001	bsh	SAMIAN SG	bowl				dec	2	
		4	0.015	bshh	unk RW	cp				<466>	2	
		1	0.063	bsh	AMPH: dr 20	amph					2	
		4	0.01	bshh	BB1 SED	indet				<466>	2	
		1	0.006	rim	BB1 SW	cp	rounded everted		8	<466>	2	
		4	0.027	rim, bshh	GW	cp	rounded everted		14	<466>	2	
		1	0.006	bsh	151	cp				<466>	2	
		1	0.003	bsh	SAMIAN SG	bowl	Dr 29			dec & abraded; <466>	2	
B1		1	0.01	base	BB1 SED	b/d					2	
		2	0.086	bshh	pink incl	stor jar				thumb impression	2	
		1	0.002	scrap	prehist SWD	indet					2	
		1	0.024	base	XGGW	b/d					2	
B2		2	0.025	bshh	GW	cp					2	
B3		1	0.004	bsh	red core	cp				lattice dec	2	
		2	0.007	bshh	BB1 SED	b/d				v thin-walled	2	
B4		4	0.071	rim, bshh	FW: unk	beak	indented		23	devolved corn; thick-walled, charc inside	2	32
		1	0.023	rim	GW	beak	stubby everted		18	v upright, horizon burnishing	2	33
		1	0.025	rim	BB1 SED	dish	plain rim, 58.2		8	lattice dec	2	
		1	0.009	bsh	unk RW	cp					2	
		1	0.014	bsh	white incl	cp					2	
B5		1	0.052	bsh	AMPH: Gauloise	amph					2	
		1	0.008	bsh	white incl	cp					2	
		3	0.014	rim	151	beak	devolved corn		17	red core	2	
		3	0.019	bshh	GW	cp				grey soft fine	2	
B6		1	0.019	base	unk RW	b/d					2	
B6 or B8		14	0.031	rim, bshh	151	cp	everted		9		2	
		7	0.032	bshh	BB1 SED	cp/bd					2	
		6	0.041	bshh	BB1 SW	cp				a.a.l, burnt orange in places	2	
B7		1	0.008	rim	151	lid			8		2	39
		5	0.011	bshh	GW	cp					2	
		3	0.059	rim, bsh	SAMIAN CG	bowl	Dr 30		17	DECORATED	2	
		4	0.014	rim, bshh	151	cp	everted		14		2	
		1	0.016	rim	GW	b/d	flat		8		2	

				2	0.029	base, bsh	XGGW	beak	bag-shaped			pedestal base, thick-walled, tan ext	2	
				1	0.031	rim	BB1 SED	cp	sq everted		13		2	
				3	0.019		BB1 SED	cp			8		2	
				1	0.007	bsh	unk RW	cp				light grey surfaces, pink core, quartz incl	2	
		B8		2	0.036	rim	GW	dish	flat rim		13	cop	2	37
				1	0.17	handle	AMPH: dr 20	amph	dr 20			stamped	2	
				1	0.017	bsh	SAMIAN SG	bowl	Dr 37			decorated + with drilled hole	2	
				1	0.082	bsh	pink incl	stor jar					2	
				1	0.117	bsh	fine grey	stor jar				thumb impression dec	2	
				1	0.083	bsh	MORT: local	mort				soft orange, rare quartz trit grit, few incl, but some soft red	2	
				1	0.129	bsh	AMPH: dr 20	amph				pierced; same vessel as other shh	2	
				1	0.017	bsh	GW	cp					2	
		B9		1	0.009	rim	FW: unk	beak	bag-shaped		16	Colch? Bl cc, poorly r/c; cop with base from cleaning, and rim in 861	2	30
				1	0.011	bsh	SAMIAN CG	bowl				mould makers sign or just dec?	2	
				1	0.008	scrap	MORT: N Gaul	mort					2	
				2	0.01	rim, bsh	BB1 SW	b/d	flat rim, 52-60		5	no surviving dec	2	
				1	0.017	bsh	pink incl	stor jar					2	
				6	0.043	bshh	GW	cp				grey ware soft	2	
				1	0.005	bsh	white incl	cp				GRITTY UN	2	
				1	0.004	rim	GW	beak	short upright		11		2	
				1	0.012	base sh	BB1 SW	b/d				scribbled dec	2	
		B10		1	0.004	bsh	SAMIAN CG	bowl	Dr 37			DECORATED ABRADED	2	
				1	0.084	rim	AMPH: dr 20	amph	dr 20		26	rim	2	
				2	0.457	bshh	AMPH: dr 20	amph	dr 20			drilled w 2 holes; thin-walled	2	
				7	0.082	bshh, base	125	cp/b/d					2	
				1	0.07	rim	125	beak	small rim, 6		11		2	
				1	0.007	rim	125	beak	stubby everted rim		3		2	
				2	0.031	rirm, bsh	GW	cp	everted		13	lattice dec	2	
				4	0.025	bshh	unk RW	cp				gritty sandy UN	2	
				1	0.019	base	unk RW	b/d				buff fabric, burnished	2	
123	122			1	0.017	rim	BB1 SW	dish	plain rim, 92		5		3	
				1	0.011	rim	QGW	cp	rounded everted		9		3	
				1	0.002	bsh	QGW?	beak?					3	
				3	0.188	bshh	amph: dr 20	amph	dr 20				3	
				1	0.003	rim	GW	beak	small everted rim		8		3	
			<454>	2	0.012	bshh	BB1 SED	cp					3	
				1	0.001	bsh	BB1 SW	indet					3	

				1	0.005	rim	unk RW	cp	everted		8	black core, tan surfaces	3	
125	124		<450>	7	0.011	bshh	BB1 SED	cp					3	
				8	0.057	base, bshh	BB1 SED	cp				burnt	3	
				1	0.005	base/bsh	125	cp					3	
				22	0.169	base, bshh	unk RW	cp				very granular, lots of quartz, white margins	3	
				1	0.009	handle	QGW	jar	lug handle			top of handle	3	
				1	0.058	base	white incl	cp				complete base	3	
				9	0.045	bshh	BB1 SED	cp				sooted, some oxid	3	
				1	0.192	handle	AMPH: dr 20	amph	dr 20			handle springing	3	
				1	0.004	bsh	unk OW	indet				white/cream fabric	3	
				1	0.007	rim	SAMIAN CG	bowl	Dr 37		4		3	
132	131		cleaning	13	0.169	rim, bshh	GW	cp	tall everted w should			jar, co-joining with lattice decoration	1	
				7	0.139	handle, bshh	XGGW	jar	cslhj			neck smoothed off	1	
				1	0.004	bsh	GW	cp					1	
				1	0.096	bsh	AMPH: dr 20	amph					1	
				1	0.006	bshh	SAMIAN SG	bowl				VERY ABRADED	1	
				1	0.002	bsh	unk RW	cp					1	
				1	0.003	rim	125	b/d	plain				1	
				2	0.029	base	XGGW	cp				BASE	1	
				2	0.005	bshh	151	cp					1	
				1	0.005	rim	151?	beak	proto cornice		7	<420>	1	
				13	0.041	bshh	151	cp				<420>	1	
		B18	Med pot present	28	0.061	rim, bshh	fine black	beak	indented		30	indented but with lattice dec	1	28
				30	0.41	rim	GW	cp	everted		8	flat everted	1	
				1	0.015	bsh	AMPH: Cam 186	amph				Cam 186s, p33	1	
				2	0.006	bshh	SAMIAN SG	dish	Dr 18/31			ABRADED	1	
				1	0.006	rim	GW	small jar	rounded everted		10		1	
				1	0.013	bsh	unk OW	flag				thin red cc or slip	1	
		B24a		2	0.024	bsh, base sh	SAMIAN CG	b/d	Dr 37, dish			VERY ABRADED DECORATED	1	
				1	0.004	sh	XGGW	cp					1	
		B26		19	0.212	rim, bshh	GW	cp	everted		39	acute angle latt	1	25
				1	0.735	handle, bsh	AMPH: dr 20	amph				handle with stamp C.A.R.	1	
				4	0.095	rim, bshh	BB1 SW	cp	24		28	sooted	1	
		B27		20	0.074	rim, bshh	151	cp	everted		15	v small shh	1	
				13	0.236	rim, bshh	BB1 SW	cp	24		21	acute a.l	1	
				1	0.055	bsh	AMPH: dr 20?	amph					1	
		B28		4	0.013	bshh	125	cp					1	
		B29		3	0.025	bshh	GW	cp				lattice	1	

		B31		13	0.166	rim, bsh, base	125	cp	everted		13		1	
				5	0.064	rim, bshh	151	b/d	flat, 56		25	3 vessels	1	
		B32		1	0.008		125	cp					1	
				2	0.035	rim	silty	cp	rounded everted		18		1	
				1	0.008	bsh	QGW	cp				lattice dec	1	
				1	0.006	rim	GW	b/d	flat		5		1	
				2	0.023	bsh	fine grey	stor jar					1	
		B34	Med pot present	1	0.025	rim	SAMIAN SG	bowl	Dr 30			ABRADED	1	
				3	0.019	rim, bshh	151	cp	everted				1	
				18	0.115	rim, bshh	XGGW	cp	everted, w shoulder		18		1	
				1	0.011	bsh	151	cp					1	
				2	0.041	rim	BB1 SW	bowl	flat, 56		16		1	
				1	0.012	rim, base	BB1 SW	b/d	plain, 92				1	
				2	0.061	rim, base	XGGW	dish	flat, 21		14	2 vessels	1	
		B35		2	0.029	rim, bsh	GW	dish	flat		4	near-cop	1	27
				1	0.064	rim	SAMIAN CG	bowl	Dr 31		16		1	
				8	0.063	bsh, base	GW	cp					1	
				3	0.009	bshh	BB1 SED	cp					1	
				12	0.145	rim, bshh	GW	cp	everted		5		1	
				1	0.027	bsh	SAMIAN CG	bowl	Dr 37			BIT ABRADED DECORATION good	1	
				5	0.094	rim, bshh	SAMIAN SG	bowl	Dr 37		13	BIT ABRADED DECORATION good large sherd	1	
				16	0.053	rim, bshh	151	cp	everted, 11		16		1	
				2	0.014	rim, bsh	GW	small jar	everted		13		1	
				3	0.018	rim, bshh	151	cp	everted		6		1	
				1	0.008	rim	GW	b/d	rounded				1	
				2	0.031	base	unk RW	stor jar					1	
134	133		<423>	1	0.002	scrap	BB1 SED	indet					2	
				1	0.001	scrap	SAMIAN SG	indet				almost all slip gone	2	
				2	0.007	bshh	GW	cp					2	
				1	0.006	bsh	BB1 SED	cp					2	
				1	0.002	bsh	SAMIAN CG	indet				no surface slip survives	2	
				1	0.008	bsh	unk OW	indet				soft orange	2	
				1	0.082	base	red core	cp				complete base	2	
				1	0.056	bsh	QGW	jar				shaped into disc (incomplete)	2	
				1	0.044	rim	QGW	bowl	flat rim, deep chamfer		6		2	
		B15					SAMIAN CG						2	
				1	0.047	base	red core	small jar				half base, v. thick	2	
136	852		cleaning	4	0.567	bshh	AMPH: dr 20	amph	dr 20				2	

				2	0.025	bshh	unk rw	stor jar					2	
				1	0.003	scrap	MORT: import	mort					2	
				1	0.026	bsh	pink incl	stor jar					2	
			<413>	1	0.003	spout?	unk OW	indet	bunghole?			not R?	2	
				1	0.001	bsh	GW	cp					2	
				1	0.01	base	unk RW	cp					2	
				3	0.014	base, bshh	BB1 SED	b/d					2	
		B1		1	0.017	bsh	pink incl	stor jar				soft grey buff	2	
				1	0.114	bsh	AMPH: dr 20	amph	dr 20				2	
		B2		1	0.04	bsh	amph: unk	amph				orange ext, thick grey core, thin-walled	2	
				1	0.023	base	BB1 SED	b/d				scribbled dec	2	
		B2		1	0.016	rim	XGGW	cp	everted		9	groove on body?	2	
				12	0.245	rim, bsh, base	BB1 SW	jar	cslhj, 33	15	22	no handles survives, but thick rim of this type	2	
				1	0.084	bsh	AMPH: dr 20	amph	dr 20				2	
				1	0.002	bsh	SAMIAN CG	indet				ABRADED	2	
		B3		2	0.018		BB1 SW	cp				abraded	2	
				1	0.022	bsh	XGGW	cp					2	
				20	0.189	bshh	BB1 SED	cp				thin-walled; diagonal line dec on 1 sh?	2	
				1	0.008	bsh	unk RW	cp				gritty, highly mic, orange core	2	
				2	0.013	bshh	151	cp					2	
		B4		1	0.03	rim	fine black	beak	imit corn		11	more in 103	2	14
153	102	B6		1	0.036	rim	SAMIAN CG	bowl	Dr 30		11		2	
		B8		1	0.024	bsh	SAMIAN CG	bowl	Dr 37			repair hole; Cinnamus?	2	
				1	0.006	rim	SAMIAN SG	bowl	Dr 37		5	ABRADED rim	2	
				3	0.028	base, bshh	BB1 SED	cp					2	
				1	0.005	bsh	151	cp					2	
		B15		1	0.072	bsh	AMPH: dr 20	amph					2	
				3	0.026	base, bshh	BB1 SED	cp					2	
				2	0.138	base	XGGW	cp				almost complete base	2	
				1	0.022	base	151	cp				solid footring	2	
				4	0.04	rim, bshh	GW	cp	everted		32	sooted	2	
				16	0.055	bshh, base	BB1 SED	cp					2	
				3	0.278	handle, bsh	BB1 SED	jar	cslhj			2 complete handles, line dec	2	
				1	0.023	bsh	151	cp					2	
		B2		5	0.025	bshh	BB1 SW	cp					2	
154	102			9	0.074	bshh	BB1 SED	cp					2	
		B9		1	0.032	base	151	cp				trimmed to disc? Prob natural break	2	

171			gravel layer	1	0.002	bsh	FW: Argonne	beak					1	
				1	0.004	bsh	XGGW	cp					1	
173	172	B6		1	0.005	bsh	GW?	cp				grey ware soft	3	
				1	0.028	base	SAMIAN EG	dish	Dr 31R or 79R			inter offset plus central set of rouletted lines	3	
176			Med pot present			bsh	prehist SWD	jar	IA				post R	
178	177			1	0.002	bsh	red core	indet					3	
				1	0.005	bsh	QGW	cp					3	
				4	0.032	rim, bshh	BB1 SED	dish	plain, 56		5		3	
				1	0.012	base	red core	b/d					3	
				8	0.087	rim, bshh	151	cp			5		3	
			cleaning	1	0.004	bsh	125	cp					3	
				1	0.012	rim	SAMIAN CG	bowl	Dr 37		8	RIM	3	
				2	0.007	bshh	GW	cp					3	
				1	0.014	base	BB1 SW	cp					3	
				1	0.015	bsh	AMPH: dr 20	amph	dr 20			buff thick sherd as in (181)	3	
				2	0.016	bshh	SAMIAN SG	bowl				one dec	3	
		B1		4	0.039	rim, bshh	silty	small jar	everted, slight shoulder		26		3	
				1	0.004	bsh	XGGW	cp					3	
				1	0.02	bsh	125	cp					3	
		B2		1	0.011	rim	SAMIAN CG	bowl	Dr 37		6	ABRADED	3	
				6	0.034	rim, bshh	silty	cp			6		3	
				2	0.072	bshh	pink incl	stor jar				thumb dec	3	
				1	0.013	bsh	white incl	cp					3	
				1	0.004	bsh	white margin	cp					3	
				1	0.004	bsh	silty	cp				burnt	3	
		B3	Med pot present	7	0.009	bshh	XGGW	cp				thin walled	3	
				1	0.009	rim	silty	small jar	everted with sharp cordon on rim		17		3	
				1	0.01	rim	BB1 SW	cp	bead rim jar, 9	12	11		3	
				1	0.005	bsh	BB1 SW	cp					3	
				1	0.042	base	GW	b/d					3	
				1	0.001	bsh	SAMIAN CG	bowl				dec, worn	3	
				3	0.008	bsh	red core	cp					3	
				7	0.023	bshh	silty	cp					3	
		B4		1	0.002	bsh	SAMIAN SG	bowl	Dr 29?			ABRADED	3	
		B5		1	0.001	bsh	151	indet				stabbed comb tip dec	3	
				2	0.121	bshh	AMPH: dr 20	amph	dr 20				3	
				4	0.019	bshh	BB1 SED	cp					3	

				1	0.005	rim	unk RW	b/d	rounded rim		3	v.v.v burnished black ext	3	
				5	0.096	bshh	pink incl	stor jar				thumb dec	3	
				4	0.037	bshh, base	GW	cp				unburnished	3	
				7	0.053	rim; also base, bshh	151	jar	butt beak imit?, cf 2	11	13		3	
				4	0.012	bshh	unk OW	indet				1 gritty orange w black ext	3	
				1	0.066	knob	silty?	lid				thick-walled; red margin	3	
				17	0.039	rim, bshh	silty	cp			7	1 with post-c groove cut in it; but small shh	3	
		B6		2	0.014	bas, bsh	GW	beak					3	
				1	0.001	bsh	SAMIAN SG	bowl				VERY ABRADED	3	
		B7	pMed pot present	2	0.008	bshh	GW	cp					3	
				1	0.002	bsh	unk OW	indet				grey core, oxid surfaces	3	
				2	0.008	bshh	SAMIAN SG	bowl				dec, v poor	3	
				4	0.011	bshh	BB1 SED	cp					3	
				4	0.076	base, bshh	pink incl	stor jar				thumb dec	3	
				3	0.005	bsh	151	cp					3	
				1	0.006	bsh	white margin	cp					3	
				1	0.007	bsh	unk OW	indet					3	
				3	0.014	bshh	unk RW	cp					3	
		B8		1	0.002	bsh	BB1 SW	indet				micaceous grey ware with the same white slip under burnish as with b2 and b7	3	
		B9		1	0.022	bsh	pink incl	stor jar				thumb dec	3	
				2	0.089	base	unk RW	b/d					3	
				1	0.009	bsh	BB1 SW	b/d					3	
				2	0.033	rim, bsh	unk OW	small jar	everted w shoulder		17	grey core, buff surfaces	3	
				1	0.003	rim	SAMIAN CG	b/d	Dr 18/31		7	burnt	3	
		B11		1	0.036	bsh	pink incl	stor jar					3	
				4	0.026	rim, bshh	GW	cp	everted w shoulder		25	soft grey	3	
181			soil layer	1	0.008	rim	151	cp	everted				unphased	
				4	0.013	rim, bshh	unk OW	cp	everted		4	un	unphased	
				2	0.021	bshh	SD	stor jar				buff co-joining base	unphased	
				1	0.005	rim	BB1 SED	cp	everted		8		unphased	
				1	0.01	rim	SAMIAN CG	cup	Dr 33		11	ABRADED rim	unphased	
				1	0.002	bsh	SAMIAN SG	indet					unphased	
196	195		cleaning	1	0.025	rim	GW	bowl	plain rim		12	curved wall	5	
				3	0.045		unk rw	cp					5	
				1	0.011	rim	GW	small jar			21		5	
				1	0.014	bsh	SD	indet					5	
				13	0.041		151	cp					5	

				4	0.054	base, bshh	unk rw	cp				5	
				1	0.023	bsh	silty	cp				5	
				1	0.005	bsh	BB1 SED	cp				5	
				2	0.009	bshh	red core	cp				5	
				3	0.019	rim, bshh	silty	cp		18		5	
				4	0.018	bshh	151	cp				5	
				1	0.021	base	SAMIAN SG	bowl	Dr 37			dec	5	
				3	0.005	rim, bshh	unk rw	cp			5	small shh	5	
				1	0.001	bsh	FW: Koln	beak	barb dec			barb dec	5	
				1	0.003	rim	SAMIAN CG	dish	Dr 18/31		3		5	
				1	0.003	bsh	SAMIAN CG	beak	72?			cutglass dec	5	
				2	0.004	bsh	unk RW	cp					5	
				1	0.002	bsh	red core	cp					5	
				3	0.033	rim, bshh	BB1 SED	dish	plain rim		8		5	
		B11		2	0.013	cp	unk rw	cp				sandy fab	5	
				3	0.016	bshh	151	cp				Sandy mica ware?	5	
				4	0.008	rim, bshh	unk rw	cp			8	v small shh	5	
				3	0.021	bshh	unk rw	cp					5	
				2	0.031	bshh	GW	cp				a.a.l	5	
				1	0.003	rim	red core	beak	small everted		8		5	
				2	0.007	rm, bsh	125	cp	small everted		5		5	
				1	0.003	bsh	GW	cp					5	
		B12		3	0.106	cop	151	bowl	flat		22	sooted; scribbled dec on base?	5	7
				3	0.193	cop	silty	dish	flat rimmed		37		5	6
				1	0.003	bsh	unk RW	cp				burnt	5	
				1	0.044	rim	GW	cp	rounded everted	22	16	large diam	5	
				3	0.07	base	GW	b/d					5	
				1	0.013	bsh	white incl	cp					5	
			<418>	3	0.013	bshh	BB1 SED	cp					5	
				3	0.005	bshh	red core	indet					5	
				1	0.005	rim	silty	small jar	everted		7		5	
				4	0.013	base, bshh	GW	cp					5	
		B13		2	0.07	rim, bsh	pink incl	stor jar			15	thumbnail dec under rim	5	4
				1	0.011	rim	SAMIAN CG	bowl	Dr 37		9	RIM	5	
				2	0.02	base, bsh	SAMIAN SG	b/d				footring base	5	
				1	0.05	base	125	indet				cut down footring from flagon?	5	
				5	0.066	bshh	GGW	dish	flat rim		15		5	
				7	0.072	bshh	BB1 SED	cp	large			o.a.l	5	
				2	0.01	bshh	unk rw	cp				UN	5	
				1	0.006		151	cp					5	

				4	0.042	rim, bshh	GW	small jar			38		5	
				1	0.006		unk rw	cp				burnt; micaceous	5	
				15	0.061	rim, bshh	silty	small jar			2	numerous vessels	5	
				1	0.008	bsh	SAMIAN SG	bowl	Dr 31			dec	5	
				1	0.007	rim	silty	cp	rounded everted		8	good burnish	5	
				2	0.013	bshh	BB1 SW	b/d					5	
				2	0.012	bsh	GW	cp					5	
		B14		2	0.033	bshh	XGGW	cp					5	
				27	0.138	rim, bshh	unk RW	cp	everted w shoulder		59	dark grey core, red or white margins, black ext; fine fab, black inc & some quartz	5	
				1	0.029	rim	unk OW	bowl	flat rim		10	burnt RW?	5	
				8	0.1	rim, b, base shh	GW	cp			13	diffr vessels	5	
				4	0.037	bshh	151	cp					5	
				15	0.12	rim, bshh	silty	cp			21	various vessels	5	
				1	0.008	bsh	BB1 SED	cp	lattice dec			incomplete pierced oval disc	5	
				1	0.007	bsh	SAMIAN CG	bowl	Dr 37			dec, bit burnt	5	
				4	0.05	rim, bsh	red core	cp	rounded everted		35		5	
				4	0.065	handle, bshh	red core	jar	lug handle			1 complete lug handle; 1 springing for lug handle	5	
				2	0.112	base	unk rw	b/d				burnt	5	
				1	0.024	rim	silty	bowl	flat		10	outer edge of rim worn away	5	
				11	0.02	rim, bshh	red core	beak	small jar		7	some with high black burnish	5	
		B15		3	0.038	rim, bshh	BB1 SED	cp	everted	15	11	sooted	5	
				28	0.186		BB1 SED	cp	a.a.l			sooted; some burnt; some small	5	
				1	0.009	rim	unk OW	small jar	small everted		21	fine pale orange, micaceous	5	
				2	0.011	rim, scrap	SAMIAN CG	bowl	Dr 37		5		5	
				1	0.008		SAMIAN CG					DECORATED	5	
				10	0.043	rim, bshh	125	small jar		11	10	sooted; diffr vessels	5	
				1	0.008	base	unk RW	cp				RW, with lots of soft pink incl	5	
				2	0.017	bshh	GW	cp				one with 2 close grooves	5	
				3	0.04	bshh	QGW	cp				one with a.a.l	5	
				1	0.038	base	unk RW	cp				fine fabric, with scattered large white quartz	5	
				1	0.007	bsh	white margin	cp					5	
202	201		void, prob. Pit [872]	1	0.012	bsh	unk RW	indet					2b?	
				2	0.017	rim	BB1 SW	cp	everted	18	14		2b?	
				1	0.002	bsh	SAMIAN SG	b/d	Dr 18/31?			little slip left	2b?	
256	255		cleaning	1	0.116	bsh	AMPH: dr 20	amph	dr 20				2b	
				1	0.045	bsh	pink incl	stor jar					2b	
				1	0.005	bsh	red core	cp				sooted	2b	

				1	0.011	rim	BB1 SED	dish	Plain, 59		4	intersecting arc	2b	
				1	0.002	bsh	red core	indet					2b	
				4	0.003	bshh	silty	cp				v small scraps	1	
				1	0.007	bsh	unk OW	indet				gritty orange	1	
259	131		<421>	1	0.003	bsh	BB1 FSW	cp					1	
				1	0.002	bsh	GW	cp					1	
				2	0.008	bshh	prehist	indet					1	
				1	0.002	scrap	QGW	indet					1	
			cleaning	1	0.002	bsh	FW: Argonne	beak	indented				3	
				1	0.004	rim	125	b/d	flat		2		3	
				1	0.021	rim	BB1 SED	b/d	flat		8	no surviving dec	3	
				3	0.008	bshh	white incl	cp				overfired	3	
				1	0.012	bsh	XGGW	cp					3	
			<461>	1	0.002	bsh	unk ox	indet					3	
				1	0.059	bsh	AMPH: dr 20	amph	dr 20				3	
				8	0.006	bshh	151	indet				v small shh	3	
				4	0.01	rim, bshh	red core	cp	cornice		9	burnished bsh	3	
				1	0.005	rim	151	cp	everted		4		3	
				7	0.024	bshh, base	BB1 SED	cp/b/d				some oxid	3	
				4	0.007	bshh	BB1 SW	cp					3	
				1	0.002	rim	GW	cp			2		3	
				1	0.023	base	151	cp					3	
				1	0.005	rim	151	beak	bead rim, rilled , 6.1		5		3	
264	263			2	0.014	bshh	GW	cp					3	
				2	0.013	base, bshh	BB1 SED	b/d					3	
				1	0.003	bsh	red core	indet					3	
				3	0.012	bshh	125	cp					3	
				2	0.011	rim	GW	cp	everted		7		3	
				1	0.004	rim	151	small jar	everted	10	8		3	
			Med pot present	1	0.019	rim	BB1 SED	stor jar	large everted		1	battered, but orig large	3	
				1	0.005	rim	151	cp			5		3	
				3	0.031	bshh	AMPH: dr 20	amph	dr 20			red int	3	
				1	0.006	bsh	red core	small jar				large ?chalk incl 8mm long	3	
				1	0.025	rim	SAMIAN CG	bowl	Dr 37		8	DECORATED	3	
				3	0.015	bshh	GW	cp					3	
				6	0.032	rim, bshh	125	bowl	plain, 55		8	coarse ware very abraded	3	
				4	0.051	handle	XGGW	jar	cslhj				3	
				4	0.101	bshh	fired clay?	stor jar				cd be pink incl, but not pot?	3	
				1	0.007	base	151	cp					3	
				16	0.064	rim, bsh, base	BB1 SED	cp	everted	16	3		3	

		5	0.091	base, bsh	XGGW	cp					3	
		2	0.006	rim	BB1 SED	b/d	plain rim		3		3	
		1	0.014	rim	BB1 SED	dish	plain		5		3	
		5	0.031	rim, bshh	GW	cp	everted		21		3	
		1	0.029	bsh	white margin	cp				black core, white margins, black surfaces	3	
		6	0.085		151	bowl	flat, 40		28		3	
B5		1	0.019	rim	silty	small jar	everted		11		3	48
		3	0.084	bshh	fine grey	stor jar					3	
		2	0.006	rim, bsh	FW: Argonne	beak	cornice r/c		11	Fine ware colour coated with grey/black. Fine red fabric	3	
B6		1	0.027		151	b/d	flat, 40		5		3	
		1	0.017	bsh	SAMIAN CG	bowl	Dr 18/31 or 31				3	
		1	0.015	bsh	SAMIAN CG	bowl					3	
		7	0.035	bshh	red core	cp					3	
		5	0.045	bshh	unk RW	cp				some burnt?	3	
		1	0.003	bsh	unk OW	flag				fine pale orange oxid	3	
		10	0.09	rim, bshh	151	small jar	everted, 11		48		3	
		2	0.056	base, bsh	151	cp					3	
		5	0.031	bshh	BB1 SED	cp					3	
		1	0.001	rim	FW: red slipped	beak	squat everted		8	grey fab, buff surfaces, red slip like Pomp red	3	
		1	0.025	rim	SAMIAN CG	bowl	Dr 37		5	dec	3	
		3	0.078	rim	SAMIAN SG	bowl	Dr 37		22	dec; 2 repair holes, 1 with lead still in it	3	
		18	0.188	rim, bshh, base	BB1 SW	cp	everted, 24	12	69	1 co-joining lots of other vessels post deposition breaks and abraded	3	
B7		1	0.079	bsh	fine grey	stor jar					3	
		5	0.111	rim, bshh	buff	cp	everted w shoulder		23	Buff exterior grey core	3	
		1	0.005	bsh	SAMIAN CG	b/d					3	
		3	0.046	bshh, base	BB1 SED	cp/b/d					3	
		4	0.046	bshh	unk RW	cp					3	
		5	0.044	bshh	GW	cp					3	
		1	0.006	bsh	unk OW	indet				groove on body	3	
		7	0.06	rim, base, bshh	BB1 SW	cp	everted, 24	12	11	same vessel as B6 above	3	
		1	0.013	base	unk GW	beak	pedestal base			fine hard grey fab, no incl. Second? Uneven base	3	
		1	0.046	base	SAMIAN CG	bowl				footring; incomplete repair hole	3	
		4	0.961	bshh	AMPH: dr 20	amph	dr 20				3	
B8		1	0.008	rim	151	lid			7	groove on int	3	
		2	0.011	bshh	unk RW	cp					3	
		1	0.003	rim	buff	beak	small everted		11		3	

				1	0.026	rim	buff	cp	everted w shoulder		14		3	
				1	0.007	bsh	GW	cp				a.a.l	3	
				1	0.011	rim	unk RW	b/d	flat		7	black ex, buff soft int	3	
				2	0.027	bsh, scrap	SAMIAN CG	bowl	Dr 37			DECORATED WITH BIRD AND ABRADED	3	
				15	1.868	bshh	AMPH: dr 20	amph	dr 20				3	
				11	0.135	base, bshh	BB1 SED	cp/b/d				mainly 1 b/d base	3	
				1	0.007	bsh	BB1 SW	cp					3	
				27	0.237	rim, bshh	buff	cp	squared everted		31		3	
				1	0.022	rim, bsh	151	cp					3	
				2	0.089	base	unk RW	jar				heavy base, grey core, buff margins, battered	3	
				11	0.103	base, bshh	white incl	cp				overfired, 1 vessel	3	
		B9		1	0.008	rim	BB1 SW	cp			6		3	
				1	0.033	rim	BB1 SED	b/d	flat		11	oxid	3	
				5	0.015	bshh	151	cp					3	
				1	0.007	bsh	GW	cp				a.a.l	3	
				2	0.011	base, bsh	BB1 SED	cp					3	
				1	0.012	bsh	MORT: local	mort				Soft red fabric with large quartz grits SW LOCAL (KH) cf FB13	3	
				1	0.011	bsh	SAMIAN SG	bowl	Dr 37			DECORATED ABRADED	3	
		B10		2	0.006	bshh	GW	cp					3	
				11	0.049	bshh	GW	cp					3	
				12	0.018	bsh, scraps	GW	indet				v small shh	3	
				5	0.143	base, bsh	black core	stor jar				co-joining; black fabric w fine quartz, pale grey ext	3	
				1	0.032	base	white margin	cp					3	
				4	0.027	bshh	BB1 SED	cp				abraded	3	
				1	0.168	bsh	AMPH: dr 20	amph	dr 20			possible graffiti	3	
		B11		2	0.014	bshh	125	small jar				burnished deep rilling	3	
				1	0.317	handle	AMPH: dr 20	amph	dr 20			handle	3	
				1	0.001	scrap	SAMIAN SG	indet				dec ovolo	3	
				1	0.021	rim	SAMIAN CG	bowl	Dr 18/31		4		3	
		B12	cleaning	7	0.018	bshh	SAMIAN SG	bowl	Dr 37			dec, abraded; 3 incomplete repair holes	3	
				1	0.004	bsh, scraps	unk rw	indet					3	
				1	0.006	bsh	SAMIAN SG	bowl	Dr 37			dec, one complete and one half hole for repair	3	
269			soil layer cut by RB features	1	0.001	scrap	SAMIAN SG	indet	dec?			v poor condition	unphased	
				2	0.005	bshh	BB1 SED	cp					unphased	
				1	0.003	rim	XGGW	cp	everted		2		unphased	
				1	0.043	rim	XGGW	jar	large everted	23	12		unphased	

				3	0.183	bshh	amph: dr 20	amph	dr 20				unphased	
278	114			1	0.011	bsh	XGGW	cp					2	
				1	0.189	handle	AMPH: dr 20	amph	dr 20			UPPER HANDLE and springing no stamp	2	
		B22/23		2	0.343	rim	grey incl	stor jar	grooved everted		22	more in B24	2	31
		B24		4	0.59	rim, base, bshh	grey incl	stor jar	grooved everted		21	more in B22/3	2	31
				1	0.006	bsh	BB1 SED	cp					2	
282			pMed pot present	1	0.001	bsh	QGW	indet					3	
				8	0.131	base, bshh	white margin	cp				all one vessel	3	
				1	0.003	bsh	SAMIAN SG	b/d				VERY ABRADED	3	
283	852	B1		2	0.044	bshh	unk RW	jar					3	
				1	0.001	scrap	SAMIAN SG	indet					3	
				1	0.093	bsh	AMPH: dr 20	amph	dr 20			with half repair hole	3	
				2	0.006	bsh	unk OW	indet					3	
				3	0.077		pink incl	stor jar				RED FABRIC	3	
				1	0.047	rim	BB1 SED	cp		15	16		3	
		B3		2	0.004	bshh	buff	cp					3	
				2	0.119	rim, bsh	MORT: Rhine	mort			7	cream fabric 150-250+ (KH) cf FC14?	3	
284	135		<415>	1	0.002	bsh	GW	cp					2	
285	131			12	0.104	rim, bshh	GW	cp	grooved everted		40	groove on ext of rim, latt dec	1	21
				3	0.041	rim, bsh, base	151	cp	11.6		5	diffr vessels	1	23
				5	0.063	rim, bshh	GW	cp	everted		16		1	
				1	0.004	rim	SAMIAN Les M?	dish	Dr 18/31		6	REPAIR hole	1	
				2	0.016	bshh	unk rw	cp				Hard fired fabric with white margin	1	
				1	0.02	base	GW	b/d					1	
		B15		1	0.005	base	125	cp					1	
				3	0.022	base, bshh	XGGW	cp					1	
		B17		42	0.496	rim, bshh	GW	cp			27	several co-joining; groove on body, aal	1	22
				2	0.012	bshh	GW	cp					1	
				3	0.04	bshh	151	stor jar					1	
				1	0.04	base	125	cp					1	
				2	0.005	bshh	BB1 SW	unk					1	
		B19		2	0.01	bshh	SAMIAN SG	b/d				VERY ABRADED	1	
				4	0.008	bshh	fine black	beak	indented			indented beaker with lattice decorated, grey fabric black slip interior and exterior, quartz inclusions	1	
				4	0.017	base, bshh	XGGW	cp					1	
				1	0.004	bsh	125	bowl					1	

				2	0.017	bshh	prehist SWD	jar				int sooting, ext grooves	1	
		B21		1	0.013	bsh	125	cp				burnished exterior over white layer	1	
		B23		2	0.022	bshh	151	bowl					1	
				1	0.04	bsh	fine grey	stor jar				abraded	1	
				8	0.104	base, bshh	125	cp				micaeous ware (wt) black core, white grey interior and exterior, dense muscovite , not burnish	1	
		B26		1	0.001	bsh	fine black	unk					1	
				1	0.001	bsh	SAMIAN CG	bowl	Dr 37			DECORATED ABRADED	1	
				1	0.002	bsh	unk OW	unk				IMPORT Oxidised fabric light orange mica quartz abraded	1	
		B28		3	0.017	bshh	BB1 SW	cp					1	
				9	0.238	base, bshh	XGGW	b/d				50% b/d base	1	
		B30		3	0.058	rim, bsh	151	cp			12		1	24
				7	0.07		151	cp				(WT)	1	
				5	0.015	bshh	GW	cp					1	
				1	0.002	bsh	FW: gp 1	beak				r/c, mottled black cc, orange int	1	
				1	0.007	base	151	cp					1	
				3	0.054	bshh	unk GW	cp				hard	1	
				2	0.027	bshh	XGGW	cp				lattice dec	1	
				25	0.271	base, bshh	QGW	cp				lattice dec	1	
286			structure	1	0.072	rim	GW	stor jar	thin everted	27	14	sooted	3	5
				1	0.008	rim	QGW	cp	everted w groove on outer edge				3	
				3	0.067	base, bsh	QGW	jar					3	
				1	0.003	bsh	125	cp					3	
				2	0.016	rim, bsh	BB1 SW	jar	39.2, lid-seat	11	12		3	
				1	0.001	bsh	unk OW	flag?				fine light orange	3	
293	292			1	0.005	bsh	125	cp				groove on body	4	
800			<416>	1	0.009	bsh	151	cp					2	
802	133		<424>	1	0.016	bsh	grey incl	stor jar					2	
		B11		1	0.004	bsh	unk OW	flag				sandy orange fab, white wash	2	
		B14		1	0.007	bsh	BB1 SED	cp				burnt	2	
806	805			1	0.013		FW INDENTED B					indented beaker (wt) mica, flint, quartz	unphased	
807	131		<422>	1	0.01	base	unk OW	cp					1	
				1	0.001	bsh	GW	indet					1	
				1	0.006	rim	151	cp	everted		9		1	
		B30		1	0.216	bsh	AMPH: dr 20	amph	dr 20				1	
808			cleaning	1	0.005	scrap	SAMIAN CG	b/d	Dr 18/31?			burnt	3	
				2	0.006	bsh	GW	cp					3	
				1	0.008	bsh	QGW	cp					3	

				1	0.007	rim	BB1 SW	small jar	upright everted, 15.1		7		3	
				2	0.014	bsh	GW	cp					3	
				1	0.018	rim	GW	small jar	everted	11	11	rim	3	
				4	0.038	base, bshh	buff	small jar					3	
282/808			cleaning	3	0.023	bshh	BB1 SED	cp					3	
				4	0.015	bshh	unk rw	indet					3	
				1	0.001	bsh	red core	indet					3	
				1	0.007	bsh	buff	cp					3	
				1	0.003	scrap	XGGW	indet					3	
				2	0.014	bshh	grey incl	stor jar					3	
				4	0.017	rim, bsh	BB1 SED	dish	plain, 59.3		6	arcaded dec	3	
				3	0.016	bshh	BB1 SW	cp/b/d					3	
				10	0.083	handle, bshh, base	GW	jar	lug-handled			complete cslh; a.a.l	3	
				1	0.001	scrap	SAMIAN CG	indet				ABRADED	3	
820	852		same as 283	1	0.148	bsh	AMPH: dr 20	amph	dr 20				3	
				1	0.002	bsh	SAMIAN CG	indet				ABRADED	3	
822	821			1	0.021	bsh	BB1 SED	cslhj	24			handle stub	1	
				1	0.034	base	XGGW	jar					1	
825	824		same as 978	1	0.003	bsh	BB1 SW	cp					5	
				1	0.001	bsh	SAMIAN?	indet				faint trace of red cc	5	
				1	0.006	bsh	BB1 SED	indet				abraded	5	
				1	0.003	bsh	QGW	cp				not abraded	5	
832	195		<419>	2	0.003	rim, bsh	red core	beak	everted		4		5	
				1	0.002	scrap	Bb1 SED	indet					5	
				1	0.011	base	151	cp					5	
		B14		1	0.023	rim	SAMIAN CG	dish	Dr 18/31		6	profile of bowl	5	
				2	0.172	base	GW	cp				complete large base	5	
				1	0.067	base	GW	cp				complete small cp	5	
		B15		17	0.138	rim, bshh	GW	nmj	everted grooved rim		10	more of same vessel in 833 & 834	5	20
				1	0.007	rim	BB1 FSW	bowl	flat rim, 13		7		5	
				1	0.143	bsh	AMPH: dr 20	amph	dr 20				5	
				1	0.011	base	unk RW	cp					5	
				7	0.041	bsh	silty	cp					5	
833	131			5	0.022	bshh		cp				with lattice and groove	1	
		B15		110	1.303	rim, bshh	GW	nmj			18	joins shh in 834: more also in 832	20	20
				1	0.008	bsh	XGGW	cp					1	
				1	0.017	base	GW	cp					1	
		B18		1	0.004	bsh	unk RW	jar	carinated			possible import	1	
				2	0.013	rim	BB1 SED	b/d	flat, 38/57		13	lattice dec	1	
834	131			84	1.065	bshh, base	GW	nmj				joins shh in 833; more also in 832	1	20

		B15		3	0.004	rim	red core	beak	everted		9		1	
				4	0.029		151	b/d	flat,				1	
				7	0.168	bshh	GW	nmj					1	
835	131	B15/B16		1	0.008	bsh	XGGW	cp					1	
843	842		north end	1	0.007	bsh	BB1 SED	cp					2	
			<425>	1	0.003	bsh	GW	cp					2	
		B13		1	0.003	bsh	prehist?	indet					2	
846	845			2	0.017	bshh	unk RW	indet					unphased	
				2	0.021	bsh	GW	cp					unphased	
		B4		2	0.017	bshh	GW	cp				good surface survives	unphased	
				1	0.016	rim	SAMIAN CG	bowl	Dr 18/31 or 31		8	burnt black	unphased	
				2	0.011	bshh	BB1 SED	cp					unphased	
				1	0.002	scraps	unk rw	indet					unphased	
				1	0.008	bsh	SAMIAN SG	bowl	Dr 36?			slightly burnt	unphased	
				1	0.067	bsh	AMPH: dr 20	amph	dr 20				unphased	
		B5		1	0.002	bsh	SAMIAN SG	indet				ABRADED	unphased	
848	177			1	0.025		125						3	
		B9		2	0.031		GGW						3	
849	177		<427>	2	0.004	bshh	red core	cp					3	
				3	0.13	bshh	AMPH: dr 20	amph	dr 20				3	
				1	0.008	rim	white incl	beak	devolved cornice		8		3	
				1	0.009	rim	GW	cp			7		3	
				2	0.014	bshh	unk rw	indet				burnt	3	
				12	0.025	rim	silty	cp	everted w shoulder		13	small shh	3	
				1	0.009	rim	BB1 FSW	dish	plain, 21				3	
				10	0.04	bshh	BB1 SED	indet				small and battered	3	
				7	0.015	bshh	125	cp				small shh	3	
				1	0.005	bsh	SAMIAN CG	b/d					3	
		B2		1	0.006	rim	BB1 FSW	beak	3	9	4		3	42
				6	0.095	base, bshh	QGW	cp				base and bshh 1 vessel	3	
				1	0.006	bsh	white margin	cp					3	
				1	0.004	bsh	QGW	cp					3	
				1	0.018	base	BB1 SED	b/d					3	
				4	0.016	bshh	151	cp					3	
				5	0.028	base, bshh	BB1 FSW	b/d					3	
				4	0.028	base, bshh	BB1 SED	b/d					3	
				14	0.006	rim	silty	small jar					3	
				2	0.018	rim, bsh	GW	cp			8		3	
				1	0.011	rim	white margin	cp	bead rim jar		10		3	
				1	0.015	bsh	pink incl	stor jar					3	

		3	0.206	bshh	AMPH: dr 20	amph					3	
		1	0.002	bsh	125?	indet				oxid fab	3	
B3		5	0.02	rim, bshh	unk RW	cp	everted, cordon at base	11	12	buff fabric, large mica plates visible, burnt	3	43
		1	0.008	rim	151	lid	groove on top surface	16	8	military period	3	47
		1	0.004	bsh	XGGW	cp					3	
		1	0.005	rim	silty	small jar		9	10		3	
		5	0.009	bshh	151	cp					3	
		3	0.043	base	unk OW	cp				thick walled, gritty, grey ext	3	
		1	0.007	rim	GW	b/d	flat rim		4		3	
		5	0.013	bshh	GW	cp				Burnished	3	
		5	0.011	bshh	125	indet				small shh	3	
		1	0.001	bsh	BB1 SED	indet					3	
B4		1	0.097		125	dish	rounded flat, 56	23	22		3	46
		1	0.005	rim	151	jar	bead rim, 8.1		8	multiple line latt	3	
		3	0.018	rim, bshh	SAMIAN CG	bowl	Dr 37		9	small dec sh	3	
		4	0.015	bshh	GW	cp					3	
		1	0.02	bsh	silty	cp	thick			a.a.l	3	
		6	0.067	rim, bshh, base	BB1 SED	cp	everted	20	10		3	
B5		1	0.011	rim	GW	beak	devolved cornice	11	11	rim diagnostic	3	41
		1	0.048	bsh	AMPH: dr 20	amph	dr 20				3	
		8	0.054	bshh	silty	cp	a.a.l				3	
		4	0.076	bshh	pink incl	stor jar				thumbprint	3	
		1	0.015	bsh	white margin	cp					3	
		5	0.024	rim, bshh	125	small jar	everted		26	oxid; also burnt	3	
		3	0.028		unk RW	cp	thick-walled			a.a.l	3	
		1	0.005	rim	125	small jar	rounded everted rim		10		3	
B6		1	0.076	bsh	AMPH: dr 20	amph	dr 20				3	
		8	0.033	rim, bshh	silty	cp	small everted		12		3	
		1	0.007	rim	125	beak	squat upright rim, cf 5		10		3	
		1	0.036	base	SAMIAN CG	b/d	Dr 18/31			stamp]R I dot	3	
		3	0.168	bshh	AMPH: dr 20	amph	dr 20, thin-walled				3	
		1	0.008	rim	BB1 SED	dish	plain		4		3	
		2	0.165	bshh	fine grey	stor jar				thumb dec	3	
		5	0.037	rim, bshh	unk RW	cp			11	sandy fabric, silver mica plates	3	
		5	0.045	rim, bshh	151	beak	cornice		11		3	
		1	0.005	bsh	SAMIAN CG	bowl	Dr 37			dec	3	
B7		6	0.026	rim, bshh	GW	small jar	everted	10	15		3	
		1	0.031	near cop	GW	dish	flat rimmed		9		3	

				1	0.032		AMPH: dr 20	amph	dr 20				3	
				1	0.011	base	SAMIAN CG	b/d				with yellow inclusions	3	
				2	0.014	rim, base	BB1 SED	dish	plain, 36		4		3	
				1	0.029	rim	GW	cp	rounded everted		13		3	
				1	0.009	rim	white incl	dish	bead rim		5		3	
				1	0.042	rim	151	cp	everted, 11	14	11		3	
				1	0.011	base	unk OW	cp				buff fabric, grey ext	3	
				1	0.004	bsh	white margin	indet					3	
				1	0.006	bsh	SAMIAN SG	bowl	Dr 37			DECORATED ABRADED	3	
				1	0.003	scrap	red core	indet					3	
		B8		6	0.118	rim, bshh	GW	cp		15	17	quartz gritted, but soft grey incl also	3	44
				1	0.009	bsh	buff	cp				burnt	3	
				1	0.011	bsh	151	cp				very abraded	3	
				2	0.077	base	BB1 SW	dish				scribbled dec	3	
				3	0.02	bsh	unk RW	indet				buff red fine ware?	3	
				1	0.011	rim	GW	small jar	everted w shoulder		19		3	
				2	0.012	bshh	GW	cp					3	
				5	0.028	bshh	BB1 SED	cp/b/d					3	
		B9		1	0.025	base	BB1 SW	b/d				burnt	3	
				2	0.031	bsh	q&g incl	cp				joind d41 in B8	3	
850	177	B5		2	0.138	rim	151	bowl	rounded		20		3	45
				1	0.008	bsh	unk RW	indet				burnt	3	
				1	0.006	bsh	buff	cp					3	
				1	0.015	bsh	silty	cp					3	
858	118	B5		1	0.008	bsh	BB1 SW	cp					2	
				1	0.007	bsh	red core	cp				diag line dec	2	
				1	0.007	bsh	GW	cp					2	
		B7		1	0.003	bsh	GW	cp					2	
				1	0.003	rim	151	beak	almost bead		10	Grey burnished cup rim (hm)	2	
		B9		2	0.021	base, scrap	BB1 SW	b/d					2	
859	118			1	0.004	bsh	XGGW	cp					2	
				1	0.053	bsh	AMPH: dr 20	amph					2	
				4	0.036	bshh	pink incl	stor jar					2	
				1	0.035	rim	BB1 SW	dish	plain, 93.1		14	o.a.l	2	
		B1		1	0.199	rim, spout	MORT: import	mort	G255		23	mortarium rim and spout oxidised and fragile in poor condition G255 Antonine (KH)	2	29
				2	0.024	bshh	BB1 SW	b/d					2	
				2	0.012	bshh	unk RW	cp					2	
860	883			1	0.012	bsh	silty	beak	indented				1	

