

6-8 Station Road West, Canterbury, Kent MAP2 Post Excavation Assessment Report



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**MAP2 Post Excavation Assessment
Archaeological Report
6-8 Station Road West, Canterbury, Kent**

Site Code SRW-EX-12

NGR 614500 158200



For
Abbott Construction Ltd.

September 2013

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1. Introduction

1.1 Between August and October 2012 SWAT Archaeology carried out an archaeological excavation on the site of 6-8 Station Road West, Canterbury, Kent (NGR 614500 158200) in advance of the construction of two buildings comprising student accommodation consisting of twelve studio apartments and two maisonettes. The work was commissioned by Abbott Construction Limited (Broadlands, Blean, near Canterbury, Kent CT2 9JJ). A planning application for the proposed development (CA/10/01726) was submitted to Canterbury City Council. Consent was given on 25 November 2011, with an attached condition (9) stating that:

No development shall take place until the applicant or the developer, or their successor(s) in title has secured; firstly, the implementation of an archaeological evaluation of the site, to be undertaken for the purpose of determining the presence or absence of any buried archaeological features and deposits and to assess the importance of the same; secondly, implementation of any mitigation measures, including further archaeological work that may be required as a result of the evaluation, to safeguard the preservation of archaeological remains; and; thirdly a programme of post-excavation analysis and recording of any matters of archaeological interest. All archaeological works shall be carried out in accordance with written programmes and schemes of work that have been first submitted to, and approved in writing, by the local planning authority.

1.2 An archaeological evaluation by Canterbury Archaeological Trust (CAT) consisting of three trenches was undertaken between the 27th March and 3rd April 2012. The results of this evaluation are included in the historical background in Section 4.

1.3 All maps within this report have been produced from the Ordnance Survey with the permission of Her Majesty's Stationary Office, Crown Copyright. Licence number AL100031917.

1.4 This post-excavation assessment has been prepared broadly in accordance with the guidelines laid out in Management of Archaeological Projects (English Heritage 1991). This document seeks to summarise the results of archaeological work at the site and the potential for future analysis, as well as determining requirements for publication and archiving of these results.

1.5 The aim of the report is to provide a framework for carrying the report through to publication, including the resources required for analysis, publication and archiving. This report outlines the results of the fieldwork (chapter 6) and the

assessment of the finds and environmental samples (chapter 7). The significance of the results and the potential for further study is discussed in chapter 11. Chapter 12 outlines the revised research aims and describes the further work required.

2. Site Description

2.1 6-8 Station Road West (Figure 2), Canterbury is located within the parish of St. Dunstons on the south side of Station Road West near the junction with St. Dunstan's Street, and was the site of a Victorian terrace damaged by bombing during WWII. The site frontage is bounded to the west by No.4, now a printing business with the rear of the development site neighbouring a small florist shop, underneath which survives the early 20th century Canterbury Swimming Baths. To the east of the site lies No 10 which also suffered from bomb damage. The area comprising of the development site was cleared of the damaged terrace (Nos. 6-8), the cellar to No. 8 backfilled and the entire site was levelled. The sites' final use before the current redevelopment was a tarmaced yard with a small shed, erected for commercial purposes. The site sits between Station Road West to the north and Kirby's Lane.

2.2 The site comprised of a rectangular plot measuring 22m by 11.50m and covered an area roughly 245 sqm with ground levels varying between approximately 10.50m OD and 11.50m OD – the gradient sloping gradually towards Kirby's Lane.

According to the British Geological Survey (1990, sheet 289, Canterbury), the development site lies at a junction of two areas of drift deposits comprised of Head Brickearth and Second River Terrace Gravels, which may be associated with the River Stour located 650m to the southeast.

3. Aims and Objectives

3.1 Aims - The aims of the excavation, as set out in the Archaeological Method Statement (July 2012) include:

- Assessing the likely impact of the proposed development on the archaeological remains using the results of earlier fieldwork.
- Assessing the impact of past development on the site's archaeological potential.
- Excavating archaeological remains that are threatened by development.

3.2 Objectives - The principle objectives of the archaeological excavation were to:

- Establish the presence or absence of any archaeological resource which may be affected by the proposed development.

- Ascertain the extent, depth below ground surface (within safe parameters), and if possible, the character, date and quality of any buried archaeological remains and their possible relationship to archaeological features revealed by the earlier fieldwork.
- Determine the state of preservation and the importance of the archaeological resource within the wider confines of Canterbury's archaeology.
- Ensure preservation by record of the archaeological resource.

4. Methodology

4.1 Summary

A Written Scheme of Investigation for the site at Station Road West was submitted by SWAT Archaeology and passed by the Heritage Officer, Canterbury City Council. Within the Scheme a methodology was agreed upon which stated that the archaeological excavation would be undertaken in two phases, and the development site divided into two areas. Phase 1 consisted of the mechanical removal of tarmac and other modern deposits in both areas, followed by the cleaning and planning of all exposed archaeological features, deposits and structures at the uppermost horizon. Phase 2 comprised the implementation of the excavation strategy after consultation with the Heritage Officer and in agreement with Abbotts Construction Ltd.

Area 1 fronted Station Road West and incorporated the front halves of Nos. 6 and 8 while Area 2 fronted Kirby's Lane. After further consultation with the Heritage Officer, it was agreed that the division between the two areas would respect the main back walls of these two Victorian houses, including the cellar of No. 8.

4.2 Phase One

In concordance with the Written Scheme of Investigation, Phase One commenced with the machine removal of the existing tarmac surface and other modern deposits. During this phase it was noted that the cellar of No 8, in Area 1, had been previously emptied (to a depth of 2m) before being backfilled a second time. The cellar was not excavated, due to health and safety issues. Phase One concluded after the surviving walls (brick) of both No. 6 and the cellar of No. 8 had been exposed, the soils within each 'room' cleaned and the area planned and surveyed. In addition, CAT's evaluation trench 2 was located and incorporated in to the plans and survey.

4.3 Phase Two

The principle aim of the excavation strategy was the preservation by record of all buried archaeological remains and the total excavation of all deposits and features located within the development site. An archaeological environmental sampling strategy was also implemented for primary targets, including; structures, hearths, kilns and ovens. All structural elements, primarily the brick and stone walls, were to be removed after recording to allow for the stratigraphic removal of earlier archaeological contexts.

All inhumations and cremations were to be fully excavated in an effort to obtain data on the character, extent and status of the burial context, both in terms of individual graves/cremations and burial groups.

To facilitate the surveying and recording, a site grid would be established and tied into the National (Ordnance Survey) Grid Reference (NGR) and temporary bench marks, also tied into the NGR, would be located across the site.

4.4 Quantification of Site Archive

The site archive comprised the following elements:

- Context register including: Context Register Sheets (20), Photo Register Sheets (12), Drawing Register Sheets (9), Environmental Register Sheets (2), Small Finds Register Sheet (1), Skeleton Register Sheet (1), and Context Sheets (404)
- Drawings: 120 A3 perm trace drawing sheets comprising feature plans and associated sections and area plans of the Victorian buildings
- Photographs: 395 Digital images
- Correspondence

5. Historical Background

5.1 Canterbury's archaeology and history is rich and complex, therefore only recent archaeological work in the parish of St. Dunstan's and entries from the Historical Environment Record (HER), accessible via www.kent.gov.uk/ExploringKentsPast are included here.

5.2 The most recent archaeological work in the area of St. Dunstan's has been undertaken by Canterbury Archaeological Trust (CAT). This includes an evaluation in 2