861	118	B9		1	0.004	rim	FW: unk	beak	bag-shaped		10	joins sh in 119; c-c	2	30
		B11		13	0.061	rim, bshh, base	GW	small jar					2	
				6	0.049	bshh	BB1 SW	cp					2	
				1	0.015	bsh	SAMIAN CG	bowl	Dr 37			dec, burnt, repair hole	2	
				2	0.004	bsh	unk RW	cp				hard grey, lots of quartz, plus bl incl	2	
				2	0.021	bsh	unk RW	cp				buff	2	
				4	0.052	rim, bh	BB1 SW	cp		14	16	sooted	2	
				2	0.034	rim	151	cp	rounded everted		22		2	
				4	0.011	bshh	GW	cp					2	
				14	0.093	bshh, base	151	cp, b/d					2	
				1	0.015	base	unk RW	bowl				deep footring, soft grey fab	2	
				3	0.079	bshh	fine grey	stor jar					2	
				1	0.006	rim	151	small jar	everted		12		2	
		B13		2	0.022	bshh	GW	cp					2	
				3	0.046	base sh, bshh	GW	beak				small jar/beak base, groove above base	2	
				3	0.085	base	GW	cp				a.a.l	2	
				1	0.003	rim	SAMIAN SG	cup	Dr 33		9		2	
863	118			1	0.007	rim	unk RW	dish	flat rim, projecting into int		8	overfired, large quartz incl	2	
		B11		1	0.054	bs	AMPH: dr 20	amph	dr 20				2	
		B5		2	0.013	bshh	XGGW	cp					2	
876	114		<436>	1	0.006	rim	XGGW	small jar	everted		12		2	
		B21		2	0.197	rim, bsh	grey incl	stor jar	large everted rim w groove	34	8	storage; bifid rim, large	2	
				4	0.048	rim, bshh	red core	small jar	everted, with shoulder, a.a.al	11	19	joins base in 892	2	40
		B24		1	0.014	bsh	BB1 SED	cp				sooted; a.a.l	2	
881	883			1	0.009	base	151	beak					1	
				1	0.017	rim, 11	XGGW	cp			5		1	
				1	0.007	rim	125	beak	everted, 17.1		17		1	16
				1	0.006	bsh	unk RW	indet					1	
				1	0.083	bsh	pink incl	stor jar				thumb impressions	1	
				3	0.022	base, bshh	BB1 SW	cp					1	
884	883			1	0.205	rim	GW	stor jar	squared everted		32	lots of quartz inc	1	19
				3	0.064	rim, base	125	beak	short everted, 7.1		23		1	17
				1	0.014	rim	BB1 SW	cp	everted, 23	12	8		1	
				4	0.11	cop	BB1 SW	dish	plain rim, 93.1		35	o.a.l. on dish	1	
				4	0.049	bshh	BB1 SED	cp				a.a.l	1	
				1	0.02	bsh	pink incl	stor jar					1	
				1	0.007	bsh	BB1 SW	cp					1	

				1	0.027	rim	unk RW	b/d	flat		7	grey, rare chalk incl	1	
				3	0.025	bhh, base	XGGW	cp					1	
889	883			1	0.037	base	prehist SWD	indet				footring; buff fabric, lots red incl, some slate	1	
				1	0.015	bsh	prehist SWD	indet				Iron age gabbro amix or SWD with slate p32	1	
				2	0.009	bshh	151	cp				Lattice decoration	1	
				1	0.017	base	red core	beak				footring	1	
				1	0.004	bsh	QGW	cp					1	
890	883			5	0.103	bshh	prehist	bowl				thick-walled	1	
				5	0.051	bshh	GW	cp				black burnished with lattice decoration	1	
				1	0.011	bsh	SAMIAN CG	bowl				dog decoration	1	
				4	0.168	rim, bsh	BB1 SED	cp	13.1	21	18	dec as 13.1; poss draw	1	26
				1	0.009	bsh	BB1 SW	cp					1	
891	883			1	0.008	bsh	BB1 SED	cp				o.a.l?? Not fully clear	2	
892	114	B18		7	0.119	base, bsh	red core	cp				joins rim in 876, all one vessel	2	40
895	894			1	0.004	bsh	BB1 SED	cp					2	
				7	0.065	bshh	SD	cp				3 vessels one half of base; p32	2	
				2	0.009	rim, bsh	SAMIAN SG	bowl	Dr 37		7	VERY ABRADED	2	
				4	0.019	bshh	XGGW	cp					2	
				1	0.001	scrap	unk OW	indet				VERY ABRADED	2	
				1	0.162	bsh	pink incl	stor jar				var fab w grey core & black ext, hi-vis wh quartz	2	
				1	0.004	bsh	151	cp					2	
				1	0.021	rim	hard grey	cp	everted		14	hard grey with white incl	2	
		B16		1	0.113	bsh	fine grey	stor jar					2	
				2	0.016	bshh	BB1 SW	b/d					2	
		B17		2	0.015	bshh	SD	indet					2	
897	896		<444>	6	0.015	rim, bshh	BB1 SED	b/d	flat		4		1	
				1	0.001	bsh	red core	indet					1	
				1	0.04	bsh	fine grey	stor jar					1	
				1	0.009	bsh	unk RW	cp				gritty, red core	1	
				1	0.04	bsh	grey incl	stor jar					1	
				1	0.001	scrap	unk RW	indet					1	
				1	0.003	bsh	SAMIAN CG	b/d					1	
		B11		3	0.042	base	BB1 SW	b/d				co-joining base of dish decorated base	1	
				1	0.023	rim	BB1 SED	cp	thin everted, 14		16		1	
				1	0.024	bsh	151	cp					1	
		B15		1	0.013	bsg	GW	cp					1	
				1	0.032	bsh	SAMIAN SG	bowl	Dr 37			DECORATED ABRADED good	1	

												bowl		
		B19		1	0.014	scrap	AMPH: dr 20	amph					1	
				1	0.005	scrap	MORT: Lyon	mort				fragment white fabric with grits 50-85 (KH)	1	
				1	0.001	bsh	SAMIAN SG	b/d				VERY ABRADED	1	
				1	0.016	rim	GW	b/d	flat		9		1	
				1	0.019	bsh	GW	cp					1	
				6	0.038	bshh	BB1 SED	cp					1	
				1	0.012	bsh	slate incl	cp					1	
				3	0.066	handle, bshh	unk RW	jar	cslhj			soft buff fabric, black ext	1	
				2	0.018	bshh	unk RW	cp					1	
				1	0.003	bsh	SD	indet					1	
		B21		2	0.016	bsh	BB1 SED	cp					1	
				1	0.01	base	unk RW	cp					1	
				2	0.009	bshh	GW	cp					1	
911	910			3	0.041	rim, bshh	red core	small jar	everted	10	25		4	51
			<463>	1	0.003	rim	BB1 SED	dish	plain		2		4	
			sondage 2	2	0.015	rim, bsh	GW	cp			5		4	
				1	0.016	rim	QGW	small jar	everted		19		4	
			prob 911	4	0.08	bshh	quartz rich	cp				same vessel, highly fired, red core	4	
				2	0.015	bshh	SAMIAN SG	b/d				ABRADED	4	
			<463>	5	0.015	rim, bshh	BB1 SED	cp		16	6		4	
				6	0.053	bshh	AMPH: Gauloise	amph	Gaul				4	
				6	0.074	rim, bshh	GW	small jar	fat-bellied everted		13		4	
			sondage 2	1	0.026	base	SAMIAN SG	b/d				VERY ABRADED foot ring base	4	
			sondage 2	1	0.006	bsh	SAMIAN CG	b/d				VERY ABRADED	4	
				2	0.015		GW	cp					4	
				1	0.041	bsh	AMPH: dr 20	amph	dr 20				4	
				1	0.013	bsh	BB1 SED	b/d				intersect arc dec	4	
				6	0.081	rim, bshh	silty	cp	rounded everted w shoulder		35		4	
		B1		1	0.012	bsh	QGW	cp					4	
				3	0.017	rim, bshh	BB1 SED	cp			5		4	
				1	0.039	bsh	pink incl	stor jar				orange fab	4	
				2	0.023	bshh	SD	cp					4	
				2	0.074	bshh	grey incl	stor jar					4	
		B2		1	0.002	footring	SAMIAN SG	b/d				VERY ABRADED	4	
				1	0.006	bsh	BB1 SED	cp					4	

		B4/B5	pMed pot	1	0.002	bsh	QGW	cp					4	
			cleaning	3	0.226	bshh	AMPH: dr 20	amph	dr 20				4	
				1	0.025	bshh	XGGW	cp					4	
			cleaning	1	0.022	base	SD	cp					4	
		B5		1	0.01	rim	SAMIAN SG	dish	Dr 18/31		11	ABRADED RIM	4	
				1	0.018	rim	125	cp	everted		10		4	
				2	0.017	bshh	440	flag	440				4	
		B6	cleaning	1	0.006	rim	l'eponge?	flag		35	58	soft orange , plentiful soft red incl, red cc	4	50
			cleaning	1	0.023	base	fine grey	stor jar					4	
				2	0.023	bshh	fine grey	stor jar					4	
				2	0.008	bshh	BB1 SED	cp					4	
				3	0.097	bshh	grey incl	stor jar					4	
				1	0.003	bsh	SAMIAN CG	bowl	Dr 37?			dec and burnt	4	
			cleaning	3	0.108	bshh	AMPH: dr 20	amph	dr 20				4	
			cleaning	1	0.014	bsh	SD	bowl				Decorated with applied cordon	4	
			cleaning	1	0.011	bsh	red core	cp					4	
			cleaning	1	0.017	rim	BB1 SED	cp		11	13		4	
		B8		1	0.008	bsh	AMPH: Gauloise	amph					4	
				1	0.005	bsh	BB1 SED	cp					4	
				2	0.026	rim, bsh	red core	cp			14		4	
				3	0.288	bshh	pink incl	stor jar				thick orange fabric	4	
				1	0.045	bsh	unk rw	stor jar				hi-vis white quartz, black core	4	
		B10		1	0.012	rim	BB1 SED	dish	plain		3		4	
				1	0.011	bsh	125	cp					4	
				1	0.007	bsh	pink incl	stor jar					4	
				1	0.146	rim	fine grey?	stor jar	cornice		7		4	
				1	0.002	scrap	unk OW	indet				VERY ABRADED	4	
		B14		1	0.007	rim	SAMIAN CG	bowl	Dr 37		6	half repair hole surviving	4	
				2	0.008	bsh	125	cp					4	
				6	0.118	bshh	XGGW	cp					4	
913	912			4	0.129	rim, bsh, knob	'tile' oxid	lid	club rim		5	burnt	5	12
				1	0.001	bsh	FW: CGBS	beak				small sh; form unclear	5	
				6	0.067	rim, bshh	GGW	small jar			12		5	
				3	0.115	bshh	pink incl	stor jar					5	
				3	0.036	rim	BB1 SED	cp		17	27	some burnt	5	
				3	0.018	bshh	SD	cp					5	
				3	0.277	rim, bshh	MORT: Rhine?	mort	G272		7	co-joining; G272: poss Rhine 150-250+ (KH); v. worn cf FC14	5	
				1	0.008	rim	BB1 SED	cp		12	9		5	

				1	0.004	bsh	red core	cp					5	
				4	0.022	bshh	BB1 SED	cp					5	
				1	0.019	base	BB1 SED	b/d					5	
				1	0.002	bsh	SAMIAN CG	bowl				burnt, dec	5	
				1	0.008	bsh	v gritty OW	indet				thick wall	5	
			<441>	5	0.018	bshh	BB1 SED	cp					5	
				1	0.004	scrap	unk RW	indet				ext oxid bright orange	5	
				3	0.078	bshh	pink incl	stor jar				grey core	5	
				10	0.084	bshh	BB1 SED	cp					5	
				1	0.012	bsh	SAMIAN SG	b/d				slip totally worn off ext	5	
				8	0.034	rim, bshh	BB1 SW	small jar	a.a.l		5		5	
				3	0.026	base, bshh	XGGW	cp					5	
			soil layer	2	0.006	bshh	GW	cp					5	
917			above	10	0.009	bshh	unk rw	indet				v.v.small shh	5	
			979	2	0.011	rim, bsh	SAMIAN SG	bowl	Dr 37		6	rim	5	
				1	0.016	bsh	AMPH: dr 20	amph	dr 20				5	
				2	0.018	bshh	BB1 SED	cp				oxid ext	5	
				9	0.096	rim, bshh	XGGW	cp			10	sooted rim	5	
				1	0.008	rim	unk RW	cp	flattened everted rim		8	fine black fab., some quartz incl	5	
				3	0.017	rim, bsh	silty	dish	Plain		10		2	
				5	0.116	bshh	AMPH: dr 20	amph	dr 20			with half a repair hole	2	
920	133			1	0.018	base	BB1 SED	b/d					2	
				1	0.003	bsh	SAMIAN SG	b/d				VERY ABRADED	2	
				1	0.004	bsh	XGGW	indet					2	
		B16		1	0.01	bsh	SAMIAN CG	b/d				VERY ABRADED	2	
				1	0.009	rim	GW	cp	rounded everted		4		unphased	
			soil layer	1	0.001	bsh	BB1 SED	indet					unphased	
921			cut by RB	1	0.001	bsh	BB1 SW	indet					unphased	
			features	1	0.027	rim	fine grey	stor jar	cornice			battered	unphased	
				1	0.021	rim	XGGW	cp	everted		7		unphased	
				1	0.001	scrap	SAMIAN CG	indet					1	
				4	0.006	bshh	unk RW	indet					1	
			<445>	2	0.011	rim, bsh	BB1 SW	cp			11		1	
				2	0.033	base, bsh	GW	cp					1	
926	896			1	0.027	bsh	SD	stor jar?					1	
		B15		1	0.001		BB1 SW	indet					1	
		B16		2	0.051		grey incl	stor jar					1	
		B17		1	0.004	bsh	SAMIAN SG	bowl	Dr 37			decorated, abraded and burnt	1	
				1	0.006	bsh	SAMIAN SG	b/d				VERY ABRADED p31	1	
		B18		1	0.097	rim	fine grey	stor jar	hooked everted		15		1	18

				1	0.008	bsh	unk OW	cp				very gritty cream	1	
				1	0.014	rim	151	cp	everted, 11		18	buff	1	
				1	0.005	bsh	SAMIAN SG	bowl	Dr 37			DECORATED VERY ABRADED	1	
		B19		1	0.033	bsh	BB1 SW	cp					1	
				2	0.055	rim	BB1 SED	cp	everted, 26		22		1	
				1	0.139	ir	AMPH: dr 20	amph	dr 20			rim and part of neck	1	
927			<442>	2	0.005	rim, bsh	red core	cp	everted				5	
				2	0.006	bshh	BB1 SED	b/d					5	
			<438>	1	0.006	bsh	unk RW	indet				all over incised dec; buff ext, grey int	5	
928	1568		single vessel	44	2.648	cop	GGW	nmj				single vessel: NOT SEEN	2	10
931	896		<446>	1	0.04	rim	BB1 SW	cp	everted, 24	13	16	sooted	1	
			<445>	1	0.006	rim	BB1 SED	cp	everted		4		1	
				1	0.055	bsh	pink incl	stor jar					1	
933	932		<446>	1	0.001	scrap	unk OW	indet				orange, with soft red incl	unphased	
				1	0.047	bsh	fine grey	stor jar					unphased	
				1	0.012	bsh	pink incl	stor jar					unphased	
				1	0.041	bsh	SAMIAN SG	bowl	Dr 37			DECORATED VERY ABRADED	unphased	
938	937			6	0.099	bshh	BB1 SED	cp					unphased	
946			cleaning	1	0.013	incom rim	MORT: Rhine?	mort				?wallside in same fab as 913 ??150-250+ cf FC14	2/3	
			pMed pot present	11	0.088		GGW						2/3	
				2	0.019	bshh	unk RW	indet				gritty orange core, black surfaces	2/3	
				1	0.004	bsh	SD	indet					2/3	
				4	0.128	rim, bshh	pink incl	stor jar	large everted		4		2/3	
				3	0.021	rim, bsh	125	cp			21		2/3	
				16	0.058	bshh	BB1 SED	cp				many small shh	2/3	
				1	0.003	bsh	unk RW	indet					2/3	
				2	0.017	bshh	red core	cp					2/3	
				10	0.976	bshh	AMPH: dr 20	amph	dr 20				2/3	
947			same as 951	1	0.017	rim	silty	small jar	everted		15	fine small jar mica surface	2	
				6	0.098	base, bshh	GW	cp				one with wavy line dec	2	
				2	0.026	rim, bsh	XGGW	cp	everted		10		2	
				1	0.01	rim	silty	dish	plain		5		2	
950	949		pMed pot present	7	0.134	rim, bshh	BB1 SED	cp	o.a.l; 20	19	20	o.a.l.+ gr	5	9
				1	0.005	bsh	white incl	indet					5	
				4	0.137	bshh	AMPH: dr 23?	amph	dr 23: thin walled			half repair hole	5	
				1	0.008	bsh	BB1 SED	cp					5	
				1	0.013	bsh	SAMIAN SG	bowl	dr 37			dec, v worn	5	
				2	0.406	bshh	AMPH: dr 20	amph	dr 20				5	

				1	0.003	bsh	FW: CGBS	beak				poss barb dec	5	
				1	0.009	bsh	SD	indet					5	
				1	0.008	bsh	GW	cp					5	
				7	0.34	bshh	AMPH: dr 20	amph				base and body sherds 3 halves of holes pierced, not amphora, granite derived inclusions with slate	5	
				1	0.056	bsh	GW	jar					5	
				3	0.28	bshh	AMPH: dr 23?	amph	dr 23: thin-walled dr 20?				5	
				1	0.008	bsh	125	cp					5	
951			same as 947	1	0.068	bsh	XGGW	jar					2/3	
				1	0.018	rim	BB1 SED	cp		15	8	sooting under rim	2/3	
952	263			4	0.143	bshh	XGGW	cp				thick-walled & sooted; also some with a.a.l	3	
				2	0.024	bshh	GW	stor jar					3	
				1	0.025	bsh	XGGW	cp					3	
				5	0.248	bshh	AMPH: dr 20	amph	dr 20				3	
				7	0.567	bshh	AMPH: dr 20	amph	dr 20				3	
				1	0.009	base	GW	cp					3	
				1	0.013	bsh	BB1 SED	cp				sooted; not deliberately shaped	3	
954	953		Cremation	4	0.008	scraps	?TR	butt-beaker			1	badly burnt; some all-over roulette, more of same in 999	milit	3
				1	0.003	rim?	?					?rim sherd, red-slipped exterior and part of interior, incised line decoration, well-sorted oxidised fabric, inclusions of quartz and muscovite <1mm		
956				9	0.4	single vessel	151	cp	cp 11		1	single vessel: NOT SEEN, accessory to cremation	milit	2
955				1	2.176	single vessel	BB1 SOW	butt-beaker imit	6 (cf 2.1)		1	single vessel: NOT SEEN, cremation urn; may not be BB1 SW as no breaks visible; decorated in rim and shoulder; but-beaker type	milit	1
958			pMed pot present	1	0.005	bsh	unk OW	indet					2	
				2	0.006	bsh, footring	SAMIAN SG	indet				VERY ABRADED	2	
				3	0.089	rim, base	BB1 SED	bowl	flanged, 45		12	1 rim sh heavily sooted on ext	2	
				7	0.088	base, bshh	BB1 SED	cp					2	
				6	0.325	bshh	AMPH: dr 20	amph	dr 20				2	
959			soil layer	1	0.007	bsh	silty	cp					prehist	
				1	0.021	bsh	151	cp					prehist	
				1	0.003	rim	GW	small jar	small everted		9		prehist	
				1	0.005	bsh	red core	cp					prehist	
960	263		same as	2	0.036	base	BB1 SED	cp					3	

			264	1	0.019	base	buff	cp					3	
				1	0.005	bsh	unk rw	indet					3	
969			soil layer cut by RB features	2	0.066	rim	QGW	cp	everted		29	distorted rim; 2nd, overfired	unphased	
				3	0.185	bshh	AMPH: dr 20	amph	dr 20				unphased	
				2	0.074	bshh	GGW	jar	lug-handle			springing for handle	unphased	
970	263		same as 987	2	0.01	bshh	151	cp					3	
				1	0.009	bsh	125	cp					3	
				1	0.015	base	XGGW	cp					3	
				1	0.045	bsh	amph: dr 20	amph	dr 20			red int ; quartz gritted	3	
973	972		<451>	1	0.001	bsh	silty	indet				thin-walled	5?	
				1	0.002	bsh	prehist?	indet					5?	
				1	0.008	bsh	unk OW	indet				thick pink sh, blackened & sooted on int	5?	
				1	0.005	bsh	red core	cp					5?	
				4	0.026	bshh	BB1 SED	cp					5?	
				2	0.022	bshh	BB1 SED	cp				sooting on int	5?	
				2	0.011	bshh	BB1 SW	cp				oxid white with red lattice	5?	
977	976			15	0.477	rim, bshh	BB1 SED	cp	large, cf 14	25	35	large vessel; not same as in 979	5?	11
				1	0.005	bsh	silty	small jar					5?	
				26	0.395	base, bshh	BB1 SED	cp	large a.a.l			possibly from large vessel	5?	
				1	0.072	rim	BB1 SED	cp	12	15	27	heavily sooted	5?	
				5	0.068	rim, bshh	BB1 SW	cp		14	24		5?	
979	978		<441>	1	0.014	base	SD	cp					5	
			<453>	10	0.039	rim ,bsh	red core	beak	triag rim		11	groove on body	5	53
				2	0.007	bshh	unk OW	indet					5	
				2	0.004	bshh	silty	cp					5	
				1	0.007	bsh	unk rw	cp					5	
				31	0.107	bshh	BB1 SED	cp				small shh	5	
				4	0.006	bshh	151	cp					5	
				14	0.745	rim, bshh	BB1 SED	cp	v large, cf 13.1	26	57	large shale incl	5	54
				1	0.03	rim	BB1 SED	bowl	flanged, 45		3	battered rim - draw if no better eg	5	55
				1	0.022	rim	151	cp			14		5	
				1	0.003	rim	125	beak	bead rim 6.3		2		5	
				18	0.211	rim, bshh, base	silty	cp	rounded everted		35		5	
				2	0.007	rim	125	beak	bead rim, cf 9.1		28		5	
				1	0.009	rim	SAMIAN CG	cup	Dr 33		6		5	
				1	0.01	rim	SAMIAN CG	bowl	Dr 30?		4		5	
				1	0.023	rim	BB1 SW	b/d	flat rim		4		5	
				3	0.105	rim	BB1 SED	jar	large heavy everted, 24	24	23	burnt	5	
				1	0.002	scrap	SAMIAN CG	indet					5	

				1	0.017	rim	BB1 SED	dish	plain, slight bead 59.2		5		5	
				2	0.011	bshh	unk RW	cp				oxid ext	5	
				6	0.017	bshh, base	silty	indet					5	
				1	0.076	base	unk RW	cp				thick base	5	
				33	0.253	base, bshh	BB1 SED	cp/b/d				includes o.a.l	5	
				90	0.727	bshh, base	BB1 SED	cp					5	
				6	0.206	rim	BB1 SED	cp	C3 rim types	17	74	sooting under rim on some	5	
				50	0.495		151	cp	everted, groove on body cf11.1		33	several vessels	5	
				3	0.009	bshh	FW: Argonne	beak				all over roulette dec	5	
				2	0.049	rim	SAMIAN CG	bowl	Dr 18/31		24		5	
				30	0.285	bshh	GW	cp					5	
				44	0.311	bshh, base	BB1 SED	cp				BASAL ANGLE	5	
				1	0.004	rim	BB1 SW	dish	plain rim		2		5	
				1	0.006	rim	BB1 SED	cp		16	5	oxid	5	
				2	0.051	bshh	fine grey	stor jar					5	
				1	0.006	bsh	151	cp					5	
				5	0.013	rim, bsh	BB1 SED	cp	a.a.l, 14	16	39	highly oxid, plus sooting	5	
				1	0.001	scrap	unk RW	indet					5	
				5	0.021	rim, bshh	GW	cp			30		5	
				2	0.013	shh	unk RW	beak	constricted body			black ext, red margins, grey core, white incl, but no soft red as 'red core'	5	
				5	0.016	rim, bshh	GW	indet			4		5	
				1	0.002	scrap	unk OW	indet				VERY ABRADED	5	
				4	0.045		red core	beak, cp				complete small base; thick bsh with groove dec	5	
				4	0.012	bshh	125	indet					5	
983	982		pMed pot present	1	0.013	base	BB1 SW	b/d				scribbled dec on base	post R	
				9	0.043	rim, bshh	BB1 SW	cp			6	battered	post R	
				1	0.001	bsh	FW: Argonne	beak	indented			orange fab, grey core, matt black slip	post R	
984	949		same as 950	2	0.186	rim	unk RW	stor jar	large everted	24	33		5	8
				4	0.315	bshh	AMPH: dr 20	amph	dr 20			cut down at neck and edge smoothed	5	
				2	0.017	bshh	GW	cp				rims	5	
				12	0.082	bshh	BB1 SED	cp					5	
				1	0.033	rim	BB1 SED	bowl	flat + groove, 40		7		5	
986			spread	1	0.023	bsh	QGW	cp			19		2/3	
				1	0.119	bsh	grey incl	stor jar				2 horizon grooves - dec between?; burnt on int	23	
987	263			1	0.002	bsh	GW	indet					3	

				2	0.016	bshh	125	cp/b/d				burnished with slate in	3	
		B10		2	0.008	bshh	SAMIAN SG	bowl	Dr 37			ABRADED one decorated,	3	
989	910		<467>	4	0.012	rim, bshh	BB1 SED	cp		12	11		4	
				1	0.006	bsh	SD	indet				burnt	4	
				2	0.002	scraps	red core	indet					4	
				1	0.009	base	BB1 SED	cp					4	
				1	0.011	bsh	GW	cp					4	
				1	0.008	rim	BB1 SED	small jar		11	12		4	
				1	0.012	rim	BB1 SW	dish	plain rim		2		4	
		B4		1	0.001	scrap	SAMIAN CG	indet					4	
				1	0.037	bsh	pink incl	stor jar					4	
		B6		7	0.224	rim, bshh, base	BB1 SED	cp		14	25	near cop; v everted rim, o.a.l+ groove	4	52
				2	0.013	bshh	GW	cp					4	
		B8		1	0.068	bsh	pink incl	stor jar					4	
				3	0.016	bshh	BB1 SED	cp					4	
				2	0.045	bshh	XGGW	cp					4	
				1	0.006	bsh	GW	cp					4	
				1	0.01	bsh	BB1 SED	cp					4	
				2	0.006	bsh	SAMIAN CG	cup	Dr 33				4	
				1	0.005	bsh	red core	cp					4	
		B15		1	0.018	bsh	XGGW	indet					4	
				1	0.027	base	BB1 SED	cp					4	
993	910	B8		1	0.071	bsh	pink incl	stor jar				var; black ext, black core; hi-vis wh quartz, 2 close groove & thumb dec	4	
				4	0.036	rim, bsh, base	BB1 SW	cp		14	8		4	
				1	0.004	bsh	FW: Koln	beak				barb dec, prob hunt cup	4	
				4	0.12		GGW						4	
				1	0.01	rim	SD	cp	grooved rim, 4.2a		6	highly everted rim	4	
999	998			1	0.006	bsh	?TR	butt-beaker imit				red ext, black core; groove & roulette dec; more in 954	milit	
1514	292	B1/B2	same cut as 910	1	0.068	bsh	black core	stor jar				black fab w quartz, pale grey surfaces	4	
1515	864	B17		1	0.044	base	fine grey	stor jar					prehist	
				1	0.04	bsh	black core	stor jar					prehist	
1521	292		<455>	2	0.009	base	BB1 SED	cp					4	
				1	0.037	bsh	GW	jar					4	
		B1/B2	part of 1513	3	0.187		pink incl	stor jar				orange fab	4	
				1	0.003	bsh	SAMIAN CG	bowl	Dr 37?			decorated	4	

1529	1528		same cut as 263	25	0.367	rim, bshh, base	BB1 SED	stor jar	unusual cupped rim	12	62	bad post depositional environ; ?obtuse latt, one pot	3	49
				1	0.01	rim	BB1 SW	dish	plain, 92		4		3	
				56	0.355	rim, bshh, base	silty	cp	rounded everted		44	bad post depositional environ; one pot	3	
				2	0.016	bshh	440	flag	440			N Gaul	3	
				1	0.004	bsh	SAMIAN SG	bowl	Dr 37			dec	3	
				4	0.016	bshh	GW	cp					3	
				2	0.112		Amph: dr 20	amph	Dr 20				3	
TOTALS				**3736**	**61.49**									

Table 12: Roman pottery by feature and context.

Appendix 9

Roman Ceramic Petrography *by Dr Imogen Wood*

Introduction
The ceramic assessment for Cullompton Shortlands Lane (see Appendix 7, above) recommended that petrographic analysis on eight selected sherds.

Geology
Cullompton lies on the edge of the Carboniferous Culm Facies where it meets the Permian rocks represented at Cullompton by the New Red Sandstone which forms the underlying geology (Durrance and Laming 1982; Clayden 1971).

Methodology
Eight sherds from eight contexts were selected by TWMS for thin-section analysis to facilitate the identification of mineral and rock fragment inclusions to establish a provenance. Evidence of production methods and clay sourcing strategies were also considered. Samples were examined using a Zeiss polarizing microscope utilising a range of magnification from ×2.5 to ×10, with a rotation stage. Photomicrographs were taken to illustrate the nature of the fabrics and highlight distinctive inclusions and production processes.

Aims
The aims of this analysis were primarily to compare existing petrographic analysis of Grey Ware storage jars found in the South West, specifically Exeter and surrounding area, with those found at Shortlands Lane. Three Grey Ware storage jar fabrics were thin-sectioned, in order to understand the development and decline of these vessels. The other five samples were selected to examine specific fabric groups identified in hand specimen by TWMS: Grey Ware Group1, Reduced Ware with Red Core, Exeter Gritty Grey Ware 101, Reduced Ware 1, and Silty Reduced Ware 2.

Microscopic Analysis

Grey Ware Group 1 (sherd from context 833/834)
- Quartz, abundant sub-angular grains ranging in size from 0.1mm-0.4mm with finer 0.1mm> sub-angular to sub-rounded grains in the groundmass.
- Opaque, scatter Ilmenite, black sub-rounded grains 0.3mm.
- Micas, Muscovite rare, and scatter of Biotite cleavage flakes, average size 0.2mm.
- Rock fragment, common granitic equigranular fine-grained rock composed of Quartz, Feldspars, Muscovite Mica, Sericite and opaque minerals; fragments are sub-rounded 0.5-0.9mm; sparse 0.9mm examples.
- Rock fragment, sparse siltstone composed of Quartz, Plagioclase Feldspar and Micas; sub-rounded, rare spherical examples, 0.9-1.5mm; leached Fe staining.
- Plagioclase Feldspar, rare sub-angular altered grains 0.4mm.

Groundmass: isotropic abundant sub-rounded Quartz, Fe leached clay.

Provenance
The sub-rounded Quartz grains in the groundmass less than 0.1mm in size (see Figure 52) and scatter of Micas suggest a sandy base clay formed of the minerals present in the rock fragments. The presence of granitic rock fragments, Biotite and sub-angular Quartz suggests a riverine origin, one of those rivers leading off Dartmoor but not close enough to retain tourmaline. The presence of siltstone suggests the source has crossed the Culm Facies Crackington formation (slates/shales) (Claydon 1971). The Ilmenite is a weathered mineral consistent with the formation of waterlogged alluvial deposits. The rare Plagioclase inclusion is most likely an accidental addition during production. On this basis the source of this fabric is weathered riverine alluvial deposits, possibly in the lower reaches of the River Taw.

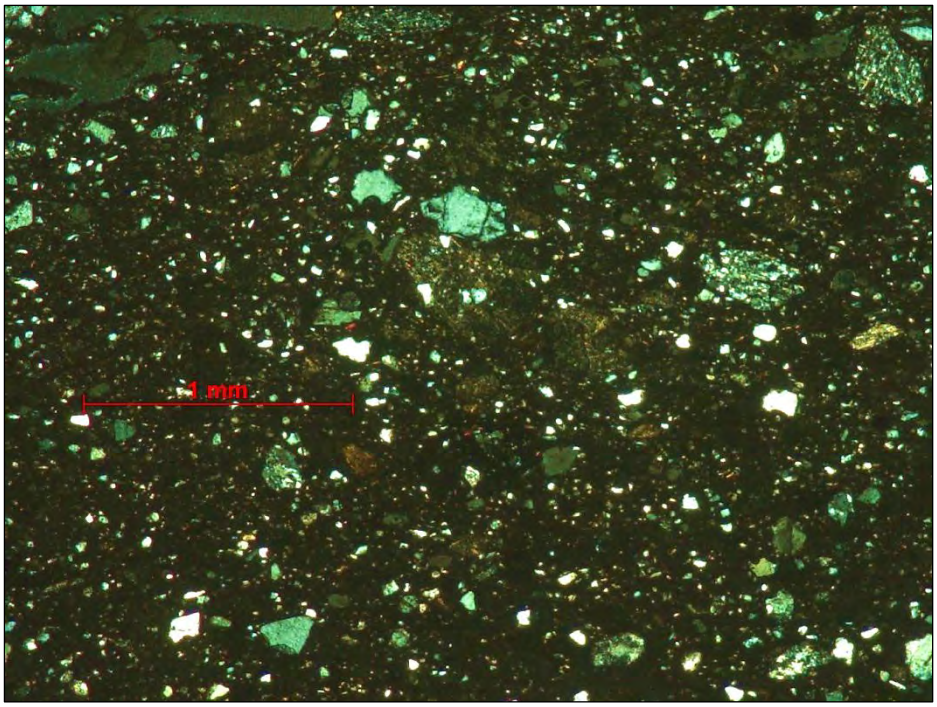

Figure 53: Photomicrograph Grey Ware Group 1, showing abundant white Quartz in the groundmass; two rock fragments can be seen in the upper right hand corner (photo: Imogen Wood).

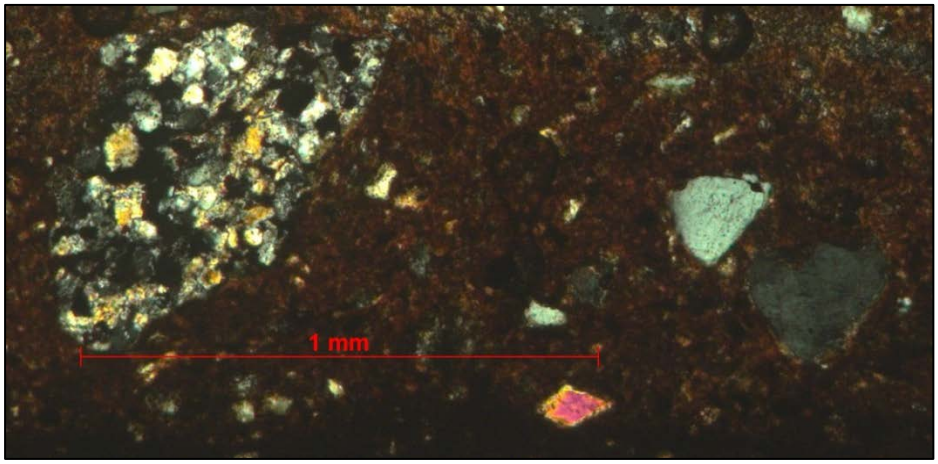

Figure 54: Photomicrograph Reduced Ware with Red Core, igneous rock fragment (left), Augite (centre bottom) (photo: Imogen Wood)

Reduced Ware with Red Core (sherd from context 876)

- Quartz, scatter angular grains, uniform size 0.2-0.5mm.
- Rock fragment, scatter of angular igneous equigranular pieces composed of Quartz, altered Feldspar and Sericite 0.8-1.3mm.
- Augite, sparse diamond-shaped grains, 2nd order birefringence, no visible cleavage, sub-rounded 0.2mm.
- Opaque, sparse rounded grains 0.3mm.
- Feldspar, rare highly-altered and sericitised well-rounded grains, alteration to Pyroxene, 2nd order birefringence colours, 1.3mm.
- Feldspar, rare highly-altered sub-rounded grains, 0.5mm.
- Rock fragment, rare siltstone pieces, well-rounded lamella structure composed of Quartz and Micas, leached Fe minerals, triaxial shape, 0.4mm.

Groundmass: isotropic Quartz common at 0.1mm> becoming sparse at 0.4-0.5mm.

Provenance

This clay contains a suite of minerals and rocks that are consistent with a source close to Exeter. The angularity of the minerals and rock fragments suggest a non-riverine clay recently formed of igneous, carboniferous and volcanic rocks (Figure 53). This would be consistent with an Exeter Sandy Grey Ware.

Exeter Gritty Grey Ware 101 (sherd from context 132)

- Mica, abundant Muscovite cleavage flakes 0.1mm>.
- Quartz, scatter sub-angular grains 0.2mm-0.1mm.
- Rock fragment, scatter Apilite grains Quartz and highly-sericitised Feldspar sub-angular 0.5-0.8mm.
- Quartz, sparse polycrystalline sub-rounded grains 3mm.
- Rock fragment, rare siltstone spherical well-rounded pieces, leaching clay minerals 0.6mm.

Groundmass: isotropic abundant mica and quartz >0.1mm.

Provenance

The abundance of Muscovite Mica in the fabric suggests similarities with the Exeter Micaceous Grey Ware (Figure 54). The rare rounded siltstones and high proportion of angular altered Quartz-rich rock and lack of Ilmenite suggests a non-riverine origin some distance from the Culm measures. Muscovite Mica is a common accessory mineral of Apilitic rocks which are found in granitic dykes; the abundance of Muscovite and presence of Quartz indicates an igneous origin. Soil survey data suggests the Lustleigh series soil north of Bovey Tracy (Clayden 1971). The possible origin of this fabric may lie between Lustleigh and Bovey Tracy.

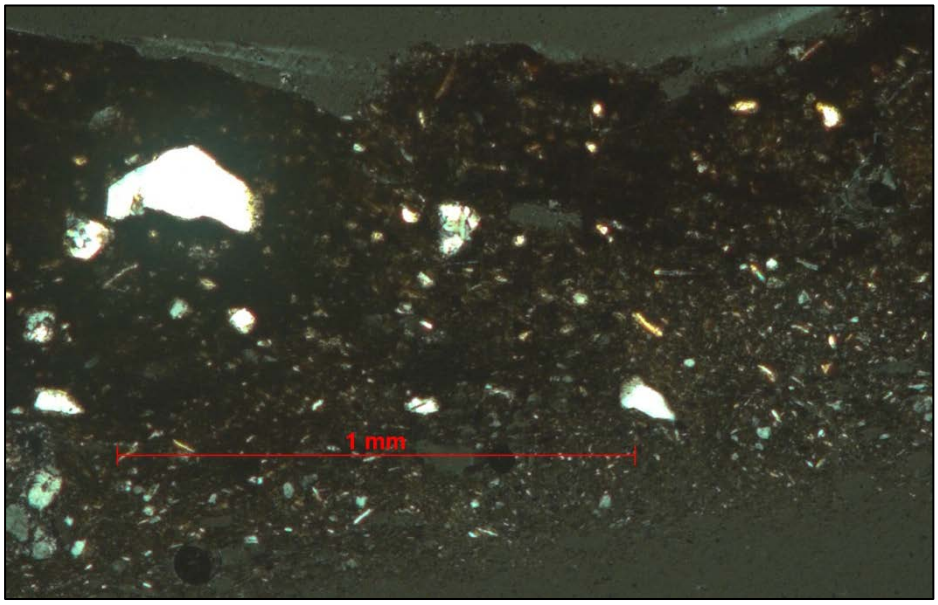

Figure 55: Photomicrograph Exeter Gritty Grey Ware 101, abundant Mica in groundmass visible as laths (Photo: Imogen Wood).

Reduced Ware 2 (sherd from context 123)

- Mica, common Muscovite cleavage flakes 0.1-0.2mm.
- Rock fragments, common highly-altered Apilitic grains composed of Quartz and sericitised Feldspar with leached clay minerals, 0.5-1.3mm.
- Quartz, scatter of sub-angular grains 0.2mm.
- Rock fragment, sparse siltstone, compacted lamella structure, prolate and spherical pieces 0.2-0.6mm.

Groundmass: isotropic abundant muscovite mica.

Provenance

This fabric has similarities with Exeter Micaceous Grey Ware and displays the same range, form and proportion of minerals and rock fragments as thin section sample (132) (Figure 55). The possible origin of this fabric may lie between Lustleigh and Bovey Tracy.

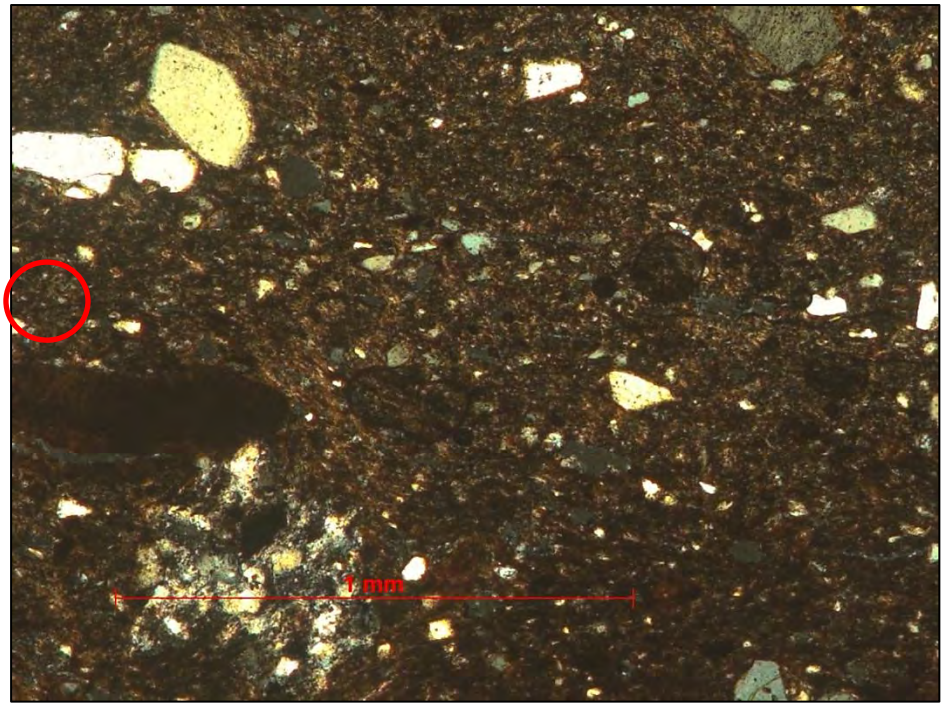

Figure 56: Photomicrograph Reduced Ware 2, Mica visible as laths in ground-mass, highlighted in red, and siltstone (left of centre) (Photo Imogen Wood).

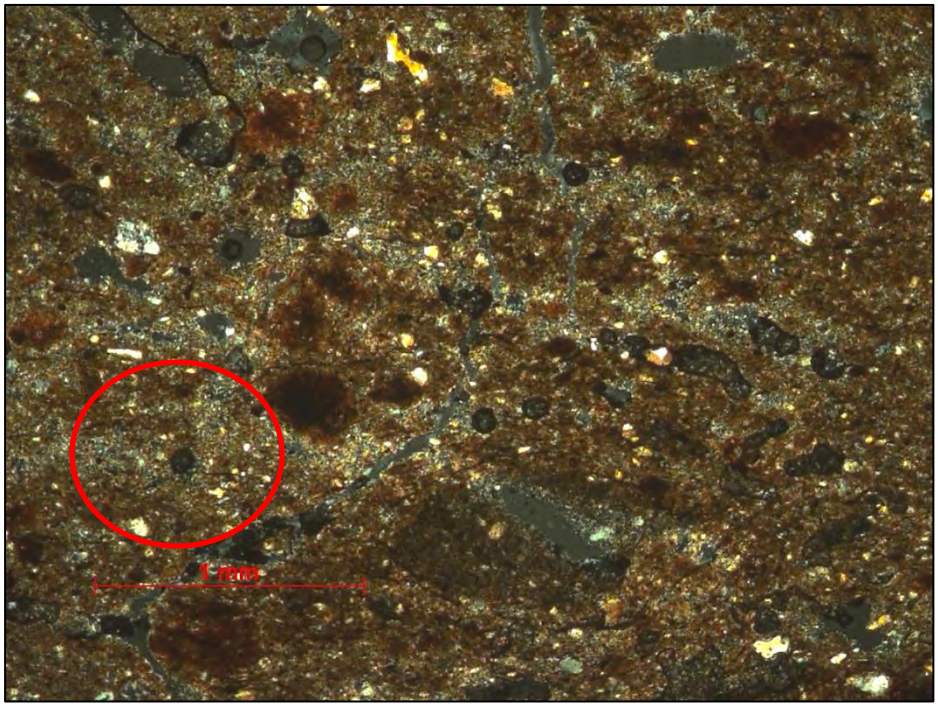

Figure 57: Photomicrograph Silty Reduced Ware 1, clay pellet highlighted in red, inclusions all of similar size (photo: Imogen Wood).

Silty Reduced Ware 1 (sherd from context 264)

- Mica, common Muscovite cleavage flakes 0.2mm.
- Quartz, scatter angular-sub-angular grains 0.2-1.0mm.
- Clay pellets, scatter of spherical high-relief pieces with inclusions visible in Fe-rich clay minerals 0.5-1.5mm.
- Ilmenite, scatter of rounded grains 0.1mm.

- Pyroxene, rare rounded grains, 2nd order birefringence, yellow/green pleochroism, leaching clay minerals 0.1mm.

Groundmass: isotropic rich in Quartz and Muscovite >0.1mm.

Provenance

This fabric represents very specific pottery production practices. It is well sorted with inclusions uniformly between 0.1mm and 0.2mm in size; the presence of clay pellets strongly suggest that grog was being used in the production of this pottery (Figure 56). It is also possible that the angular Quartz was added as a temper. Due to this level processing it is very difficult to comment on its provenance. It is reasonable to assume that the Muscovite, Ilmenite and fine Quartz in the groundmass represent the base clay for which a general riverine alluvial source near an igneous outcrop can be suggested.

Storage Jar 1 (sherd from context 196)

- Quartz, common angular grains 0.1-0.5mm.
- Rock fragment, sandstone, common Quartz Arenite, rounded pieces, 0.5-1.0mm.
- Rock fragment, scatter siltstone stained by clay minerals, well-rounded 0.3-1.5mm.
- Ilmenite, sparse opaque sub-angular grains 0.2mm.
- Pyroxene, rare rounded pieces, 2nd order birefringence, non pleochroic 0.1mm.

Groundmass: isotropic quartz-rich clay.

Provenance

The rounded sandstone/siltstone inclusions and the Ilmenite suggest a riverine alluvial clay derived from sandstone beds some distance from their source (Figure 57). The poorly-sorted fabric does not suggest these rounded inclusions are tempering material. It is difficult to locate a specific source as these elements are widely found, but a source in East Devon may be appropriate.

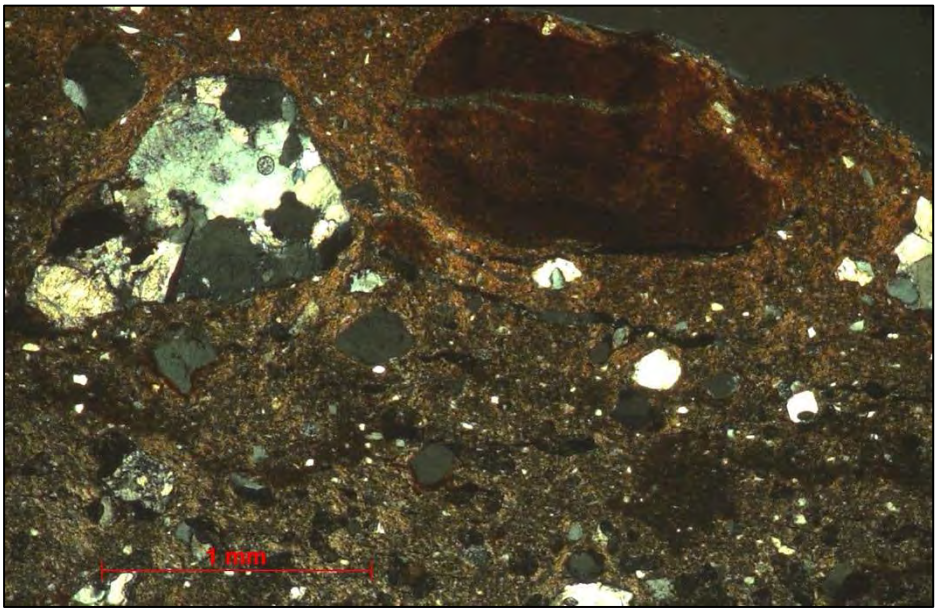

Figure 58: Photomicrograph Storage Jar 1, Quartz Arenite (top left corner) and rounded siltstone (top of centre) (photo: Imogen Wood).

Storage Jar 2 (sherd from context 115)

- Quartz, abundant angular to sub-angular grains, some polycrystalline grains 0.2-0.5mm.
- Rock fragment, common sandstone quartz arenite pieces composed of Quartz, altered Feldspar and Sericite, rounded 1.0-5.0mm.
- Mica, scatter Muscovite cleavage flakes 0.2mm.
- Rock fragment, scatter of siltstone well-rounded spheres 0.6-1.0mm.
- Mica, rare Biotite brown pleochroic altered cleavage flakes 1.2mm.
- Pyroxene, rare rounded, 2nd order birefringence 0.2mm.

Groundmass: isotropic Quartz-rich with sandstone fragments 0.1mm.

Provenance
The suite of minerals and rock fragments suggests a derived source that combines both the igneous geology of Dartmoor and the Permian rock of east Devon. The significantly larger sandstone inclusions may represent tempering material, as their level of rounding would suggest a fluvial sand source (Figure 58). The majority of the fabric suggests a non-fluvial granitic-derived clay possibly from the Dartmoor granite aureole.

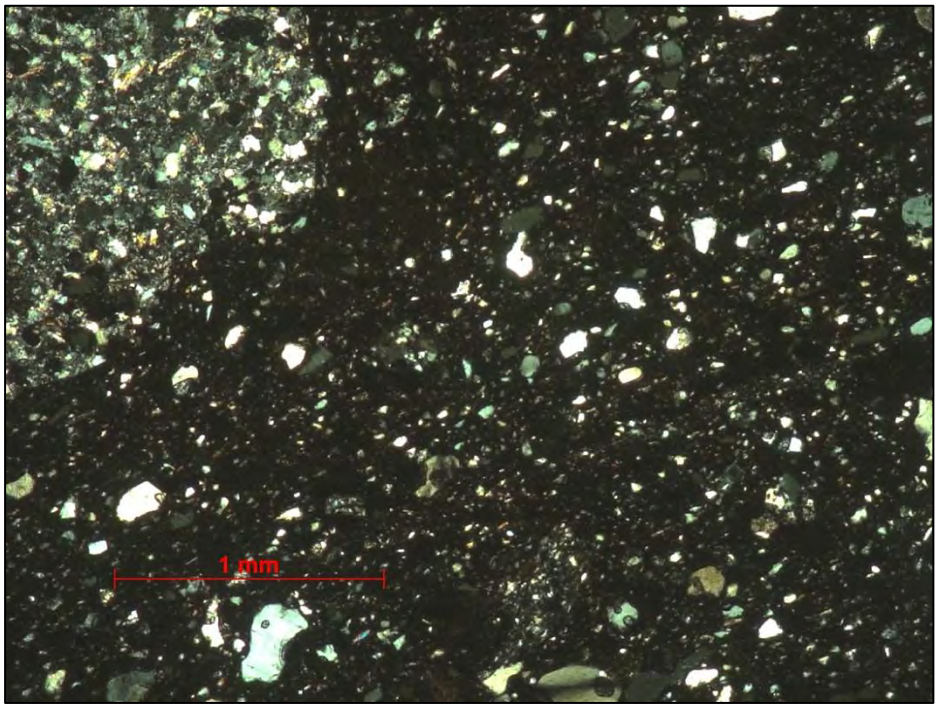

Figure 59: Photomicrograph Storage Jar 2, rounded sandstone fragment (upper left corner) (Photo: Imogen Wood).

Storage Jar 3 (sherd from context 278)
- Rock fragment, abundant mudstone/slate, varying density and size of inclusions, Quartz-rich lamination with micas, rounded, prolate and discoidal in shape 0.4-4.0mm.
- Quartz, scatter, sub-rounded 0.1-0.3mm.
- Quartz, sparse, polycrystalline rounded grains 0.8-0.7mm (sand).
- Mica, scatter of Muscovite cleavage flakes 0.1-0.2mm.
- Opaque, sparse Ilmenite grains, well-rounded 0.5-2.0mm.
- Rock fragment, rare Apilite, angular grains 1.2mm.

Groundmass: isotropic silty clay with Muscovite and Quartz 0.1mm>.

Provenance
The abundance of mudstone/slate and altered Quartz in this fabric strongly suggests a source deriving on the transition zone between the Culm Facies and shales such as Pilton Shales (Durrance and Laming 1982). Whilst the rounding suggests a dynamic fluvial environment, the shape and size of the siltstone/slate suggests that they have not travelled a significant distance (Fig 8). The polycrystalling Quartz is the result of alteration, as is the Apilite, which may derive from the quartz-veining characteristic of this transition zone. The Muscovite derives from the weathered mudstone. The abundance of shale/slate with altered Quartz with Ilmenite suggests a riverine clay source close to the Pilton Shales.

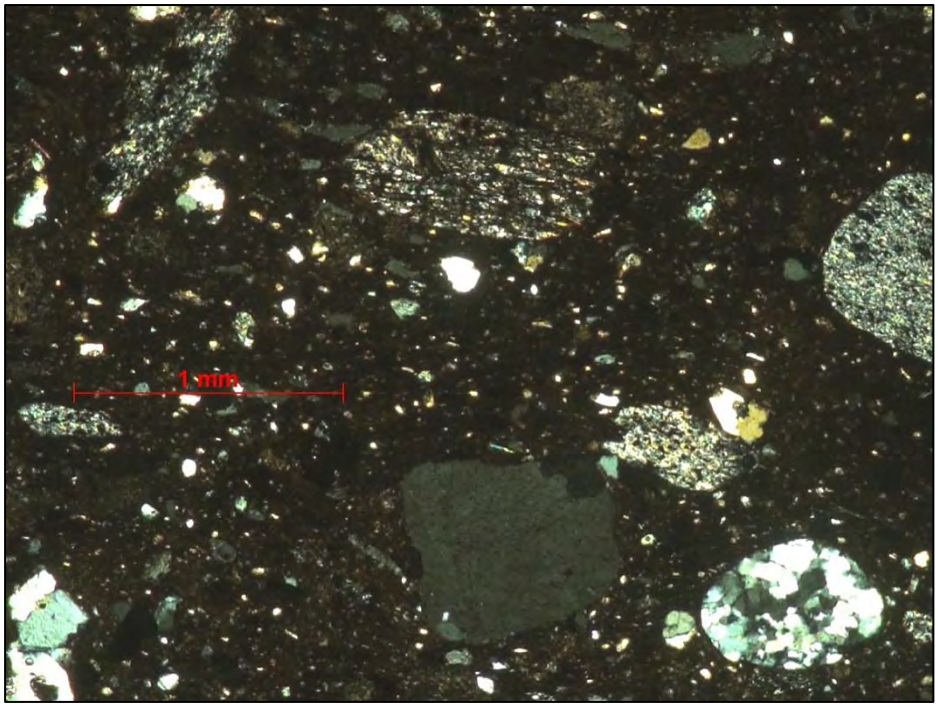

Figure 60: Photomicrograph Storage Jar 3, rounded siltstone pieces (upper centre and right) and polycrystalline Quartz grain (lower right corner) (photo: Imogen Wood).

Results

The majority of clays used to make the pottery sampled came from riverine alluvial clay deposits; the inclusion of Ilimenite is characteristic of this type of clay. The addition of grog to the sherd from context (264) (Silty Reduced Ware 1) provides evidence for skilled and specific ceramic production processes. The provenance of the pottery fabrics possibly indicates a wide distribution from the eastern edge of Dartmoor to the Blackdown Hills in west Somerset and into North Devon.

The sherd from context (833/834) listed as Grey Ware 1 has a possible provenance in the lower reaches of the River Taw, as suggested by the granitic and slate components and lack of Tourmaline. The clay source for Storage Jar 2 (115) could also derive from the River Taw area, as indicated by the presence of Biotite Mica.

The sherd (876) listed as Reduced Ware with Red Core has a mineral and rock assemblage comparable to that of the Exeter Sandy Grey Ware fabric 151 as identified in Exeter (Holbrook and Bidwell 1991, 154). The suggested provenance is in the Exeter area.

The sherds sampled from (132) and (123) (Exeter Grey Gritty Ware and Reduced Ware 2) display the same range of minerals and are comparable with Exeter Micaceous Grey Ware (Holbrook and Bidwell 1991, 163). The clay for this fabric may have derived from the east Dartmoor aureole, the distinctive Muscovite Mica is suggestive of the Lusteigh/Bovey Tracy area, although sampling of clays from that area would be needed to validate this.

The sherd from (264) tells us more about specific production process more than its provenance, which can only be given as a general East Devon distribution.

The Storage Jar 1 (196) sherd also has an East Devon provenance, as indicated by the highly weathered sandstone/siltstone and angular quartz. The Storage Jar 3 (278) sherd has a far more distinctive fabric and provenance. The inclusions strongly suggest a derived source near the Pilton Shale Formation, which forms the north-eastern boundary of the Carboniferous Culm Facies and late Devonian geology on the Devon Somerset border. The presence of altered quartz suggest quartz veining typical of that found in altered slate/mudstone. Possible grey ware wasters have been found on a developer-funded site near Wellington (AC Archaeology *unpublished*). A possible derived source of this clay might be found in the beds of the River Batherm or Barle, though further research would be needed to establish clear proof.

References

Durrance, E. M. & Laming, D. J. C. 1982: *The Geology of Devon.* Exeter: University of Exeter Press.
Clayden, B. 1971: *Soils of the Exeter District*. Bungay: The Chaucer Press.
Holbrook, N. & Bidwell, P. T. 1991: *Roman Finds from Exeter*. Exeter Archaeological Reports 4. Exeter.

Appendix 10

Roman Coins, *identifications by Dr Sam Moorhead*

Seven coins were recovered during the excavation, several of them with the aid of the metal detectorist Cliff Wilmer and the Taw and Torridge Metal Detecting Club.

SF no.	Context	Weight	Diameter	Thickness	Condition, notes.
1	(176)	14g	29×27mm	1.8mm	Surface badly corroded/powdery, no detail.
4	(215)	6.5g	20mm	1.8mm	Surface badly corroded/powdery, no detail.
5	(264)	16g	25mm	2.3mm	Copper alloy sestertius of Faustina II, under Marcus Aurelius (AD 161-80) Rome, AD 161-75 Obv. (FAVSTINA AVGVSTA); Draped bust right Rev. ?[VENVS FELIX], S C; Venus seated left holding three figures or shrine(?) and sceptre RIC III, p. 348, cf. 1686; BMC IV, p. 537, cf. 959
6	(911)	18.5g	29×27.5mm	2.3mm	Copper-alloy sestertius of Marcus Aurelius (as Augustus, AD 161-80) Rome, AD 171-2 Obv. M ANTONINVS AVG TR P XXVI; Laureate head right Rev. IMP VI COS III S C; Roma seated left, holding Victory and spear; behind, shield RIC III, p. 295, no. 1033
7	(917)	3g	19.8mm	0.7mm	Copper-alloy nummus of Decentius (351-3) Mint unclear:, 352-3 Obv. [ ]; Bare-headed and cuirassed right Rev. SALVS DD NN AVG ET CAES; Large Chi-Rho, between Alpha and Omega Mintmark: -//[ ] Type as RIC VIII, p. 123, no. 40 (see Figure 60)
8	(1513)	3g	24.4mm	1.3mm	Surface badly corroded/powdery, no detail, 1/3 broken away and lost.
11	{286}	18g	28.2mm	2.8mm	Corroded, with iron concretion on both sides adding to weight.

Table 13: The Roman coins.

Note that the two *sestertii* are quite worn, and are noted elsewhere as circulating well into the 3rd century. The mid 4th century coin of Decentius is of some interest, as late 4th century coins are generally quite rare in Devon. The coin itself is rather small, and *may* be clipped. If so, that would suggest a rather later date for deposition than the 350s.

Figure 61: SF7, the nummus of Decentius (351-3), under raking light (£1 coin for scale).

Appendix 11

The Romano-British Glass, *by Birgitta Hoffmann*

Catalogue

1. Context (1514); one body fragment of bluegreen glass; edge of a prismatic bottle with right-angled edge; small round bubbles; mould impression on surface; no weathering; extant height: 30.4mm, S1(ext): 20.1mm, S2(ext): 8.5mm, Thickness: 4.7mm.

2. Context (1521) SF10; one handle fragment; bluegreen; bun-shaped section with three shallow ribs, widening towards the lower attachment; edge chipped on one side; elongated bubbles; no weathering; extant height: 19.3mm, extant width: 12-14mm, thickness: 7mm.

3. Context (954) sample <447> Cremation; one fragment of bluegreen glass; heat deformed and fused together; dimensions: 19.55×17.4mm.

4. Context (119) Block 5; three fragments of bluegreen glass; heat deformed and fused together; dimensions: 24.4×15.5mm.

5. Context (955) (inside primary cremation vessel); neck and rim of a pale bluegreen glass; slightly flaring, wavy rim; cylindrical neck, constriction at base; cylindrical body?; some evidence of heat deformation; partial brown layer of weathering; height from rim to constriction: 37.5mm, rim diameter: c.14mm, extant height: 55.5mm.

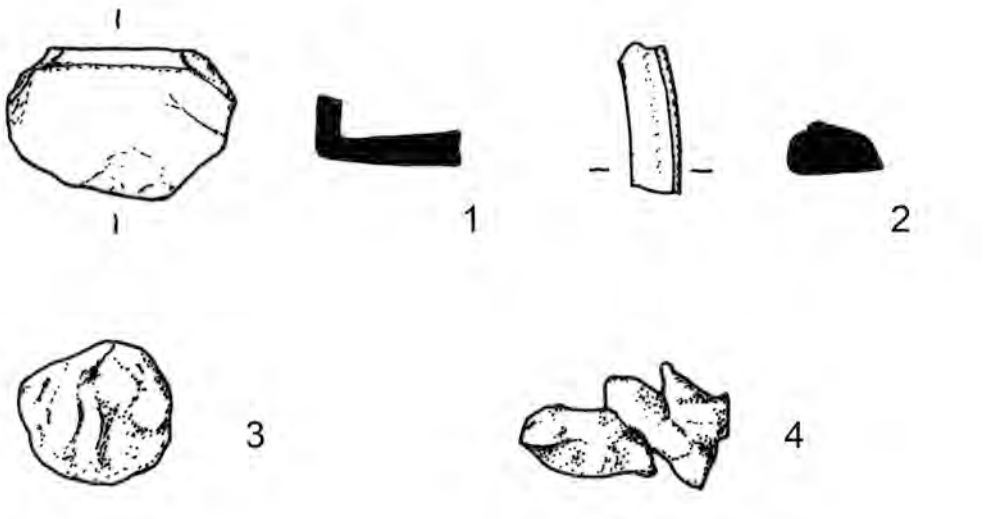

Figure 62: Romano-British glass, scale 1:1 (illustrated by T. Hooper).

Discussion

This small assemblage suggests that the use of glass was well established in Cullompton. Despite the fact there are only two recognizable pieces, there is evidence for both storage vessels and table ware. Kitchen ware, or rather storage vessels, are present in the form of a prismatic bottle (Isings form 50/62 – Isings 1957, 63-67 & 81). These vessels, which existed as bottles with necks of varying size and as a jar form with much wider rims, are a stock component of the furnishings of kitchens and storage spaces in both civilian and military settings. In Britain they were available from the second half of the first century and continued in use throughout the second century in large numbers (Price & Cottam 1998: 94-98, 135-6).

The small handle, in shape halfway between a rod and a ribbon handle, comes from a small jug. The size of the handle suggests a vessel up to *c*.200mm in height, and the handle shape – which differs markedly from the more solid containers discussed above – suggests that it was used at table, rather than as a storage vessel. This handle form occurs on a number of jug types, including a yellow-brown example from

Colchester (Cool & Price 1995, 130-131 and Fig. 8.8), representing Isings type 54, a late first/early second century jug with a wide mouth. This type is frequently encountered in the Mediterranean, but also in small quantities along the Rhine and in Britain (Isings 1957, 71-72 form 54) e.g. an isolated fragment from Castleford (Cool & Price 1998, 169 Fig. 58, 214). This 40mm example preserves the shoulder and turn of the handle, underlining the small size of the handle and thus probably the vessel as a whole. Most of the dated examples belong to the late first and early second century AD.

The cremation vessel {955} contained part of a small unguent bottle; this was studied from photographs and closer examination may reveal more detail. The vessel appears to belong to a group of small unguent bottles known as tubular unguentaria (Isings type 8). They tend to have a constriction about ⅓ to ½ down the body, and end in a rounded or very slightly flattened base (Cool & Price 1995, 159-60 with further references). The majority have sheared-off rims, although rolled-in rims have been identified, for example in York, and might be slightly later. Their size varies from about 50mm to nearly 200mm in height, although heights of about 80-110mm appear to be the most common in southern Gaul and northern Italy, where they occur in large numbers in first century cremation burials.

The earliest examples date to the early 1st century, and they became very common in the second half of the first century; for the most part they did not survive beyond the turn of the century.

Their use in cremations in Britain includes Flavian cremations from Winchester (Collis 1978, 85 & 102), as well as an example from Little Alie Street, London. These isolated finds contrast with their extensive use in the south of France and the north of Italy, where they (or similar unguentaria) frequently form part of the 'typical' cremation assemblage, for instance in the cemeteries of Nimes (Sternini 1990, 36-46) or the 235 examples from the cemeteries in the Ticino (Biaggio-Simona 1991, 140-2, Fig. 64-5), to name but two. The use of these vessels spread during the first century throughout the Roman Empire, and examples can be found in most of the provinces occupied at the time.

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Appendix 12

Romano-British Metalwork, *by Quita Mould*

Introduction
A small assemblage of iron finds and two selected copper alloy finds were examined and a basic record was compiled (see Table 14). The iron assemblage from the settlement (*c*.48 objects) was principally comprised of medium-sized timber nails (less than *c*.80mm in length) and hobnails from leather footwear of nailed, or nailed and stitched, or nailed and thonged (sandals) construction. Of particular note were a tanged arrowhead, a knife and an ox goad, and a possible pair of shears.

Pre-Roman contexts
A single timber nail with a flat, round head and a straight shank was found in an early Roman or Pre-Roman soil layer, Spread (215). There is nothing to distinguish it from other timber nails from Roman contexts.

The early Roman Cemetery
The remains of thirty iron nails, eleven hobnails, a ceramic rim fragment and a spherical globule of melted glass could be recognised from the cremation. The nature of the surface on some objects suggested that they had been burnt and many had small pieces of cremated bone adhering. The external surface of at least six hobnails and one nail suggested that they been burnt but this was not obvious when viewed in the radiographic image; however, the X-radiographic image of a three further timber nails did suggest that they had been burnt. The relatively high proportion of hobnails that appear to have been burnt – six of the eleven examples recovered – may suggest that shoes had been cremated with the body. The timber nails comprised principally of small/medium nails with flat heads and angular-sectioned shanks. Of the complete nails present at least three sizes could be recognised (small less than 26mm in length, medium and medium/large), suggesting that potentially more than one wooden item had been present in the cremation. One nail (from spit 20 bag 3) had two smaller nails encrusted at right angles to its shank suggesting they had been used to secure a wooden joint, such as the corner of a wooden box.

The Romano-British settlement Phase 1
The heavily encrusted remains of a relatively narrow blade with a thick back were found in fill (888) of a large pit [883]. The blade has what appears to be a strap-like handle set at right angles to the blade and appears to be broken from a pair of shears. This identification can only be tentative, however, until investigative conservation is undertaken. Three iron hobnails surviving as corrosion products were found on an irregular metalled surface (874). Single hobnails were also found in a fill (891) of pit [883] and a fill (259) of a linear feature [131/896]; timber nails were found in the same contexts. A small collar ferrule (SF446), used to prevent a wooden handle from splitting, came from the basal fill (896) of the same linear feature [131/896], with a large rectangular-sectioned bar, apparently bar iron, coming from a fill (926) above.

The Romano-British settlement Phase 2
A hobnail, a timber nail and a thicker shank came from fill (119) of U-shaped linear feature [118].

A small tanged arrowhead with a lozenge-shaped blade (Figure 62, no.3) and four hobnails came from the upper fill (136) of a linear feature [852], a re-cut of linear feature [135]. Small flat-bladed arrowheads are not common finds, the largest group to be recovered coming from Housesteads on Hadrian's Wall (Manning 1976, 22-3); there are only two examples in the collection of the British Museum (Durden Collection), and those may be of Post-Roman date (Manning 1985, 177 V280-1).

The Romano-British settlement Phase 3
A slightly larger group of material came from contexts attributed to Phase 3. A group of three hobnails came from the basal fill (850) of the linear cut [177]. A near complete knife (Figure 62, no.1), a nail shank and what appears to be a fragment of highly vitrified grey/black ceramic, possibly a fragment of crucible, came from a fill (849) above. The knife has a sinuous back and a curving, convex edge and is of Manning's type 24 (Manning 1985, 118); a type believed to date from the late Iron Age-early part of the Roman period, and not likely to date later that the end of the first or very beginning of the second century AD.

Timber nails and an iron cramp came from fill (264) of linear feature [263] and cleaning above.

The Romano-British settlement Phase 4
An iron nail with a flat, lozenge-shaped head and a broken shank, possibly a broken clench bolt (also known as a rove nail), was found in the upper fill (911) of linear feature [910]. Clench bolts were used to secure edge-lapped timbers as seen in domestic plank-and-ledge woodwork, such as doors and shutters, and clinker-built boats.

A large formless fragment of ?melted leaded bronze (SF9) weighing 322g was recovered from basal fill (1514) of [292]. A small fragment of iron nail shank, a disc-shaped 'slaggy' conglomeration with possible hammerscale present, and a very small formless fragment of copper alloy along with a slag nodule with a combined weight of less than one gram (SF455) came from fill (1521). (1514/1521) is described as a charcoal-rich deposit at the corner of an enclosure. The melted copper alloy and slag-like items recovered here may suggest the disposal of metal working waste at this location.

The Romano-British settlement Phase 5
An iron hobnail (SF441), a small timber nail that appears to have been burnt, and a nail shank were found in fill (913) of a narrow linear feature [912] which may form one side of the rectangular structure [912/937]. The tip of a nail shank (SF453), with mineral-preserved organic wood remains, was recovered from fill (979) of a shallow, sub-rectangular pit [978]. A hobnail and a timber nail were found in the upper fill (196) of short linear pit [195], the re-cut of terminus [131] seen in Phase 1

An ox goad of Rees type II (Rees 1979: 76) also came from (196) (Figure 62, no.2). Ox goads, most likely used to urge on draught animals during ploughing, have been the subject of discussion and the use of these small implements is a matter of some debate. The identification of traces of ink at the end of the wooden shaft of one example found at Vindolanda, and the recovery of at least five other examples in contexts clearly associated with writing tablets at that fort has prompted Birley (in 1999) to suggest they may be ink pen nibs (see Blake 2013, 19). However, the ink pen nib identification has yet to be widely accepted.

Post-Roman finds
The left branch broken from a horseshoe of Clark type 2A was found during cleaning above the upper fill (103) of V-shaped ditch [102], and dates to the second half of the 11th-first half of the 12th century. A horseshoe nail of post-medieval type (SF407) was found in fill (227) of linear feature [226], and during cleaning above a medieval soil layer (176). A length of bar iron was found in the fill (186) of Posthole [185], one of a line of postholes running across the site and likely to be of 18th century date.

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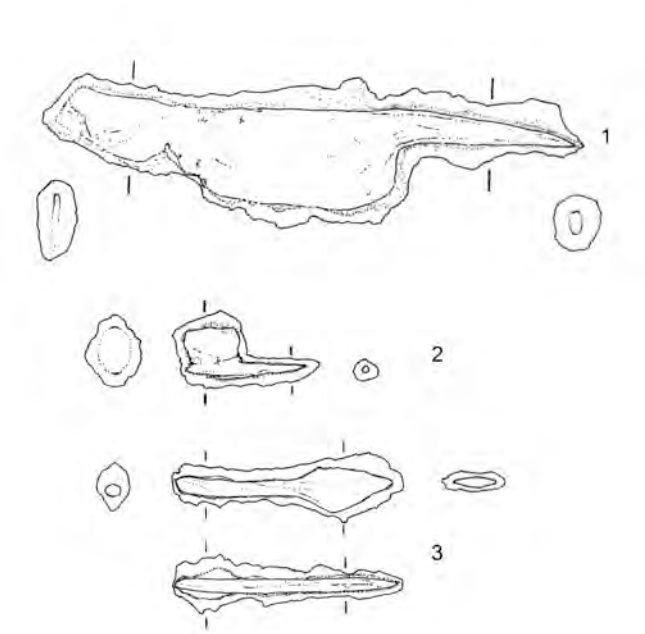

Figure 63: Romano-British metalwork, scale 1:2 (illustrated by T. Hooper).

Context	Other context details	SF No	Material	Name	Description	Completeness	Length/Height (mm)	Width/Diam (mm)	Thickness (mm)	Weight (g)	Condition	Radiograph	Type	Date	Measured from object or X-ray	Notes
103	Cleaning L102 B5		Iron	Horseshoe	left branch of small horseshoe with 'right-angle' calkin, wavy outer profile and three round nail holes within rectangular countersinkings, broken across the toe.	incomplete	Ht 88	20			encrusted	CX933	Clark 2A	second half 11th century-first half 12th century	object	
119	L118 B6		Iron	Nail, timber	medium nail with flat round head and angular sectioned straight shank	complete	39	14			encrusted	CX934			object	
119	L118 B6		Iron	Shank	angular-sectioned shank broken each end, one end slightly upturning, slightly sinuous in profile and gently tapering. Probably structural	incomplete	105+	20	15		encrusted, small stones adhering, possibly plaster	CX935			object	
119		SF466	Iron	Hobnail	hobnail, tip of shank broken	almost complete	15+	D12			encrusted	CX961			object	
123			Iron	Nail, timber	medium nail with small flat head and clenched shank	complete	40/25	14			heavily encrusted, little iron remaining	CX933			x-ray	
125			Natural	concretion	iron rich soil matrix		49	15		18g		CX933			object	
134		SF423	Iron	Nail shank, timber	fragment broken from a medium nail	incomplete	33+				encrusted	CX961			object	
136	L135 B1		Iron	Arrowhead	small tanged arrowhead with lozenge-shaped blade and narrow tang, encrusted so blade section unknown, one side of the blade edge lost	almost complete	60 (blade L 26)	15+			encrusted	CX934			blade length measured from xray, rest from object	DRAWN
136		SF413	Iron	Hobnailx4	4 hobnails with curved shanks and some mpo leather present	complete	21	D13			encrusted	CX961			object	
176	cleaning		Iron	Nail	straight, rectangular sectioned shank with an expanded, flat head. Possibly a horseshoe nail detail obscured by encrustation	complete	56	19	17		encrusted	CX933			object	
178	cleaning		Iron	Nail shank, timber	Square sectioned medium nail shankd bent toward the broken tip	incomplete	26+	8	8		encrusted	CX934			object	
186			Iron	Bar	tapering angular-sectioned shank, the wider end has a rectangular section, the narrower appears square, both ends broken	incomplete	88	30	18		encrusted, fissured	CX935			object	
196	L131/195 B13		Iron	Nail, timber	medium nail with flat round head and angular sectioned curved shank	complete	30/8/14	D19			encrusted, flaking	CX961			object	
196	L195B12	SF418	Iron	Hobnail		complete	16	D12			encrusted	CX961			object	
196			Iron	Ox goad	open collar ferrule with point	complete	36 (point L 20)	D14			encrusted	CX961	Rees type II	most common 1st and 2nd centuries	object	DRAWN
215	Adj. to L118 B9		Iron	Nail, timber	medium nail with flat round head and straight shank	complete	38	14			encrusted	CX934			object	
227		SF407	Iron	Nail, horseshoe	small/medium nail with short shank and expanded head with domed top, probably a fiddlekey horseshoe nail	complete	28	11	8		encrusted, flaking	CX961			object	
259		SF421	Iron	Hobnail	hobnail with shank clenched at the tip	complete	17	D14			encrusted	CX961			object	
264	L263 B6		Iron	Nail, timber	medium nail with flat round head and straight angular sectioned shank, tip missing	almost complete	64+	15			encrusted	CX933			object	
264	L263 B8		Iron	Nail, timber	medium/large nail with flat round head and straight angular-sectioned shank	complete	91	18			encrusted	CX933			object	
264	L263 B8		Iron	Nail shank, timber	curved shank broken before the head	incomplete	43+				encrusted	CX933			object	
264 979			Iron	Cramp	upstanding tapering arm at right angles to the rectangular-sectioned strap-like body, other end now missing. Mpo wood present in encrustation on both strap and arm	incomplete	43+ (arm Ht 38)	30			encrusted, fractured and repaired	CX935			object	part found in 264, part found in 979
264	cleaning		Iron	Nail shank, timber	rectangular sectioned shank from small/medium nail, tip clenched, broken at each end	incomplete	17/5				slightly encrusted	no X-ray			object	
286			Iron	Nail, timber	medium nail with flat round head and straight shank	complete	60	20			encrusted	CX933			object	
846		SF426	Iron	Nail, timber	medium nail with flat round head and straight shank with mpo wood on the tip (no jointing present or grain direction visible)	complete	64	16			encrusted, fractured and repaired	CX961			object	
849	L177 B3		Iron	Nail shank, timber	shank broken from medium nail with angular section, slightly curving	incomplete	41+				encrusted	CX934			object	
849	L177 B7		Iron	Knife	tanged knife with sinuous concave back and curving convex edge, tip of the blade now missing. The rectangular sectioned tang is set on line with the back and has mpo wood from the handle present on one face, mpo wood also visible on the blade	almost complete	144+	35	2 (back)		encrusted, fractured and repaired	CX934	Manning type 24	IA to beginning of 2nd century AD	object	DRAWN MPO wood on tang
849		SF427	Iron		tip of the knife above (not joining) now bagged with the rest of the blade						encrusted	CX961				
849		SF427	Ceramic	?Crucible frag.	concave hollow fragment of slag-like highly vitrified grey/black fabric				8.5	6g					object	
849		SF427	Natural		concretion formed around a rootlet		25									
850		SF428	Iron	Hobnailx3	group of 3 hobnails corroded together with mpo leather present, shanks broken off			D14			encrusted	CX961			object	

874			Iron	Nail shank, timber	medium nail shank, slightly curving	incomplete	40+				heavily encrusted	CX935, 936			x-ray	
874			Natural	Hobnail casts	encrustation casts from 3 hobnails, very little iron now remaining						encrusted	CX935, 936				
874			Natural		concreted soil matrix, the largest with several stones adhering, likely to have formed around nail shanks but very little iron now present						encrusted	CX935, 936				
884	L118 B1		Iron	Nail, timber	medium nail with flat broken head and straight angular sectioned shank with the tip missing	almost complete	72+				encrusted	CX933			object	
888	L118 B1		Iron	Shears?	remains of a relatively narrow straight-sided, thick-backed blade with a sloping choil, flattening at a right angle into a strap-like handle. Appears to be the broken junction of the blade and handle from a pair of shears. Investigative conservation could confirm this	incomplete	73+	22	7 (back)		heavily encrusted, stones adhering, cinder in encrustation	CX935, 936			object	
891		SF435	Iron	Nail, timber	small nail head detail obscured by encrustation, appears domed	?complete	32	12			heavily encrusted	CX961			object	
891		SF435	Iron	Hobnail	hobnail with domed head and straight shank with mineral-preserved organic leather adhering	complete	19	D12			encrusted	CX961			object	
911		SF463	Iron	Nail, timber, ?rove	possibly a rove nail with a flat, lozenge-shaped head and a lozenge (angular) sectioned broken shank	incomplete	46+ (43+ shank)	23			encrusted	CX962			object	
913		SF441	Iron	Hobnail		complete	14	D11			slightly encrusted, stones and charcoal present	CX961			object	
913		SF441	Iron	Nail, timber	relatively small nail with flat round head fractured from the straight square sectioned shank. Appears burnt	complete	26	D16			encrusted	CX961			object	appears burnt in radiograph
913			Iron	Nail shank	fragment	incomplete	32+				encrusted, stones adhering	CX934			object	
916			Iron	Nail shank	fragment	incomplete	33+				encrusted	no radiograph			object	
926			Iron	Bar	rectangular sectioned bar with a blunt tip at one end, other broken. No distinguishing features	incomplete	310	30	25		heavily encrusted	CX939			object	
931		SF446	Iron	Collar ferrule	collar ferrule of strip 25mm wide	complete		D27			encrusted, flaking	CX962			object	
931		SF446	Iron	Nail, timber	medium nail with flat round head and straight angular sectioned shank	complete	42	D24			encrusted, stones adhering, cinder present	CX962			object	
979		SF453	Iron	Nail shank	shank tip broken from small nail, some mineral-preserved organic wood present on the tip	incomplete	13+				heavily encrusted, stones adhering, cinder in encrustation	no X-ray			x-ray	
1514		SF9	Cu alloy	Formless frag.	formless fragment with highly irregular surface with a thick rectangular section in one area only. Appears to be more slag-like than a mass solidified from a former molten state, however, the presence of one flat surface might suggest it melted in an intense fire		94	39		322g		CX932			object	
1521		SF455	Iron	Nail shank	small fragment of nail shank	incomplete	20+				encrusted	CX962			object	
1521		SF455	Iron	Slag	disc-shaped slag conglomeration with iron rich flecks potentially hammerscale		44	40		37g	stones and cinder adhering	CX962			object	
1521		SF455	Cu alloy	Slag	formless fragment and very small slag nodule					1g		CX961			object	
CREMATION {955}																
955	spit 5		Iron	Nail, timber	small nail with flat head and angular sectioned shank	?complete	31	16			encrusted	CX927			object	
955	spit 9		Iron	Hobnail	tip of the shank is broken. Appears burnt	almost complete	16+	D12			encrusted	CX927			object	appears burnt
955	spit 11	bag 1	Iron	Hobnail	heavily encrusted, no detail visible appears to be a hobnail	unknown	24				heavily encrusted	CX927			object	
955	spit 11	bag 2	Iron	Hobnail	tip of the shank is curled	complete	20	D14			encrusted	CX927			object	
955	spit 12	bag 1	Iron	?Hobnail shank	small straight shank, could be from a hobnail	incomplete	15+				encrusted	CX927			object	
955	spit 12	bag 2	Iron	Hobnail	hobnail with curving shank	complete	19	D13			encrusted	CX927			object	
955	spit 12	bag 3	Iron	Nail, timber	small nail with flat round head and short shank	?complete	19	12			encrusted	CX927			object	
955	spit 13	bag 1	Iron	Nail, timber	small nail with flat head and straight, angular sectioned shank	complete	25	11			encrusted	CX927			object	
955	spit 13	bag 2	Iron	Nail, timber	nail shank	incomplete	23+				encrusted	CX927			object	
955	spit 13	bag 3	Iron	Hobnail	appears burnt	complete	21	D12			encrusted	CX927			object	appears burnt
955	spit 13	bag 3	Iron	Hobnail	appears burnt	almost complete	16+	D12			encrusted	CX927			object	appears burnt
955	spit 14	bag 1	Iron	Nail, timber	rectangular-sectioned straight shank, bone adhering	incomplete	22+				encrusted	CX927			object	
955	spit 14	bag 2	Iron	Nail, timber	nail with either a curled shank or a second nail shank encrusted to it, bone adhering	complete	28	10			encrusted	CX927			object	
955	spit 14	bag 3	Iron	Nail, timber	medium nail with broken angular sectioned shank	incomplete	26+	12			encrusted	CX927			object	
955	spit 14	bag 4	Iron	Nail, timber	medium nail with flat head and clenched shank	complete	20/33	13			encrusted	CX927			object	
955	spit 15	bag 2	Iron	Hobnail	appears burnt, bone adhering	complete	20	D13			encrusted	CX928			object	appears burnt

955	spit 16	bag 1	Natural	Stone			26	21		1g		CX928			object	
955	spit 16	bag 2	Non-ferrous	globule	small spherical globule of glassy substance			D4.5		<0.5g		CX928			object	
955	spit 16	bag 3	Iron	Nail, timber	small/medium nail with flat head and straight shank, charcoal in encrustation	?almost complete	26	D14			encrusted	CX928			object	
955	spit 18	bag 1	Iron	Nail, timber	medium nail with flat round head and straight shank, bone adhering	complete	39	12			encrusted	CX928			object	
955	spit 18	bag 2	Iron	Hobnail	appears burnt	complete	20	D10			encrusted	CX928			object	appears burnt
955	spit 18	bag 3	Iron	Nail, timber	nail with flat broken head and straight shank, bone adhering appears burnt	incomplete	53				encrusted	CX928			object	appears burnt
955	spit 18	bag 4	Iron	Hobnail	hobnail with curving shank	complete	16	D12			encrusted	CX928			object	
955	spit 18	bag 5	Iron	Nail shank	medium nail shank	incomplete	30+				encrusted, stone adhering	CX928			object	
955	spit 19	bag 1	Iron	Nail, timber	medium nail with flat head and straight shank, bone adhering, appears burnt	complete	42	13			encrusted	CX928			object	appears burnt
955	spit 20	bag 1	Iron	Nail, timber	medium nail with flat head and straight shank, bone and charcoal present	complete	35	14			encrusted	CX928			object	
955	spit 20	bag 2	Iron	Nail shank	medium timber nail shank	incomplete	26+				encrusted	CX928			object	
955	spit 20	bag 3	Iron	Nail, timber	medium nail with flat and straight shank, bone adhering	?complete	38	11			encrusted	CX928			object	
955	spit 21	bag 1	Natural	Stone			28	23	21	14g		CX928			object	
955	spit 21	bag 2	Iron	Nail, timber	2 medium nails encrusted together both have straight shanks, one has a small flat head		45	11			encrusted	CX928			object	
955	spit 22	bag 1	Iron	Hobnail	hobnail with tip of shank curled, bone adhering. Appears burnt	complete	16	D12			encrusted	CX931			object	appears burnt
955	spit 22	bag 2	Iron	Nail, timber	medium nail with flat round head and straight shank, bone adhering, possibly burnt	complete	51	11			encrusted	CX930			object	possibly burnt
955	spit 22	bag 3	Iron	Nail shank	medium nail shank	incomplete	22+				encrusted	CX930			object	
955	spit 22	bag 4	Iron	Nail, timber	nail with small, flat, round head and straight shank	complete	35	10			encrusted	CX930			object	
955	spit 22	bag 5.1	Iron	Hobnail	bone adhering	complete	18	11			encrusted	CX930			object	
955	spit 22	bag 5.2	Ceramic	Pot with encrustation	rim fragment of pot with small formless fragment of iron encrustation on it, bone also adhering							CX931			object	
955	spit 22	bag 6	Iron	Nail, timber	medium nail with small flat head and straight shank, bone adhering	complete	56	12			encrusted				object	
955	spit 22	bag 7	Iron	Nail, timber	medium nail with small flat head and clenched shank	complete	16/31	11			encrusted	CX931			object	
955	spit 23	bag 1	Iron	Nail, timber	medium/large nail with flat head and shank clenched over at the tip, bone adhering	complete	48/9	18			encrusted	CX930			object	
955	spit 23	bag 2	Iron	Nail shank	square sectioned timber nail shank, bone adhering	incomplete	38+				heavily encrusted	CX931			object	
955	spit 23	bag 3	Iron	Formless frag.	No identification possible without radiography		20				heavily encrusted	CX931			object	
955	spit 23	bag 4	Iron	Nail shank	straight timber nail shank	incomplete	23+				encrusted	CX930			object	

Table 14: Ferrous objects from Romano-British contexts.

Appendix 13

Miscellaneous Finds, *by Bryn Morris*

Introduction
A series of miscellaneous finds were recovered during the excavation.

Bone Objects
1. Small wooden disc with central perforation; 19mm diameter, 1.5mm thick, hole bore 1.5mm and slightly offset. A series of very fine concentrate marks around the hole on both sides, possibly from a lathe; overlain by four clear grooves on both sides, presumably wear marks. Found above Ditch [102] and put up into context (101), but may well be a Roman gaming counter (cf. No.7 Holbrook & Bidwell 1991, 267).

Post-Medieval Glass
2. Tiny fragment of vessel glass, perhaps from the rim of a pedestal goblet; fragment 15×13mm and <1mm thick. White opaque applied trail; very badly weathered. Probably 16th century. Context (105).
3. Late 18th century wine bottle, light green opaque glass; 117mm diameter, surviving height 100mm, vessel wall thickness 3mm; seal marked 'Wm Brutton 1777'. This may be William Brutton (1750-1795), buried in Cullompton, and Governor of the Workhouse in Exeter. The juxtaposition with the Workhouse in Cullompton may not be fortuitous. Context (261).

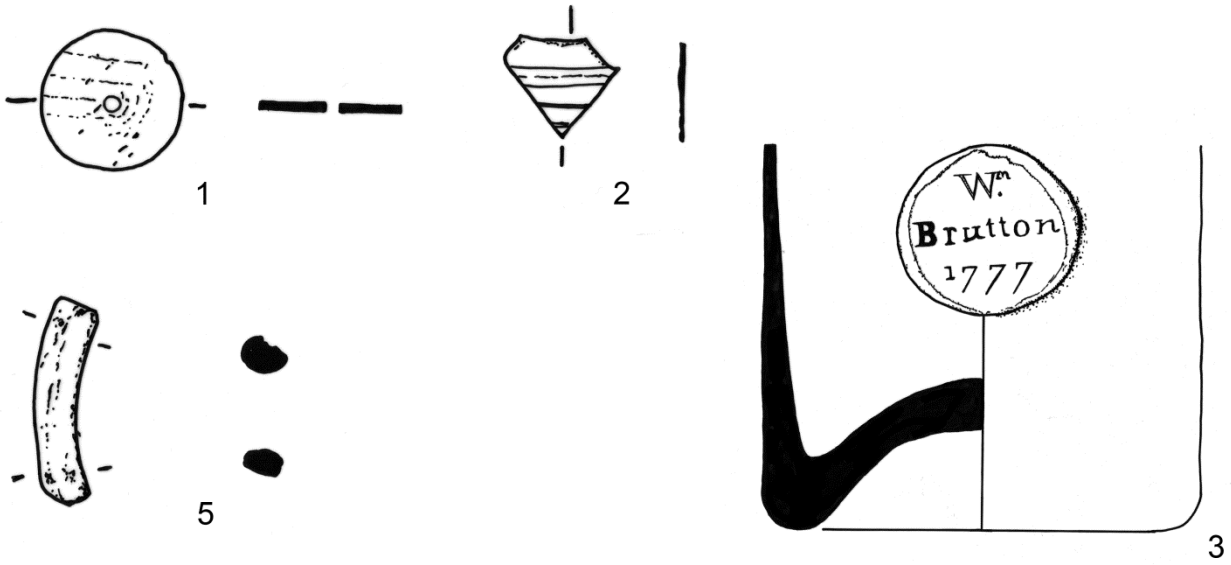

Figure 64: Miscellaneous finds; scale 1:1, bottle 1:2 (illustrated by T. Hooper).

Shale Objects
4. A single bead, context (123) in elongate Pit [122], recovered during the examination of the sample residue. Diameter 10mm, bore diameter 4mm, hole slightly offset; damaged.
5. Shale bracelet fragment, context (119) in Ditch [118]. Circular in cross section, diameter 7mm, surviving length 24.5mm, original diameter 70mm. No visible decoration, very worn.
6. Decorated shale tray/trencher (object #957), used to cover cremation vessels #955 and #956 in Pit [953]. Almost square, original size 392×356mm and 8mm thick. Substantially complete, although damaged at the centre by the neck of the cremation vessel. Two parallel lines of grooves around the outside, with roundels at the corners and the inside angle. In the centre, a third set of incised grooves, with a double line of indented dots going from the corners, and the centre of the long axis, to the middle. A series of faint shallow cut marks cross on both the front and the back of the tray, suggesting its use as a trencher. Stabilised and now on display in the Royal Albert Memorial Museum in Exeter. The decorative motifs are in keeping with examples from Dorset and elsewhere, but comparable artefacts appear to be rare this far west. The context – accompanying a 1st century burial – is not unparalleled, as examples have been found with Flavian burials in Winchester (Biddle 1967).

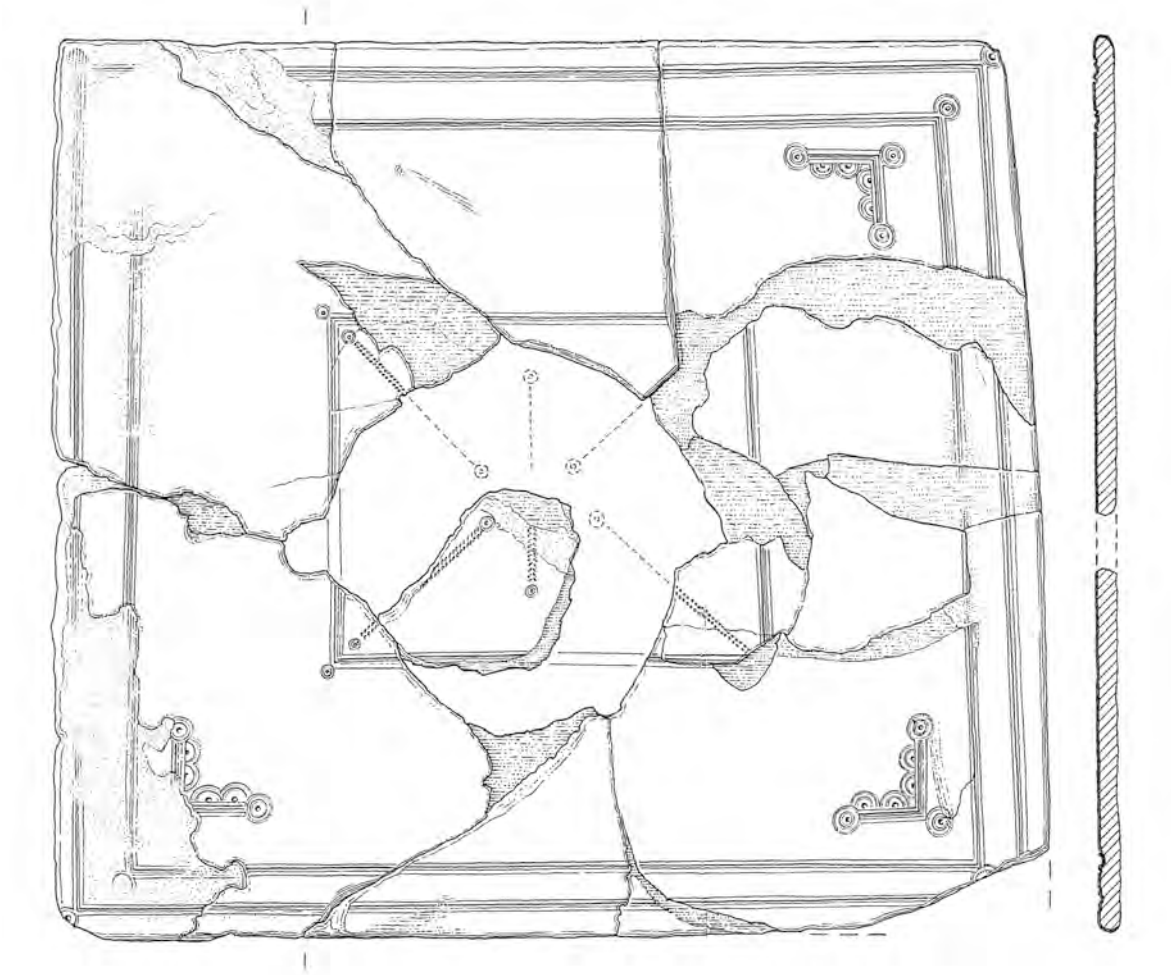

Figure 65: Shale tray #957 (scale 1:3; illustrated by N. Griffith).

References

Biddle, M. 1967: 'Two Flavian Burials from Grange Road, Winchester', *Antiquaries Journal* 47, 224-250.
Holbrook, N. & Bidwell, P. 1991: *Roman Finds from Exeter*. Exeter.

Appendix 14

The Cremated Bone, *by Jacqueline MacKinley*

Introduction
Cremated remains from two contexts were received for analysis. Both derived from grave 953 and comprised the remains of an undisturbed (lidded) urned burial (955) and the grave fill (954; see Figure 15 & Figure 16). The artefactual remains from the grave, including the urn, a shale tray functioning as a lid and one of the grave goods (glass perfume bottle), indicated an early Romano-British date for the burial. A sample of cremated bone was submitted for radiocarbon analysis and returned a 1st century date [AD 22-80 68.2% probability – SUERC-42600].

Methods
The vessel was lifted intact and the fill (0.32m depth) was excavated as 23 spits, of variable depth (5-30mm), by a conservator at The Royal Albert Memorial Museum, Exeter. To render the spits of a more uniform depth (as close to 20mm as possible) and enable a more systematic study of the burial formation processes, the writer amalgamated several spits reducing the overall number to 12 (see archive report for concordance). These spit sub-divisions were maintained throughout subsequent processing and recording, the detailed findings of which are held in the archive.

The recovered material was processed following the standard methodology of wet-sieving to 1mm fraction-size and floatation using a 500 micron mesh for recovery of any charred plant remains and charcoal. The sieve residues >5mm mesh size were sorted and all non-osseous material removed; the <5mm sieve residues were retained and subject to a rapid scan by the writer for the recovery of identifiable skeletal elements. A subjective note of the quantity of bone remaining amongst the unsorted residue was made and is presented in the archive.

Osteological analysis followed the writer's standard procedure for the examination of cremated bone (McKinley 1994a, 5-21; 2000; 2004a). Age was assessed from the stage of skeletal and tooth development (Beek 1983; Scheuer & Black 2000), and the general degree of age-related changes to the bone (Buikstra & Ubelaker 1994). Sex was ascertained from the sexually dimorphic traits of the skeleton (*ibid.*; Gejvall 1981; Wahl 1982).

Results and Discussion
Taphonomy
The grave had survived to the unusually substantial depth of 0.38m. The machine strip level corresponded with that of the decorated shale board used as a lid to cover the urn, apparently added after the vessel had been placed in the grave (possibly with a primary organic cover) and the backfill incorporated. The shale board broke post-burial but in antiquity, allowing the infiltration of the overlying soil matrix and stones into the vessel, but the burial remains had not suffered any damage or disturbance.

The intrusive soil matrix and small-medium stones had infiltrated the vessel fill to a depth of 240mm, the upper 120mm of which was largely devoid of bone (9.3g, *c*. 0.6% of total weight). Other than that recovered from the grave fill (9.7g) and the soil-rich Spit 1 (80mm depth), the bone is visually in good condition and trabecular bone, generally the first to be lost in an adverse burial environment (McKinley 1997, 245; Nielsen-Marsh *et al.* 2000) is well represented throughout. The bone from Spit 1 and the grave fill is slightly worn and chalky in appearance and includes no trabecular bone. Having suffered greater exposure to the acidic (slightly clayey sandy silt) burial environment, the bone from both these areas had experienced its detrimental effects.

The Individual
The 1586.4g of bone recovered (plus 9.7g from the grave fill) represent the remains of a probable male, *c.* 25-35 years of age, and is inclusive of 223.5g (14.1% by weight) of cremated animal bone (piglet, sheep and a minimum of four domestic fowl; species identifications by Lorrain Higbee).

Few pathological lesions were observed in these well-preserved remains, which are inclusive of a high proportion of articular surfaces. Lesions indicative of cribotic *cribra orbitalia* (Robledo *et al.* 1995, fig. 1) were recorded in the right orbit (left not recovered). This condition – manifest as pitting in the orbital roof – is generally believed to result from a metabolic disorder associated with childhood iron deficiency anaemia,

though other contributory factors, such as parasitic infection, are also recognised (Molleson 1993; Roberts & Manchester 1997, 166-9). Although these changes probably only develop in childhood, the lesions can persist into adulthood (*ibid.*).

A shallow Schmorl's node (a pressure defect resulting from a rupture in the intervertebral disc; Rogers and Waldron 1995, 27) was observed in the inferior surface of one thoracic vertebra (rate 1:14). Unlike many of the other forms of joint disease, this condition commonly develops in young adults; the lesions are most frequently seen in the lower thoracic and lumbar vertebrae, and stress-related trauma is implicated as a major cause of the condition (Roberts & Manchester 1997, 107).

Enthesophytes are bony growths which may develop at tendon and ligament insertions on the bone. Causative factors include advancing age, traumatic stress, or various diseases (Rogers & Waldron 1995, 24-25). They are commonly seen - as here - in the anterior surface of the patella (slight in the right, none in the left) where they reflect activity related stress.

Several uneven but marked, acutely U-shaped, linear features were observed in the exocranial surface of the vault including the occipital area. Such features represent plastic changes formed in reaction to strong pulsing action in vessels – generally fine blood vessels – overlying the surface of the skull. The direct cause of the implied increased activity in this case is unclear but could include localised strenuous physical activity heightening blood pressure.

Pyre Technology and Mortuary Rite

The bone is almost universally white in colour indicating an overall high level of oxidation (Holden et al. 1995a & 1995b). Very minor variations reflecting incomplete oxidation were, however, observed in a few bone fragments. Slight blue or grey colouration was seen in parts of (usually) a single fragment of various elements from all four skeletal areas. Elements of the lower limb were most frequently affected (five), only one or two from the axial skeleton, upper limb and skull being involved. The variations are so minor and dispersed no specific problems with the cremation are indicated. It has been observed that the greatest variability in oxidation in the Romano-British period is generally seen in the remains of adult males, their larger bulk requiring longer to cremate in full and, consequently, being more prone to a shortfall particularly if a ‘standard’, ‘one-size-fits’ all pyre is employed (McKinley 2008a).

The weight of bone recovered from grave 953 is amongst the highest from any cremation burial, of any period, in the British Isles. It represents almost 99% by weight of the average expected from an adult cremation (McKinley 1993), though clearly not quite all skeletal elements were present in this case. Similarly high weights have been recorded from numerous contemporaneous cemeteries (McKinley 2004b, table 6.6) and singletons such as that from Tregony, Cornwall (1101.3g; Anderson forthcoming).

The fragmentation of cremated bone is influenced by a variety of intrinsic and extrinsic factors exclusive of human manipulation with the deliberate intent to fragment (McKinley 1994b; 2004b). The majority of the bone from both the burial remains and the grave fill were recovered from the 10mm sieve fraction (64% and 48%), with maximum fragment sizes of 72mm and 33mm. Only one of the 1mm sieve residues (Spit 5) contained a few scraps of bone (<1g). As is generally observed, there is no evidence to suggest any deliberate manipulation of the bone aimed at reducing the size of the fragments prior to burial.

Most cremation burials of any period (unless substantially disturbed) will include fragments of elements from all four skeletal areas (skull, axial skeleton, upper and lower limb). The identifiable proportions from each are often skewed from what may be referred to as a ‘normal’ distribution due to the ease with which skull fragments may be recognised, even as very small fragments, and the difficulties in distinguishing individual long bones (McKinley 1994a, 6; McKinley 2004b, 298-9). The taphonomic loss of trabecular bone also often reduces the proportion of the axial skeleton (mostly trabecular) identified. In this case, a moderate proportion of the bone was identifiable to skeletal element (c. 42% by weight), and the skeletal areas represented show and almost ‘normal’ (by weight) distribution with c. 17% skull elements, c. 17% axial skeleton, c. 18% upper and 48% lower limb.

The small bones of the hands and feet and tooth roots no longer *in situ* are routinely recovered from cremation burials, and the writer has discussed elsewhere how their frequency of occurrence may provide some indication of the mode of recovery of bone from the pyre site for burial (McKinley 2004b, 300-1). A substantial number of hand and foot bones (48, i.e. c. 45%) were identified amongst the burial remains at Shortlands Lane, together with a smaller number of tooth roots (three). Relatively large numbers of these

elements have been recorded from some contemporaneous cemeteries, e.g. 27-32 from the burials at Kingsley Fields, Nantwich, Cheshire (McKinley 2009), but elsewhere much smaller quantities have been found, e.g. Wall, Staffordshire (maximum 13 elements; McKinley 2008b, 136) and Brougham, Cumbria (McKinley 2004b, 298-301). This observation is one indication of some variation in the mode of collection of bone for burial between (and sometimes within) contemporaneous cremation cemeteries. The implication here is that collection was facilitated by raking-off and winnowing of the cremated remains rather than individual hand-recovery of fragments, thereby easing the recovery of the smaller skeletal elements as well as the larger ones.

Pyre goods, in the form of cremated animal bone and fragments of iron nail fused to or causing staining to the bone, were recorded from all except Spit 1 within the urned burial, a small quantity of animal bone also being recorded from the grave fill. Numerous iron objects (?Fe nails) were recovered by the conservator during emptying the vessel. In addition, iron nails were recorded in osteological analysis fused to fragments of human and/or animal bone from Spits 4, 6 and 11. Iron staining to fragments of skull vault and the long bone shafts of the upper and lower limbs was recorded in material from most spits (5-11). Iron objects had been recovered during excavation of the vessel in most of these levels with the exception of Spit 9, where staining was observed to a fragment of femur shaft. Conversely, no staining was observed to bone from Spit 12 despite the recovery of four objects from this level in excavation. It is not entirely clear at what stage when this staining and fusion occurred. Whilst it seems most likely to have been a post-depositional event and therefore random in its effect, this does not explain why staining/fusion appears to be limited to a certain range of skeletal elements (no axial skeleton, no facial bones, and no hand/foot bones were affected), and why no staining was observed to bone from Spit 12. It may be that in this instance some other, currently unclear mechanism, affected the process.

The inclusion of animals, part or whole, on the pyre was a common facet of the Romano-British rite, though the frequency of occurrence varied widely ranging from 3.5% of burials from Westhampnett, West Sussex (McKinley & Smith 1997) to 80% of urned burials from Wall (McKinley 2008b, 126-7). The substantial quantity of animal bone from Shortlands Lane (223.5g, i.e. 14.1% of the overall assemblage) and the large number of individuals represented (piglet, sheep and a minimum of four domestic fowl) does, however, render this burial unusual for the period. Most contemporaneous examples involve small quantities of bone, such as the <10g (maximum 5% total weight) from most of the burials inclusive of cremated animal bone at Brougham (though there were also a few unusual exceptions at this site; McKinley 2004c). In general the number of taxa and/or individuals per burial are also restricted to one or two, not the six seen here (Barber & Bowsher 2000, 72-74; McKinley 2004c; 2008b, 137). The species represented are, however, those most commonly encountered. Pig, particularly immature individuals, generally represents the most popular species in this period, possibly for ritual reasons linked to 'legalisation' of graves via pig sacrifice rather than simply as a food offering (Barber & Bowsher 2000, 72-3; McKinley 2004c; Toynbee 1996, 50). Birds also comprised a relatively common offering, domestic fowl representing the usual species though others have been found (e.g. Barber & Bowsher 2000, table 25). Such offerings may represent 'food' for the deceased or have been symbolic in other ways (Toynbee 1996, 50); in this instance, the species identified suggest food offerings. Elsewhere in Continental Europe at this time animal remains appears to have been consistently included on most pyres and subsequently within the burials (80%) with, as here, pig comprising the usual species (Wahl 2008, 150).

Evidence for ceramic pyre goods, and by inference its contents (food/drink?) is represented by the few fragments of re-fired pot sherds recovered from Spits 10 and 11. The inclusion of such items on the pyre appears to have been a common occurrence in at least some contemporaneous ustrina/cemeteries e.g. at Brougham (Cool 2004, 352).

A few small globules of fuel ash slag (a silica-based general hearth slag, doubtless derived from the local sandy soil matrix) were found at various levels within the vessel, mostly in the upper 155mm depth of the vessel (Spits 1-4), in which a few small flecks of fuel ash were also observed. Both are representative of pyre debris, small amounts of which were probably collected incidentally during recovery of material from the pyre site for burial.

During excavation it was observed that the upper levels of the bone deposit (observed in Spit 4, at 140mm depth) formed a central cone, indicating that the bone fragments had been fed in through the mouth of the vessel while upright, and it had not subsequently been shaken to level the contents out. Most of the bone (96.7%) lay in the lower half of the vessel (Spits 5-12). The highest proportions were recovered from Spits 8 and 10 (21-22% of the total weight in each), but the 20mm depth between these two spits was oddly devoid

of bone, containing only 2.4% of the total. This may be indicative of the original presence of some organic remains which subsequently disintegrated leaving a void. Bone fragments from all three animal species were recovered throughout the fill (Spit 2 onwards), with a concentration in Spits 6 and 7, which contained 22.1% and 21% respectively of the total weight of animal bone recovered. Amongst the human bone, although fragments from some skeletal areas was more common in some spits then others, there was no pattern indicative of an ordered distribution. Joins between fragments from different spits was recorded in two cases, both involving parts of the left and right zygomatic bone from Spit 10, the left joining with a fragment from Spit 6 and the right with one from Spit 8. With the exception of Spit 8, the majority of the bone from each spit was recovered from the 10mm sieve fraction (range 70-80%); most (72%) fell in the 5mm fraction in Spit 8. The maximum fragment sizes, which ranged from 21mm (Spit 1) to 72mm (Spit 5) showed no progressive change by spit order. The hand and foot bones were, as with other elements, generally distributed throughout, but 18 of the 48 elements recovered (i.e. 37%), were found in Spit 10. The general impression is of a random distribution of elements throughout the fill with odd incidental concentrated pockets of certain elements (small bones; animal bone). This is commensurate with what might be anticipated had the material been collected for the pyre site for burial using the methods suggested above.

context	cut	deposit type	total wt. (g)	10mm wt. (g)	% total wt.	5mm wt. (g)	% total wt.	2mm wt. (g)	% total wt.	1mm res.
955										
spit 1			2.4	1.7	70.83	0.3	12.50	0.4	16.67	
spit 2			6.9	5.5	79.71	0.7	10.14	0.7	10.14	
spit 3			2.1	1.5	71.43	0.5	23.81	0.1	4.76	
spit 4			41.8	31.7	75.84	8.9	21.29	1.2	2.87	
spit 5			176.5	133.6	75.69	41.9	23.74	1	0.57	<
spit 6			209.7	165.1	78.73	38.3	18.26	6.3	3.00	
spit 7			190.8	150.3	78.77	36.3	19.03	4.2	2.20	
spit 8			341.5	92.7	27.14	245.7	71.95	3.1	0.91	
spit 9			38.3	28.2	73.63	9.2	24.02	0.9	2.35	
spit 10			347	242.3	69.83	91	26.22	13.7	3.95	
spit 11			180.7	128.6	71.17	45.8	25.35	6.3	3.49	
spit 12			48.7	34.3	70.43	12.2	25.05	2.2	4.52	
total	953	u.burial	1586.4	1015.5	64.01	530.8	33.46	40.1	2.53	
(954)	953	grave fill	9.7	4.7	48.45	4.5	46.39	0.5	5.15	

context	max. frag.	id. wt. (g)	% total wt.	skull wt.	% id. wt.	axial wt.	% id. wt.	u.limb wt.	% id. wt.	l.limb wt.	% id. wt.
955											
spit 1	21mm	1.7	70.83	1.7	100.00		0.00		0.00		0.00
spit 2	34mm	2.3	33.33		0.00		0.00		0.00	2.3	100.00
spit 3	31mm	1.3	61.90		0.00	0.6	46.15		0.00	0.7	53.85
spit 4	56mm	22	52.63	3.3	15.00	9.5	43.18	1	4.55	8.2	37.27
spit 5	72mm	91.5	51.84	8.9	9.73	19.6	21.42	19.7	21.53	43.3	47.32
spit 6	48mm	92	43.87	12.7	13.80	26.9	29.24	24.7	26.85	27.7	30.11
spit 7	64mm	93.8	49.16	19.4	20.68	14.5	15.46	17.6	18.76	42.3	45.10
spit 8	36mm	54.1	15.84	14.9	27.54	6	11.09	9.9	18.30	23.3	43.07
spit 9	36mm	20.1	52.48	1	4.98	6.5	32.34		0.00	12.6	62.69
spit 10	70mm	193.6	55.79	36.4	18.80	14.4	7.44	28.7	14.82	114.1	58.94
spit 11	59mm	72.7	40.23	12.3	16.92	8.6	11.83	13	17.88	38.8	53.37
spit 12	47mm	18.7	38.40	1	5.35	6.2	33.16	4.3	22.99	7.2	38.50
total	72mm	662.1	41.74	109.9	16.60	112.8	17.04	118.9	17.96	320.5	48.41
(954)	33mm	6.2	63.92	5.2	83.87		0.00	1	16.13		0.00

Table 15: Cremated bone data, by excavated spit.

Cremated Bone Archive Report

See table A1 for weights and percentage distributions by sieve fraction and identifiable skeletal elements and maximum fragment sizes.

Context 955
Remains of undisturbed urned burial made in grave 953 (0.38m deep). Accessory vessel in upper half grave fill, Fe nails visible in urn fill. Shale board used as lid to vessel but broken in antiquity. The vessel fill was excavated as 23 spits, of variable depth (5-30mm), by a conservator at The Royal Albert Memorial Museum, Exeter (RAMM). To render the spits of a more uniform depth (as close to 20mm as possible) and enable a more systematic study of the burial formation processes, the writer amalgamated several spits; concordance given below.

- *spit 1 (0-80mm; EM spits 1-3); predominantly soil and stones, some fragments shale board.*
  80mm depth because largely devoid of bone, i.e. above burial deposit. Frequent large-medium stones, contamination from grave fill through broken lid.
  SKULL: anterior fragment left petrous temporal.
  COMMENT: slightly worn/chalky appearance.
  INCLUSION: small fragments charcoal (<0.1g).

- *spit 2 (0.80-120mm; EM spits 4-5); Fe obj., fragments shale, common stone, min. 1 bone aligned vertically (extended to 160mm).*
  40mm depth because largely devoid of bone/i.e. above burial deposit. Frequent large-medium stones, contamination from grave fill through broken lid.
  LOWER LIMB: Tibia; shaft fragment.
  PYRE GOODS: 1.3g immature animal bone.
  INCLUSIONS: 1.1g fuel ash slag; Charcoal fragment (<0.1g).

- *spit 3 (120-140mm; EM spit 6); soil, stone & bone.*
  20mm depth, start of standard depths because appeared from records to form upper levels of burial deposit, in event contained frequent large-medium stones, contamination from grave fill through broken lid.
  AXIAL SKELETON: Rib; 2 small fragments shaft.
  LOWER LIMB: Femur; small fragment distal articular surface.
  PYRE GOODS: 0.8g immature animal & bird bone.
  INCLUSIONS: 0.1g fuel ash.

- *spit 4 (140-155mm; EM spits 7-9); dense bone within soil matrix forming centralised cone/mound. Fe obj.*
  15mm depth, common small-medium rounded stones contamination from grave fill through broken lid.
  SKULL: Fragment mandibular M3 roots (small).
  Vault; 4 fragments single plate.
  AXIAL SKELETON: Thoracic; left half one upper body.
  Sacrum; 1st body (joint with 2nd unfused).
  Rib; 2 small fragments shaft.
  UPPER LIMB: Radius shaft fragment (blue/grey inside).
  Proximal phalanx shaft fragment.
  LOWER LIMB: Femur; 2 fragments shaft (one slight blue one end).
  Tibia; small fragments proximal condyle.
  PYRE GOODS: 7.9g immature animal (piglet) & bird bone. One fragment with fused Fe (?nail) fragment.
  INCLUSIONS: 1 fragment FAS, 0.1g charcoal.

- *spit 5 (155-172mm; EM spits 10-13); bone in soil matrix across width of vessel. 7 Fe obj. (prob. nails)*
  17mm depth, common small-medium stones prob. contamination from grave fill through broken lid.
  SKULL: Fragment basal occipital.
  Vault; 11 small fragments, sutures open max. 1/8th fused.
  AXIAL SKELETON: Thoracic; 3 bodies. Spinal process.
  Lumbar; 2 articular processes.
  Rib; 4 small fragments shaft.
  Innominate; fragment right iliac border; fragment left acetabulum; small fragment iliac crest.
  UPPER LIMB: Humerus; fragment large head. Distal shaft fragment with Fe staining.
  Radius; fragment large head (>20mm diameter). 2 fragments shaft (one blue inside).
  Ulna; small fragment sigmoid surface.
  Proximal phalanx shaft. Distal phalanx base with shaft fragment.
  LOWER LIMB: Femur; dorsal fragment medium-large head with shaft. 4 fragments
  shaft. Fragment distal articular surface.
  Tibia; 2 fragments shaft.
  Fibula; 4 fragments shaft.
  Talus fragment. Fragment large 1st proximal phalanx head with shaft.

PYRE GOODS: 24.7g immature animal & bird bone.

- *spit 6 (172-190mm; EM spits 14-15); bone in soil matrix, c. 20mm diameter fuel-ash rich area against one side vessel. 6 Fe obj.*
  18mm depth, common small-medium stones prob. contamination filtered in from grave fill through broken lid.
  SKULL: Maxillary molar root fragment.
  Fragment left zygomatic arch with postglenoid tubercle, joins articular fossa from spit 10.
  Vault; 8 fragments, sutures largely open.
  AXIAL SKELETON: Axis posterior arch. Cervical; right 1/3rd body. Fragment articular process pair.
  Thoracic; 2 articular processes.
  Lumbar; most of 2 bodies; spinal process.
  Sacrum; small fragment lateral mass.
  Rib; 6 fragments shaft.
  Innominate; fragments acetabulum inc. min. right inferior anterior; fragment left auricular surface margin; fragment left symphyseal face with clear but not deep transverse pattern & only very slight ventral border, no dorsal.
  UPPER LIMB: Humerus; head fragments. 5 fragments shaft, one distal with Fe staining.
  Radius; 2 fragments shaft, distal shaft with part articular surface.
  Fragments 2nd metacarpal base with shaft. Metacarpal shaft fragment. Middle phalanx head with shaft fragment, base with shaft fragment. Distal phalanx base with shaft fragment.
  LOWER LIMB: Femur; 8 fragments shaft.
  Patella; large part medium-sized left (slightly grey).
  Tibia; proximal condyle fragment. 2 fragments shaft.
  Fibula; 2 fragments shaft.
  Calcaneum – fragment lateral anterior facet (2 facets). Most moderate-sized left navicular, intermediate cuneiform fragment.
  PYRE GOODS: 46.3g immature animal & bird bone. Fe nail with adhering bone
  INCLUSIONS: Small globule fuel ash slag.

- *spit 7 (190-220mm; EM spits 16-17); 6 Fe obj.* 20mm depth, few small stones
  SKULL: Right malar process (slightly blue inside), medium sized. Fragment inferior orbital margin. Right lateral half supra-orbital with medium margin & foramen.
  Vault; 15 fragments mostly single plate (many Fe stained).
  AXIAL SKELETON: Axis; large odontoid process (W= 10mm, D = 10-mm; slight grey) rather 'squat' appearance.
  ?inferior articular process fragment. Cervical; most of small/medium body.
  Lumbar; articular process fragment.
  Rib; 18 fragments shaft.
  Innominate; fragment acetabulum,. Right auricular surface fragment. (Fe stained).
  UPPER LIMB: Humerus; 5 fragments shaft. Fragments distal articular surface.
  Radius; small fragment relatively large head.
  Ulna; 2 fragments shaft (Fe staining both).
  Metacarpal shaft fragment.
  LOWER LIMB: Femur; 8 fragments shaft. Large fragment right distal articular surface & fragments probably from same (NB. Piglet right distal epiphysis also from this layer).
  Fragments tibia (1) & fibula (4) shaft.
  1st metatarsal base fragment; fragment large left head with shaft. Proximal phalanx base with shaft fragment.
  PYRE GOODS: 39.5g immature animal (piglet) & bird bone.
  INCLUSIONS: FAS 0.1g.

- *spit 8 (220-240mm; EM spit 18) 5 Fe obj. & glass vessel.*
  20mm depth; few small stones
  SKULL: Fragment styloid process. Fragment right zygomatic arch, joins dorsal portion in Spit 10.
  Vault; 10 fragments (some single plate), sutures open. One fragment with 3 uneven lines across it, not quite but approaching parallel, form of acute 'U'-shaped linear features, worn margins, min. 0.5mm deep, do not penetrated outer plate - clearly vessel action & noted elsewhere in vault.
  AXIAL SKELETON: Cervical; fragment articular process pair.
  Thoracic; most of central-upper body. Fragments 2 articular processes.
  Rib; 5 fragments shaft.
  UPPER LIMB: Humerus; 3 fragments shaft (1 Fe stained). Distal articular surface fragment.
  Small fragment right scaphoid.
  LOWER LIMB: Femur; 7 fragments shaft (1 with Fe stain).
  Tibia; Proximal condyle fragment. 3 fragments shaft (1 slightly blue). Right distal articular surface fragment.
  Fibula; 2 fragments shaft.
  Talus fragment.
  PYRE GOODS: 22.6g immature animal & bird bone (one of latter fused to Fe nail shank fragment).

- *spit 9 (240-260mm; EM spit 19)); glass vessel (=).*
  20mm depth; most contamination ends.

SKULL: Fragments mandibular molar root.
Sphenoid fragment.
AXIAL SKELETON: Thoracic; fragments lower body with small shallow Schmorl's node in centre dorsal inferior surface.
Sacrum; fragment ?5th body.
Rib; 2 fragments shaft.
Innominate; small fragment greater sciatic notch, angle tending obtuse but could go either way.
LOWER LIMB: Femur; 4 fragment shaft (one with Fe stain).
Tibia; small fragment proximal condyle.
Calcaneum posterior surface .
1st metatarsal base with shaft fragment. Metatarsal shaft fragment.
PYRE GOODS: 5.9g immature animal & bird bone.
INCLUSIONS: small fragment FAS (<0.1g).

- *spit 10 (260-280mm; EM spits 20-21); 5 Fe obj.* 20mm depth.
  SKULL: Fragments min. 1 premolar & 1 maxillary molar root.
  Mandible – fragment inferior labial body with small spines & left I2-right P2 sockets, joins fragment with right P2-M2 sockets. Small fragment buccal body with min. 2 sockets.
  Maxilla- small fragment anterior left palate.
  Dorsal fragment right petrous temporal. Fragment left articular fossa & tuberosity (see above for join). Right articular fossa & tuberosity. Right postglenoid tubercle. Sphenoid fragments. Articular fissure.
  Fragment supra-orbital with foramen & marked ridge (4-5).
  Vault; 21 fragments, mostly single plate. Sutures open. Inc. left lateral occipital fragment with edge of neuchal crest – marked acute U-shaped uneven linears in exocranial surface suggests marked vessel activity. Some Fe staining.
  AXIAL SKELETON: Atlas; fragment left articular surfaces (slightly grey). Axis, fragment right body & superior articular surface. Small cervical body & right half one other with superior articular process; articular process fragment.
  Thoracic; fragments 2 bodies. Fragment transverse process & 6 articular processes.
  Lumbar; fragments min. 1 body, 1 articular process fragment (grey).
  Rib; 6 fragments shaft.
  Innominate; fragments ilium with crest.
  UPPER LIMB: Clavicle; small fragment gracile shaft.
  Humerus; fragments head, one with tubercles. 4 fragments shaft inc. left anterior proximal with marked lateral lip & fragment anterior distal.
  Radius; small fragment large head. 3 fragments shaft.
  Ulna; fragments on left proximal haft with radial articular surface & coronoid surface. 2 fragments shaft.
  Fragment small-medium right lunate; small-medium hook of right hamate; fragments pisiform & trapezoid.
  Large left 1st metacarpal. Metacarpal head with shaft fragment. 1st proximal phalanx head with shaft fragment, fragments 2 proximal phalanges shafts. Fragments (join) middle phalanx head with shaft. 1st distal phalanx base with shaft fragment. Distal phalanx head with shaft fragment.
  LOWER LIMB: Femur; head fragment. 34 fragments shaft, moderate linea aspera (few blue sandwich).
  Patella; most of right in anterior & dorsal halves, medium-size, very slight enthesophytes (grey).
  Tibia; fragment proximal condyle. 4 fragments shaft (one Fe stained). Left distal articular surface & shaft fragment.
  Fibula; 3 fragments shaft (1 Fe stained) Small fragment left distal head with shaft.
  Most of large right navicular. Right calcaneum anterior-lateral facets (small double facets). Fragments min. right talus (part slightly grey|). Fragments cuboid & intermediate cuneiform. Large right 1st metatarsal head with shaft fragment.
  PYRE GOODS: 36.8g immature animal & bird bone. Small fragment pottery (0.6g) - unclear if re-fired.
  INCLUSIONS: 0.2g FAS

- *spit 11 (280-300mm; EM spit 22); 8 Fe obj. + ceramic rim fragment.*
  SKULL: Mandible – right condyle & neck fragment, broad condyle (7mm D). Small fragment distal left labial body with 2 molar sockets.
  Small fragment right lateral orbital vault with slight pitting (cribotic) in min. 4mm diameter area (damaged). Occipital fragment with moderate-marked external occipital protuberance (4).
  Vault 3 small fragment, most single plates.
  AXIAL SKELETON: Cervical; most of small body with left articular processes.
  Fragment articular process.
  Thoracic; fragment 2 articular processes
  Thoracic/lumbar; fragments min. 1 body.
  Rib; 5 fragments shaft.
  Innominate; ilium fragment.
  UPPER LIMB: Humerus; shaft . Fragments min. left distal articular surface (capitulum) and shaft.
  Fragments radius (3) & ulna (1 Fe stain) shaft.
  Fragment left scaphoid. Metacarpal head fragment. Middle phalanx head with shaft fragment.
  LOWER LIMB: Femur; fragment head. 10 fragments shaft. Distal articular surface fragments.
  Fragments tibia & fibula shaft.
  Fragments medium-large left talus. Fragment left medial cuneiform. Metatarsal shaft fragment; 5th metatarsal proximal tuberosity.

PYRE GOODS: 31.4g immature animal & bird bone. Fe nail with fragment fused ?femur shaft. Sherd re-fired pottery (3.5g).
INCLUSIONS: Fragment FAS <0.1g).

- *spit 12 (300-320mm: EM spit 23); 4 Fe obj.*
  SKULL: Vault; 2 small fragments.
  AXIAL SKELETON: Thoracic; left half upper body. Fragments 2 articular processes.
  Lumbar; body fragment. Fragment articular process (slightly grey).
  Rib; shaft fragment.
  UPPER LIMB: Humerus; large part right distal articular surface.
  Middle phalanx head with shaft fragment. Distal phalanx.
  LOWER LIMB: Tibia; shaft fragment.
  Fibula; fragment right proximal head with shaft. 2 fragments shaft (grey interior).
  PYRE GOODS: 6.3g immature animal & bird bone.
  INCLUSIONS: Small globule FAS.

- Context 954
  Grave fill.
  SKULL: Incisor root fragment.
  Vault; 10 fragments (sutures open).
  UPPER LIMB: Ulna; fragment proximal shaft.
  PYRE GOODS: 0.5g animal/bird bone (worn & slightly chalky appearance).
  COMMENT: bone worn & slightly chalky appearance.

Conclusion

AGE: adult c. 25-35 yr.
SEX: ?male
PYRE GOODS: 223.5g cremated animal & bird bone including remains piglet, sheep & min. 4 domestic fowl (see detailed archive report, Lorrain Higbee).
PYRE DEBRIS: Several small fragments fuel ash slag (FAS) & charcoal.

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Appendix 15

The Roman and Post-Medieval Archaeometallurgical Debris, *by Dr Lee Bray*

Background
This report presents the results of a preliminary assessment of an assemblage of material classified during the excavation as metallurgical and pyrotechnical debris. The assemblage was recovered from Shortlands Lane, Cullompton, Devon, during excavations in advance of development undertaken by South West Archaeology Ltd. between September 2009 and April 2011. Dr. L. S. Bray was commissioned by SWARCH to undertake a visual assessment of the material and make recommendations for any further work. This was carried out between October 2011 and March 2013.

Methodology
The composition, morphology and textures of each fragment in the assemblage was examined visually and a classification of the material made on this basis. Each fragment was then weighed and its maximum dimension recorded and any significant textures or other characteristics noted. The results are presented in Table 18.

Description
The assemblage consists of 332 fragments of material weighing a total of 19.9kg with individual fragments ranging from less than 1g to 1.3kg in weight with an average of approximately 60g. Visual examination identified materials, textures and morphologies typical of several different metallurgical processes and enabled the assemblage to be divided into six different categories as follows (Table 16);

Crucible: fragments of ceramic vessels with vitrified exterior surfaces and copper oxide-rich residues adhering to the internal surfaces.
Interpretation: Fragments of crucible used in copper alloy processing.

Refractory/Vitrified Material: heated and vitrified fragments of clay mixed with other materials such as sand and stone fragments. Textures identified included charcoal impressions, glassy surfaces and flow structures indicating intense heating. Colours ranged from oranges, yellows and reds to grey suggesting formation under oxidising and reducing conditions respectively.
Interpretation: this material most likely consists of fragments of the heat-affected lining and wall of metallurgical structures.

Smithing Hearth Cakes: fragments of slag mixed with stone and vitrified material, most with a characteristic plano-convex morphology.
Interpretation: this category of material consists of fragments of hearth slag, in this case most likely to be derived from iron smithing, which accumulate in a smithing hearth. They are also known as *Plano-Convex Bottoms (PCBs)* and form below the air inlet of a smithing hearth. Indeed several of the examples in this assemblage had protrusions on one side or indentations in their surfaces marking the location of the air inlet to the hearth and the impression made by the air blast respectively. Smithing hearth cakes typically weigh between 0.2 and 0.5kg (Crew 1996) though this can vary considerably. The examples in this assemblage reached 0.13kg maximum and were thus smaller than is usual, though many were incomplete.

Stone: a small amount of heated stone was included in the assemblage.

Tap Slag: dense slag exhibiting the typical ropey surface texture slag indicative of flow while in a molten state.
Interpretation: this material is most likely to derive from slag released from a furnace during smelting, although similar textures can sometimes form during smithing.

Undiagnostic slag: slag exhibiting a range of textures and morphologies, including adhering vitrified material, charcoal impressions and limited flow structures, but which cannot be associated with a specific process with a sufficient degree of confidence.

Unknown: 5 adjoining fragments of low density material with a planar morphology. Its upper surface displays ‘rings’ which are visible as laminae in section.

Interpretation: this material could not be identified and it is possible that it is not metallurgical in origin. However, its laminar structure suggests a possible sedimentary origin and one metallurgical possibility is that it is a quenching residue, formed from material accumulating in a vessel holding water used for quenching steel during smithing. If this is the case, the semi-regular shape of the object may preserve the morphology of the base of the vessel used.

Material Type	Weight (kg)	% Assemblage
Crucible	0.85	4.2
Hearth Bottoms	9.59	42.7
Iron Objects	0.14	0.7
Refractory/ Vitrified Material	3.0	15.4
Stone	0.03	0.15
Tap slag	2.64	12.9
Undiagnostic	4.46	23.0
Unknown	0.18	0.9

Table 16: Assemblage classification and quantification

As illustrated by Table 16, the assemblage is dominated by weight by SHBs which constitute 42.7% of the total. In part, this is due to the relatively large size of the individual hearth bottoms, but it is an indication of the importance of this type of waste in the assemblage. Undiagnostic slag and refractory/vitrified material dominate the remainder of the assemblage by weight, with tap slag fragments forming a relatively minor component.

Discussion

The Shortlands Lane assemblage of technological debris contains material derived from three different metallurgical processes: copper alloy processing, smelting and iron smithing. Copper alloy processing is represented by the two fragments of crucible recovered from context (885), a fill of pit [893]. The latter was a large rectilinear pit, possibly a pond bay or pool related to industrial activities or the leat system of Cullompton. According to the finds it contained, [893] was infilled during the 19th century and also contained a wide range of redeposited material. The crucible fragments are most likely of post-medieval date and, more specifically, probably originate in the Bilbie bell foundry known, from documentary evidence, to exist in the vicinity of the Shortlands Lane site in the late 18th century.

A total of 62 fragments of waste were classified as tap slag on the basis of their characteristic 'ropey' surface texture which is suggestive of formation and flow in a molten state. Tap slag is diagnostic of smelting, specifically that employing slag-tapping technology in which slag is released from the furnace during smelting in order to allow the process to continue for longer, thereby producing a higher volume of metal. This material is most likely to be derived from the smelting of iron as this activity is known to have been widespread in eastern Devon, probably using ores from the Blackdown Hills during both the Roman and Medieval periods.

As discussed, smithing hearth bottoms are an important part of the assemblage. A total of 21, some fragmentary, were recovered and constitute over 40% of the assemblage by weight. This type of waste is diagnostic of iron smithing. Also potentially deriving from smithing is the fragment of unknown material from context (136). If, as discussed (above), this is a quenching residue the implication is that steel was being processed at Shortlands Lane, and this represents a valuable addition to our knowledge of the iron-working technology of the South West.

Phase	Weight (kg)	% Assemblage
Prehistoric	<0.01	<0.05
Roman Phase 1	3.32	16.3
Roman Phase 2	1.28	6.3
Roman Phase 3	2.33	11.4
Roman Phase 4	0.58	2.8
Roman Phase 5	0.32	1.6
Roman unphased	0.4	2.0
Early post-medieval	0.45	2.2
Later post-medieval	7.37	36.1

Unphased	1.57	7.7
Residual/unstratified	2.7	13.2
Total	20.32	100

Table 17: Assemblage breakdown by stratigraphic phase

As can be seen from Table 17, very little of the metallurgical assemblage was recovered from Prehistoric contexts. In fact, only two probable iron objects originated in this phase and these are so small there is a reasonable possibility they are intrusive.

Metallurgical activity is first apparent in Roman Phase 1; material from this phase comprises just over 20% of the total and consists mostly of a mixture of hearth bottoms, vitrified material, and fragments of largely undiagnostic slag. Among the latter are tiny pieces retrieved from the residue after wet sieving, some of which are magnetic and others of which display a spheroidal morphology. These features and the combination of materials present are suggestive of iron smithing. This activity was probably taking place somewhere near the Shortlands Lane site, with waste being dumped in Pit [893] and Ditch [131]. Tap slag is almost absent from the Phase #1 assemblage, suggesting that no iron smelting was being undertaken in the vicinity.

After Phase #1 the character metallurgical assemblage in each phase changes. Hearth bottoms become rare and some of those that do occur are from residual contexts (e.g. context (849)). Tap slag fragments are concentrated either in Phase 3 or in unphased deposits, with only a scattering assignable to later phases. This would suggest that smelting activity in the vicinity of the site was concentrated in Phase 3. However, iron smelting using a slag-tapping technology generates large amounts of waste; these tend to accumulate in significant deposits and often include large fragments. The relatively small amount of material present on the site suggests it is unlikely that smelting was being undertaken on, or even very close to, Shortlands Lane. The tap slag on the site is most likely a 'background' level of material that might be expected to be present near a smelting site, but not immediately adjacent to it. Such smelting operations are known to have existed in the area around Cullompton in the Roman period, for example at Gingerlands (HER 35873; site located 2.5km to the south-west). Fragments would thus be present in the environment in moderate numbers before being incorporated into archaeological contexts. This conclusion is supported by the generally small fragment size and the levels of abrasion.

A more difficult question to assess is whether smithing continued in the vicinity after Phase 1. The relative absence of hearth bottoms after this point in time would seem to imply that it may have stopped with the stratigraphically later material being wholly residual, as is in the case of tap slag. However, hearth bottoms were recovered from contexts (125) and (964) belonging to Phase 3 which, in combination with the volume of material recovered from this phase, hints that smithing continued, at least until this point. It should also be remembered none of the metallurgical debris was recovered from primary contexts in association with the actual installations used in smithing. The workshop area was likely to be somewhere nearby in the area surrounding the site. Also, a major reorganisation occurred at the end of Phase 1 which most likely affected a wider area, perhaps including the smithing workshop. This may have been relocated so less waste was deposited on the Shortlands Lane site, though smithing continued as before.

Phases 4 and 5 saw further reorganisation of the site and a further decrease in the volume of metallurgical waste deposited, suggesting that smithing in the vicinity may have halted and the material present is residual.

The largest proportion of the assemblage (almost 40%) was recovered from post-medieval contexts. It is likely that a high proportion of this material is residual and re-deposited following disturbance of earlier features, many of which are likely to have been outside the area of the site. The exceptions are the crucibles which probably derive from a post-medieval bell foundry known to have existed nearby. It is possible that some of the refractory material recovered from these contexts may have a similar origin; it is difficult to be certain based on the available evidence, but a single fragment from (885) contained copper alloy residues.

Fragments of technological debris with no diagnostic composition or textures were recovered throughout the sequence with the exception of the Prehistoric phase. Small fragments, some of which were magnetic, or had spheroidal morphologies, similar to those from Roman Phase 1 were present in contexts of all phases and imply an origin in the smithing process.

Also recovered from throughout the sequence were 61 iron objects, all corroded to a variable degree. Many were unidentifiable, but 32 are probably nails, or parts of nails. The size of most suggests they are hobnails which have entered the archaeological record having fallen from a shoe. Their presence is interesting as it indicates the adoption of Romanized footwear on the site, even as early as Phase 1 and possibly in the Prehistoric phase although, as noted, the two nails recovered from this phase are possibly intrusive.

Conclusion

In summary, the Shortlands Lane metallurgical assemblage is dominated by the by-products of iron smithing which began during Roman Phase 1, probably in a workshop somewhere close to the site, with the waste material being deposited in convenient pits and ditches. A major reorganisation of the site and, probably, its surrounding area occurred at the start of Roman Phase 2. It is likely that the smithing workshop was affected by this as less material was deposited thereafter, although smithing probably still continued. A fragment of material, tentatively identified as residue from the quenching of steel, was recovered from this phase, If this identification is correct, this represents a rare and important find on a European scale as few have been recognised to date. It also has more local significance, as it indicates the working of steel on the site; a valuable addition to our knowledge of the capabilities of iron workers in the Roman South West. The interpretation of the Shortlands Lane site as a whole is important in this regard as it provides the social and economic context of the activity.

The available evidence suggests smithing may have declined from Phase 3, the material recovered from deposits dating to this period being residual, an interpretation strengthened by the frequency of residual ceramics on the site. Phase 3 also sees the increased occurrence of tap slag; while the amount of this material does not suggest the presence of smelting operations in the immediate vicinity of the site, it may suggest an increase in smelting in the wider area.

An assemblage of small iron objects, dominated by nails, probably hobnails, was also recovered from the site. This is of interest chiefly because, in common with other sites in the South West, it implies the adoption of Romanized forms of footwear by the occupants and, as such, provides an indicator of local cultural change under Roman rule.

Following the Roman period, the final period of metal-working occurred in the post-medieval period when a bell foundry is known to have operated within the immediate area. Two crucible fragments recovered from the fill of a 19th century pit are the most reliable evidence for this, although it is possible that some fragments of slag or vitrified material recovered from post-medieval contexts also derive from this source.

Recommendations

Ideally, the Shortlands Lane metallurgical assemblage should be retained in its entirety for future reference. However, as discussed above, a significant proportion of the material is probably residual in nature, with a commensurate reduction in its archaeological value. Thus, if necessary, parts of the assemblage can be discarded. The recommendations for the assemblage are:

1 - The most important aspect of the assemblage is the possible quenching residue from (136). Cakes of this material are rarely recognised in the archaeological record so an addition to the corpus available is valuable. However, at present the identification remains tentative and needs confirmation.

2 - The post-medieval crucible fragments should also be sent to a specialist for further comment and perhaps confirmation of date.

3 - The smithing hearth bottoms are good examples of their type with typical morphologies and textures and thus should be archived.

4 - The material from the Roman Phase 2 is most likely to be non-residual and should be archived.

5 - The tap slag from the site is residual as is, most probably, the material from phases after Roman Phase #2, and can thus be discarded if necessary. This should be undertaken responsibly in order to avoid contamination of the archaeological record.

Context	Classification	Max. Dimension (mm)	Weight (kg)	Abrasion?	Notes
Pre-Roman					
1518	iron object	15			×2 objects - non magnetic - little metal remaining
Roman Military					
954	undiagnostic slag	20	0.011		×12 fragments inc ×1 with spheroidal morphology.
954	iron object	20	0.004		×4 fragments, inc ×2 possible nail shafts
999	vitrified material	10			<0.001 kg
999	undiagnostic slag	25	0.027		×14 fragments, some magnetic, one with signs of flow
Roman Settlement Phase 1					
132	hearth bottom	140	1.315		high density, protrusion due to air supply, charcoal impressions
132	hearth bottom?	70	0.133		
132	vitrified material	50	0.039		
132	vitrified material	40	0.024		glassy texture, quartz fragments
132	vitrified material	30	0.006		
132	vitrified material	50	0.027		
132	undiagnostic slag	10	0.005	Y	×5 fragments, some magnetic
259	undiagnostic slag	10			×2 fragments, one magnetic
259	vitrified material	5			×2 fragments
285	hearth bottom	80	0.27		
882	hearth bottom?	100	0.223		protrusion due to air supply, dense, Fe oxide rich, stone inclusions
882	undiagnostic slag	55	0.089		protrusion on one side - possible SHB
884	hearth bottom	110	0.432		glassy texture on upper surface, convex base
884	hearth bottom	100	0.27		charcoal impressions, convex lower surface
884	hearth bottom	90	0.253		charcoal impressions
884	vitrified material	40	0.011		glassy texture
890	undiagnostic slag	30	0.008	Y	
890	vitrified material	90	0.184		adhering wall material, possible SHB
891	undiagnostic slag	5	0.002		×6 slag fragments including 1 magnetic w/ spheroidal morphology - possibly derived from smithing
891	iron object	20	0.005		×4 objects inc 2 possible nail shafts - magnetic
891	stone	20	0.003		
891	vitrified material	35	0.006		
891	vitrified material	20			
897	undiagnostic slag	15	0.004		×5 fragments, magnetic
897	vitrified material	30	0.003		
926	iron object	5			
Roman Settlement Phase 2					
103	tap slag	110	0.401		
103	undiagnostic slag	100	0.326	Y	
103	undiagnostic slag	40	0.029		
103	undiagnostic slag	25	0.004		slag prill
103	vitrified material	65	0.032		flow structure
103	vitrified material	35	0.008		
103	vitrified material	30	0.007		highly vitrified, glassy texture
103	vitrified material	10			<0.001 kg, black and finely vesicular, ×2 fragments
103	vitrified material	10			< 0.001 kg, black and finely vesicular
103	undiagnostic slag	20	0.005		×5 fragments, some magnetic
119	iron objects	10			×2 objects - possible nail shafts
119	hearth bottom	150	0.821		protrusion on upper surface possibly associated with air supply

119	hearth bottom	130	0.491		impression in upper surface probably due to air blast, charcoal impressions
119	hearth bottom	100	0.359		depression in upper surface probably due to air blast
119	hearth bottom?	90	0.235		iron oxide-rich
119	tap slag	40	0.018		
119	vitrified material	60	0.088		
119	vitrified material	90	0.212		one flat surface
119	vitrified material	55	0.044		
119	vitrified material	45	0.016		
134	undiagnostic slag	10	0.004		×7 fragments
134	iron object	10	0.003		×3 iron objects - ×2 probably nails - magnetic
136	unknown	160	0.18		possible residue from quenching, in ×5 fragments, laminar structure, low density
136	stone	30	0.002		heat altered
136	vitrified material	35	0.004		intensely vitrified, v low density
136	undiagnostic slag	10	0.002		×4 fragments, some magnetic
136	iron object	15	0.01		×11 objects inc ×8 probable nails
153	undiagnostic slag	20	0.003	Y	
278	tap slag	45	0.051		
284	undiagnostic slag	5			×1 fragment
800	vitrified material	40	0.015		
802	undiagnostic slag	5			
802	undiagnostic slag	65	0.099		
802	undiagnostic slag	60	0.042		
802	undiagnostic slag	60	0.027		
802	undiagnostic slag	50	0.023		
843	undiagnostic slag	20	0.005		×3 fragments
846	iron object	10			×1 nail
876	vitrified material	5	0.001	Y	×4 fragments
933	undiagnostic slag	20	0.005		×3 fragments
933	iron objects	10	0.002		×2 objects
934	iron object	15	0.004		×2 objects, non-magnetic - little metal remaining
934	undiagnostic slag	5			×6 fragments - some may be corrosion products.
Roman Settlement Phase 3					
125	hearth bottom	110	0.359		charcoal inclusions, iron oxide-rich, pronounced plano-convex shape
125	undiagnostic slag	15	0.001		
125	vitrified material	35	0.019		iron oxide rich
125	vitrified material	45	0.015		iron oxide-rich, charcoal inclusions
125	vitrified material	30	0.006		
125	vitrified material	10			<0.001 kg, black and finely vesicular
125	iron object	15	0.001		
125	undiagnostic slag	10	0.001		×2 fragments - magnetic
178	tap slag	50	0.066		
264 cleaning	undiagnostic slag	45	0.041	Y	
264 cleaning	undiagnostic slag	15	0.002		
264 cleaning	vitrified material	15			<0.001
264	undiagnostic slag	5	0.001		×11 fragments
264	tap slag	70	0.14	Y	
264	tap slag	30	0.017		
264	tap slag	30	0.016		
264	tap slag	35	0.015		

264	tap slag	30	0.014		
264	tap slag	30	0.011		
264	undiagnostic slag	25	0.003		
264	undiagnostic slag	10			<0.001
264	vitrified material	40	0.011		glassy texture
282	tap slag	40	0.034		
282	vitrified material	35	0.019		
282, 808	tap slag	40	0.037		
282, 808	tap slag	40	0.036		
282, 808	tap slag	50	0.013		
282, 808	tap slag	25	0.011		
282, 808	tap slag	25	0.008		
282, 808	undiagnostic slag	35	0.018	Y	
808 cleaning	tap slag	50	0.058		
808 cleaning	tap slag	35	0.032		
808 cleaning	tap slag	25	0.009		
808 cleaning	tap slag	20	0.004		
808 cleaning	undiagnostic slag	35	0.014		
808 cleaning	undiagnostic slag	30	0.009		
849	tap slag	90	0.325		
849	undiagnostic slag	75	0.158	Y	
849	hearth bottom?	90	0.134		possible hearth bottom fragment
849	vitrified material	55	0.069		
849	vitrified material	35	0.005		
849	vitrified material	75	0.114		
849	undiagnostic slag	20	0.006		×12 fragments, some magnetic
849	iron object	15	0.002		probable nail - magnetic
850	undiagnostic slag	20	0.01		×10 fragments some magnetic
850	iron object	15	0.004		×2 objects
952	undiagnostic slag	30	0.033		
960	hearth bottom	110	0.295		charcoal impressions, protrusion possible associated with air supply
960	vitrified material	30	0.01		sandy/gritty texture
964	hearth bottom?	110	0.364		iron oxide-rich, charcoal impressions, non magnetic
964	vitrified material	30	0.016		sandy/gritty texture
964	vitrified material	30	0.012	Y	sandy/gritty texture
970	vitrified material	30	0.017		
973	undiagnostic slag	25	0.012		×2 fragments, one with flow structure
987	tap slag	25	0.006		
293	iron objects	10	0.003		×3 objects
293	tap slag	35	0.024		
293	undiagnostic slag	15	0.003		
911 cleaning	tap slag	35	0.018	Y	
911	undiagnostic slag	15	0.01		×13 fragments
911	tap slag	45	0.023		
911	tap slag	30	0.019		
911	undiagnostic slag	45	0.03		
911	undiagnostic slag	20	0.005		
989	undiagnostic slag	90	0.138		
989	undiagnostic slag	45	0.115		massive texture, dense

989	iron objects	5	0.001		×2 objects - inc ×1 probable nail - magnetic
1513	undiagnostic slag	20	0.002		
1513	undiagnostic slag	15	0.001		
1513	undiagnostic slag	20	0.011		×14 fragments; some with platey morphology and small stones adhering - suggests possible corrosion products
1514	undiagnostic slag	5	0.009		×14 fragments, some possibly corrosion products or other concretions
1514	iron object	10			×2 probable nails
1521	iron objects	15	0.07		mostly non magnetic, identification suggested by morphology and texture
1521	undiagnostic slag	25	0.042		possibly mixed with natural concretions and vitrified material
1521	tap slag	40	0.023	Y	
Roman Settlement Phase 5					
196	hearth bottom?	90	0.334		high density, charcoal impressions
196	vitrified material	40	0.015		slag prill, flow structure
196	iron object	20	0.003		probable nail - magnetic
825	tap slag	35	0.007		
825	vitrified material	60	0.064		
825	vitrified material	10			<0.001kg
832	vitrified material	5		Y	×1 fragment
832	undiagnostic slag	10			×2 fragments
832	iron object	15	0.001		inc ×1 nail - magnetic
832	vitrified material	25	0.05		glassy texture
913	stone	45	0.014		possible heat-affected vesicular lava fragment
913	tap slag	90	0.179		
913	undiagnostic slag	85	0.114		
916	undiagnostic slag	25	0.018		×33 fragments - some magnetic
916	iron objects	15	0.004		×5 objects inc ×3 probable nails and nail shafts
916	undiagnostic slag	45	0.034	Y	
916	vitrified material	40	0.063		
927	undiagnostic slag	10	0.006		×8 fragments
927	iron object	20	0.009		×2 objects - probably nails
950	vitrified material	30	0.004		
979	undiagnostic slag	10	0.004		×2 fragments
979	vitrified material	10	0.001		
979	iron object	10			probable nail - magnetic
979	stone	40	0.008		heat affected
979	undiagnostic slag	60	0.034	Y	adhering wall material
Roman Settlement unPhased					
269	tap slag	35	0.018		
917	tap slag	20	0.004		×10 fragments total
917	vitrified material	20	0.003		glassy texture
958	vitrified material	30	0.007		glassy texture
959	tap slag	45	0.03		
969	tap slag	70	0.224	Y	underside smooth with rapid cooling texture
969	tap slag	50	0.034		
969	tap slag	30	0.012		
969	vitrified material	50	0.038		glassy texture
1565	undiagnostic slag	15	0.245		slag prills, ×159 fragments, some magnetic
1566	undiagnostic slag	15	0.063		×109 fragments, mostly amorphous, some with platey, flattened morphology, some near spheroidal.

1566	undiagnostic slag	40	0.012		charcoal impressions, flow structure
1566	undiagnostic slag	40	0.009		charcoal impressions, flow structure
1566	undiagnostic slag	40	0.008		flow structure
1566	vitrified material	30	0.269		×8 fragments w charcoal impressions; possible fragmented SHB.
976	undiagnostic slag	10	0.001		×1 fragment
976	iron object	10	0.004		×4 objects inc ×3 nails
977	iron object	30	0.011		×4 objects inc ×1 large probable nail; mostly non-magnetic, little metal remaining
977	undiagnostic slag	25	0.01	Y	×2 fragments
Medieval and Post-Medieval					
105	vitrified material	80	0.108		
107	tap slag	35	0.019		
111	undiagnostic slag	90	0.383	Y	massive texture
111	undiagnostic slag	80	0.197	Y	
111	undiagnostic slag	50	0.067	Y	massive texture
111	undiagnostic slag	50	0.049	Y	
111	undiagnostic slag	40	0.027	Y	
111	undiagnostic slag	35	0.022	Y	
111	vitrified material	35	0.015		
117	tap slag	25	0.01		
113	tap slag	25	0.004		
176	hearth bottom?	90	0.236		
176	tap slag	40	0.028	Y	
176	tap slag	40	0.017	Y	
176	undiagnostic slag	60	0.15	Y	
176	undiagnostic slag	45	0.022	Y	
176	vitrified material	20	0.004		flow structure
181	undiagnostic slag	60	0.049	Y	
181	undiagnostic slag	45	0.03		
181	undiagnostic slag	30	0.007	Y	
181	vitrified material	70	0.103		
181	vitrified material	35	0.011		glassy texture
181	vitrified material	30	0.003		
188	vitrified material	25	0.002		
194	tap slag	55	0.058		
194	vitrified material	30	0.009		vitrified, glassy surface
217	undiagnostic slag	80	0.135		
227	undiagnostic slag	100	0.292		
227	undiagnostic slag	35	0.013	Y	
227	undiagnostic slag	30	0.01	Y	
227	undiagnostic slag	30	0.009	Y	
227	undiagnostic slag	10	0.002	Y	
227	undiagnostic slag	40	0.089		×22 fragments
227	vitrified material	40	0.037		glassy texture
245	tap slag	40	0.015		
245	undiagnostic slag	60	0.159		massive texture
245	undiagnostic slag	25	0.009		
260	undiagnostic slag	45	0.029		
260	undiagnostic slag	25	0.011		
260	undiagnostic slag	20	0.005		

260	undiagnostic slag	15	0.001		
266	undiagnostic slag	90	0.322		massive texture, dense
266	tap slag	35	0.009		
299	tap slag	55	0.055		
299	undiagnostic slag	40	0.023		
815	tap slag	35	0.027		
815	vitrified material	30	0.015		charcoal inclusions
877	tap slag	55	0.072		
878	undiagnostic slag	25	0.01	Y	
885	crucible fragment	120	0.657		heavily vitrified exterior, copper oxide residues in interior, corroded iron material adhering to side.
885	crucible fragment	85	0.191		copper oxide residues on interior, heavily vitrified exterior
885	hearth bottom	120	0.706		
885	hearth bottom	110	0.633		slight protrusion on one side probably associated with air supply
885	hearth bottom	95	0.285		well-formed plano-convex morphology
885	hearth bottom?	120	0.593		probably hearth bottom with protrusion on one side probably associated with air supply
885	undiagnostic slag	120	0.518		possible hearth bottom, poorly formed plano-convex morphology
885	vitrified material	50	0.521		iron oxide-rich, charcoal impressions, possible SHB
885	vitrified material	80	0.191		copper oxide residues
885	vitrified material	75	0.093		low density
885	vitrified material	90	0.088		copper oxide residues
885	vitrified material	80	0.095	Y	
1501	tap slag	30	0.017		
1501	tap slag	35	0.017		
1505	tap slag	35	0.012		
1505	undiagnostic slag	65	0.067	Y	massive texture
1505	undiagnostic slag	40	0.031		
1507	tap slag	55	0.068		
1507	tap slag	20	0.005		
1523	tap slag	20	0.005		
1578	vitrified material	65	0.113		
Unstratified					
Unstratified	tap slag	90	0.266		
Unstratified	vitrified material	55	0.033		
Unstratified	vitrified material	90	0.115		glassy texture
Unstratified	vitrified material	60	0.035		glassy texture
		Total debris	20.414		

Table 18: Concordance of metallurgical debris.

Appendix 16

The Romano-British Quern Fragment, *by Sue Watts with Roger Taylor*

Description
About one third of a neatly made upper stone of a rotary quern, from context (989). It has a flat top with the remains of a collar around the eye and a concave grinding surface. The grinding surface is worn and smooth, especially around the periphery but there is some surviving evidence of pecking. There is no evidence of a handle hole in the surviving fragment from Cullompton and it is possible that the stone was turned by means of a handle attached to an iron band around the circumference as on a complete quern found at the fort at Chesters on Hadrian's Wall (Watts 2002, 37), although there is no evidence of iron staining on the surviving fragment. The original diameter of the stone was circa 46.0cm.

The form and size of the quern, with its concave grinding surface and slight collar around the eye, is typical of the querns that came into use in the later Roman period (Watts 2002, 37). It is broadly similar to a fragment found near Billany Farm, Dartington in South Devon and also to those found at Chew Park and Camerton, Somerset (Watts and Taylor 2010, 179; Rahtz and Greenfield 1977, 202; Wedlake 1958, 244).

L33.8cm/W18.2cm/Th3.1cm over the collar, 2.8 behind the collar and 4.6cm at the edge; weight 2.749kg.

Provenance
The rock is silicified glauconitic sandstone consisting predominantly of quartz with some feldspar and rare black tourmaline grains and muscovite flakes.

This rock is characteristic of silicified beds in the decalcified Blackdown Facies of the Upper Greensand (Cretaceous). The decalcified facies extends over a triangular area from Blackborough in the north to Yarcombe in the east and Peak Hill in the south. The open texture of the rock is characteristic and results from the original decalcification of the rock and the weathering-out of the soft glauconite.

The worked rock is normally a greyish buff colour; the brownish colour of the quern probably results from staining by the red Permian soils of the Cullompton area

This is the first example of the use of the silicified Upper Greensand for quern production that I have come across. The Blackborough-North Hill scarp was one of the centres for the production of Devonshire Batt whetstones, and lies about 7 km east of Cullompton. This is the most likely source area for the quern. The rock was also popular for manufacture of spindle whorls. A significant proportion of those in the RAM Museum are made of this rock.

Appendum *by Bryn Morris*
Note that a possible millstone of glauconitic sandstone was recovered from Phase Vc (later C4) villa at Higher Holcombe Farm, Uplyme (Pollard 1974, 152), and two 'Greensand' quern fragments were recovered from the C3/C4 levels at Pomeroy Wood (Fitzpatrick *et al.* 1999, 281). This may be enough to suggest there was a minor local industry operating in the Blackdowns during the later Roman period.

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Figure 66: The quern fragment from fill (989), upper surface (scale in cm).

Figure 67: The quern fragment from fill (989), grinding surface (scale in cm).

Appendix 16

The Medieval and Post-Medieval Pottery
by Bryn Morris, identifications by John Allan and Graham Langman

Introduction
A total of 2339 sherds weighing 52.88kg of medieval and post-medieval pottery were recovered from 62 contexts during the excavation. The bulk of this material (40.697kg) was recovered during the topsoil strip; the unstratified material was scanned, recorded, and the common and undiagnostic material discarded.

Quantification
A large amount of white refined earthenware was recovered (225 sherds, 4.749kg), most of which came from the topsoil, context (885) and context (111). On a subjective note, most of the material from the topsoil strip actually came from (885), with relatively little WRE present in either the upper (100) or the lower (101) topsoils on site.

The assemblage is dominated by South Somerset coarsewares: 1656 sherds weighing 40.697kg, or 77% of the total. Not unexpected, most of the material came from the topsoil (1049 sherds, 25.961kg), the backfill (885) of the large 19th century Pond Bay [893] (200 sherds, 7.175kg), and the fill (111) of the disturbed robber trench for wall {276} (192 sherds, 3.118kg). This material includes cups, plates, dishes, jugs and storage vessels, and exhibits the usual range of sgraffito decoration; the bulk of the material dates to the later 17th and 18th century, with only a few pieces (most notably a 16th century storage jar with thumbed decoration below the rim, and a 15th century barley-twist handle) dating to the earlier post-medieval period.

North Devon wares are present, but in very small quantities (15 sherds, 0.284kg). Surprisingly, this includes both the attractive 17th century Sgraffito tablewares and the more utilitarian post-medieval gravel-tempered coarsewares. Two sherds (0.138kg) of post-medieval Totnes-type ware are also present. The dominance of South Somerset material is not surprising – Cullompton lies *c.*15km away from the known production centres at Hemyock and Honiton, and only 30km from Donyatt, as opposed to 50km+ overland to the North Devon centres. This is in accordance with the picture from Exeter, and in marked contrast to Crediton, where North Devon wares were dominant in the 18th century (Allan & Langman 2010, 153).

In terms of the finer wares, most of the Bristol/Staffordshire yellow slipwares (109 sherds, 0.662kg), Westerwald stonewares (66 sherds, 0.662kg) and Mottled wares (17 sherds, 0.183kg) are represented by closed forms or tankards, reflecting a demand for drinking vessels. In terms of higher status tablewares, there are 34 sherds (0.226kg) of Delft-type tin-glazed vessels, English or Dutch 17th-18th century, and a single sherd from a Saintonge chafing dish (19g).

Surprisingly little medieval and early post-medieval material was recovered (48 sherds, 0.376kg), and most of this was abraded or heavily abraded. This reflects a general lack of medieval contexts. A relatively large proportion of the medieval material belonged to the Exeter Fabric 23 group; vessels of this fabric are less common in Exeter itself, which might suggest the Exeter 23 potter was (more) local to Cullompton. Only one tiny sherd (1g) of Upper Greensand-tempered pottery could be dated to before the 13th century.

Conclusion
This is a relatively large assemblage of material that contributes to our understanding of the overall character of ceramic supply and demand in Devon. With the exception of Crediton (Allan *et al.* 2010), and the production site at Hemyock, this is one of the larger assemblages from inland Devon. It demonstrates that in the 17th and 18th centuries the products of the South Somerset potteries dominated, supplemented by finer tablewares – especially drinking vessels – imported from elsewhere.

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Fill	Block	Notes	Count	Wgt. kg	Ware
Topsoil		strip	1049	25.682	S. Somerset wares, mainly C18; ×1 Pot handle, ×18 Jar and jug handles, ×4 Cup handles, ×1 Handle nub, ×15 Cup rims, ×1 Bowl basal angle, ×15 Bowl base, ×13 Dish, ×2 IF?, ×10 Bowl rim, ×27 Bowls, ×29 Dish rims, ×11 Type I bowl, ×21 Type II bowl, ×22 Type III bowl, ×20 type IV bowl, ×9 Dish bases, ×3 eC17 separation dish, ×22 Cups
			2	0.206	S. Somerset ware, storage jar with thumbed rim, C16-eC17
			1	0.073	S. Somerset ware, barley-twist handle, C15-eC16
			40	2.393	English stoneware, C19; ×1 bottle marked" T.Dyer St Thomas Exeter Gin"
			61	0.337	Bristol/Staffs Yellow Slipware, mainly closed form
			16	0.182	Mottled ware, tankards
			10	0.12	Stoneware, Frechen; ×1 jug lC16-eC17; ×9 up to 1720
			44	0.431	Westerwald stoneware, mainly tankards
			28	0.16	English stoneware, C18 tankard
			15	0.106	White stoneware, C18
			4	0.095	Chinese porcelain; ×2 famille-rose style cup, 1740-60; ×2 blue&white 1720-50
			15	0.162	Tin glaze; ×2 e-midC18 dishes; ×1 drug jar C17-eC18; ×1 London lobed dish 'chinaman among grasses', *c.*1680; ×1 bleu de Nevers, 1680-90; ×4 lC17-C18; ×4 London or Bristol, eC18
			4	0.045	North Devon Yellow Slipware; ×3 Sgraffito
			3	0.117	North Devon gravel-tempered, post-med
			2	0.138	Totnes-type, bucket-handled pot, post-med
			52	2.738	WRE [retained: ×12]
			3	0.066	Jackfield type ware C19
			1	0.004	Black Basalt ware
			7	0.023	Scratch Blue
			5	0.132	Flowerpot
			14	0.214	Medieval; ×3 S. Somerset ware, C14-eC16; ×1 North Devon Gravel-tempered, e.C16; ×3 Exeter F42, lC13-C14; ×3 plain S. Somerset ware, C15-C16; ×3 Exeter F43, C14-C15; ×1 unclassified
101		cleaning	3	0.014	S. Somerset wares, post-med
			1	0.016	Westerwald stoneware, C18
103			3	0.011	medieval
105		cleaning	3	0.095	S. Somerset wares
			1	0.001	WRE flow blue
			1	0.004	Border Ware
105			17	0.044	S. Somerset wares, C18
			1	0.017	S. Somerset wares, C17?
			5	0.011	White stoneware, C18
			1	0.004	Westerwald stoneware, C18
			1	0.001	?Frechen stoneware
			3	0.003	Bristol/Staffs Yellow Slipware, closed form
			1	0.001	Mottled ware tankard, C18
			2	0.003	Tin-glaze, plain cup handle
			1	0.006	North Devon Sgraffito
107			4	0.038	S. Somerset wares, C18
			3	0.007	WRE
111			106	1.498	S. Somerset wares, largely C18
			3	0.048	S. Somerset ware, post-med
			51	0.336	WRE
			2	0.099	Flowerpot
			14	1.051	English stoneware, C19, single vessel
			5	0.027	Red Industrial Slipware
			3	0.006	White stoneware, C18
			6	0.043	Bristol/Staffs Yellow Slipware, closed form & plate
			1	0.005	English stoneware , C18
			1	0.005	medieval, Exeter Fabric 23, lC13-C14
113			38	0.3	S. Somerset wares C18
			1	0.076	Flowerpot
			22	0.062	WRE
116			7	0.094	S. Somerset wares, C18
			1	0.003	Bristol/Staffs Yellow Slipware, closed form
			1	0.001	Medieval, scrap
125			1	0.002	Medieval
132	34		1	0.006	Medieval
138			2	0.029	S. Somerset wares, C18
			3	0.032	WRE
			1	0.006	Bristol/Staffs Yellow Slipware, closed form
			1	0.013	Westerwald stoneware, C18
146			3	0.015	S. Somerset wares, C18
176					Medieval
180			10	0.204	S. Somerset wares, C17
			2	0.012	Tin-glaze; ×1 with manganese mottling (Lambeth), 1620-60
			1	0.023	Saintonge or Border Ware, eC17

194			2	0.006	Medieval; ×1 North Devon, C14-eC16; ×1 ??Exeter F43
204			5	0.031	S. Somerset ware, C18
			1	0.01	Medieval, Exeter F42, C14-eC15
			1	0.004	Bristol/Staffs Yellow Slipware, closed form
217			5	0.016	S. Somerset ware, C18
			2	0.001	WRE
			2	0.003	Bristol/Staffs Yellow Slipware, closed form
219			5	0.098	S. Somerset wares, C18
			1	0.001	White slip? Prob. S. Somerset
			1	0.001	White stoneware, C18
			1	0.002	Bristol/Staffs Yellow Slipware, closed form
221			2	0.026	S. Somerset ware, C17-C18
225			1	0.001	Bristol/Staffs Yellow Slipware, late C17
227			8	0.375	S. Somerset ware, C17; ×3 from single vessel, a broken jar pecked down to form a bowl
			2	0.009	Medieval; ×1 Exeter F42, jug, C14-C15; ×1 Exeter F43 C14-C15
233			1	0.007	S. Somerset ware, C17
241			2	0.054	S. Somerset ware, C18
245			1	0.131	S. Somerset ware, large plain bowl, C18
250			1	0.027	S. Somerset ware, post-med
260			94	0.914	S. Somerset ware, C17-C18
			15	0.063	Bristol/Staffordshire yellow slipware
			2	0.006	Westerwald stoneware, C18
			5	0.009	Tin-glaze, purple & blue, bowl, e-midC17
			1	0.004	North Devon Sgraffito, C17
			2	0.017	North Devon gravel-tempered, post-med
			1	0.001	Saintonge plain unglazed ware, C16
			2	0.011	White stoneware, C18
			1	0.002	English stoneware, C18, tankard
261			54	2.785	S. Somerset ware, C17-C18
			19	0.284	WRE
			1	0.07	English stoneware, C19
			1	0.021	Black Basalt stoneware, 1780-1820
			1	0.004	Westerwald stoneware, tankard, C18
			2	0.006	Bristol/Staffs Yellow Slipware, closed form, e-midC18
			1	0.004	Tin glaze, C18, ???Portuguese
264		cleaning	1	0.008	'Donyatt Gritty Ware', jar, lC15-C16
266			47	0.804	S. Somerset ware, C17-C18; ×1 cup base; ×1 dish with pie crust rim
			1	0.046	North Devon gravel-tempered, post-med
			2	0.059	Westerwald stoneware, C18, tankard
			1	0.006	Chinese porcelain, later C18
			1	0.001	Tin glaze, plain, C18
			1	0.002	Medieval, unclassified
282			1	0.009	S. Somerset ware, C16-C17
			1	0.006	Medieval, Exeter F43, lC13-C15
297			5	0.144	S. Somerset ware, C17-C18; ×1 posset pot
299			14	0.151	S. Somerset ware, C17-C18; ×1 cup base
			1	0.005	North Devon gravel-tempered, post-med
			1	0.001	Tin glaze, plain
			1	0.019	Saintonge chafing dish, C16
849			1	0.005	S. Somerset ware, C17-C18
			1	0.002	Medieval, Exeter F23, C13-C15
885			112	5.54	S. Somerset ware, C18-C19; cup bases, heavy bowls, dishes
			1	0.176	S. Somerset ware, storage jar with thumbed decoration below the rim, C17
			52	0.883	WRE
			14	0.128	Westerwald stoneware, tankard
			1	0.004	Tin glaze, plain, C18
			4	0.125	English stoneware, C19
			1	0.036	Flowerpot
			1	0.063	Bridgewater coarseware, C19
			12	0.176	Bristol/Staffs Yellow Slipware, closed form and plate
			2	0.044	North Devon Sgraffito
887			4	0.177	S. Somerset ware, C18-C19
			1	0.041	WRE
			1	0.04	Flowerpot
901			2	0.013	S. Somerset ware, C17
			1	0.006	Stoneware, Raraen, 1480-1560
905		cleaning	1	0.009	S. Somerset ware, trailed slip, ?chamber pot, 1720-60
909			1	0.026	S. Somerset ware, jar, C17
			1	0.001	Medieval, Upper Greensand, 950-eC14
911			1	0.006	S. Somerset ware, C18
			1	0.006	Flowerpot
			1	0.009	Medieval, S. Somerset ware, C15-C16
916			1	0.002	Medieval, S. Somerset ware, jug, C14-C15

917			2	0.001	Medieval, scraps, ×1 S. Somerset ware, jug, C15-C16
921			1	0.03	S. Somerset lC16-C17
			1	0.001	Medieval, Exeter F23, C13-C14
943			21	0.508	S. Somerset ware, C17-C18
			14	0.354	WRE
			3	0.105	Flowerpot
			2	0.014	Bristol/Staffs Yellow Slipware
			1	0.019	English stoneware, C19
			1	0.003	Tin glaze, tiny cup, C18
945		cleaning	3	0.019	S. Somerset ware, C18
			2	0.003	WRE
946		cleaning	1	0.004	S. Somerset ware, lC16-C17
			1	0.005	Medieval, S. Somerset, C15-C16
950	6		1	0.001	S. Somerset ware, C17
			1	0.002	Westerwald stoneware C17
952			1	0.02	S. Somerset ware, C16-C17
			1	0.016	'Donyatt Gritty Ware', lC16-C17
975			2	0.007	Medieval; ×1 Exeter F23; ×1 Exeter F42, jug, lC13-C14
977			1	0.006	Medieval, unclassified, prob. S. Somerset, jug, C14-C15
979			1	0.005	Medieval, S. Somerset, jug, C14-C15
983			2	0.018	Tin glaze, Delft-type drug jar, C16-C17
987	10		1	0.013	S. Somerset ware, C18
992			1	0.127	S. Somerset ware, eC17
			3	0.007	WRE
1505			3	0.009	Medieval; ×1 Exeter F43 jug C14-C15; ×1 S. Somerset jug C15-C16
1507			1	0.006	S. Somerset ware, post-med
			1	0.002	Red refined earthenware, C18-C19
1512			1	0.007	S. Somerset ware, C15-C16
1523			1	0.002	Medieval , S.Somerset ware, C14-C15
1527			1	0.03	S. Somerset ware, C18
			1	0.004	Tin glaze, plain, eC18,
1572			1	0.014	S. Somerset ware, C17
1574			1	0.014	S. Somerset ware, post-med
1578			3	0.022	S. Somerset ware, C17, bowl
			1	0.003	Tin glaze, manganese mottling 1620-40
Totals			**2339**	**52.88**	

Table 19: Medieval and post-medieval pottery by context (weight in kg).

	S. Somerset C17-C18		S. Somerset C15-C16		WRE		Industrial Slipware		Bristol/Staffs YS		North Devon GTP		North Devon Sgraffito		Westerwald Stoneware		Other German Stonewares		White Stoneware C18		English Stoneware C19		Chinese Porcelain		Mottled Ware		Tin Glaze		Totnes Type		Jackfield Type		Black Basalt Ware		Scratch Blue		Flowerpot		Medieval		Border Ware		Saintonge		Bridgewater		TOTAL COUNT	TOTAL WEIGHT
CONTEXT	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.	no.	wgt.		
topsoil	1049	25682	3	279	52	2738			61	337	3	117	4	45	44	431	10	120	15	106	68	2553	4	95	16	182	15	162	2	138	3	66	1	4	7	23	5	132	14	214								1376	33424
101 c	3	14													1	16																														4	30
103																																						3	11							3	11
105 c	3	95			1	1																																	1	4					5	100
105	18	61							3	3			1	6	1	4	1	1	5	11					1	1	2	3																	32	90
107	4	38			3	7																																							7	45
111	106	1498	3	48	51	336	5	27	6	43									3	6	15	1056															2	99	1	5							192	3118
113	38	300			22	62																															1	76							61	438
116	7	94							1	3																													1	1							9	98
125																																							1	2							1	2
132																																							1	6							1	6
138	2	29			3	32			1	6					1	13																															7	80
146	3	15																																													3	15
176																																															0	0
180	10	204																									2	12													1	23					13	239
194																																							2	6							2	6
204	5	31							1	4																													1	10							7	45
217	5	16			2	1			2	3																																					9	20
219	6	99							1	2									1	1																											8	102
221	2	26																																													2	26
225									1	1																																					1	1
227	8	375																																					2	9							10	384
233	1	7																																													1	7
241	2	54																																													2	54
245	1	131																																													1	131
250	1	27																																													1	27
260	94	914							15	63	2	17	1	4	2	6			2	11	1	2					5	9															1	1					123	1027
261	54	2785			19	284			2	6					1	4					1	70					1	4					1	21													79	3174
264																																							1	8							1	8
266	47	804									1	46			2	59							1	6			1	1											1	2							53	918
282	1	9																																					1	6							2	15
297	5	144																																													5	144
299	14	151									1	5															1	1															1	19					17	176
849	1	5																																					1	2							2	7
885	112	5540	1	176	52	883			12	176			2	44	14	128					4	125					1	4									1	36							1	63		200	7175
887	4	177			1	41																															1	40									6	258
901	2	13															1	6																													3	19
905	1	9																																													1	9
909			1	26																																			1	1							2	27
911	1	6																																			1	6	1	9							3	21
916																																							1	2							1	2
917																																							2	1							2	1
921	1	30																																					1	1							2	31
943	21	508			14	354			2	14											1	19					1	3									3	105									42	1003
945	3	19			2	3																																									5	22
946			1	4																																			1	5							2	9
950	1	1													1	2																															2	3

952	1	20																																					1	16							2	36
975																																							2	7							2	7
977																																							1	6							1	6
979																																							1	5							1	5
983																											2	18																			2	18
987	1	13																																													1	13
992			1	127	3	7																																									4	134
1505																																							3	9							3	9
1507	1	6			1	2																																									2	8
1512			1	7																																											1	7
1523																																							1	2							1	2
1527	1	30																									1	4																			2	34
1572	1	14																																													1	14
1574	1	14																																													1	14
1578	3	22																									1	3																			4	25
TOTALS	**1645**	40030	**11**	667	**226**	4751	**5**	27	**108**	661	**7**	185	**8**	99	**67**	663	**12**	127	**26**	135	**90**	3825	**5**	101	**17**	183	**33**	224	**2**	138	**3**	66	**2**	25	**7**	23	**14**	494	**46**	346	**2**	27	**2**	20	**1**	63	**2339**	52880

Table 20: Concordance of medieval and post-medieval pottery (weight in grammes).

Appendix 18

The Clay Tobacco Pipes, *by Bryn Morris & Holly Hunt-Watts*

Introduction

The excavations at Shortlands Lane have recovered the single largest assemblage of clay pipe bowls from the town: 1010 fragments weighing 4.835kg. This assemblage comprised: 758 stems, 81 stem/heel, 109 bowl fragments and 62 complete bowls, derived from 28 contexts, but largely unstratified.

Most of this material was recovered during the topsoil strip, but there are a number of stratified examples. The many unstratified examples included in the catalogue are intended to provide a baseline database for the town, which subsequent investigations may refine. The material was quantified and recording according the methodology outlined in Higgins & Davey 2004.

Catalogue

1. Bowl, *c.*1610-40, stem bore 7/64". Rim bottered and three-quarters milled. Unstratified.
2. Bowl, *c.*1640-60, stem bore 7/64". Rim bottered and half milled. Context (116).
3. Bowl, *c.*1660-80, no stem. Rim cut and three-quarters milled. Context (180).
4. Bowl, *c.*1660-90, stem bore 9/64". Rim bottered with an internal knife cut and fully milled. Context (117).
5. Bowl, *c.*1660-90, no stem. Rim wiped and unmilled, but has a plain groove all around. Context (180).
6. Bowl, *c.*1660-90, stem bore 7/64". No rim surviving but an internal knife cut is present. Unstratified.
7. Bowl, *c.*1690-1730, stem bore 7/64". Rim bottered and fully milled with an internal knife cut. Unstratified.
8. Bowl, *c.*1690-1730, stem bore 7/64". Rim wiped and milled around the surviving portion. Unstratified.
9. Bowl, *c.*1660-90, stem bore 9/64". Rim bottered and three-quarters milled. Unstratified.
10. Bowl, *c.*1660-90, stem bore 8/64". Rim wiped and fully milled. Unstratified.
11. Bowl, *c.*1660-90, stem bore 7/64". Rim bottered and fully milled. Context (266)
12. Bowl, *c.*1680-1720, stem bore 8/64". Rim bottered and fully milled around the surviving portion. Unstratified.
13. Bowl, *c.*1670-90, stem bore 6/64". Rim bottered and fully milled. Context (105).
14. Bowl, *c.*1660-90, stem bore 7/64". Rim cut and fully milled around the surviving portion with an internal knife cut. Unstratified.
15. Bowl, *c.*1680-1720, stem bore 7/64". Rim cut and three-quarters milled. Context (260).
16. Bowl, *c.*1680-1720, stem bore 9/64". Rim wiped and roughly milled. Unstratified.
17. Bowl, *c.*1660-90, no stem. Rim bottered and milled around surviving portions. Unstratified.
18. Bowl, *c.*1660-90, stem bore 8/64". Rim bottered and fully milled. Context (180)
19. Bowl, *c.*1670-1700, stem bore 6/64". Rim bottered and milled around surviving portions. Unstratified.
20. Bowl, *c.*1660-80, 8/64". No surviving rim but evidence of milling on surviving portions. Unstratified.
21. Bowl, *c.*1670-1690, stem bore 9/64". Rim bottered and three-quarters milled. Context (1505)
22. Bowl, *c.*1660-80, stem bore 8/64". Rim bottered and one-quarter milled. Context (180).
23. Bowl, *c.*1680-1720, stem bore 8/64". Rim bottered and fully milled. Unstratified.
24. Bowl, *c.*1690-1730, stem bore 7/64". Rim bottered and fully milled with an internal knife cut. Unstratified.
25. Bowl, *c.*1660-90, stem bore 7/64". Rim bottered and fully milled. Unstratified.
26. Bowl, *c.*1660-80, stem bore 7/64". Rim bottered and fully milled with an internal knife cut. Unstratified.
27. Bowl, *c.*1670-90, stem bore 7/64". Rim and three-quarters milled. Context (266)
28. Bowl, *c.*1690-1730, stem bore 8/64". Rim bottered and has a plain groove around three-quarters. Unstratified.
29. Bowl, *c.*1690-1730, stem bore 8/64". Rim bottered and one-half milled. Unstratified.
30. Bowl, *c.*1690-1700, stem bore 6/64". Rim wiped and milling is present on surviving portion. Unstratified.
31. Bowl, *c.*1690-1730, stem bore 8/64". Rim cut and three-quarters milled with an internal knife cut. Unstratified.
32. Bowl, *c.*1690-1700, stem bore 7/64". Rim bottered and fully milled. Unstratified.
33. Bowl, *c.*1690-1730, stem bore 8/64". Rim wiped and fully milled with an internal knife cut. Unstratified.
34. Bowl, *c.*1690-1730, stem bore 7/64". Rim bottered and fully milled. Unstratified.

35. Bowl, *c.*1690-1720, stem bore 8/64". Rim bottered and three-quarters milled. Unstratified.
36. Bowl, *c.*1690-1730, no stem. Rim wiped and fully milled. Unstratified.
37. Bowl, *c.*1690-1730, stem bore 5/64". Rim bottered and three-quarters milled also with milling 13mm below the rim running parallel to it around one-quarter of the bowl. Unstratified.
38. Bowl, *c.*1660-1720, stem bore 6/64". Rim cut, no milling. Context (266).
39. Bowl, *c.*1670-1720, stem bore 8/64". Rim wiped and one-quarter of the surviving portion milled. Unstratified.
40. Bowl, *c.*1690-1730, stem bore 9/64". Rim bottered and milled. Context (266).
41. Bowl, *c.*1670-1700, stem bore 8/64". Little rim survives, evidence of milling. Context (180)
42. Bowl, *c.*1700-30, stem bore 8/64". Rim cut and fully milled. Unstratified.
43. Spur bowl, *c.*1700-40, stem bore 6/64". Rim bottered with milling around the surviving portion and an internal knife cut. Context (266).
44. Bowl, *c.*1820-40, stem bore 6/64". Rim cut and fully milled with an internal knife cut and maker's marks "PK" in position BS. Unstratified.
45. Bowl, *c.*1700-1760, stem bore 5/64". Rim wiped and an internal knife cut. Unstratified.
46. Bowl, *c.*1820-30, no stem. Rim cut and fully milled with an internal knife cut. Unstratified.
47. Bowl and stem, *c.* 1700-40, stem bore 5/64". Rim cut and not milled with an internal knife cut. Stamp present in position BR. Unstratified.
48. Bowl, *c.*1700-60, stem bore 6/64". Rim cut, no milling. Context (105).
49. Bowl, *c.*1716-41, stem bore 5/64". Rim wiped andfully milled on surviving portions with an internal knife cut. Marked with a stamp "PK" in the position BL (as Oswald, 1984). Unstratified.
50. Bowl, *c.*1700-1770, stem bore 7/64". Rim cut and no milling. Unstratified.
51. Bowl with most of stem, *c.* 1820-40, stem bore 5/64". Rim cut and no milling. Unstratified.
52. Bowl, *c.*1820-30, stem bore 6/64". Rim cut and no milling with an internal knife cut. Unstratified.
53. Bowl, *c.*1820-30, no stem. Rim cut and fully milled with an internal knife cut. Small, star-shaped mark on one side of the body. Unstratified.
54. Bowl, *c.*1740-1800, stem bore 5/64". No surviving rim. "PK" stamp in position BL. Unstratified.
55. Bowl, *c.*1700-40, stem bore 5/64". Rim cut and one-half milled with an internal knife cut star-shaped mark in position BL. Unstratified.
56. Bowl, *c.*1700-40, no stem. Rim cut and fully milled with an internal knife cut. Mark "IL" in position BL (as Allan, Blackmore and Passmore 2010). Unstratified.
57. Bowl, *c.*1740-70, no stem. Rim cut, no milling. K dotted in relief in position BL (as Oswald, 1984). Context (943).
58. Bowl, *c.*1820-40, stem bore 6/64". Rim wiped and the body is highly decorated with fluted design interposed with leaf designs on both moulded seams. Maker's marks, "C", are in position SH. Context (111).
59. Bowl, *c.*1820-30, stem bore 5/64". Rim wiped, leaf decorated moulded seams and fluted decoration on the rest of the body. Unstratified.
60. Bowl, *c.*1820-30, stem bore 5/64". Rim cut and the body is decorated with a fluted design. Unstratified.
61. Stem, stem bore 3/64". Stem bearing the words UNDERHILL and OLLUMPTON on either side. Unstratified.
62. Stem, stem bore 7/64". Abraded marks in position SH. Context (266).
63. Heel and partial stem, *c.*1820-30, stem bore 5/64". Start of a fluted design and an "S" in position SS. Unstratified.
64. Foot, *c.*19th century, stem bore 5/64". The start of a fluted design. Unstratified.
65. Foot. Circular marks in position SH. Context (260).
66. Partial bowl, *c.*1840-90, no stem. Rim cut with a design of leaves. Unstratified.

Discussion

The assemblage, although largely unstratified, provides a good sample of the pipes being used in Cullompton from *c.*1620-1900, and is one of the larger assemblages from an inland Devon town. It is unclear whether there was a pipemaker in the town – none of the material appears to be production waste – but the presence of a stem marked 'UNDERHIL' and 'OLLUMPTON' strongly suggests there was a pipemaker in the town. The narrow stem bore (3/64") of the piece would suggest this pipemaker was operating in the 19th century. The only Underhill in Cullompton in the 1841 Census was a *professor of music* and his family, but it is not impossible the bell founders on the New Cut had a sideline in clay pipes.

In general, the dating for this assemblage is rather poor. The bulk of the material is unstratified – although most of the complete bowls came from topsoil (101) in the south-east corner of the site – and the stratified examples are the most-closely datable artefacts for those contexts.

There are no very early (pre *c*.1610) pipes, but this is not unexpected as smoking was, in general, quite rare before this date. In addition, there are no contexts on the site which date to the early post-medieval period. Pipes are present from *c*.1610, with the earlier forms showing the emergence of typical south-western styles. Most of the earlier bowls are barrel-shaped, although there are some examples where the side facing the smoker is straighter. Most of the bowls date to the late 17th and early 18th century.

Most of the pipes are plain with milled rims, but there are a small number of moulded bowl marks. There is one pipe marked IL, where the mark is surrounded by a circle of dots (no. 56). This is probably the mark of Jonathon Ley, a Freeman of Exeter in 1725. There are three, possibly four, bowls marked PK, where the mark is surrounded by dots (no.s 43, 44, 49, 54). This is the mark of Peter Knight senior, 1716-41, another Exeter pipemaker; as with the published Exeter example (no.118, Oswald 1984) these are all on the left side of the bowl. There are three crude 'stars' (no.s 46, 53, 55), a mark paralleled by an example from Credition (Higgins 2010, no. 32) and stated to be in the style of the Exeter makers. There is a single example of a crude K expressed in dots (no. 57; Oswald 1984 no.71), in the Bristol style but common in Exeter. Among the later material, there is a CP and a S mark moulded on the sides of the heel, similar to examples from Exeter (see Oswald 1984, no.94)

Conclusion

This is a fairly large assemblage of pipe bowls from an inland Devon town, with few other comparative groups (notably Crediton, Higgins 2010). The overall consistancy of the assemblage, and a general lack of diagnostic products, would suggest most of the Cullompton material was produced in Exeter, and unlike Credition, there does not seem to be an overt North Devon presence. Cullompton is located on the eastern side of the county and straddles one of the main overland routes from Bristol, so a strong Bristol presence might also be expected. In the 19th century, the marked stem would suggest there was a manufacturer in the town.

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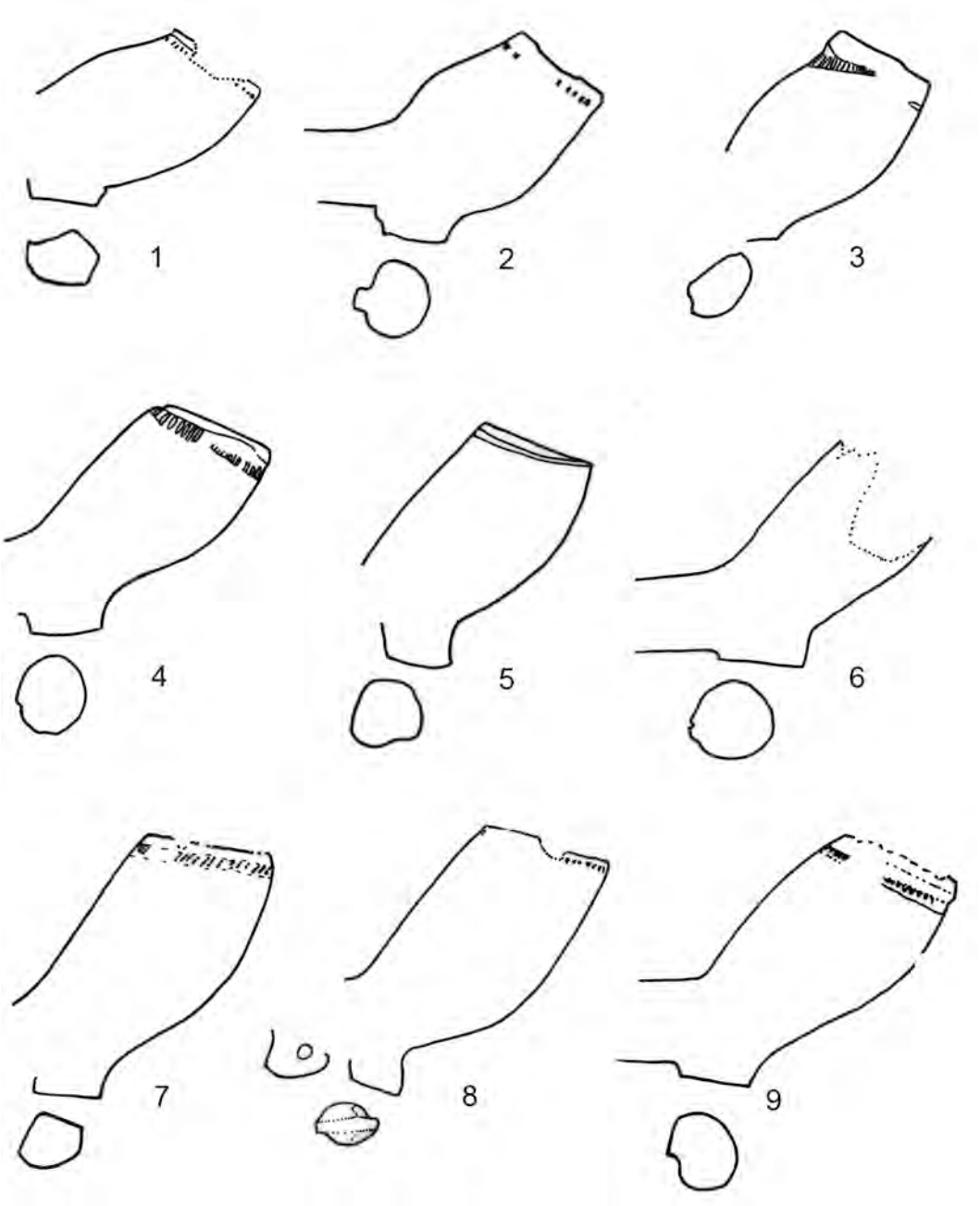

Figure 68: Clay pipes (scale 1:1; drawn by L Blampied).

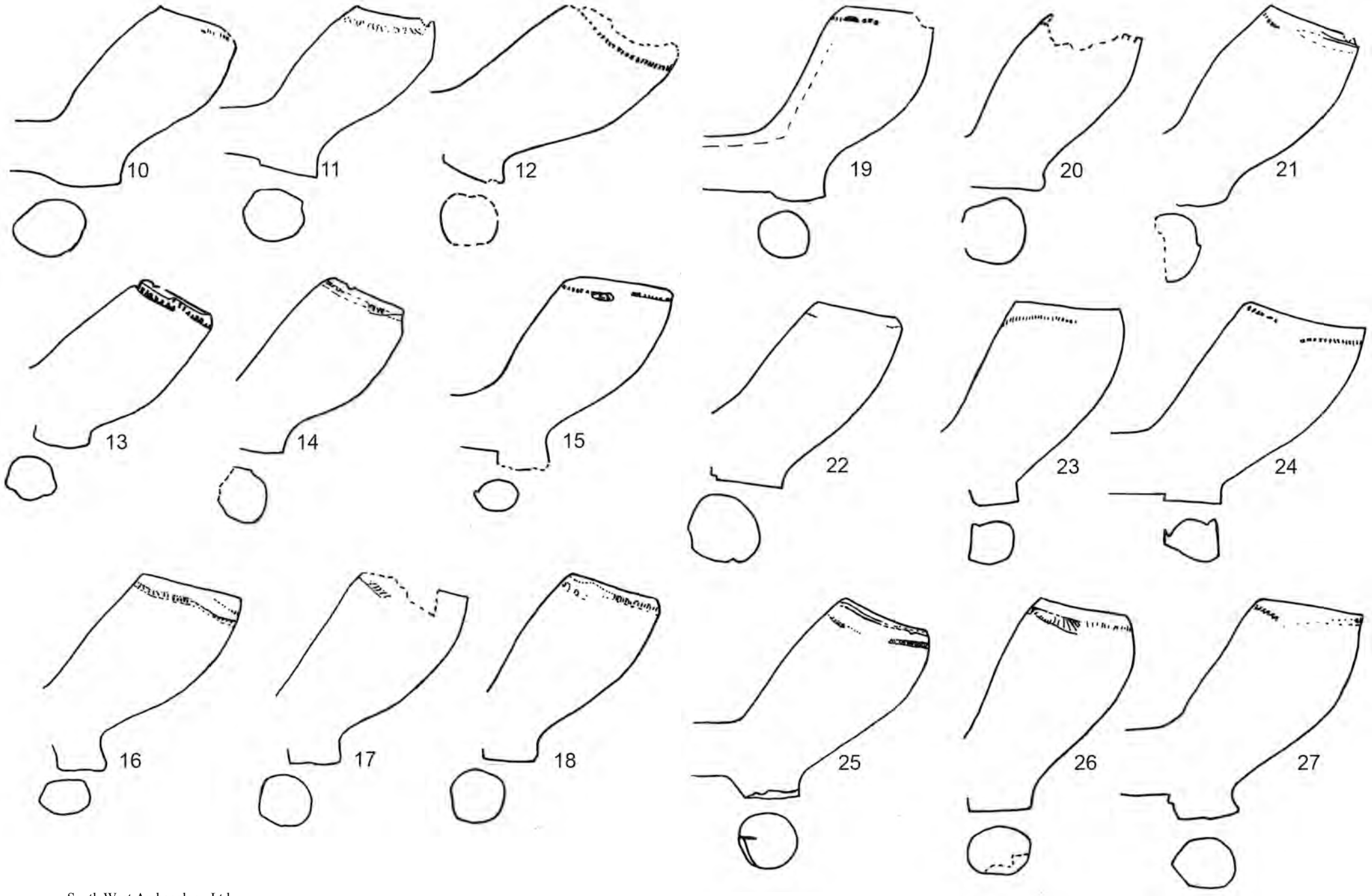

Figure 69: Clay pipes (scale 1:1; illustrated by L Blampied).

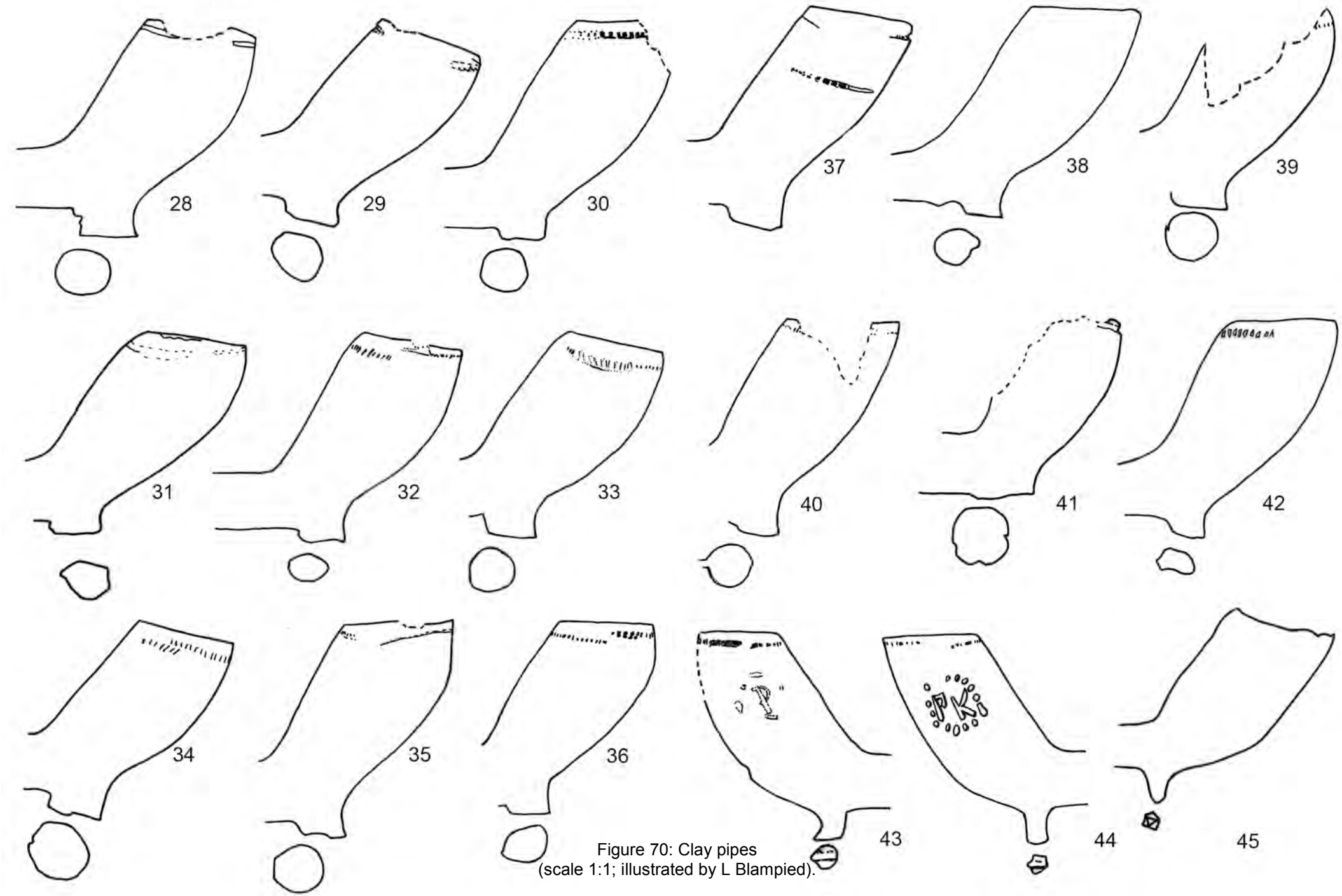

Figure 70: Clay pipes
(scale 1:1; illustrated by L Blampied).

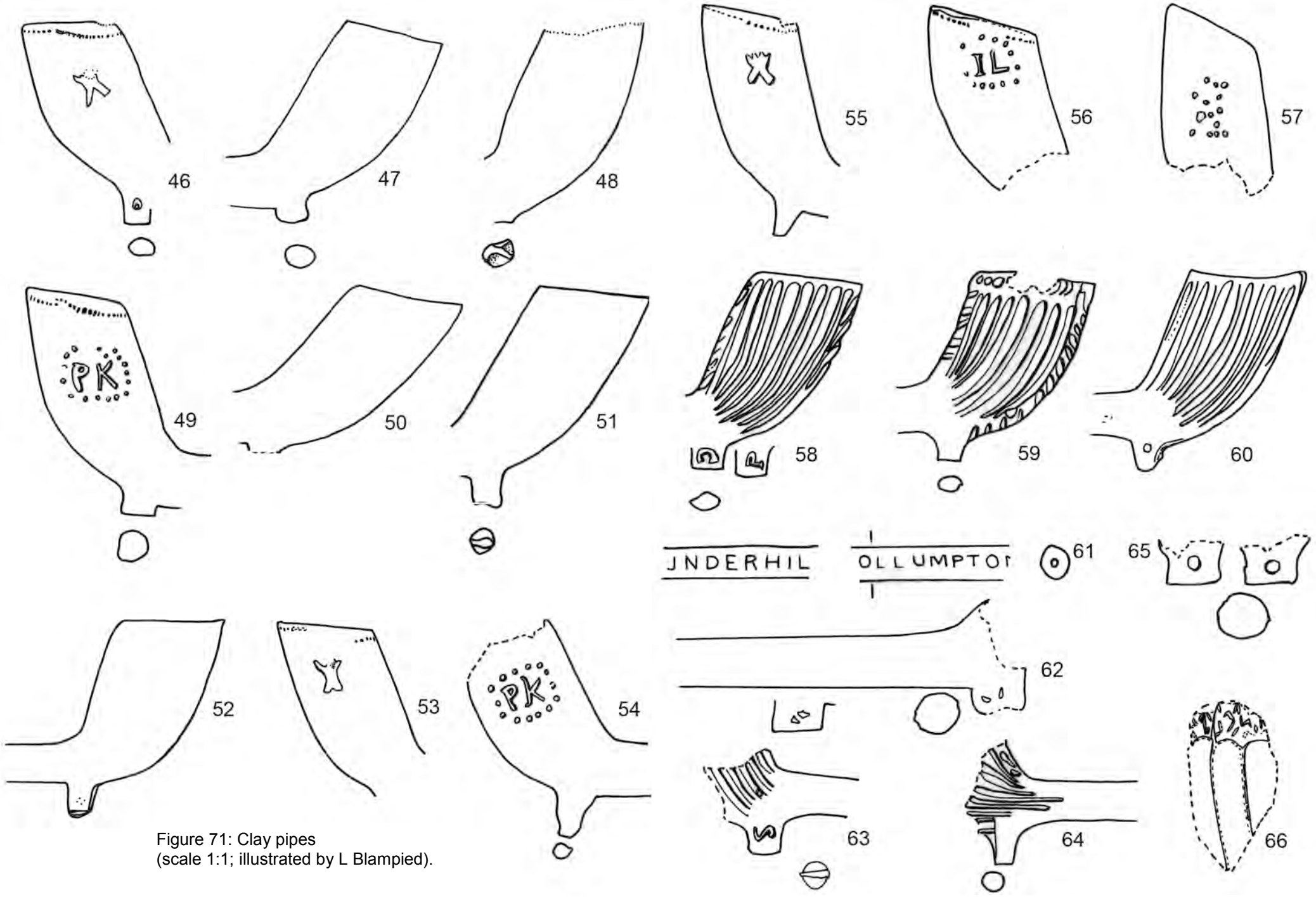

Figure 71: Clay pipes
(scale 1:1; illustrated by L Blampied).

Appendix 19

The Animal Bone, *by Wendy Howard*

A small assemblage of 361 animal bones and fragments was recovered from the excavation of a Romano-British site at Cullompton (Devon) by South West Archaeology Ltd. Faunal analysis showed these bones to be mostly from mammals with a single bird bone, from a domestic chicken. The mammal bones comprised mainly cattle and ovicaprids, of which 17 were definitely sheep, though 11 of these derived from a modern sheep burial. The only other mammal species represented comprised horse, pig and cat. Many of the bones were fragmented, and a number were abraded or weathered. A number exhibited evidence of butchery, and some had been subjected to carnivore gnawing. The overall impression is of primary and secondary butchery, and probably mainly represents household waste.

Introduction
Excavations by South West Archaeology Ltd. at a site in Cullompton (Devon) in 2011 recovered a small quantity of animal bone. This report comprises an assessment of those remains.

Methodology
All collected bones and fragments were examined using the following methods:

- Bones and fragments were identified to anatomical element and species where applicable. This was based on bone morphological characteristics, and undertaken using a modern comparative skeletal collection and specialist literature.
- The handedness (left or right) of each element was identified, as was the part (zone) of the bone present.
- Where either species or element identification to species or family was ambiguous, such as for bone fragments lacking diagnostic features (like certain skull and rib fragments), the remains were recorded as 'indeterminate', though noted as being from a large, small or medium-sized animal where applicable.
- Where bone fragments could be conjoined, these were treated as a single element (and recorded as such) to minimise distortion, and marked with an asterisk* in the database.
- Ribs and vertebrae, other than axis, atlas, and sacrum, were identified to size level, either large-sized (cattle/horse) or medium-sized (sheep/pig).
- Metrical separation of ovicaprid metapodials was determined using Boessneck (1969). Anatomical separation of sheep/goat followed Boessneck (1969), and Prummel and Frisch (1986).
- Where possible, the sex of the animal was determined from dimorphic features, and the age-at–death was determined from either the state of bone fusion after Silver (1969), state of tooth eruption and wear after Payne (1987) for sheep/goat, or cattle tooth wear stage after Grant (1982).
- All bones and fragments (even those deemed indeterminate) were examined for *in vivo* changes such as pathology, and *post-mortem* modification such as from butchery, burning, or carnivore action. The presence of staining on bone was noted.
- Where long bones were broken, the nature of broken surfaces was noted, and the type of fracture recorded to determine bone freshness at time of fracture.
- Measurements were taken using digital callipers where bone completeness permitted, after Von den Dreisch (1976), to enable future comparison with faunal remains from other sites.
- Subjective assessment was made of the state of preservation and bone condition.

All the above assemblage data was entered onto a computer database, using the following coding:
Any fields left blank were not applicable
State of fusion = F (Fused), U (Unfused), NF (Nearly fused: epiphyseal line still visible)
Sex = M (Male), F (Female)
Zone = W (Whole), P (Proximal), S (Shaft), D (Distal)
Fracture type = H (Helical), L (Longitudinal), Irr (Irregular, dry)

Results
A total of 361 bones and bone fragments were examined from the topsoil strip and 20 underlying contexts, of which 125 came from the topsoil layer, and 236 from the remaining contexts. A further 34 were recovered from context (217) containing a sheep burial. Of the bones and fragments examined, most were mammals, with a single bird bone that was identified as (*Gallus* sp.), most likely domestic chicken (Table 21).

Context	*Equus*	*Bos*	Large-sized	*Sus*	*Ovis*	*Ovi-caprid*	Medium-sized	*Felis*	Indet.	*Gallus*	Total
Topsoil	1	32	33		3	18	19		15	1	**125**
101						1					**1**
105		2	3		1	3	3		1		**13**
107		1	1			1			1		**4**
111			1			2	1				**4**
119							1				**1**
180		3	3			2	2		8		**18**
194		1							1		**2**
217*					11*		5*		17*		**33**
227									13		**13**
260		9	8		1	8	9	2	18		**55**
261		7	19			10	2				**38**
266		7	2	2	1	2	1		2		**17**
280			1								**1**
299		1	1			1			3		**6**
849									3		**3**
885		6	2						2		**10**
913									10		**10**
931							2				**2**
943						1					**1**
989									3		**3**
	1	**69**	**76**	**2**	**17**	**50**	**45**	**2**	**97**	**1**	**361**

*Sheep burial in context (217) (burial will over-inflate the number of sheep bones within the context).
Table 21: Identified faunal remains by context; those in red are dated to the Romano-British period.

Bone condition
Most of the bones were fragmented, with the majority of the limb long-bones exhibiting diaphyseal (shaft) fractures. The presence of helical fractures on these suggested that most had occurred when the bones were fresh, while a few exhibited dry, irregular fractures suggesting later damage to the bone. Bone condition varied between contexts, with most bones in reasonable condition though 47 (13%) exhibited some level of abrasion, or surface laminar flaking suggestive of weathering following deposition. However, a number were in poor condition and had suffered recent fractures, demonstrating the friable nature of the bone, and suggesting preservation conditions had adversely affected the bone.

Entire assemblage
The high degree of bone fragmentation within the assemblage undoubtedly impacted on the number of bones that could be accurately identified, with only 145 (40%) positively identifiable to both element and species (Table 22). However, most of the unidentifiable fragments could be ascribed to large or medium mammal (Table 23). Of the remaining unidentified bones a further 22 fragments were from context (217) containing the sheep burial, and so may well also have been sheep.

	Topsoil strip		Sheep burial		Underlying contexts		Total	
	Number	%	Number	%	Number	%	Number	%
Identified	59	47%	11	32%	75	37%	**145**	**40%**
Indeterminate	66	53%	23*	68%	127	63%	**216**	**60%**
Total	**125**		**34**		**202**		**361**	

*Comprised small bone fragments found associated with the sheep burial, so all may be sheep
Table 22: Proportion of identified and indeterminate faunal remains

	Topsoil strip			Sheep burial			Underlying contexts			Total		
	Number		%	Number		%	Number		%	Number		%
Identified	**59**		**46%**	**11**		**41%**	**75**		**37%**	**145**		**40%**
Unidentified (Total)	**67**		**54%**	**22***		**59%**	**127**		**63%**	**216**		**60%**
Indeterminate		15			17*			65			80	
Large mammal		33			0			41			74	
Medium mammal		19			5*			21			40	
Total bones and fragments	**125**			**33**			**202**			**361**		
% of whole assemblage	34%			9%			56%					

*Comprised small bone fragments found associated with the sheep burial, so could all be sheep.
Table 23: Proportion of faunal remains from indeterminate, large and medium mammals

The results will now be examined by: topsoil strip, and underlying contexts, with context (217) (the sheep burial) also examined separately. Note that the animal bone from Romano-British contexts was wholly undiagnostic.

Topsoil strip
The assemblage from the topsoil strip comprised 125 bones and fragments, of which most were mammals, with a single bird bone. The bone condition was generally poor, with over half the bones fragmented, rendering them unidentifiable to both element and species. The only whole elements consisted of teeth, a few phalanges, a sheep mandible, and a tarsal bone, resulting in bone measurements taken on only 26 elements. Fifteen bones (12% of total) were abraded or with flaking of the laminar bone surface. Several others (13) had suffered recent fractures, further indicating the friable nature of the bone, and suggesting burial conditions had adversely affected preservation.

Mammals
The mammal bones identifiable to both element and species comprised cattle (*Bos*), a single horse (*Equus*) tarsal bone, and ovicaprids. Of these, 32 were positively identified as *Bos*, with a further 33 fragments came from large (cattle or horse sized) animals. Some of these were probably also cattle but lacked clear diagnostic features to confirm this. Eighteen bones derived from ovicaprids, though lacked diagnostic features enabling accurate separation to goat or sheep, though three were positively identified as sheep (*Ovis*) using Boessneck's (1969) method of metrical separation (Table 24).

Equus	***Bos***	**Large-sized**	***Ovis***	***Ovicaprid***	**Medium-sized**	**Indet.**	***Gallus***	**Total**
1	32	33	3	18	19	15	1	**125**

Table 24: Faunal remains from the topsoil strip.

Horse (Equus)
A single equid bone was present, consisting of a whole tarsal bone (large cuneiform) from the hind leg. The bone was in good condition and no gnawing or other modification was seen.

Cattle (Bos)
Cattle bones were the most abundant within the topsoil, with around a third of those present being long-bones, many bearing evidence of butchery. A number of teeth were present, from at least two adult animals. The presence of skulls suggests primary butchery local to the site, while chopped long bones are more likely related to household use of jointed bones. Of note was the range of sizes within the cattle metapodials. While the presence of several unfused elements indicates some animals of different ages within the assemblage, a difference in sizes may be seen in the fused elements, suggesting that the remains derived from variously-sized breeds. Though it is not possible to identify specific breeds from the bones, it is possible that these variously represented smaller and larger milk and meat breeds, or some may have been from castrates and used for traction, but unfortunately the lack of suitable elements meant that it was only possible to determine the animal's sex in a single case. That identified was a pelvis from a male (based on Grigson, 1982) or castrate.

Ovicaprids
There were 21 bones identified as sheep or ovicaprid within the topsoil, with three confirmed as sheep. A further 19 bones were from medium-sized species, and may also have been sheep. The sex of only one animal could be determined, and this was from a female based on pelvic morphology, though another damaged pelvis was probably also from a female animal.

Birds: Domestic fowl (Gallus)
The bird bone from the entire assemblage was in the topsoil strip, and consisted of a sternum that was identified as from *Gallus* sp. (domestic chicken). No cut marks were present on the bone, nor was there any evidence of gnawing.

Elements
In terms of skeletal elements, a small number of skull and vertebral fragments were present in the assemblage from the topsoil strip, but most comprised limb long-bone fragments suggesting that these resulted from secondary butchery with animals jointed into smaller portions for household use. A few cattle feet bones were present, but could have come from a single animal as all were from cattle aged over 18 months; such elements are often associated with tanning, with the feet bones left in to facilitate handling, but could also have merely been discarded.

Ageing
The level of bone fragmentation and lack of elements precluded determining the age of most animals; where present they often served to only indicate a minimal age. For those elements where epiphyseal fusion could be determined the majority were fused, so from adult animals, though some younger animals were present as 25% of the bones were unfused. Evidence for several young ovicaprids included a phalanx and tooth, with one animal under one year old, and another 16 months old at most. No butchery evidence was present, but such elements are unlikely to exhibit butchery marks, so it is not possible to determine if these animals were eaten rather than natural casualties. The presence of unfused and smaller cattle elements suggests that younger animals were also utilised, while at the other end of the scale some ovicaprids and cattle were at least 3 years old, variously suggesting their use for wool, milk or as breeding stock.

Sexing
The lack of dimorphic bones meant that the sex of the animals could only be reliably determined in a few cases. As mentioned above, those included one sheep pelvis from a female animal and a pelvis from a probable male or castrated *Bos*.

Ante-mortem changes: Pathology
Little evidence of pathology was seen on the bones; that present included periodontal disease in a sheep, which is a common occurrence, and pronounced entheses (muscle attachment sites) on the probable male/castrate *Bos* pelvis. Two of the ovicaprid metapodials exhibited linear ridging on the anterior upper medial aspect of the bones. This condition has been recorded by other authors including Dobney *et al.* (1996) and Brothwell *et al.* (2005), with the latter authors identifying this condition in sheep metapodials from at least nine assemblages from the North of England, from animals of Roman, medieval and post-medieval date. The pathology has also been identified in red and fallow deer (Brothwell *et al.* 2005, 78-79), and cattle (Dobney *et al*. 1996, Plate 12b). The aetiology of this pathology is currently unknown, though there are a number of theories as to the cause, including grazing/moving on uneven terrain. The condition is not limited to northern Britain as the author has identified the same condition in sheep metapodia from a medieval assemblage in south Devon. However, the latest view is that such changes in sheep are 'normal' and may be linked to sex, age and body weight (Thomas & Grimm 2011).

Post-mortem modification: Butchery
Evidence of butchery was identified on 29 (23%) bones, mostly in the form of cut-marks and having been chopped across. A number of the larger mammal bones had also been sawn, including a cattle femur and pelvis from cattle. One of the ovicaprid skulls had been sawn through the midline, dividing the skull into two halves. This may have been to access the brain or merely to divide the whole carcase.

Fractures
Many (26) of the limb long-bones present were fractured, with the majority of these being helical in shape and so suggest breakage when the carcase was fresh. A further 12 bones exhibited 'dry' irregularly edged fractures, and so would have been damaged at a later stage.

Gnawing:
Of the bones, 24 (19%) showed evidence of carnivore gnawing. The majority of the elements affected were long bones and likely to represent household waste that was discarded where it could be accessed by scavengers like dogs.

Burning:
A patch of surface blackening was present on one medium-sized tibia, but no other burning was seen.

Underlying contexts (excluding the sheep burial)
A total of 202 bones were recovered from 19 contexts, with a further 34 bones and fragments recovered from a discrete sheep burial which is examined separately below. As in the topsoil, the general bone condition was poor, with much of it abraded (30 bones = 15%). Among these were 7 bones, mostly from context (180), which also exhibited evidence of surface flaking consistent with changes due to weathering. The number of recent fractures further indicative of the friable nature of the bones, as did the fact that measurements could only be taken on 23 bones. Most of the bones from the underlying contexts were also fragmented, so that out of 202 bones there were a total of 106 fragments (representing 52% of the assemblage from these contexts).

Mammals
The assemblage comprised entirely mammal bones, with those identified from domestic species (Table 25). These consisted of mostly cattle (*Bos*) and ovicaprids, with 38 identified specimens in each case. Only two pig bones were present, fragments from a scapula and mandible, with both recovered from context (266). The only other species recovered was cat (*Felis*),

Context	*Bos*	Large-sized	*Sus*	*Ovis*	*Ovi-caprid*	Medium-sized	*Felis*	Indet.	Total
101					1				**1**
105	2	3		1	3	3		1	**13**
107	1	1			1			1	**4**
111		1			2	1			**4**
119						1			**1**
180	3	3			2	2		8	**18**
194	1							1	**2**
227								13	**13**
260	9	8		1	8	9	2	18	**55**
261	7	19			10	2			**38**
266	7	2	2	1	2	1		2	**17**
280		1							**1**
299	1	1			1			3	**6**
849								3	**3**
885	6	2						2	**10**
913								10	**10**
931						2			**2**
943					1				**1**
989								3	**3**
Total	**37**	**41**	**2**	**3**	**31**	**21**	**2**	**65**	**202**

Table 25: Faunal remains from the underlying contexts

Cattle (Bos)
Within the underlying contexts, 37 bones were identified as cattle, though a further 41 were from large animals, and some of these are also likely have been *Bos*. Most were from adult animals, though several calf/foetus bones were present in context (260), representing at least one animal (MNI = 1).

Sheep/goat (Ovicaprids)
Thirty eight bones were identified as ovicaprids, but the lack of distal metapodia or diagnostic bone features precluded ascribing many as specifically sheep or goat, so that only three bones were definitely sheep.

Pig (Sus)
Only two bones were recovered, both from context (266), representing a minimum number of one animal (MNI = 1). These comprised fragments from a mandible with M2 molar, which had been chopped through indicating its use as foodstuff, and a scapula. From the fragments present it was not possible to obtain any indication of the animal's age or sex.

Cat (Felis)
The only cat bones present were found in context (260). Two bones came from a right foreleg, and consisted of part of a radius and metacarpal, so represented a minimum number of one animal (MNI = 1). Both bones were broken transversely, with irregular surfaces, suggesting they were not broken when fresh. The proximity to settlement suggests these were from domestic cat rather than European wildcat.

Elements
Quite a number of long bones (such as tibia and radius) were present, with many others fragmented, such as seen with secondary jointing for household use, but the assemblage also comprised low meat-utility elements including ovicaprid teeth, skull and rib fragments, and phalanges. Such items are more in keeping with primary butchery or even small-scale industrial waste (such as phalanges and skull with tanning).

Ageing
Bone fragmentation precluded identifying the state of epiphyseal fusion for many elements, but most of those identified were from adult animals. The exceptions were from ovicaprids and included an unfused femur with chop-marks and a probable ovicaprid tibia. There was little evidence for juvenile large animals, with only an unfused tibia present, though again bone fragmentation could have skewed this result. There is also evidence for some older animals (especially in context (261)), with several ovicaprids aged over three years, so again may have been used for milk, wool or as breeding stock.

Sexing
As with the topsoil material the lack of dimorphic bones meant that the sex of the animals could only be determined in a few cases. Those suitable included a sheep pelvis from a female animal, while another was damaged but probably also female.

Ante-mortem changes: Pathology
There was little evidence for pathology, with periodontal disease on a sheep, and pronounced entheses (muscle attachment sites) and articular surface changes on a *Bos* phalanx. This latter animal was at least 18 months old though may have been much older; unfortunately it was not possible to more accurately age it. Such changes may therefore have been degenerative changes due to age or stress related through working.

Post-mortem modification: Butchery
A large percentage (49 = 24%) of the bones exhibited chop- or cut-marks, indicating that they had been butchered. A number of large mammal bones had also been sawn, including a pelvis from context (105). There was also parasagittal chopping to a vertebra in context (885), while there was midline chopping to one in context (105).

Fractures
A number of the limb long-bones exhibited fractures (35 = 17%), most of which were helical in shape and so suggest breakage soon after death when the carcase was fresh, though 'dry' fractures were present on three bones, indicating subsequent breakage.

Gnawing
A large proportion (49 = 24%) of the bones and fragments bore evidence of carnivore gnawing or perforated by tooth holes (6), suggesting that the bones had either been fed directly to animals (most likely dogs) on the site, or were accessible to them when discarded (suggesting they were left exposed, such as if deposited into a midden).

Burning
There were 25 bones with evidence of burning (12%), of which a number were white and chalky. All of these were on bone fragments, with one exception being a scapula from a medium-sized animal, which was white with blackening in patches, with a possible chop-mark. Given the fragmentation these may have simply been discarded into fires, though could perhaps have been used as fuel?

Context (217) sheep burial
An ovicaprid skeleton buried as a discrete deposit was recovered from context (217), which was identified by the excavator as being of modern date (20th century). A small sample of 34 bones and fragments was retained and the remainder discarded (B. Morris *pers. comm*.). Of these bones, 11 were clearly sheep, while the remaining 22 small fragments were found in the same context as the burial and so may also have been from the same animal. These ranged from vertebra and rib fragments to small pieces of bone, but in each case these lacked diagnostic features to unequivocally identify them as from sheep. A fragment of corroded metal was also among the assemblage.
The bones that were identified comprised forelimb elements (whole radius, carpals), and there was a single cervical vertebra from the distal end of the neck. The animal was further confirmed as a sheep (*Ovis aries*) using Boessneck's (1969) method of metrical separation, and aged between approximately three to three-and-a-half years of age based on bone fusion after Silver (1969), though as the radius was nearly-fused it makes it likely to be from the lower end of this range. The whole radius was measured, which produced a maximum length (GL) of 155.37 mm and enabled an estimation of the animal's withers height. This was calculated to be 62.46 cm (after von den Driesch & Boessneck 1974).
Examination of the remains revealed no evidence of butchery, fracture or gnawing, suggesting that the animal had not been used as food, but buried for other reasons. Given the absence of gnawing, burial was likely to have occurred soon after death or the carcass kept away from scavenging carnivores such as dogs or foxes. The presence of pathology on the distal portion of a 3rd phalanx, in the form of pitted and expanded bone, makes the animal's demise due to illness more likely. The appearance of the osteological changes is consistent with osteomyelitis and infection, and given that sheep are notoriously susceptible to various foot ailments, such as foot-rot, this condition could have been a contributory cause of the animal's death. Any such pathology and inflammation within the hoof would have caused the animal pain and impaired its ability to walk, potentially affecting its general condition if unable to access adequate feed, or if the infection was systemic. Had the animal received veterinary treatment, the introduction of medication would also have rendered it unfit to enter the food chain, and unless farmed for its wool, would further explain its burial in this location.

Conclusion:
Many of the assemblage bones were fragmented, with a large number broken when fresh. The overall bone condition was generally poor, with many bones abraded or weathered, suggesting they had been left exposed, which would explain the level of carnivore gnawing on many of them. The assessment indicated that bovids and ovicaprids dominated the assemblage, with only a few bones from species such a horse, cat, pig, and bird. These seemingly all represent domestic species, while variation in certain bovid elements suggests that more than one breed may have been represented at the site. The overall impression is of a mix of bones exhibiting evidence primary and secondary butchery of domestic species, and probably mainly represents household waste, though some minimal use of remains for small-scale industrial purposes cannot be excluded. There is no evidence for the use of wild species.

Future/Potential work
Given the small number of bones per context, and the fragmented state of much of the assemblage, there is little further analysis that could be beneficial to provide additional information. The small number of bones and lack of appropriate elements within most individual contexts also means that any further analyses, such as mortality profiles, would produce statistically insignificant results.

Curation
With regard to future curation of the bone, the fragmented state of most of the assemblage means that there is little value in long-term storage of the entire collection, although with the present advances in

isotope analysis small samples of teeth and more intact bone may be of future use. Similarly, even small bone samples from contexts or features of particular interest may be of future use, given the recent advances in collagen analysis. It may also be of use to retain pathological specimens, such as the ovicaprid metapodials with anterior linear ridging as such changes have been seen at other sites (see for example Dobney *et al.* 1996), especially given that their aetiology is still in doubt.

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Appendix 20

The Wood Charcoal, *by Dana Challinor*

ASSESSMENT

Following processing, the flots from 52 samples were submitted for assessment of the charcoal. Charcoal caught on the 2mm sieve was considered identifiable and scanned under a binocular microscope at up to ×45 magnification. Fragments were randomly extracted, fractured if necessary and examined in transverse section. While this provides a reliable method for the identification for ring porous taxa (e.g. *Quercus* sp.), identifications for the diffuse-porous taxa should be considered as 'type' and require confirmation at high magnification. In the case of large flots, a sample of *circa* 20% was examined, although any quantification given is based on estimates of the entire flot. The following key is used for estimated quantification: + = up to 5 fragments; ++ = 5-25; +++ = 25-100, ++++ = 100+.

Results

The full results of the assessment are recorded in Table 26. Charcoal was generally well preserved in the samples, with most producing identifiable material. However, the condition was very variable, often infused with sediment and very friable. Additionally, it was noted that many of the samples produced relatively small fragments – so that while there may have been 100 fragments, most came from the 4-2mm fraction. Charcoal is identifiable from this fraction, but the ability to record certain data, such as maturity, is limited by the smaller size. A good range of taxa was provisionally identified, including *Acer* sp. (maple), *Alnus/Corylus* (alder/hazel), *Fagus* sp.(beech), *Fraxinus excelsior* (ash), Maloideae (hawthorn group), *Prunus* sp. (cherry/blackthorn), *Quercus* sp. (oak), Salicaceae type (willow family) and *Ulex/Cytisus* (gorse/broom). While the identifications are provisional, the assessment suggests that a diverse range of taxa would be confirmed in further analysis. Most of the samples would provide a fragment suitable for AMS dating. Coal and clinker type material was noted in many of the flots.

Implications

The majority of the samples dated to the Romano-British period and came from ditch fills. The few pit fills did not produce much charcoal and will not yield further useful information. The single cremation burial is of interest and, although the condition of the charcoal was quite poor, the assemblage appeared to be quite diverse and merits further analysis to examine ritual fuel use. The provenance of the charcoal from the many ditch samples is less clear at this stage; artefactual and contextual analysis may provide some detail on the specific activities resulting in the charcoal assemblages. When this information is known, it will be useful to examine any charcoal that can be confidently ascribed to a specific activity. Otherwise, most of the charcoal is likely to represent spent fuelwood from domestic sources and/or mixed debris from several activities. These samples still offer useful general information on the types and nature of wood selected for fuel in the Romano-British period and the exploitation of local woodlands. When the phasing has been completed, it may be of interest to look at any differences over time.

The rare samples from the later medieval and post-medieval phases did not produce particularly interesting assemblages and are unlikely to provide useful interpretative data. No further work is recommended.

Sample	Context	Feature	Vol. (L)	Flot wgt. (G)	Context	Phase	Quantity	Identification	Notes	Potential
400	103	102	c.40	63	upper fill, ditch [102]	RB	++++	Qu r-w, Sal, Frax	Quite mixed. Cereal grain. Coal. Rad<4mm	B
401	105	104	c.40		upper fill, glass pit [104]	17th-18th	Missing			N
436	876	114	c.10	3	lower fill, ditch [114]	RB	+	Mal, Qu		N
437	876	114	c.10	3	lower fill, ditch [114]	RB	+	Qu		N
435	891	118	c.60	47	group of 3 contexts, fill, ditch [118]	RB	+++	Qu, Pru, Mal, A/C	Quite mixed.	B
466	119	118	c.40	52	upper fill, ditch [118]	RB	++++	Qu, Mal r-w	Lots Qu. Small frags, friable. Roots. Coal.	C
454	123	122	c.40	7	fill, short linear [122]	RB	++	A/C r-w, Mal R-W, Frax	Quite mixed. Bark.	C
450	125	124	c.30	25	fill, short linear [124]	RB	++/+	Qu, A/C,	Coal. Roots. Scrappy.	C
412	840	131	c.40	39	deposit in corner of ditch [131]	RB	+++	Qu, A/C r-w	Qu predom.	B
420	132	131	c.40	28	upper fill, ditch [131]	Med	+++	Qu r-w, Frax, A/C		B
421	259	131	c.40	12	middle fill, ditch [131]	RB	+++	A/C r-w, Qu r-w, Mal	Quite mixed	B
422	807	131	c.40	9	basal fill, ditch [131]	RB	++	Qu, A/C r-w		C
423	134	133	c.40	7	upper fill, ditch [133]	RB	++	A/C r-w, Qu		N
424	802	133	c.40	4	lover fill, ditch [133]	RB	+	A/C r-w,	Roots	N
413	136	135	c.40	9	upper fill, ditch [135]	RB	++	Qu r-w	Roots	N
415	284	135	c.20	12	fill, re-cut of ditch [135]	RB	++/+	Qu, A/C r-w,, Acer type	Quite clean.	B/C
416	800	135	c.20	11	fill, re-cut of ditch [135]	RB	++	Qu h-w, r-w	Qu predom. Some h-w plus r-w(faint)	N
417	801	135	c.10	14	fill, re-cut of ditch [135]	RB	+	Qu		N
426	846	135	c.40	14	deposit in [135]	RB	++/+	Qu, A/C		C
427	849	177	c.60	290	charcoal middle fill, ditch [177]	RB	++++	Qu, A/C r-w	Lots Qu. Lots charcoal but friable and small.	B/C
428	850	177	c.40	25	basal fill, ditch [177]	RB	+++	Qu, A/C, Pru, Sal type	Slag. Cereal grain. Quite mixed.	B
418	196	195	c.40	8	dark fill of pit [195]	RB	++	Qu r-w	Lots roots.	N
419	832	195	c.40	12	fill, pit [195]	RB	+	Mal r-w, Qu	Lots roots. Coal.	N
407	227	226	c.40	71	northern end, ditch [226]	17th-18th	++++	Qu, Mal, Frax, cf U/C	Q mixed, crumbled	C
461	264	263	c.40	18	upper fill, ditch [263]	RB	++	Qu, Mal	Roots. Lots of clinker type material.	C
464	293	292	c.40	68	upper fill, ditch [292]	RB	++++	Qu, Frax, A/C,	Quite mixed but very small frags. Cereal/clinker rad <4mm.	B/C
425	843	842	c.40	39	fill, ditch [842]	RB	+++	A/C r-w, Qu	Roots, coal, clinker type. Small	C
455	1521	864	c.40	149	lower fill, terminus, ditch [864]	RB	++++	Pru r-w, Qu r-w, U/C r-w, A/C r-w, Frax	Some large charcoal. Very mixed	A/B
456	1518	864	c.40	4	fill, ditch [864]	RB	+	Frax, A/C		N
443	934	894	c.40	19	lower fill, ditch [894]	RB	+++	A/C, Qu r-w	Coal	C
444	897	896	c.40	9	upper fill, ditch [896]	RB	++	A/C r-w, Qu r-w	Roots. Coal.	C
445	926	896	c.40	35	middle fill, ditch [896]	RB	+++	Sal type, A/C, Qu	Very infused and friable. Roots.	B/C
446	931	896	c.40	74	lower fill, ditch [896]	RB	+++	Qu r-w	Could be other but terrible	D

									presence. Very friable and covered in sediment.	
440	933	897	c.40	76	deposit in corner of ditch [897]	RB	++++	Mal, Qu, A/C r-w,	Very small frags, friable.	C
457	1514	910	c.10	48	deposit in corner of [910]	RB	+++	Qu incl r-w, A/C r-w	Quite a lot of Qu	B/C
463	911	910	c.40	69	upper fill, ditch [910]	RB	++++	A/C, Qu r-w, Pru	Quite small frags. Coal and vesicular material.	B
465	1513	910	c.40	63	lower fill, ditch [910]	RB	++/+	Qu, A/C r-w	Very small. Coal	C
467	989	910	c.40	162	middle fill [910]	RB	+++++	Qu, A/C r-w, Mal,	Mixed. Some large frags but infused. Friable	B
441	913	912	c.40	119	narrow slot [912]	RB	++++	Qu, Mal, Frax cf, U/C	Quite mixed. Very small and friable. U/C crumbled.	B/C
439	916	915	c.40	53	narrow slot [915]	RB	++/+	Qu, Frax	Coal and slaggy stuff. Roots. Generally small	C
442	927	926	c.40	13	narrow linear [926], above (928)	RB	++	A/C, Qu r-w, Pru ?	Lots roots. Very small. Coal	C
438	?927	928	c.10	4	around vessel (928)	RB	++	A/C, Qu	Roots	N
448	973	972	?	5	fill of posthole [972]	RB	+	Qu	Highly vitrified	N
451	975	974	c.20	14	fill of posthole [974]	RB	+++	Qu, A/C, Sal type, Fagus	Mixed	B/C
452	977	976	c.20	10	fill of posthole [976]	RB	++/+	Qu, A/C, Sal	Small	C
468	999	998	c.40	7	fill, square feature [998]	RB	++/+	Frax, A/C, Qu r-w,	Quite small frags. Coal.	C
462	1532	1531	c.10	85	fill, posthole [1531], cut by [910]	RB	++++	Qu, Pru type, Mal r-w, A/C	Quite mixed but infused.	B
469	1566	1565	c.10	6	fill, posthole [1565], near cremation	?	++	Qu, A/C	Good preservation	B/C
409	804						-		Nothing but roots and fleck	N
410	806						-		Nothing but roots and flecks	N
411	831						-		Nothing	N
447	954	953	c.60	63	cremation pit	RB	++/+	A/C, Acer, Qu	Roots. Mixed. Lots roots and coal and vesicular material. Cereal grain'++. Not great sample- small frags but mixed.	A/B
453	979		c.40	11	fill of pit with lots of pottery	RB	++	Frax,Qu,Sal		B/C

Table 26: Results of the charcoal assessment.

ANALYSIS

Introduction

An earlier assessment of 52 flots (Challinor 2011, above) revealed that there was an interesting, highly diverse assemblage of charcoal preserved in the samples from Shortlands Lane, but that the condition of the charcoal was generally poor. The majority of the samples came from Romano-British features, mostly ditches, with a few pits and postholes, and a single cremation burial. Five phases of occupation debris were represented, from the Roman military phase to the late 4th century AD. There were few samples from earlier or later periods, with none producing significant assemblages. The aim of additional analysis was to confirm and extend the species list, with a view to examining general patterns in the types and nature of wood selected for fuel and the exploitation of local woodlands in the Romano-British period.

Methodology

The quantity of soil processed varied from 10 litres to 60 litres with variable quantities of charcoal preserved. The condition was often poor, with small, friable fragments and anatomical structure obscured by infusion of sediment. The most diverse and best preserved samples had been identified in the assessment and ten of these were selected for further examination. The methodology adopted was designed to reveal the general range of taxonomic occurrence, rather than the detailed composition of individual samples. Consequently, 30 fragments were selected randomly from each sample, with the exception of one very diverse assemblage for which 50 were analysed. Given the difficulties of examining the soft, crumbling fragments from the smaller fraction (<4mm), most fragments were identified from the larger fraction size (>4mm).

The charcoal was fractured and sorted into groups based on the anatomical features observed in transverse section at ×7 to ×45 magnifications. Representative fragments from each group were then selected for further examination in longitudinal sections using a Meiji incident-light microscope at up to ×400 magnification. In practice, since most of the samples produced anatomically similar genera (such as *Alnus* and *Corylus*), it was necessary to confirm most identifications at high magnification. Identifications were made with reference to Schweingruber (1990), Hather (2000) and modern reference material. The maturity of the wood was noted where possible.

Results

Fourteen taxa were positively identified (Table 27). All were consistent with native taxa, and an assumption has been made that the native species are likely to be represented. Although the Romans introduced several exotic species to Britain, there was nothing to suggest their presence here.

Fagaceae:

Fagus sylvatica L. (beech), large tree, sole native species.

Quercus spp. (oak), large tree, two native species, not distinguishable anatomically.

Betulaceae:

Alnus glutinosa, Gaertn. (alder), tree, sole native species. *Corylus* has a very similar anatomical structure to *Alnus* and can be difficult to separate.

Corylus avellana L. (hazel), shrub or small tree, only native species.

Salicaceae:

Salix spp. (willow) and *Populus* spp. (poplar) are rarely possible to separate. Both are trees, although there is variation within the genera.

Rosaceae:

Prunus spp., trees or shrubs, including *P. spinosa* L. (blackthorn), *P. avium* L. (wild cherry) and *P. padus* L. (bird cherry), all native. The distinction between *P. spinosa* and *P.avium* in these samples was made on the basis of significantly smaller rays in the *P.avium*. The identification keys differ as to the separation of *P. padus* (see Hather 2000 & Schweingruber 1990), but since this species has a more northern distribution, it is unlikely to be represented here.

Maloideae, subfamily of various shrubs/small trees including several genera, *Pyrus* (pear), *Malus* (apple), *Sorbus* (rowan/service/whitebeam) and *Crataegus* (hawthorn), which are rarely distinguishable by anatomical characteristics.

Celastraceae:

Euonymus europaeus L. (spindle), shrub or small tree, native.

Fabaceae:

Cytisus/Ulex (broom/gorse), shrubs, several native species, not distinguishable anatomically.

Aquifoliaceae:

Ilex aquifolium L. (holly), evergreen tree or shrub, native.

Aceraceae*:*
Acer campestre L. (field maple), tree, sole native species.
Oleaceae:
Fraxinus excelsior L. (ash), tree, sole native species.
Caprifoliaceae:
Sambucus nigra L. (elder), shrub or small tree; sole native species.

Most of the samples contained fragments with evidence of moderate ring curvature (classified as roundwood in Table 27), but there were no complete stems. Some separated bark fragments were also recorded. It was not always possible to determine maturity on presence of tyloses due to sediment infusion, but some oak heartwood was noted.

Discussion
The main characteristic of the charcoal from Shortlands Lane is the relatively high taxonomic diversity, with an average of 6 taxa per sample. This indicates a non-focused selection of fuelwood, such as might be expected for domestic firewood gathering. Most of the assemblages are indeed likely to have derived from fuel waste from domestic type fires. In the absence of evidence for burning *in situ,* structural timbers are unlikely, although there is the possibility of occasional re-used wood from old posts and broken artefacts.

The cremation debris from pit [953] was the only assemblage to which a specific activity might be confidently ascribed. It is interesting, therefore, that the charcoal was not significantly different from the other features. Four taxa were recorded; oak, alder, hazel and willow/poplar, all of which were recorded in other assemblages. The analysis suggested that oak was the primary fuelwood, but the charcoal fragments were very sparse and scrappy, with any remaining (non-identified) fragments of indeterminate taxa. The use of oak in cremations is unsurprising since it provides the high calorific value required to cremate a body, and is commonly found in cremation assemblages of Romano-British date.

The generally wide range of taxa suggests that fuel wood was sourced from a wide variety of local habitats, including hedgerow/woodland margin (elder, spindle, blackthorn, hawthorn group), wet-ground areas (alder, willow/poplar) and heathland (gorse/broom). Light demanding species such as ash and blackthorn indicate quite open conditions. In contrast, holly is very shade tolerant and often associated with dense oak woodland.

Alder is considered to make poor firewood, so its frequency (Figure 69) suggests that this taxon was growing in the near vicinity, perhaps on the lower-lying ground of the river Culm and tributaries, as alder likes damp soil conditions but not stagnant water. The poor condition of the charcoal generally may also be attributed to a high water table or seasonal flooding causing mechanical damage to the charcoal. Alder is likely to have been easily available and may have been preferentially selected to alleviate pressures on woodland resources. The assessment data, while not conclusive, suggests that alder was present in many other assemblages.

The presence of beech is more unusual as this is a tree that flourishes on chalk and limestone, though it can grow in any well-drained conditions. It is thought to have had quite a restricted distribution in the South East of England (Rackham 2003) and would have been rare in the South West. There are issues with the pollen record for beech which may complicate the picture, but it is interesting to note that beech is not commonly recorded in the charcoal record until the Saxon and early medieval periods. In any case, only two fragments of beech from one sample (context (975)) were recorded in all the samples from Shortlands Lane, suggesting that it may have derived from another source such as an artefact.

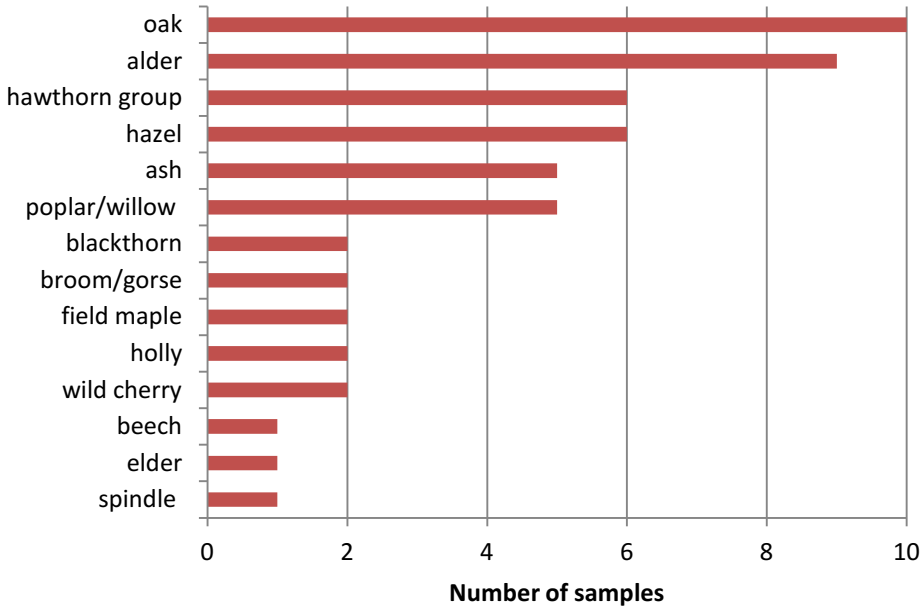

Figure 72: Frequency of charcoal Taxa (based on 10 samples).

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	Feature type	Cremation pit	Ditch	Ditch	Ditch	Ditch	Ditch	Ditch	Ditch	Posthole	Posthole
	Feature number	953	102	118	131	135	177	864	910	974	1531
	Context number	954	103	891	259	284	849	1521	989	975	1532
	Sample number	447	400	435	421	415	427	455	467	451	462
Fagus sylvatica L.	beech									2	
Quercus sp.	oak	12 (1r)	12 (1r)	13	11 (2r)	11 (3r,1h)	17 (3r)	25 (13r, 4h)	16 (4r,1h)	14 (2r,2h)	9
Alnus glutinosa Gaertn.	alder	4	8 (2r)	4 (1r)	7 (1r)		7 (2r)	5 (3r)	7 (4r)	10 (2r)	2
Corylus avellana L.	hazel	1	1		3 (3r)	7 (7r)		2			6 (4r)
Alnus/Corylus	alder/hazel	4	4		4		3	2			
Populus/Salix	poplar/willow	5				9 (3r)	1	1		4	
Prunus spinosa L.	blackthorn				1			1			
Prunus avium L.	wild cherry					1 (1r)					4
Prunus sp.	cherry type			1				1	1		
Maloideae	hawthorn group			6	3		1		4		
cf. Maloideae	hawthorn group		1								
Cytisus/Ulex	broom/gorse				1			4 (2r)			
Euonymus europaeus L.	spindle										7 (2r)
Ilex aquifolium L.	holly			4							2
Acer campestre L.	field maple		2	2							
Fraxinus excelsior L.	ash		2			1	1	6 (1r,1h)	2		
Sambucus nigra L.	elder							3			
Indeterminate: bark		4				1					
Total analysed		30	30	30	30	30	30	50	30	30	30

Table 27: Results of the charcoal analysis.

Appendix 21

Plant Macrofossils *by Julie Jones*

Introduction and Methodology
Excavations by South West Archaeology Ltd. at Shortlands Lane, Cullompton, Devon, revealed some Prehistoric features, part of a Romano-British settlement, and a small part of a probable cemetery that contained a single urned cremation, probably of Flavian date associated with the nearby Roman garrison. The site was subsequently occupied by a large, multi-phase rural settlement occupied from the late 1st/early 2nd AD to late 3rd century AD. Bulk samples were taken from a range of features and seven were chosen for the analysis of charred plant remains.

The samples were processed by flotation sieving by South West Archaeology Ltd. to a minimum mesh size of 250 microns with the dried float examined by the author. Plant remains occurred at very low abundance throughout but included charred grains of barley (*Hordeum*), hulled and free-threshing wheat (*Triticum*), together with small weed assemblages. The results are shown in Table 28. Nomenclature and habitat information for the weeds follows Stace (1991). Much of the grain was in a poor state of preservation, with pitting and fragmentation. Chaff was limited to several wheat glume bases, one well enough preserved to identify as spelt (*Triticum spelta*). Weeds were generally well preserved.

Results
Context (954), fill of pit [953] containing cremation urn
The fill (954) of included a patch of highly fragmented bone, a cremation urn and accessory vessel, and other material of early Romano-British date. A sample of cremated bone provided a radiocarbon date of 1 cal BC – 126 cal AD (1948±26BP, SUERC-42600). In addition to charcoal there were a few (15) charred grains of hulled barley, hulled and free-threshing wheat. Arable weeds included oats (*Avena*), (unable to determine if cultivated without chaff), with brome (*Bromus*), other grasses (*Poa/Phleum*), stinking chamomile (*Anthemis cotula*) and common chickweed (*Stellaria media*). Seeds of elder (*Sambucus nigra*) and a rose (*Rosa*) thorn may have come from wood used in the cremation.

Context (999), fill of [998]
To the south of [954] was a narrow shallow V-shaped linear feature [998] that appears to have formed part of a rectangular enclosure or structure with Linear [995]; it is suggested this represents the truncated remnant of a rectangular funerary enclosure. The fill (999) included very few charred items, with single grains of free-threshing wheat and oat, plus several grasses, in addition to a hazelnut (*Corylus avellana*) fragment and bramble (*Rubus* sect. Glandulosus) fruit.

Context 843, fill of [842]
Linear [842] was one of three parallel features defining two long sub-rectangular enclosures, likely to have been positioned along one side of a contemporary road. There is little structural evidence from this phase, with the settlement focus to the north. The charred remains are again limited with only 15 grains of barley, hulled and free-threshing wheat, a few arable weeds and four hazelnut fragments.

Context 850, fill of [177]
The basal fill (850) of a V-shaped linear feature [177] produced limited macros with only a single hulled wheat grain, 5 hulled wheat glume bases and several arable weeds.

Context (927), fill of [937].
Two samples were recovered from this feature. Sample <438> produced no plant remains, with single barley and indeterminate cereal grain, plus a bramble fruit from sample <442>.

Context (916), fill of [915]
The only spelt wheat glume base from the site was found in the fill of this sub-rectangular post socket, with an oat/grass caryopsis.

Discussion

Plant remains were very limited from the features at Shortlands Lane. Most of the linear features dated to the Romano-British period appear to be associated with enclosures, with the settlement focus elsewhere. The relatively sparse remains of cereal crops imply they are secondary inclusions in these features, and represent the scattered remains from processing elsewhere.

Although the concentrations of cereal remains recovered from the site are very low, it is clear that different crops are represented. Although it is difficult to distinguish between wheat species – especially once affected by the charring process – several of the more angular grains are clearly of a hulled variety; a single well-preserved glume base, showing the characteristic sharp keel and lengthwise striations, indicate that some of this was spelt (*Triticum spelta*) although it is possible that emmer (*Triticum dicoccum*) is also present. In addition, there are several grains of a more rounded form, typical of bread-type wheat (*Triticum aestivum* type). Barley also occurs in very low concentrations, with most grain poorly preserved with the grain surface lost from charring, so it was not possible to determine whether the naked or hulled form was present, although the more angular shape of the better preserved examples suggests that hulled barley was present. No barley chaff was recovered.

The weed assemblage is similar to that recovered from a post-Roman pit at Cullompton Tiverton Road (Jones 2013). Stinking chamomile implies clay soils and today is largely confined to poorly-drained alkaline clay soils (Kay 1971); it may have grown with spelt, which is a hardy cereal that thrives on heavy soils ideal for winter sowing. Barley is a spring-sown field crop with annual weeds including oats and brome (*Bromus*), so it seems likely that the fills of these features contained the remains of separate mixed-crop processing waste, deposited with wood charcoal from their primary source. As with Tiverton Road, it is difficult to determine whether these crops were grown locally, but it seems highly likely.

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		Early Roman Cemetery		Romano-British settlement					
				Phase 2	Phase 3		Phase 5		
	Context	**954**	**999**	**843**	**850**	**927**	**927**	**916**	
	Sample	**447**	**468**	**425**	**428**	**438**	**442**	**439**	
	Fill of	953	998	842	177	937	937	915	
	Flot size (ml)	130		70	30	10	28	145	**Habitat**
Cereal grain									
Hordeum sp	Hulled barley - straight	1							#
Hordeum sp	Barley			2			1		#
Triticum sp	Hulled wheat	5		7	1				#
Triticum sp	Free-threshing wheat	7	1	1					#
c.f. *Triticum* sp	Wheat			4					#
Cereal indet		2		1			1		#
	Totals	**15**	**1**	**15**	**1**	**0**	**1**	**0**	
Cereal chaff									
Triticum spelta	Spelt wheat glume base							1	#
Triticum sp	Hulled wheat glume base			1	5				#
	Totals	**0**	**0**	**1**	**5**	**0**	**0**	**0**	
Weeds									
Anthemis cotula L.	Stinking Chamomile	1							CDh
Avena sp	Oat	3	1		1				CD?#
Avena/Bromus spp	Oat/brome	1							CDG
Avena/Poaceae	Oat/grass			1				1	CDG
Beta vulgaris	Beet	1							Ds
Carex spp	Sedge	3							GMPRW
Chenopodiaceae indet	Goosefoot Family				1				CD
Corylus avellana L.	Hazel		1	4					HSW
Eleocharis palustris/uniglumis	Spike-rush			1					MPw
Galium aparine L.	Cleavers			1	1				CHSo
Lathyrus/Vicia spp	Vetch	2							DG
Poa/Phleum spp	Meadow-grass/ cat's-tail	16	3	1	1				G
Rosa sp (thorn)	Rose family	1							HSW
Rubus sect. Glandulosus	Bramble		1				1		DHSW
Rumex sp	Dock			1					DG
Sambucus nigra L.	Elder	1							DHSWn
Stellaria media (L.)Villars	Common Chickweed	1							CD
	Totals	**30**	**6**	**9**	**4**	**0**	**1**	**1**	

Habitats: C: Cultivated/arable; D: Disturbed; G: Grassland; H: Hedgerow; M: Marsh; P: Ponds, ditches, stagnant/slow flowing water; R: Rivers, streams; S: Scrub; W: Woodland; h: heavy soils; n: nitrogen-rich soils; o: open habitats; s: coastal; w: wet/damp soils.
cultivated plant/of economic importance

Table 28: Plant macrofossil remains.

Appendix 22

Geoarchaeology of Pit [883], *by Dr Ben Pears*

Geoarchaeological analysis was conducted upon a column of sediments taken from a monolith sequence from five contexts within a large Romano-British pit feature from Shortlands Lane, Cullompton, in order to determine variations between the horizons and a potential source. Overall, the horizons showed distinctive evidence of a legacy of burning through numerous charcoal inclusions and distinctive levels of total P and magnetic susceptibility. These most likely demonstrate the dumping of burnt residues from domestic hearths whereas in the basal horizon 888 there was a very large magnetic susceptibility increase and evidence of slag typical of the dumping of industrial waste illustrating a range of localised land-uses on and around the site.

Introduction

Archaeological excavations at Shortlands Lane, Cullompton, Devon, in 2009 highlighted a number of important features which contained a range of organic and inorganic fills. Determining the origin and form and function of these deposits is important in order to more clearly understand the history of the site and this was conducted using detailed field analysis and geoarchaeological research. These techniques have successfully been utilised across the world to interpret anthropogenic effects on the landscape and each will complement the other, as well as the archaeological evidence, in order to more fully interpret landscape history across the site and the surrounding landscape.

Geology and Soils

The solid geology around the site is composed of the Exeter Series of breccias and sandstones. These typical alluvial fan deposits date to the early Permian period (c.299-271ma) (Ussher, 1902; 1906, Henson 1972) and are covered in places by coarse-grained sand and gravel terraces and finer grained alluvial horizons within the Culm Valley. The distinctive geology of the localised landscape reflects clearly in the localised soils of the area. Covering the vast majority of the area, except the Culm Valley, is the Bromsgrove Association (541b) which are typically free draining, slightly acidic, loamy soils. This soil typically hosts open deciduous woodland with bracken and gorse commonplace. However, there are also areas of neutral and acid pasture alongside some arable land but the fertility of the soils is traditionally poor and cultivation has traditionally been sugar beet, potatoes, vegetables and fruits. By contrast, in the Culm Valley and many of the smaller tributaries, the soils are largely composed of the Hollington Association (811c) which is typically composed of heavier alluvial gleys and because of infrequent flooding has been used mainly as grassland and meadowland.

Fieldwork and Methods

The geoarchaeological fieldwork at Shortlands Lane, Cullompton consisted of the detailed excavation, recording and sampling of ten distinctive fills of a steep-sided Romano-British pit *c.*1.1m deep and these contexts were sampled using a 0.5m long monolith tin (Figure 70). Of the ten fills in the pit, five were chosen for more detailed analysis based upon a distinctive dark colouration, the presence of frequent charcoal fragments, burnt clay and slag suggesting a possible anthropogenic origin (Table 29).

In the laboratory all the samples were dried, sieved (to <2mm) and analysed in the Department of Geography at the University of Exeter. Soil pH (H_2O 1:2.5) was determined following the methods of Avery and Bascomb (1982) and the University of Exeter. Soil organic matter was also determined using percentage loss on ignition (LOI)(550^{o}C), percentage carbonate at (950^{o}C), total P in the fine earth fraction (<100µm) by sodium hydroxide fusion (Based on Mehta *et al.* 1954 and Sommers *et al.* 1972), magnetic susceptibility (x10^{-6}mg^{3}kg^{-1}) was conducted using the methods developed by Dearing (1999) and particle size analysis was determined by wet sieving the 8mm to 63µm size fraction following McManus (1988) and using the program GRADISTAT© (Blott & Pye 2001), to determine values of mean grain size and sorting using the Udden-Wentworth nomenclature.

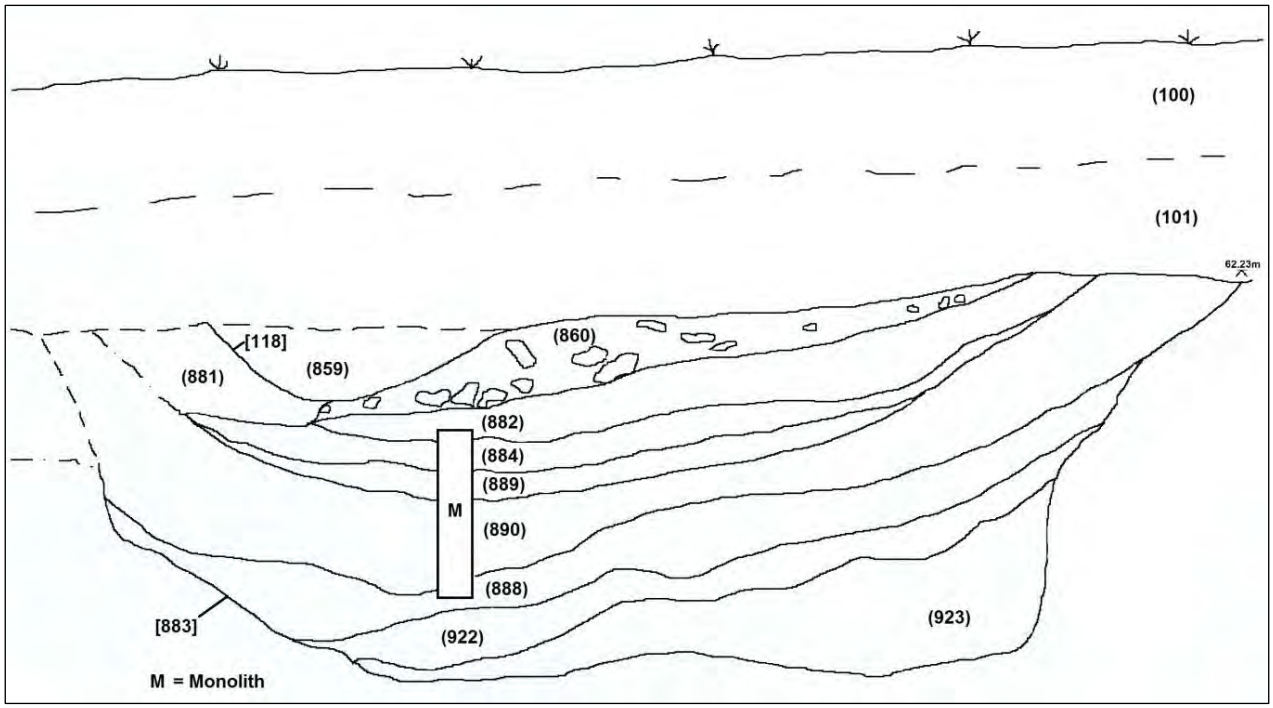

Figure 73: Section drawing of pit [883] and of the sediment contexts sampled by the monolith tin.

Context	Depth	Munsell Colour	Description
(882)	180mm	5YR 6/3 to 6/4 light reddish brown to 7.5YR 6/6 reddish yellow	Fill of pit feature [883]. Gravelly sandy-clay containing common to abundant sub-rounded chert nodules and other stones, 50-100mm; possibly heat affected; possible surface?
(884)	100mm	10YR 5/2 greyish brown to 10YR 4/2 dark greyish brown	Fill of pit feature [883]. Silty-clay with abundant charcoal fragments
(889)	80mm	10YR 5/2 greyish brown	Fill of pit feature [883]. Silty-clay with frequent to abundant charcoal flecks and fragments; occasional sub-angular to sub-rounded stones <80mm.
(890)	320mm	10YR 5/1 grey to 10YR 5/2 greyish brown	Fill of pit feature [883]. Clay-silt with occasional to common charcoal fragments and burnt clay
(888)	220mm	10YR 7/6 yellow to 10YR 6/8 brownish yellow	Fill of pit feature [883]. Silty-clay with frequent to abundant sub-angular to sub-rounded stones 20-30mm and rare slag material.

Table 29: Summary of sediment contexts sampled from the monolith tin.

Geochemical Results

Five of the sedimentary contexts excavated within pit feature [883] were selected for further physical and chemical analysis in order to determine how they were formed and whether there was any anthropogenic influence through deliberate or accidental addition and disturbance. The five contexts selected were carefully extracted from the monolith, dried and subjected to a range of analyses summarised in Table 30 and Figure 71and the results are discussed further below.

Overall the sequence has a moderately acidic pH ranging from 5.6 in horizon 882 and increasing slightly to 6.3 in horizon (890). In the basal deposit (888) there is a subtle decrease to 5.9 but overall the pH results are stable throughout and not dissimilar from the pH of the natural Bromsgrove Association soils. There is a similar stability in the percentage carbonate results which are very low but overall there is a slight increase with depth from 0.39-0.56%. These low results are most likely due to the acid nature of the soils which would remove all forms of carbonate including animal and human bone material which might be incorporated into the pit fills. The pH and carbonate results therefore illustrate that animal or human bone

may have been incorporated into the pit fills, but that the acidic soils have removed any physical or chemical evidence of them.

	Methods	pH	Loss on Ignition	Carbonate	Mag Susceptibility	Inorganic P	Organic P	Total P	Multi-Element	Particle Size
Context	Sample		%	%	(SIx10-6mg3kg-1)	ppm	ppm	ppm		φ scale
882	I	5.6	2.12	0.39	1.14	1393.64	564.20	829.43		-0.62
884	II	6.1	3.12	0.46	1.36	2245.91	850.57	1395.34		-0.27
889	IV	6.2	1.95	0.51	1.23	1044.20	431.25	612.95		0.28
890	V	6.3	2.47	0.56	0.76	1081.70	196.02	885.68		0.32
888	III	5.9	2.98	0.44	4.80	1949.32	644.32	1305.00		0.08
884	Replicate				1.23					
888	Replicate	5.8	2.97	0.43						

Table 30: Summary of geochemical and physical analyses from five samples taken from the monolith column.

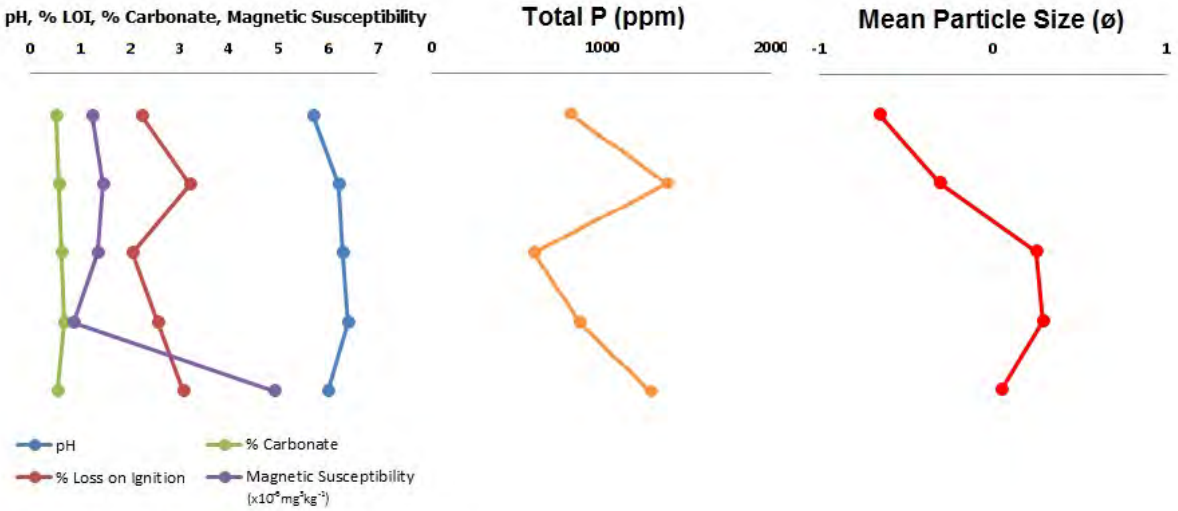

Figure 74: Graphical summary of geochemical and physical analyses conducted on the sediment samples.

A similar process may also have been acting upon the organic contents of the soils, which demonstrate a very low organic content. Overall the sequence shows a loss on ignition of between 2 and 3% which is very surprising given the charcoal fragments present. There is also a good deal of variation with depth, with contexts (884) and (888) containing the highest results (3.12 and 2.98% respectively). These mini-peaks may represent the remnant of a once higher organic content which has subsequently been removed by post-burial biological consumption, physical mixing and chemical degradation, but they might also illustrate that the pit was not filled systematically in a single action but by a mixture of organic and inorganic dumps over a much longer period. Interestingly, this idea is mirrored by the total P results which also peak in contexts (884) (1395ppm) and (888) (1305ppm), but with high results also present in the other contexts between c.600-800ppm. The majority of the total P results are, however, composed of inorganic P which in context (884) exceeds 2200ppm which is exceptionally high and may derive from dumped occupation waste. Other evidence of anthropogenic material within the pit fills was seen in the magnetic susceptibility results. In contexts (882) to (890) the results were typical of topsoils with inclusions of burnt material ranging from 0.76 to 1.36x$10^{6}mg^{3}kg^{-1}$. There was a drastic increase to 4.80x$10^{6}mg^{3}kg^{-1}$ in context (888) which tends to indicate considerably more carbonised material, but may also be due to the inclusion of some igneous rock or metamorphic rock inclusions or slag from industrial waste. The fact that context (888) also contains a very high total P suggests that the horizon has a distinctive anthropogenic source which includes burnt material.

The particle size of the fills of pit [883] show a number of distinct variations. Overall there is a general fining down profile with the contexts (882) and (884) with the coarsest mean Wentworth value (-0.63 to -0.27) as shown in Figure 72. But in the more detailed breakdown contexts (882) and (884) contain a similar particle size pattern up to 250µm but there is considerably more variation in the coarser fractions with more 1-2mm material in context (884) but a very high 4-8mm fraction in context (882). This suggests composition of a

range of different material including some larger stone inclusions and charcoal inclusions. In contrast to the upper fills contexts (889) and (890) show very similar results with the vast majority between 250-500µm and considerably less coarse inclusions. The most distinctive variation can be seen in context (888). This contains the most fine-grained material between 63-125µm and very little material between 1 to 4mm suggesting that the distinctive geochemical signature derives from very fine grained inclusions possibly ash and fine charcoal material. The presence though of a peak of material *c*.8mm also shows that there is also a number of larger inclusions possibly stones, ceramics, or industrial material which could also account for the distinctive magnetic susceptibility result.

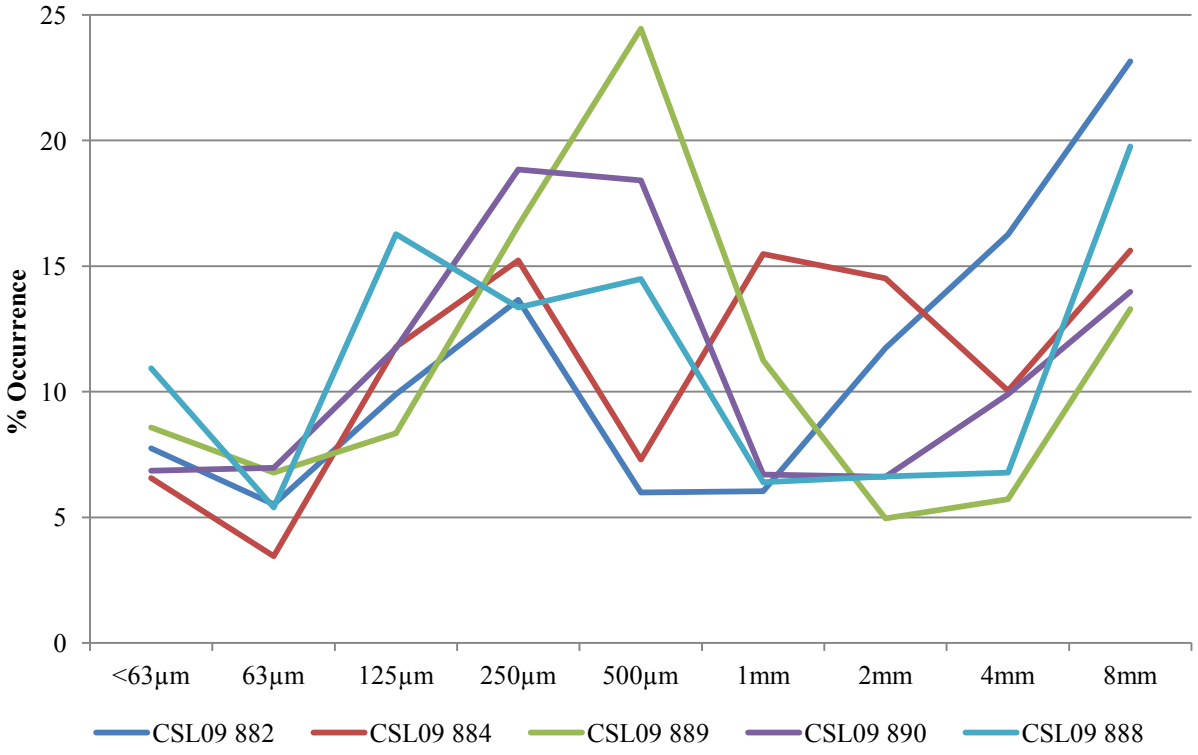

Figure 75: Detailed particle size results.

Multi-Element Analysis

Of the five soil samples within the monolith, three were selected for multi-element analysis ((882), (884) and (890)). These samples were selected as they all had distinctive colouration, the presence of frequent charcoal fragments, burnt clay and slag suggesting a possible anthropogenic origin and it was felt that multi-elemental analyses would assist in determining the origin of the horizons. Once extracted from the monolith tin, 0.5-1.0g of the sample was accurately extracted and these were then subjected to digestion firstly by 3ml of concentrated nitric acid and then by 0.5ml of concentrated hydrochloric acid. After digestion the samples were centrifuged at 2500rpm for 20 minutes and the resultant supernatant retained for analysis using an Atomic Absorption Spectrophotometer (AAS). During the AAS analysis an air/acetylene flame was used to determine the concentration of five elements Fe, Mn, Cu, Pb and Zn which are typically enhanced in anthropogenic and archaeological contexts as a result of deliberate or accidental occupation of activity such as occupation, industry and waste disposal.

	Element and concentration (mg/l)				
Context	**Fe**	**Mn**	**Cu**	**Pb**	**Zn**
882	303.869	20.154	0.400	0.113	0.573
884	296.890	43.819	0.651	0.168	0.739
889					
890	214.663	13.381	0.599	0.845	0.543
888					

Table 31: Summary of multi-element results from three archaeological contexts.

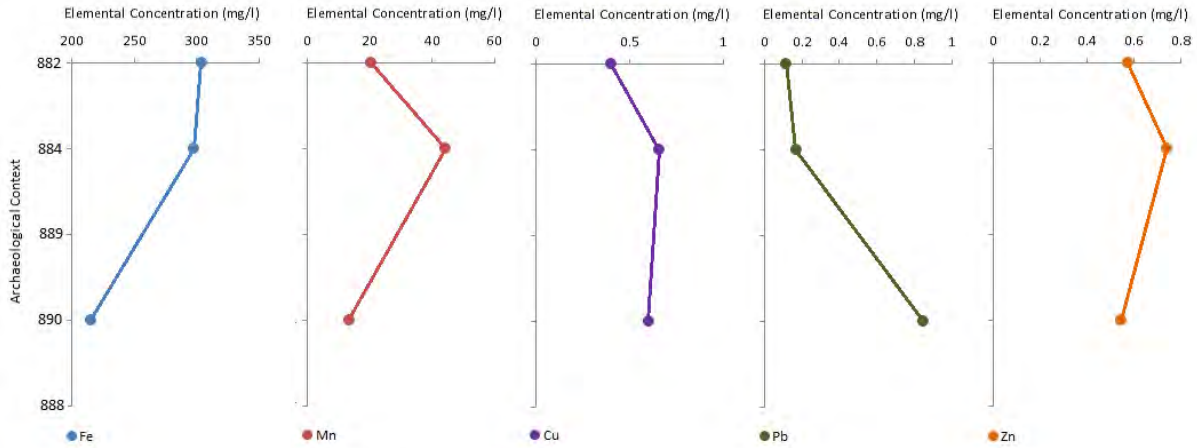

Figure 76: Graphical summary of multi element results conducted on three archaeological contexts.

Overall the multi-element results (Table 31 and Figure 73) from the samples show discrete levels of heavy metal enhancement suggesting little industrial waste has been added to the pit fill and that if any material was present then post-burial leaching has removed any evidence of it. The most distinctive elemental concentrations were of Fe and Mn especially in the top two horizons (882)(884), probably as a result of free drainage through the upper contexts and these two horizons also contained subtly higher concentrations of Cu and Zn. In context (890) the Fe and Mn levels were considerably lower and there were also only trace quantities of Cu and Zn suggesting little anthropogenic input, the results for Pb were distinctly higher than the upper two horizons and either illustrates the remnants of heavily leached occupation waste or more likely a naturally high anomaly deriving from natural sediments. When the results are compared to the other geoarchaeological results it is clear that the enhancement has most likely derived from the addition of organic material and domestic hearth waste rather than from a more industrial source. When compared to other geochemical analyses this theory holds true. At a number of sites in Europe including Greece (Bintliff *et al.* 1992), Italy (Lewis *et al.* 1993), Sweden (Linderholm and Lundberg, 1994), Shapwick, England (Aston *et al.* 1998), Isle of Skye, Scotland (Entwistle *et al.* 2000) and Denmark (Kristiansen 2001) heavy metal results taken from potential occupation sites illustrated very high Pb, Zn, Cd and Cu compared to the natural soils and distinctive correlations with the archaeology were determined.

Conclusions

Overall the physical and chemical results from the fills of pit [883] show a variety of results which suggest distinct variation in the origins of the source material. Contexts (884) and (888) contain the clearest evidence of human interaction with distinctive physical characteristics and inclusions including abundant charcoal alongside very high total P figures, increased loss on ignition and distinctive particle size results. Contexts (882), (889) and (890) also showed evidence of human enhancement but on a smaller scale with lower loss on ignition, total P, magnetic susceptibility alongside variable particle size signatures indicating a variety of fine and coarse grained inclusions. Overall all the horizons probably represent dumps of material deriving from domestic or industrial sources associated with activity around the site during the last phases of occupation or activity on and around the site. The frequency of charcoal particles in all contexts and the magnetic susceptibility results suggest that these deposits might well be dumps of burnt residues possibly from domestic hearths but the exceptionally high magnetic susceptibility results and inclusions of slag material in context (888) may well reflect remnant industrial detritus from metal working.

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Appendix 23

The Post-Medieval Glass from Pit [104] *by Bryn Morris*

Introduction
The early 18th century sub-rectangular Pit [104] contained two fills. The uppermost fill contained discrete dumps of stone, brick and slate, as well as a significant quantity of glass. The deposit of window glass was sampled during the excavation. Approximately 1365 fragments weighing 7.454kg were recovered. This glass was subject to chemical analyses undertaken by English Heritage as part of a wider research project; the results of this analysis have already been published (see Girbal & Ford 2010).

Quantification and Analysis
The retained assemblage was sorted into four groups according to colour, which roughly corresponds to chemical composition and thus date.

Count	Weight kg	Colour	Notes
218	1.125	Dark green	×36 rims
918	4.473	Light green	×305 rims; ×2 bull's eyes; ×1 almost complete pane; ×1 circular pane
192	1.747	Blue	×81 rims; ×2 bull's eyes; ×1 rim glass jar
37	0.109	Clear	×8 rims
1365	7.454		

Table 32: Composition of the assemblage.

The chemical analysis undertaken by English Heritage determined that three chemical groups were present within the assemblage: high lime, low alkali (HLLA) glass (dated to *c*.1570-1700), kelp glass (dated *c*.1700-1830), and a group of mixed chemical composition (either a transitional product or perhaps imported). The dark green glass was HLLA, the blue glass and some of the light green glass was kelp, and most of the light green glass belonged to the mixed group. The clear glass, although visibly very different, shared the chemical signature of the HLLA group.

The four bull's eyes present, and the rounded rims of a high proportion of the glass, indicate manufacture by way of the crown glass method, introduced in 1678. There is only one recognisable pane of glass: square and 92mm across. The rest appear to be off-cuts.

Discussion
This group of glass represents a single dump of material, associated with other material that might broadly be considered 'demolition debris'. The high proportion of cheap edge pieces, the presence of bull's eyes and a general lack of cames would suggest this represents a dump of glaziers waste. The heterogeneous chemical composition of the glass would also support this interpretation, and presumably reflects the use and reuse of glass, with all the implications for dating that implies.

Conclusion
Pit [104] contained a large dump of glaziers waste, containing a range of material broadly dateable to the early 18th century. Chemical analyses undertaken by English Heritage demonstrated this assemblage contained a range of material, probably dating to the transitional period when HLLA glass was replaced by kelp glass. This is a useful group from an area otherwise poorly represented.

References
Girbal, B. & Ford, D. 2010: *Shortlands Lane, Cullompton, Devon: scientific examination of the window glass*. English Heritage Research Department report series no. 79-2010.

Scottish Universities Environmental Research Centre
Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

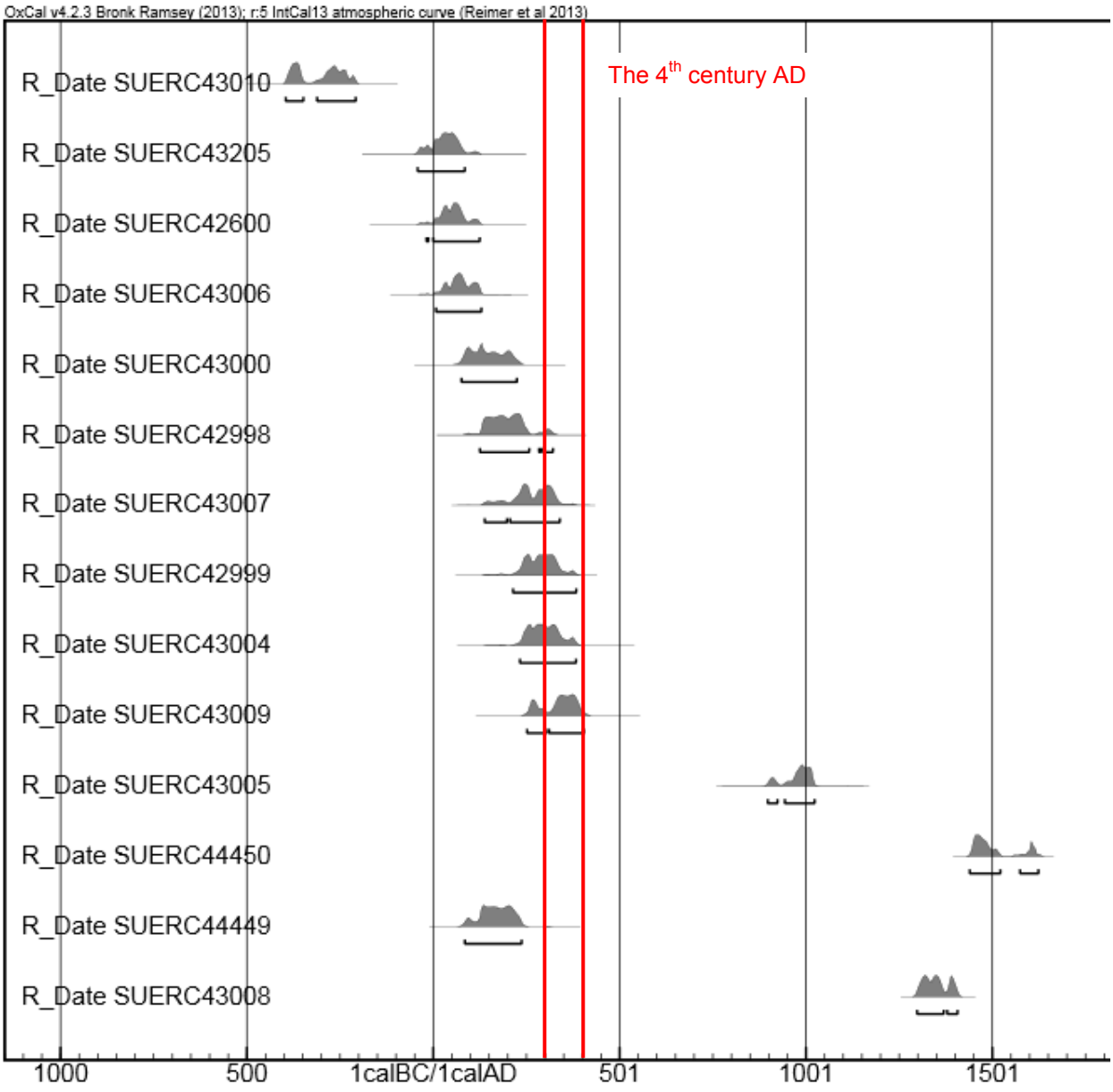
Appendix 24

Radiocarbon Determinants, *by SUERC*

A single burnt bone fragment from the cremation burial was selected and submitted for analysis (see Appendix 14). The bulk samples collected during the excavation were processed and the charred plant remains sent for specialist analysis (see Appendix 20). Charcoal suitable for radiocarbon dating was selected and sent to SUERC in May 2009. The results from samples <427> and <453> appeared so unusual that a second set of charcoal samples were submitted for dating.

N.B.

1. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standards, background standards and the random machine error.
2. The calibrated age ranges are determined using the University of Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.1 (Bronk Ramsey 2009). Terrestrial samples are calibrated using the IntCal09 curve while marine samples are calibrated using the Marine09 curve.
3. Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or Telephone 01355 270136 direct line.


OxCal v4.2.3 Bronk Ramsey (2013); r:5 IntCal13 atmospheric curve (Reimer et al 2013)
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R_Date SUERC43205
R_Date SUERC42600
R_Date SUERC43006
R_Date SUERC43000
R_Date SUERC42998
R_Date SUERC43007
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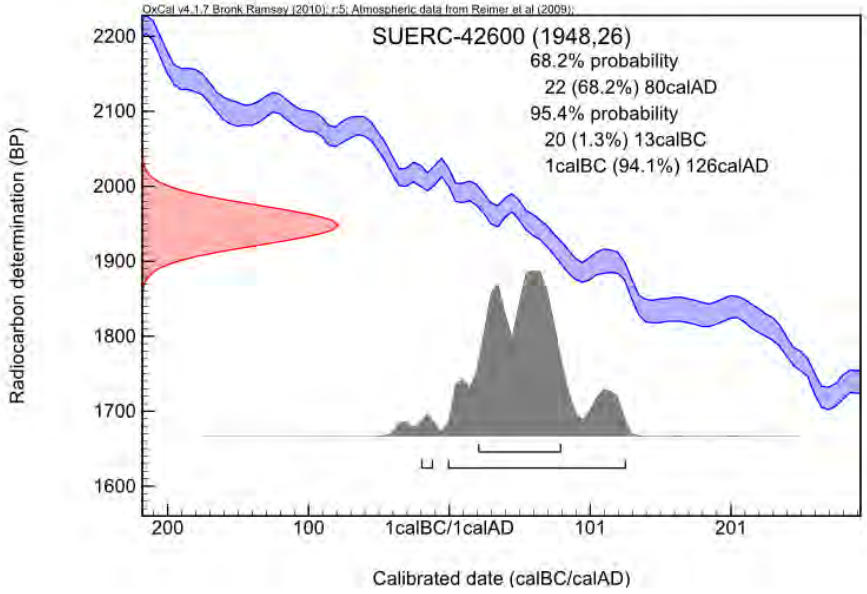
R_Date SUERC43009
R_Date SUERC43005
R_Date SUERC44450
R_Date SUERC44449
R_Date SUERC43008
The 4th century AD
1000
500
1calBC/1calAD
501
1001
1501

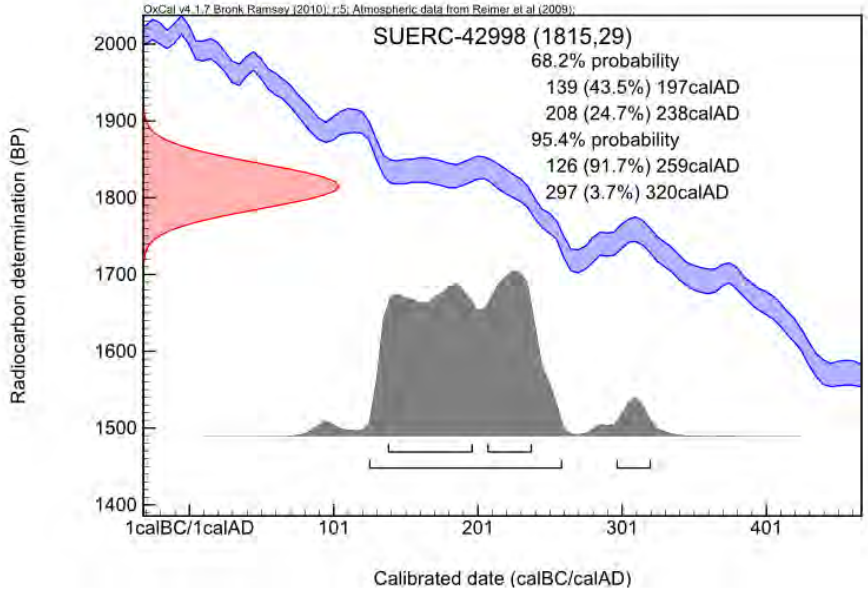
Scottish Universities Environmental Research Centre
Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

Laboratory Code	SUERC-42600 (GU-28514)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (955) <955.spit6>
Material	Burnt bone: Human
$\delta^{13}C$ relative to VPDB	-22.6 ‰
Radiocarbon Age BP	1948 ± 26



Scottish Universities Environmental Research Centre
Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

Laboratory Code	SUERC-42998 (GU-28733)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (103) <406>
Material	Charcoal : *Alnus glutinosa*
$\delta^{13}C$ relative to VPDB	-27.1 ‰
Radiocarbon Age BP	1815 ± 29



Scottish Universities Environmental Research Centre
Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

Laboratory Code	SUERC-42999 (GU-28734)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (284) <415>
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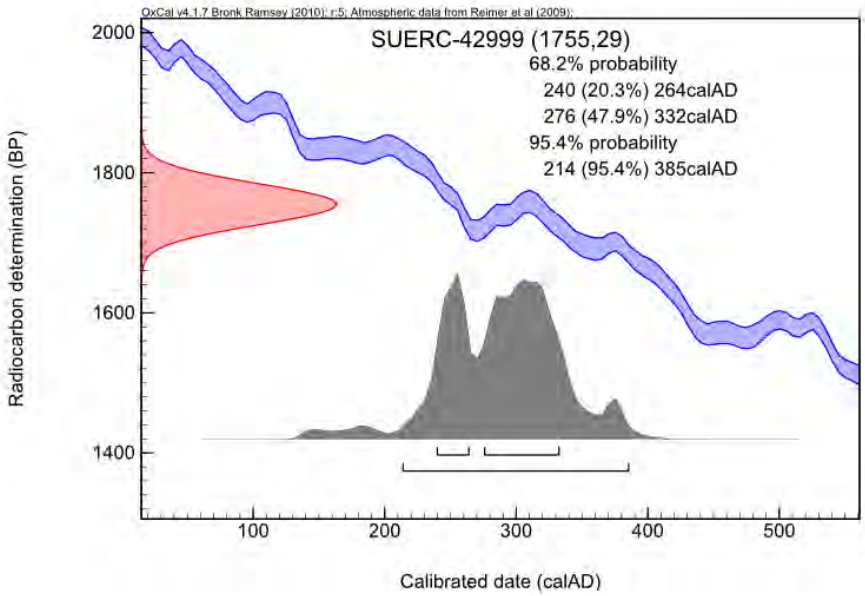
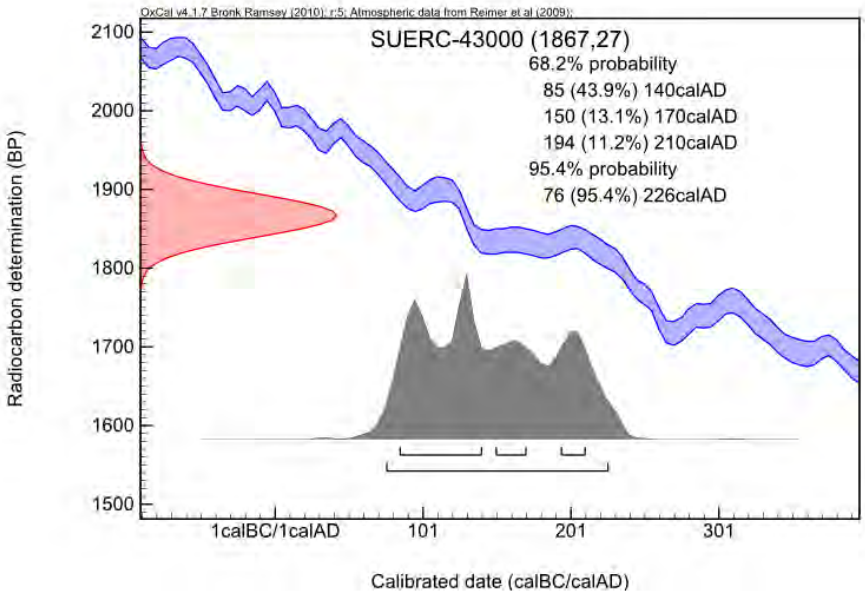
Radiocarbon Age BP	1755 ± 29



Scottish Universities Environmental Research Centre
Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

Laboratory Code	SUERC-43000 (GU-28735)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (259) <421>
Material	Charcoal : *Alnus glutinosa*
$\delta^{13}C$ relative to VPDB	-26.5 ‰
Radiocarbon Age BP	1867 ± 27



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Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
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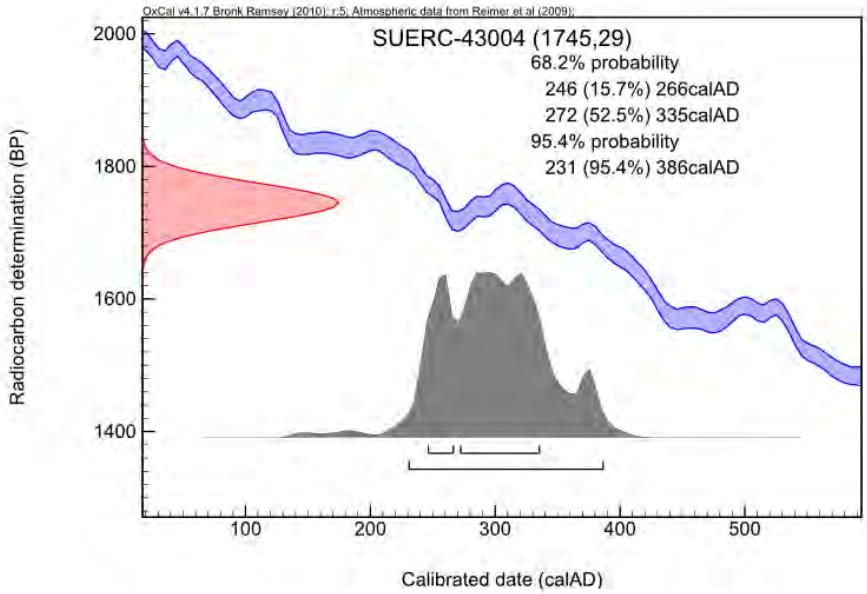
Laboratory Code	SUERC-43004 (GU-28736)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (843) <425>
Material	Charcoal : *Sambucus*
$\delta^{13}C$ relative to VPDB	-25.3 ‰
Radiocarbon Age BP	1745 ± 29



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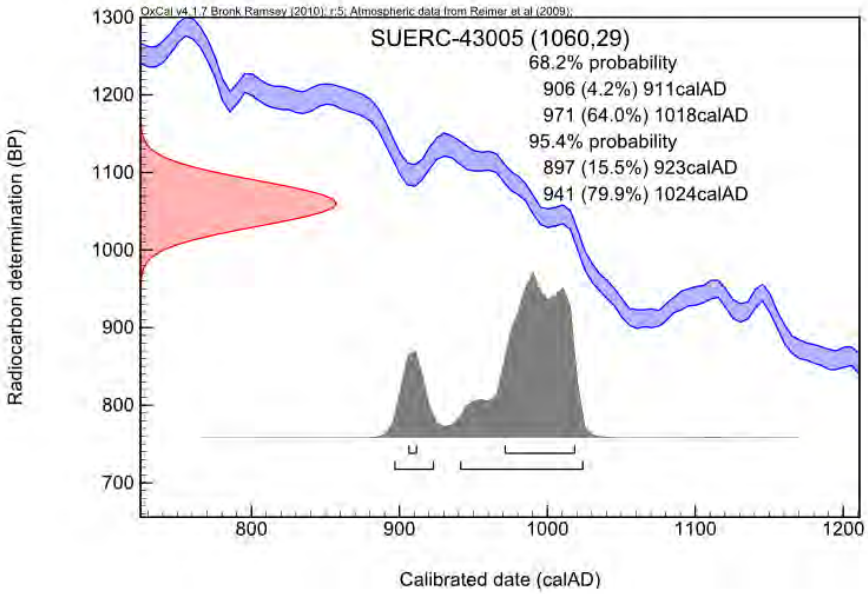
Laboratory Code	SUERC-43005 (GU-28737)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (849) <427>
Material	Charcoal : *Salicaceae*
$\delta^{13}C$ relative to VPDB	-25.2 ‰
Radiocarbon Age BP	1060 ± 29



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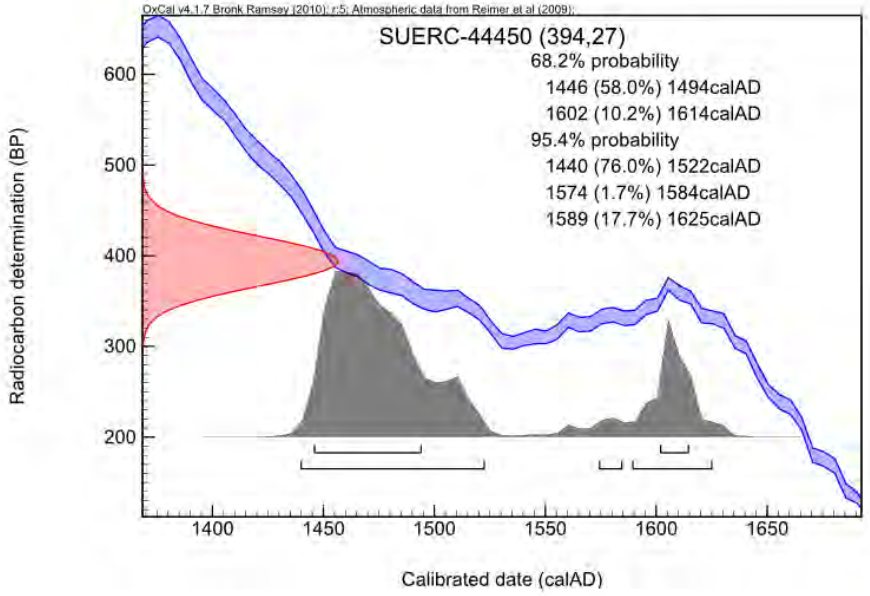
Laboratory Code	SUERC-44450 (GU-29450)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (849) <427>
Material	Charcoal : *Alnus*
$\delta^{13}C$ relative to VPDB	-27.4 ‰
Radiocarbon Age BP	394 ± 27



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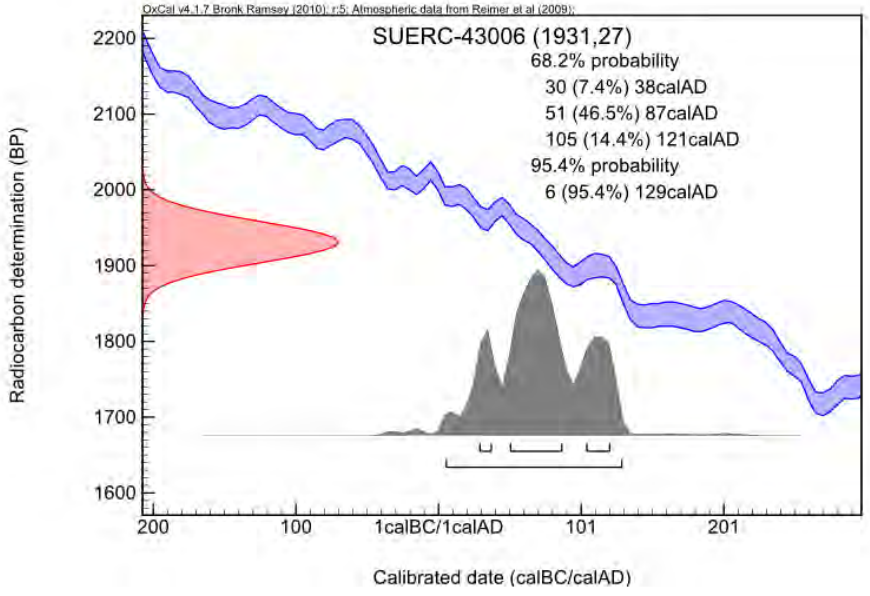
Laboratory Code	SUERC-43006 (GU-28738)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (876) <436>
Material	Charcoal : *Alnus glutinosa*
$\delta^{13}C$ relative to VPDB	-27.7 ‰
Radiocarbon Age BP	1931 ± 27



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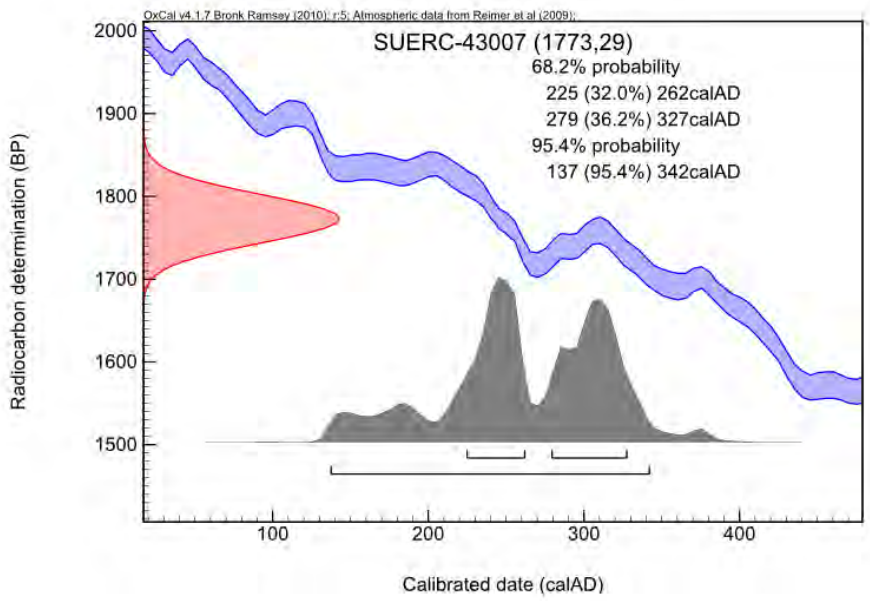
Laboratory Code	SUERC-43007 (GU-28739)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (913) <441>
Material	Charcoal : *Ulex/Cytisus*
$\delta^{13}C$ relative to VPDB	-24.0 ‰
Radiocarbon Age BP	1773 ± 29



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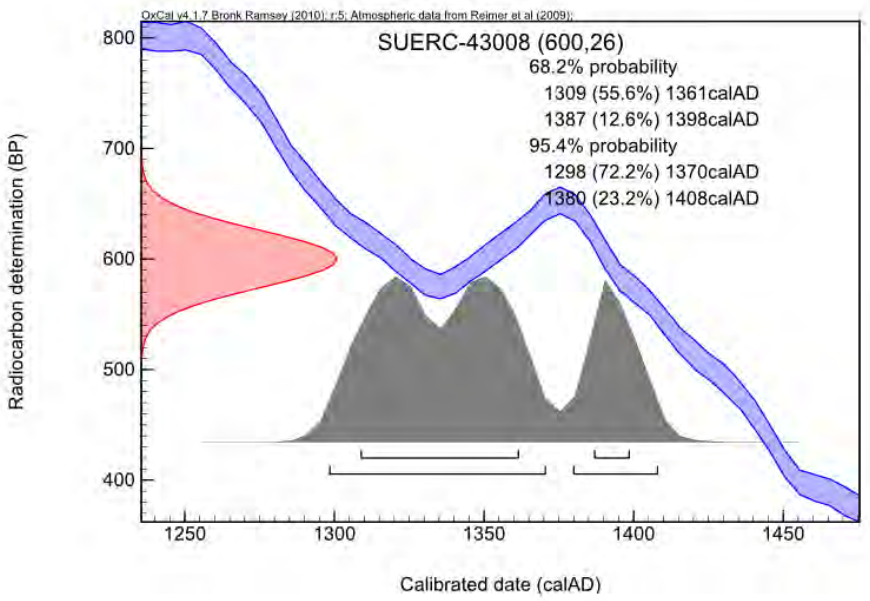
Laboratory Code	SUERC-43008 (GU-28740)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (979) <453>
Material	Charcoal : *Quercus sp*
$\delta^{13}C$ relative to VPDB	-24.3 ‰
Radiocarbon Age BP	600 ± 26



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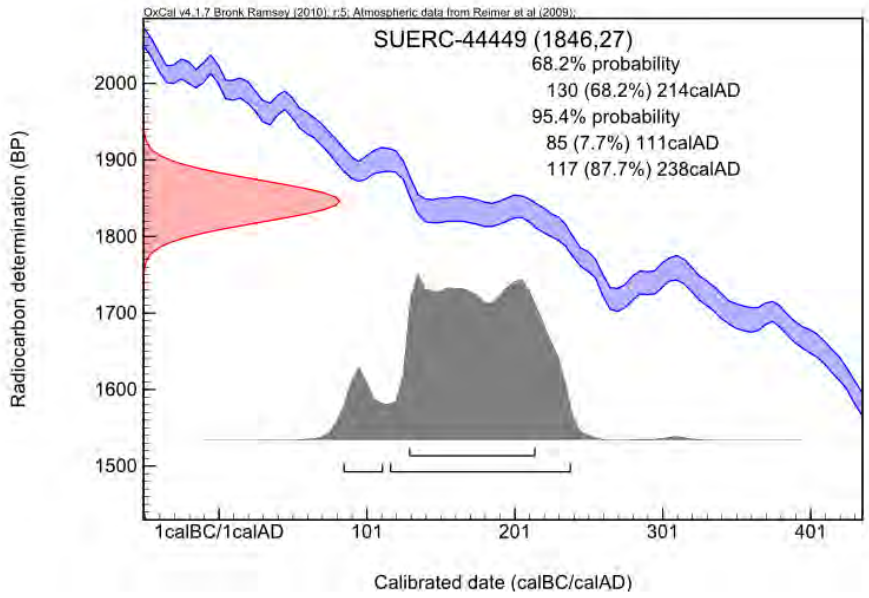
Laboratory Code	SUERC-44449 (GU-29449)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (979) <453>
Material	Charcoal : *Salix/popular*
$\delta^{13}C$ relative to VPDB	-24.9 ‰
Radiocarbon Age BP	1846 ± 27



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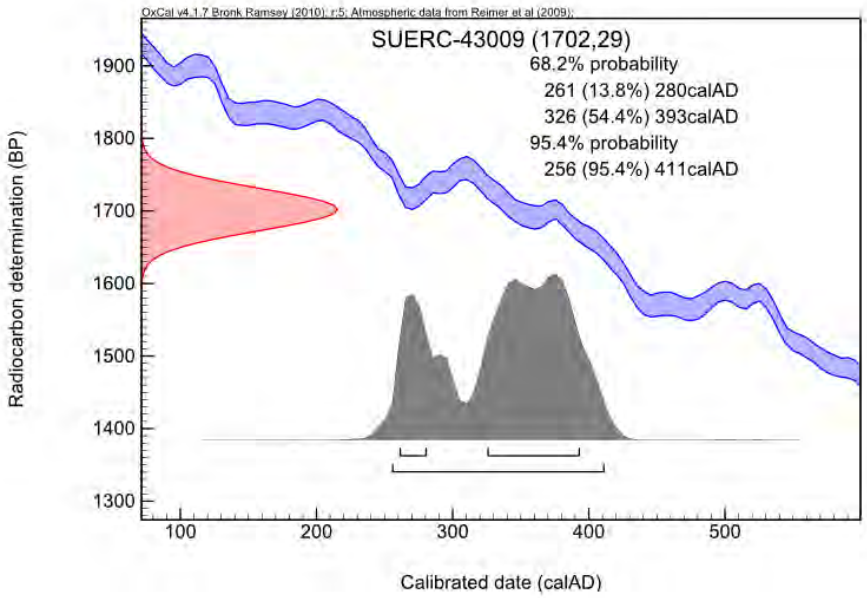
Laboratory Code	SUERC-43009 (GU-28741)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (1521) <455>
Material	Charcoal : *Cytisus/Ulex*
$\delta^{13}C$ relative to VPDB	-21.7 ‰
Radiocarbon Age BP	1702 ± 29



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Rankine Avenue, Scottish Enterprise Technology Park,
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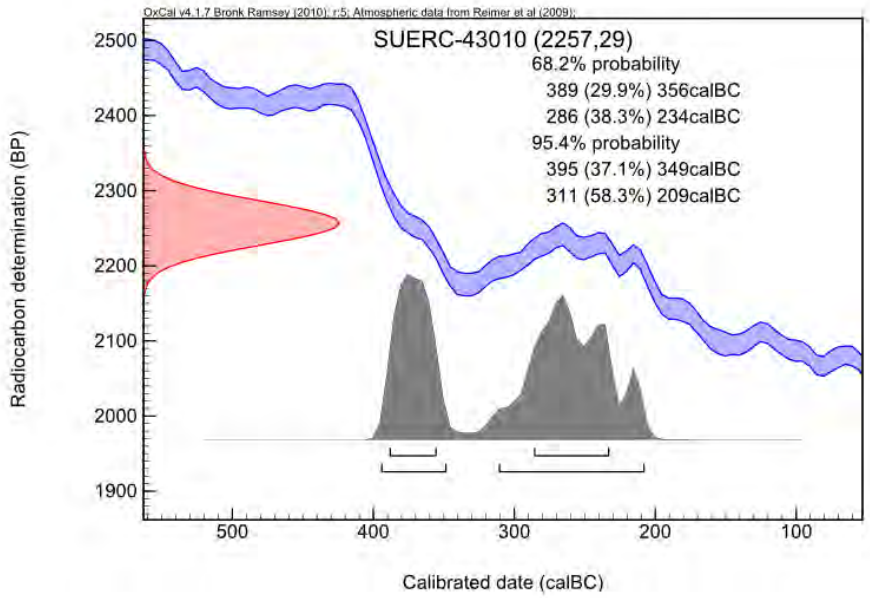
Laboratory Code	SUERC-43010 (GU-28742)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (1518) <456>
Material	Charcoal : *Corylus avellana*
$\delta^{13}C$ relative to VPDB	-23.5 ‰
Radiocarbon Age BP	2257 ± 29



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Director: Professor A B MacKenzie Director of Research: Professor R M Ellam
Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
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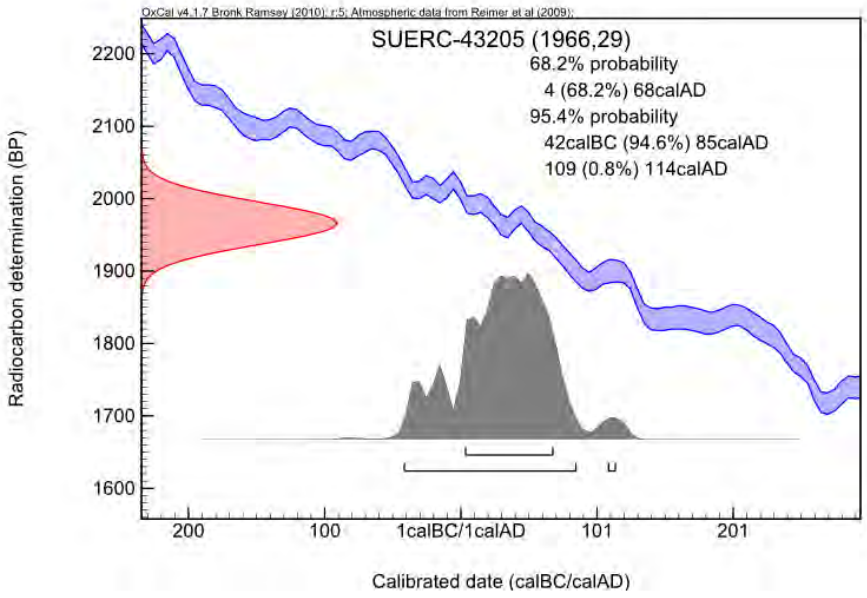
Laboratory Code	SUERC-43205 (GU-28743)
Submitter	South West Archaeology Ltd
Site Reference	Cullompton Shortlands Lane
Sample Reference	CSL09 (264) <461>
Material	Charcoal : *Corylus avellana*
$\delta^{13}C$ relative to VPDB	-23.7 ‰
Radiocarbon Age BP	1966 ± 29



Appendix 25

List of Jpegs held on CDROM at the rear of this report

No.	Description	From	Scale
1	View of the west elevation of the adjacent rifle range	SW	2m
2	View of the south elevation of the northern boundary wall of the site, adjacent to the rifle range	S	2m
3	Pre-ex view across the site, from the east	E	~
4	View of the south elevation of the northern boundary wall of the site, stub of surviving brick walling	S	2m
5	View of the shed in the south-east corner of the site	NW	2m
6	Pre-ex view across the site, from the south-east	SE	~
7	View of the south elevation of the northern boundary wall of the site, at the western end	S	2m
8	As above, from the south-east	SE	2m
9	Pre-ex view across the site, from the north-west	NW	~
10	As above, from the south-west	SW	~
11	Linear [102], from the east	E	1m+0.4m
12	Linear [102] east-facing section	E	~
13	As above, vertical scale	E	1m
14	Linear [102] post-ex, from the east	E	1m+0.4m
15	Pit [104] pre-ex with Linear [102] post-ex in the background	N	2m+1m
16	Linear [118] pre-ex	E	1m
17	Linear [112] pre-ex	W	1m
18	Linear [114] and Linear [106] pre-ex, north end of Trench #1	N	2m+1m
19	As above, from the south	S	2m+1m
20	Linear [133] and [136], from the north	N	2m+1m
21	As above, from the south	S	2m+1m
22	East-facing section of Trench #1, southern end, with Linear [102], oblique	NE	2m+1m
23	East-facing section of Trench #1, southern end, with Pit [104], oblique	SE	2m+1m
24	East-facing section of Trench #1, southern end, with Pit [104]	E	2m+1m
25	East-facing section of Trench #1, northern end, with Linear [112]	E	2m+1m
26	East-facing section of Trench #1, northern end, with Linear [106]	E	2m+1m
27	East-facing section of Trench #1, northern end, with Linear [112]	E	2m+1m
28	View along Trench #2, from the east	E	2m+1m
29	South-facing section of Trench #2, eastern end, from east to west	E	2m+1m
30	As above	E	2m+1m
31	As above	E	2m+1m
32	As above	E	2m+1m
33	View along Trench #2, from the west, Linear [131] and [133] in foreground	W	2m+1m
34	South-facing section of Trench #2, western end, from west to east, Linear [131] and [133] pre-ex	S	2m+1m
35	As above	S	2m+1m
36	As above	S	2m+1m
37	As above	S	2m+1m
38	As above	S	2m+1m
39	As above	S	2m+1m
40	As above	S	2m+1m
41	View along Trench #2, from the east, Feature [122]	W	2m+1m
42	Detail of Roman pottery crushed *in situ,* Pit [178]	S	0.5m+0.4m
43	Pit [104] pre-ex	W	2m
44	Pit [104] pre-ex	NW	2m
45	Pit [104] pre-ex	E	2m
46	Pit [104] pre-ex	NE	2m
47	Feature group <213>, base of four sub-rectangular pits	NW	2m
48	Sheep skeleton, partially excavated	E	1m+0.5m
49	Sheep skeleton, partially excavated	W	1m+0.5m
50	East end of southern area, after cleaning, showing Linear [118]	S	2m
51	As above, from north	N	2m
52	Western terminus of Linear [102]	W	2m+1m
53	SF: Roman coin, Layer (176)	W	10cm
54	As above	N	~
55	Section of southern area, after clearing, showing [119], gravel [171]	S	2m

56	Shots of two possible post-holes [197] and [199]	SSW	2m
57	Metalled layer (171)	N	2m
58	View along Linear [172]	N	2m
59	Shot of whole south-east corner of excavated area, after cleaning	NW	2m
60	Section of southern area, showing Linear [172]	S	2m+1m
61	As above	N	2m+1m
62	Excavation of a large body sherd in Linear [131]	W	~
63	Group shot, from left to right: Dr Martin Tingle, Matt Palmer, Jon Freeman, Dr Genieve Hill, Dr Imogen Wood	E	~
64	West end of the southern area, after cleaning, from the north	N	2m+2m
65	as above	N	2m+2m
66	View along east-west section of Linear [131], from the east	E	2m
67	Feature [195] pre-ex	E	2m+1m
68	Posthole [253] pre-ex	N	2m+1m
69	Linear [102], east-facing section of Block #1	E	2m
70	As above, with scale in the base of feature	E	2m+1m
71	As above, showing ditch terminus	NE	2m
72	Linear [102], west-facing section of Block #1	W	2m
73	View above Linear [102] showing block divisions	W	2m+1m
74	Postholes [218], [220], [222] and [224] pre-ex	S	2m+1m
75	Feature [232] partly excavated, north-facing section	N	2m
76	View of the north-east corner of site, Linear [110] and [226] pre-ex	W	2m
77	As above, from north	N	2m
78	Linear [106] pre-ex	W	2m
79	Stony northern terminus of Linear [226]	W	1m+0.5m
80	As above from the north	N	1m
81	Pit [255] pre-ex	N	2m+1m
82	Posthole [183]	S	0.5m
83	Posthole [185]	S	0.5m
84	Posthole [187]	S	0.5m
85	Posthole [251]	S	0.5m
86	Posthole [242]	S	0.5m
87	Posthole [240]	S	0.5m
88	Posthole [218] south-facing section	S	0.5m
89	Posthole [220] south-facing section	S	0.5m
90	Posthole [222] south-facing section	S	0.5m
91	Posthole [224] south-facing section	S	0.5m
92	Posthole [240] west-facing section	W	0.5m
93	Posthole [242] west-facing section	W	0.5m
94	Detail of late C18th bottle with seal (Wm Brutton 1777) from Linear [106]	~	10cm
95	Linear [106], west-facing section, north-east corner of site	W	2m
96	As above, oblique, from south-west	SW	2m
97	As above, base of the feature	S	1m
98	Linear [102], west-facing section of Block #15	W	2m
99	Linear [102], east-facing section Block #15, inc base of section	E	2m+1m
100	Post hole [218] post-ex	S	0.5m
101	Post hole [220] post-ex	S	0.5m
102	Post hole [222] post-ex	S	0.5m
103	Post hole [224] post-ex	S	0.5m
104	Post hole [242] post-ex	W	0.5m
105	Post hole [240] post-ex	W	0.5m
106	Central part of the northern site strip, east end, general shot	N	2m
107	As above	N	2m
108	Shot along Linear [112] etc from west	W	2m
109	As above, detail of wall footings {946}	W	2m
110	Linear [114] pre-ex	SW	2m
111	Feature [104] east-facing section	E	2m+0.5m
112	As above, west-facing section	W	2m+0.5m
113	As above, post-ex	N	2m
114	Post hole [230] pre-ex	S	0.5m
115	Posthole [185] south-facing section	S	0.5m
116	Posthole [230] south-facing section	S	0.5m

117	Posthole [183] south-facing section	S	0.5m
118	Posthole [187] south-facing section	S	0.5m
119	Posthole [251] and Linear [226] south-facing section	S	0.5m
120	As above, detail of [251]	S	0.5m
121	Posthole [251] and Linear [226] post-ex	S	0.5m
122	Stone and brick floor [274] and Linear [226] post-ex	W	1m
123	As above, from south	S	1m
124	As above, detail from west	W	1m
125	Linear [226] post-ex, Block #6	S	1m+0.5m
126	Linear [226], east-facing section of Block #6	E	0.5m
127	Linear [226], west-facing section of Block #6	W	0.5m
128	Posthole [230] post-ex	S	0.5m
129	Posthole [187] post-ex	S	0.5m
130	Posthole [185] post-ex	S	0.5m
131	Posthole [183] post-ex	S	0.5m
132	Post hole [251] post-ex	S	0.5m
133	View along a line of postholes: [183][185][187][251] post-ex	W	2m
134	Linear [226] post-ex, Block #12	W	1m+0.5m
135	Dr Martin Tingle excavating a post-medieval pot base in Linear [226] Block #19	SE	0.5m
136	West end of southern strip, following the removal of Layer (176)	W	2m
137	As above, from north	N	2m
138	Intersection of Linears [106], [114] and [226], post-ex	NW	1m+0.5m
139	As above, from NNW	NNW	1m+0.5m
140	As above, from west	W	1m+0.5m
141	Pit [279] north-facing section	N	1m
142	Linear [226] north-facing section Block #19	N	0.5m
143	West end of southern strip, following the removal of (176)	S	2m
144	As above, from east	E	2m
145	Structure {286}	NW	2m
146	As above, from west	W	2m
147	As above, from east	E	2m
148	As above, from north	N	2m
149	Linears [294] and [864], pre-ex	N	2m
150	Posthole [287] pre-ex	W	0.5m
151	Posthole [972] pre-ex	N	0.5m
152	Linear [133] south-facing section Block #14	S	2m+1m
153	As above, detail	S	1m
154	Linear [133] post-ex, Block #14	E	1m
155	As above, from north	N	1m
156	Posthole [972] under excavation, showing pottery	N	0.5m
157	Amphora handle in Linear [131]	S	0.5m
158	Linear [131] south-facing section Block #33	S	2m+1m
159	Linear [131] post-ex Block #33	E	1m
160	Linear [133] Block #14 and Linear [131] Block #33 post-ex	N	2m+1m
161	As above, from east	E	2m+1m
162	Pit [178] during excavation	SE	1m+0.5m
163	As above, from south-west	SW	1m+0.5m
164	Linear [135] pre-ex	SE	2m
165	Linear [133], showing junction with Linear [135] pre-ex	E	2m
166	As above, from north-west	NW	2m
167	Linear [135] north-facing section of Block #1	N	2m
168	As above, detail	N	2m
169	Linear [133] north-facing section of Block #8, with Linear [135] in background	N	0.5m
170	As above, detail of the section	N	0.5m
171	Linear [133] south-facing section of Block #8	S	0.5m
172	Postholes [803] and [805] pre-ex	E	0.5m
173	Postholes [803] and [805] in relation to Linear [135]	E	0.5m
174	Linear [133] south-facing section of Block #11	S	1m+0.5m
175	Linear [133] Block #11, post-ex	E	1m
176	Linear [131] south-facing section of Block #30	S	1m+0.5m
177	Linear [131] Block #30, post-ex	E	1m+0.5m

178	Post hole [272] pre-ex	S	0.5m
179	Post hole [244] pre-ex	S	0.5m
180	Post hole [814] pre-ex	S	0.5m
181	Post hole [816] pre-ex	S	0.5m
182	Post hole [246] pre-ex	S	1m+0.5m
183	Posthole [805] south-facing section	S	0.5m
184	As above, vertical shot	S	0.5m
185	Posthole [803] sectioned, vertical shot	SE	0.5m
186	Postholes [803] and [805], post-ex	SE	0.5m
187	Linear [135] south-east facing section, Block #6	SE	2m+1m
188	As above, but showing base of the ditch	SE	2m+0.5m
189	Linear [135] north-west facing section, Block #6	NW	1m+0.5m
190	Linear [131] north-facing section Block #26	N	1m+0.5m
191	Linear [131] south-facing section Block #26	S	1m+0.5m
192	Linear [131] Block #26, post-ex	E	0.5m
193	Linear [131] east-facing section Block #21	E	1m+0.5m
194	Linear [131] west-facing section Block #21	W	1m+0.5m
195	Linear [131] Block #21, post-ex	N	0.5m
196	Linear [131] east-facing section Block #19	E	1m+0.5m
197	Ross Dean excavating Linear [131] Block #23 with Block #19 in the foreground	E	1m+0.5m
198	Linear [131] west-facing section Block #19	E	1m+0.5m
199	Linear [131] Block #19 post-ex	N	0.5m
200	Linear [131] east-facing section Block #17	E	1m+0.5m
201	Linear [131] west-facing section Block #17	W	1m+0.5m
202	Linear [131] Block #17 post-ex	N	0.5m
203	Linear [131] Block #15. Romano-British pottery scatter Fill (833)	N	0.5m
204	Linear [131] east-facing section Block #15	E	1m+0.5m
205	Linear [131] west-facing section Block #15	W	1m+0.5m
206	Linear [131] Block #15, post-ex	N	0.5m
207	Linear [131] and Pit [195] east-facing section Block #13	E	1m+0.5m
208	Linear [131] and Pit [195] west-facing section Block #13	W	1m+0.5m
209	Linear [131] and Pit [195] Block #13, post-ex	N	0.5m
210	Pit [195] east-facing section Block #11	E	1m+0.5m
211	Pit [195] Block #11, post-ex	N	1m+0.5m
212	Ross Dean and Matt Palmer, recording Linear [131] in the rain	WNW	~
213	Modern material culture ~ addition to the site assemblage	S	0.5m
214	Posthole [841] pre-ex	W	0.5m
215	Excavated sections of Linear [131], from the west	W	~
216	The south-west corner of the site, excavated sections through Linear [131] and [133]	NW	~
217	Posthole [838] pre-ex in section, Linear [131] Block #17	W	0.4m
218	Posthole [838] post-ex in section, Linear [131] Block #17	W	0.4m
219	Linear [131] west-facing section Blocks #22/23	W	1m+0.5m
220	Linear [131] south-facing section Blocks #23/24	S	1m+0.5m
221	Linear [131] Blocks #22-#24, post-ex	S	1m
222	View up Linear [131] from the south, post-ex	S	1m
223	The south-west corner of the site, excavated sections through Linear [131] and [133]	WSW	~
224	The south-west corner of the site, excavated sections through Linear [131] and [133]	NW	~
225	Linear [131] Block #16. Romano-British pottery scatter Fill (834)	N	1m
226	Linear [131] Block #16. Romano-British pot bases Fill (832)	E	10cm
227	Feature [225] pre-ex	S	2m
228	Rainbow on site	W	~
229	Pit [179] pre-ex	N	1m+2m
230	As above	NE	1m+2m
231	North-facing side of excavated area, showing bank (194) as a parch-mark in section	NE	2m
232	View along Linear [842] from South	S	2m
233	Linear [842] south-facing section Block #11	S	1m+0.5m
234	Linear [842] north-facing section Block #11	N	1m+0.5m
235	Pit [179] north-facing section inc topsoil layers	N	2m
236	Linear [842] Block #11, post-ex	W	1m
237	Linear [842] Block #9, post-ex	W	1m
238	Linear [842] Block #7, post-ex	W	1m

239	Linear [842] Block #5, post-ex	W	1m
240	Linear [842] Block #2, post-ex	W	1m
241	As above, showing possible continuation to south	NW	1m+0.5m
242	Linear [842] south-facing section Block #9	S	1m
243	Linear [842] north-facing section Block #9	N	1m+0.5m
244	Linear [842] south-facing section Block #7	S	0.5m
245	Linear [842] north-facing section Block #7	N	0.5m
246	Linear [842] south-facing section Block #2	S	0.5m
247	View along Linear [842] from south, post-ex	S	2m
248	As above, from north	N	2m
249	Pit [179] post, vertical from south	S	2m+1m
250	Feature [845] pre-ex	NE	1m
251	Linear [177] Block #7, post-ex, showing charcoal-rich Fill (849)	W	1m+0.5m
252	As above, from south	S	1m+0.5m
253	Linear [177] Block #3, post-ex, showing charcoal-rich Fill (849)	S	1m+0.5m
254	Linear [177] Block #5, post-ex, showing charcoal-rich Fill (849)	W	1m+0.5m
255	As above, from south	S	1m+0.5m
256	Linear [177] Block #9, post-ex, terminus of Fill (849)	W	1m+0.5m
257	Pit [179], post-ex	N	2m
258	As above, from south, vertical	S	2m
259	Feature [845] west-facing section	W	1m
260	View along Linear [177] and [172], during excavation	S	2m+1m
261	Feature [845], post-ex	NW	2m+1m
262	As above, from south-west	SW	2m+1m
263	As above, from north-east	NE	2m+1m
264	Linear [177] north-facing section Block #3	N	1m+0.5m
265	Linear [177] sorth-facing section Block #3	S	1m+0.5m
266	Linear [177] north-facing section Block #5	N	1m+0.5m
267	Linear [177] sorth-facing section Block #5	S	1m+0.5m
268	Linear [177] north-facing section Block #7	N	1m+0.5m
269	Linear [177] sorth-facing section Block #7	S	1m+0.5m
270	Linear [177] north-facing section Block #9	N	1m+0.5m
271	Linear [177] sorth-facing section Block #9	S	1m+0.5m
272	View along Linears [177] and [172], post-ex, with Dr Genieve Hill	S	2m+1m
273	As above	S	2m+1m
274	Linears [177] and [172] Block #3, post-ex	W	2m+1m
275	Linears [177] and [172] Block #5, post-ex	W	2m+1m
276	Linears [177] and [172] Block #7, post-ex	W	2m+1m
277	Linears [177] and [172] Block #9, post-ex	W	2m+1m
278	Linear [135], under excavation	NW	0.5m
279	As above, from north-east	NE	0.5m
280	Matt Palmer excavating indented beaker fragment from Linear [118]	E	10cm
281	Posthole [854] west-facing section	W	0.5m
282	Post hole [854], vertical, with North arrow	W	0.5m
283	As above, post-ex	W	0.5m
284	Post hole [203] east-facing section	E	0.5m
285	Post hole [203] post-ex	S	0.5m
286	Root hollow [862] post-ex	E	0.5m
287	Linear [118] south-facing section Block #5	S	0.5m
288	Linear [118] north-facing section Block #5	N	0.5m+0.2m
289	Linear [118] Block #5, post-ex	E	0.5m
290	Linear [118] south-facing section Block #7	S	0.5m+0.2m
291	Linear [118] north-facing section Block #7	N	0.5m+0.2m
292	Linear [118] Block #7, post-ex	E	0.5m
293	Linear [118] south-facing section Block #9	S	0.5m+0.2m
294	Linear [118] north-facing section Block #9	N	0.5m+0.2m
295	Linear [118] Block #9, post-ex	E	0.5m
296	Linear [118] north-facing section Block #11	N	1m+0.5m
297	Linear [118] south-facing section Block #11	S	1m+0.5m
298	Linear [118] Block #11, post-ex	W	0.5m
299	Soil layer (215) adjacent to Linear [118] with location of SF coin marked	W	1m+0.5m

300	Linear [118] north-facing section Block #13	N	1m+0.5m
301	Linear [118] south-facing section Block #13	S	1m+0.5m
302	Linear [118] Block #13, post-ex	E	1m
303	Linear [118] north-facing section Block #5	N	1m+0.5m
304	Linear [118] south-facing section Block #5	S	1m+0.5m
305	Linear [118] Block #5, post-ex	W	0.5m
306	Linear [118] north-facing section Block #7	N	1m+0.5m
307	Linear [118] south-facing section Block #7	S	1m+0.5m
308	Linear [118] Block #7, post-ex	W	0.5m
309	Linear [118] north-facing section Block #9	N	1m+0.5m
310	Linear [118] south-facing section Block #9	S	1m+0.5m
311	Linear [118] Block #9, post-ex	W	0.5m
312	Linear [118] north-facing section Block #11	N	1m+0.5m
313	Linear [118] south-facing section Block #1	S	1m+0.5m
314	Linear [118] Block #11, post-ex	W	0.5m
315	Linear [118] and [864] south-facing section Block #3	S	2m
316	Linear [118] and [864] north-facing section Block #3	N	2m
317	Linear [118] and [864] Block #3, post-ex	W	2m+0.5m
318	Linear [118] and [864] south-facing section Block #5	S	2m
319	Linear [118] and [864] north-facing section Block #5	N	2m
320	Linear [118] and [864] Block #5, post-ex	W	2m+0.5m
321	Linear [864] pre-ex, with Block #7 in the foreground	S	2m
322	Posthole [272] south-facing section	S	0.5m
323	Posthole [224] south-facing section	S	0.5m
324	Posthole [272] post-ex	W	0.5m
325	Posthole [244] post-ex	S	0.5m
326	View of surface (874), from south-east	SE	2m
327	As above, from north	N	2m
328	View of surface (874), entire, from SSW	SSW	2m
329	As above, detail	SSW	2m
330	Linear [114] north-facing section Block #17	N	1m+0.5m
331	Linear [114] south-facing section Block #17	S	1m+0.5m
332	Linear [114] Block #17, post-ex	W	1m+0.5m
333	Linear [114] north-facing section Block #24	N	1m+0.5m
334	Linear [114] south-facing section Block #24	S	1m+0.5m
335	Linear [114] Block #24, post-ex	W	1m+0.5m
336	Linear [114] north-facing section Block #21	N	1m+0.5m
337	Linear [114] south-facing section Block #21	S	1m+0.5m
338	Linear [114] Block #21, post-ex	W	1m+0.5m
339	Linear [114] north-facing section Block #19	N	1m+0.5m
340	Linear [114] south-facing section Block #19	S	1m+0.5m
341	Linear [114] Block #19, post-ex	W	1m+0.5m
342	Digger, at the end of the day	NE	~
343	Posthole [814] south-facing section	S	1m+0.5m
344	Posthole [816] south-facing section	S	1m+0.5m
345	Posthole [814], post-ex,	S	1m
346	Posthole [877] and [298] west-facing sections	W	1m+0.5m
347	Posthole [816], post-ex	S	0.5m
348	Posthole [877] and [298], post-ex	W	1m+0.5m
349	Line of post holes {189}, from north-west end	NW	~
350	As above, from south-east	SE	~
351	Central section of northern strip, Layer (269)	N	2m
352	As above, north-east	NE	2m
353	As above, from west	W	2m
354	John Hutchins, Jerry Bell, Matt Palmer, Steve Ottery, Dr Martin Tingle and Dr Lee Bray, at work	SW	~
355	John Hutchins, Jerry Bell, Matt Palmer, Steve Ottery and Dr Martin Tingle, at work	SW	~
356	Pond bay [893] pre-ex	S	2m
357	Linear [110] west-facing section Block #2	W	2m+0.5m
358	Linear [110] west-facing section Block #3	W	2m+0.5m
359	Linear [110] east-facing section Block #4	E	2m+0.5m
360	Linear [102] east-facing section Block #3	E	1m+0.5m

361	Linear [102] west-facing section Block #3	W	1m+0.5m
362	Linear [102] Block #3, post-ex	N	1m+0.5m
363	Linear [102] east-facing section Block #9	E	1m+0.5m
364	Linear [102] west-facing section Block #9	W	1m+0.5m
365	Linear [102] Block #9, post-ex	N	1m+0.5m
366	Linear [102] east-facing section Block #7	E	1m+0.5m
367	Linear [102] west-facing section Block #7	W	1m+0.5m
368	Linear [102] Block #7, post-ex	N	1m+0.5m
369	Pond bay [893] partly excavated	W	2m
370	As above, detail of base	W	2m
371	Features north of [893], pre-ex	S	2m
372	Features north of [893], pre-ex	SW	2m
373	View along northern edge of [893], pre-ex	W	2m
374	Posthole [195], pre-ex	W	1m
375	Posthole [898], pre-ex	S	1m
376	Posthole [900], pre-ex	S	1m
377	Posthole [902], pre-ex	S	1m
378	Posthole [904], pre-ex	S	1m
379	Posthole [906, pre-ex	S	1m
380	Posthole [908], pre-ex	S	1m
381	Posthole [145] south-facing section	S	0.5m
382	Pond bay [893] north-facing section, oblique, from north-east	NE	2m+0.5m
383	As above, from north-west	NW	2m+0.5m
384	Posthole [145], post-ex	W	1m
385	Posthole [898] south-facing section	S	1m+0.5m
386	Posthole [900] south-facing section	S	1m+0.5m
387	Posthole [902] south-facing section	S	1m+0.5m
388	Posthole [898], post-ex	S	1m
389	Posthole [900], post-ex	S	1m
390	Posthole [902], post-ex	S	1m
391	Posthole [904] south-facing section	S	1m+0.5m
392	Posthole [906] south-facing section	S	1m+0.5m
393	Posthole [908] south-facing section	S	1m+0.5m
394	Pit [883] north-facing section, partly excavated	N	2m
395	As above, from north-east	NE	2m
396	Posthole [904], post-ex	S	1m
397	Posthole [906], post-ex	S	1m
398	Posthole [908], post-ex	S	1m
399	Central section of northern strip, across [949]	N	2m
400	As above, detail	N	2m
401	Feature [915], pre-ex	NW	1m
402	Linear [131] and [133] south-facing section Blocks #35 and #16	S	1m+0.5m
403	Linear [131] and [133] north-facing section Blocks #35 and #16	N	1m+0.5m
404	Linears [131] and [133] Blocks #35 and #16, post-ex	W	2m+1m
405	Posthole [918], post-ex	W	0.5m
406	Feature [915] south-facing section	S	0.5m
407	Top of bank over Linear [131] and [133], cleaned showing cuts at higher levels	W	2m+1m
408	As above, showing north-facing section	NW	2m+1m
409	Linear [896] Block #21 under excavation, showing vessel (928) emerging	E	2m+1m
410	As above, detail of vessel (928)	E	10cm
411	As above, with section	E	1m
412	Linear [143] east-facing section Block #11	E	1m+0.5m
413	Linear [143] wast-facing section Block #11	W	1m+0.5m
414	Linear [143] Block #11, post-ex	S	1m+0.5m
415	Linear [896] Block #21 vessel (928) under excarvation by Dr Martin Tingle	SE	~
416	Close up of vessel (928)	W	10cm
417	As above	S	10cm
418	Linear [143] east-facing section Block #13	E	1m+0.5m
419	Linear [143] westt-facing section Block #13	W	1m+0.5m
420	Linear [143] Block #13, post-ex	S	1m+0.5m
421	Excavation of Pit [883] by John Hutchins under the supervision of Dr Lee Bray	W	~

422	As above	W	~
423	Shot of vessel (928), fully exposed	S	10cm
424	As above	NW	10cm
425	Vessel [928], in relation to adjacent stone blocks	N	10cm
426	As above	E	10cm
427	Dr Martin Tingle excavating vessel (928)	NE	10cm
428	Pit [883] north-facing section but with shoring in place	N	2m
429	As above	N	2m
430	Pit [883], post-ex	W	2m+0.5m
431	Location of vessel (928), post-ex	S	2m+0.5m
432	Intersection of Linear [894] and [896], pre-ex	E	2m
433	As above, from north	N	2m
434	Linear [896] east-facing section Block #19	E	2m+0.5m
435	Linear [896] west-facing section Block #19	W	2m+0.5m
436	Linear [896] Block #19, post-ex	S	2m+0.5m
437	Feature [915], post-ex	W	1m
438	Feature [935], post-ex	S	1m
439	Feature [932] west-facing section	W	1m
440	Linear [896] east-facing section Blocks #21 and #20	E	2m+0.5m
441	Linear [896] west-facing section Blocks #21 and #20	W	2m+0.5m
442	Linear [896] Blocks #21 and #20, post-ex	S	2m
443	Feature [912] south-west facing section	SW	0.5m
444	Linear [896] Block #17, post-ex	N	2m+1m
445	Feature [932], post-ex	W	2m+1m
446	Linear [896], Block #20.5 and #21, post-ex	S	2m
447	As above, from east	E	2m
448	Linear [896] east-facing section Block #20.5	E	2m+0.5m
449	Linear [936] west-facing section	W	1m+0.5m
450	Linear [912], post-ex, direct sunlight	N	2m+0.5m
451	As above, in shade	N	~
452	Matt Palmer, John Hutchins, Ross Dean, Dr Martin Tingle and Jerry Bell, providing the shade	N	~
453	Linear [896] and [894] west-facing section Block #17	W	1m+0.5m
454	Linear [896] and [894] east-facing section Block #17	E	1m+0.5m
455	Linear [896] Block #15, post-ex	W	2m
456	As above, from north	N	2m
457	Posthole [938], partly excavated	S	0.5m
458	Linear [912], post-ex	N	2m+1m
459	As above, from south	S	2m+1m
460	Linear [936], post-ex	SE	1m+0.5m
461	As above, from north	N	1m
462	Linear [896] east-facing section Block #19	E	2m+0.5m
463	Linear [896] west-facing section Block #19	W	2m+0.5m
464	Linear [896] Block #19, post-ex	N	2m+1m
465	Site at dawn	W	~
466	Posthole [938] south-facing section	S	0.5m
467	Posthole [938], post-ex	S	0.5m
468	South-facing section EoE, where Linear [894] enters the section	S	2m+1m
469	Linear [910] west-facing section Block #2	W	2m+1m
470	Posthole [174] and [821], pre-ex	S	1m+0.5m
471	South-facing section EoE, where Linear [940] enters the section	S	2m+1m
472	Posthole [174] and [821] south-facing section	S	1m+0.5m
473	Linear [910] Block #1 and #2, post-ex	S	2m+1m
474	Posthole [174] and [821], post-ex	N	1m
475	Central section of northern strip, across [949]	N	2m
476	Linear [910], viewed from the north-west	NW	2m
477	Recent pit [944], pre-ex	E	2m+1m
478	Linear alignment of stones/pottery {946}	S	2m+1m
479	Central section of northern strip, across [949], from east	E	2m
480	As above, from north	N	2m
481	Shale lid #957 emerging from the soil	E	0.5m
482	As above	E	0.5m

483	As above	E	0.5m
484	As above	E	~
485	Shale lid #957 fully exposed	E	0.5m
486	As above	E	0.5m
487	As above	E	~
488	As above	E	~
489	As above	E	~
490	As above	E	~
491	As above	E	0.5m
492	As above, showing the wider cut [953]	E	1m+0.5m
493	Shale lid #957 fully exposed	E	~
494	As above	E	0.5m
495	As above	E	0.5m
496	Matt Palmer and John Hutchins excavating Pit [953]	SE	~
497	Pit [953] partly excavated	E	~
498	As above	SE	~
499	Vessel #955 and #956 as exposed during the excavation of Pit [953]	E	0.5m
500	As above	E	0.5m
501	Matt Palmer and John Hutchins excavating Pit [953]	E	~
502	Removing vessel #956	E	~
503	Matt Palmer holding vessel #956	E	~
504	As above	E	~
505	Vessel #955 as exposed during the excavation of Pit [953]	E	0.5m
506	As above	E	0.5m
507	Removing vessel #955	E	~
508	Matt Palmer holding vessel #955	E	~
509	Pit [953], post-ex	E	1m+0.5m
510	Layer (969) pre-ex	N	2m
511	As above, from West	E	2m
512	Feature [962], pre-ex	W	1m+0.5m
513	Layer (969) pre-ex, with edges of contexts highlighted	E	2m
514	As above	S	2m
515	As above	E	2m
516	Terminus of Linear [965] and posthole [967] pre-ex	E	1m+0.5m
517	Structure {286} north-facing section, oblique	NE	2m
518	Structure {286} south-facing section, oblique	SE	2m+0.5m
519	View along [265], as excavated through {286}	E	2m+1m
520	Linear [961] in Sondage #2, partly excavated	W	1m
521	View along Sondage #2 from east showing cut for [910] and Pit [296]	E	2m+0.5m
522	Linear [961] in Sondage #2, post-ex	W	1m
523	Linear [842] in Sondage #3, pre-ex	S	1m+0.5m
524	Pit [978] pre-ex	N	2m+1m
525	As above, from west	W	2m+1m
526	Posthole [974] and [976], pre-ex	N	1m
527	Features [122] and [124], pre-ex	SE	2m+1m
528	Features [122] and [124], and Pit [978] from the top of the spoil heap	SW	2m+1m
529	As above	SW	2m
530	As above, general shot of site	SW	2m+1m
531	As above	SW	~
532	Posthole [972], partly excavated, showing stone packing	N	1m
533	Romano-British pottery in Pit [978], under excavation	W	1m
534	As above, with Feature [122]	W	2m+1m
535	As above	N	2m
536	East end of Sondage #2, showing Feature [296] and Linear [292] pre-ex	E	2m
537	Feature [296], north-facing section, oblique	NE	2m+0.5m
538	Pit [883], post-ex	N	2m
539	Linear [842] in Sondage #3, north-facing section	N	1m+0.5m
540	Linear [842] in Sondage #3, south-facing section	S	1m+0.5m
541	Linear [842] in Sondage #3, post-ex	W	1m+0.5m
542	Linear [292] in Sondage #2, south-facing section	S	1m+0.5m
543	Linear [292] in Sondage #2, north-facing section	N	1m+0.5m

544	Linear [292] in Sondage #2, post-ex	E	1m+0.5m
545	Eastern end of Sondage #3 showing Linear [864] and [292] pre-ex	E	2m
546	Rainbows on site, with Jeremy Bell and Peggy Gilje	W	~
547	Deposit of charcoal-rich material in Sondage #2	E	0.5m
548	Feature [122] and [124] partly excavated, with south-east facing sections	SE	2m
549	Dawn on site	NW	~
550	Feature {946}, pre-ex	S	2m
551	Linear [910] east-facing section Block #6	E	2m+1m+0.5m
552	As above, detail of humic basal deposits	E	1m+0.5m
553	Feature {946} and (986), pre-ex	W	2m
554	Linear [122] and posthole [982] south-east facing section	SE	2m+0.5m
555	Linear [910] east-facing section Block #6	E	2m+1m
556	Linear [910] Block #6, post-ex	S	2m
557	Linear [910] east-facing section Block #14	E	2m+1m
558	Linear [910] Block #14, post-ex	S	2m+1m
559	Linear [910] west-facing section Block #2	W	2m+1m
560	Linear [910] Block #1 and #2, post-ex	W	2m+1m
561	SF #6 *in situ* Fill (911)	W	10cm
562	Linear [864] south-facing section Block #15	S	2m
563	Posthole [982], pre-ex	SE	0.5m
564	Intersection of Linear [864] [910] [292], post-ex [296], and modern cuts	NNE	2m
565	As above, corner of Linear [910] and [292]	E	2m
566	Linear [864] north-facing section Block #15	N	2m
567	North-west area strip, pre-ex	S	2m
568	As above, shadows	S	2m
569	Feature [137] and [991], pre-ex	W	2m
570	Posthole [974] and [976], north-facing section	N	1m+0.5m
571	Posthole [972], post-ex	N	1m+0.5m
572	Posthole [972], [974], [976] and [972], post-ex and partly excavated	NW	1m
573	Posthole [982], south-east facing section	SE	1m+0.5m
574	Feature [137] and [991] north-facing section	N	2m+1m
575	Features [137] and [991], partly excavated	W	2m
576	As above, from east	E	2m
577	Posthole [972], [974] and [976], post-ex	W	2m
578	As above, from North	N	~
579	Pit [978], partly excavated	SSW	2m+1m
580	Pit [978] SSW-facing section	SSW	2m+0.5m
581	Linear [263] west-facing section Block #6	W	1m+0.5m
582	Linear [263] Block #6 post-ex	S	1m+0.5m
583	Linear [263] east-facing section Block #8	E	1m+0.5m
584	Linear [263] west-facing section Block #8	W	1m+0.5m
585	Linear [263] Block #8 post-ex	S	1m+0.5m
586	Linear [263] east-facing section Block #10	E	1m+0.5m
587	Linear [263] west-facing section Block #10	W	1m+0.5m
588	Linear [263] Block #10 post-ex	S	1m+0.5m
589	Linear [910] east-facing section Block #14	E	2m+1m
590	Linear [910] west-facing section Block #14	W	2m+1m
591	Linear [910] Block #14, post-ex	S	2m+1m
592	Posthole [982], post-ex	SE	1m
593	Feature [998], pre-ex	W	2m
594	Feature [995], pre-ex	W	2m
595	Features [995] and [998], area view	S	2m+1m
596	As above, from south-east	SE	2m+1m
597	SF#7 *in situ* C4th coin with Chi-Rho symbol	W	10cm
598	As above, in relation to post holes [972] and [974] etc	W	10cm
599	SF#7, detail	W	10cm
600	As above	W	10cm
601	Jeremy Bell with SF#7	SW	10cm
602	Feature [122], [124] and Pit [978], postholes, post-ex	SSW	2m+1m
603	Feature [122] and [124], post-ex	SSE	2m
604	Linears [995], post-ex	E	1m

605	Linear [263] east-facing section Block #12	E	1m+0.4m
606	Linear [263] Block #12, post-ex	S	1m+0.4m
607	Linear [910] east-facing section Block #15	E	2m+1m
608	Linear [910] Block 15, post-ex, showing terminus of [864]	N	2m+1m
609	Structure {286}, after second cleaning	N	2m
610	As above, from East	E	2m
611	North terminus of Linear [864], partly excavated	N	2m+1m+0.5m
612	Posthole [1500], pre-ex	S	0.5m
613	Posthole [1502], pre-ex	S	0.5m
614	Posthole [1504], pre-ex	S	0.5m
615	Posthole [1506], pre-ex	S	0.5m
616	Posthole [1509], pre-ex	S	0.5m
617	Posthole [1511], pre-ex	W	0.5m
618	Linear [292] south-facing section Block #5	S	2m+0.5m
619	Linear [292] north-facing section Block #5	N	2m+0.5m
620	Linear [292] Block #5, post-ex	E	2m+0.5m
621	Linear [910] east-facing section Block #10	E	2m+1m
622	Linear [910] west-facing section Block #10	W	2m+1m
623	Linear [910] Block #10, post-ex	N	2m+0.5m
624	Terminal of [864], fully excavated	N	2m+1m
625	Linear [910] east-facing section Block #8	E	2m+1m
626	Linear [910] west-facing section Block #8	W	2m+1m
627	Linear [910] Block 8, post-ex	N	2m+0.5m
628	Posthole [287] south-facing section	S	1m+0.5m
629	Structure {286} south-facing section	N	2m+0.5m
630	Posthole [1500] south-facing section	S	1m+0.5m
631	Posthole [1522] south-facing section	S	1m+0.5m
632	Concentration of charcoal at corner of Linear [292] and [910] (1514)	N	0.5m
633	Posthole [1502] south-facing section	S	1m+0.5,m
634	Posthole [1504] south-facing section	S	1m+0.5m
635	Posthole [1509] south-facing section	S	2m+1m
636	Posthole [1506] south-facing section	S	0.5m+0.4m
637	Posthole [287], post-ex	S	0.5m
638	Posthole [1502], post-ex	S	0.5m
639	Posthole [1500], post-ex	S	0.5m
640	Posthole [1504], post-ex	S	0.5m
641	Divot at base of [1504], fully excavated	S	10cm
642	Posthole [1506], post-ex	S	0.5m
643	Posthole [1509], post-ex	S	0.5m
644	Posthole [1522], post-ex	S	0.5m
645	Posthole [1511] south-facing section	S	0.5m+0.4m
646	South-east corner of Linear [910] and [292], post-ex	W	2m
647	Terminus of Linear [102], post-ex	E	2m+1m
648	Posthole [1511], post-ex	S	0.5m
649	Structure {286} following the removal of (282)	N	2m
650	Posthole [1539], pre-ex	E	0.5m
651	Features [965] and [967], south-east facing sections	SE	1m
652	SF#11 *in situ*	E	10cm
653	Dr Lee Bray with SF#11	E	~
654	John Hutchins, Ross Dean, Jerry Bell, Matt Palmer congratulate Dr Lee Bray on his find	E	~
655	Linear [1528], pre-ex	S	1m+0.5m
656	NW quadrent, between Sondage #1 and #2, post-ex	W	2m+1m
657	Linear [1528], post-ex	W	1m
658	Posthole [1533], pre-ex	S	0.5m
659	Posthole [1535], pre-ex	E	0.5m
660	Linear [1526], south facing section where it enters the EoE	S	0.5m
661	Linear [1526], post-ex	W	1m
662	Posthole [1533] south-facing section	S	0.5m+0.4m
663	North-western corner of site, where differential crying shows up feature [998]	S	2m
664	Posthole [1537], pre-ex	S	0.5m
665	Linear [949] and Feature [1531], post-ex	W	1m

666	Posthole [1537] north-facing section	N	0.5m
667	Posthole [1539] east-facing section	E	0.5m
668	Linear [864] south-facing section Block #12	S	2m
669	Posthole [1535] south-facing section	S	0.5m+0.4m
670	Corner of Linear [263], post-ex	E	2m
671	Posthole [1544] south-facing section	S	0.4m
672	Posthole [1546] south-east facing section	S	0.4m
673	Linear [998] and Postholes [1546] and [1544], post-ex	W	2m
674	Posthole [1533], post-ex	S	0.5m
675	Posthole [1535], post-ex	S	0.5m
676	Arc of postholes around cremation Pit [953]	S	2m
677	As above, from north	N	2m
678	Posthole [1551], pre-ex	E	0.5m
679	Posthole [1553], pre-ex	S	0.5m
680	Post-hole [1555], pre-ex	S	0.5m
681	Posthole [1557], pre-ex	SE	0.5m
682	Posthole [1559] and [1561], pre-ex	S	0.5m
683	Posthole [1563], pre-ex	E	0.5m
684	Feature [1549] southern end, pre-ex	E	0.5m
685	Posthole [1551] south-facing section	S	0.5m
686	Posthole [1553] east-facing section	E	0.5m
687	Posthole [1555] east-facing section	E	0.5m
688	Posthole [1557] east-facing section	E	0.5m
689	Posthole [1559] east-facing section	E	0.5m
690	Posthole [1561] north-east facing section	NE	0.5m
691	Posthole [1563] east-facing section	E	0.5m
692	Posthole [1546] east-facing section	E	0.5m
693	Posthole [1544] east-facing section	W	0.5m
694	Posthole [1565] east-facing section	W	0.5m
695	Posthole [1551], post-ex	W	0.5m
696	Posthole [1553], post-ex	NE	0.5m
697	Posthole [1555], post-ex	SE	0.5m
698	Posthole [1557], post-ex	W	0.5m
699	Posthole [1559], [1561] and [1563], post-ex	NE	2m+0.5m
700	Strucured deposit of "scrumpy jack" cans: wind blown or deliberate ???	E	0.5m
701	Structured deposit - washing machine	W	~
702	Structured deposit - toy sword	SW	0.5m
703	View of the site one year on - from the west looking east	WSW	~
704	View of north-west corner of site, the location of creamation Pit [953] marked by a pile of bricks	SE	~
705	Posthole [1571], pre-ex	SW	0.5m
706	Natural feature crossing cable Trench	N	2m+1m
707	North-west facing section of cable trench, from north to south	NW	2m+1m
708	As above	NW	2m+1m
709	As above	NW	2m+1m
710	As above	NW	2m+1m
711	View along cable trench, from north	N	2m+1m
712	As above, from south	S	2m+1m
713	Posthole [1571] south-west facing section	SW	1m+0.5m
714	Posthole [1571], post-ex	SE	1m+0.5m
715	North-west corner of site striped down to subsoil, from west	W	2m+1m
716	As above, from east	E	2m+1m
717	As above, from south-west	SW	2m+1m
718	Posthole [1573], pre-ex	S	0.5m
719	Posthole [1575], pre-ex	E	0.5m
720	Posthole [1577], pre-ex	S	0.5m
721	Post hole [1579], pre-ex	E	0.5m
722	Post hole [1581], pre-ex	S	0.5m
723	Post hole [1585], pre-ex	E	0.5m
724	Posthole [1575] south-facing section	S	0.5m
725	Feature [1587], as sectioned by Posthole [1573], north-facing section	N	1m+0.5m
726	Posthole [1573] south-facing section	S	1m+0.5m

727	Posthole [1579] south-facing section	S	0.5m
728	Posthole [1577] west-facing section	W	1m+0.5m
729	Posthole [1583] south-facing section	W	0.5m
730	Posthole [1581] south-facing section	W	1m+0.5m
731	South-west corner of the site, stripped down to subsoil, from east	E	1m+2m
732	As above, from south	S	1m+2m
733	Area shot Posthole [1573], [1575], [1577], [1579], [1581] and [1583], post-ex, from WSW	WSW	2m+1m
734	Posthole [1573], post-ex	S	0.5m
735	Posthole [1575], post-ex	S	0.5m
736	Posthole [1577], post-ex	S	0.5m
737	Posthole [1579], post-ex	S	0.5m
738	Posthole [1581], post-ex	S	0.5m
739	Post hole [1583], post-ex	S	0.5m
740	Feature [1585] west-facing section	W	1m+0.5m
741	Feature [1585] east-facing section	E	1m+0.5m
742	Feature [1585], post-ex	N	0.5m+1m
743	Feature [1592], post-ex	N	0.5m+1m
744	Feature [1592] east-facing section	E	0.5m
745	Feature [1594] south-facing section	S	0.5m
746	Feature [1594] north-facing section	N	0.5m
747	Feature [1594], post-ex	E	0.5m
748	Feature [1585], [1592], [1594], [1589] west-facing section	W	2m
749	Feature [1585], [1592], [1594], [1589] east-facing section	E	2m
750	Feature [1589] east-facing section	E	~
751	Feature [1589] west-facing section	W	2m+1m
752	Feature [1589], post-ex	N	1m+0.5m
753	North-west corner of site, post-ex	SSE	2m+1m
754	As above	SW	2m+1m
755	As above, from south-east	SE	2m+1m

ARCHAEOLOGICAL SERVICES & HISTORIC BUILDING RECORDING
SOUTHWEST ARCHAEOLOGY

The Old Dairy
Hacche Lane Business Park
Pathfields Business Park
South Molton
Devon
EX36 3LH

Tel: 01769 573555
Email: mail@swarch.net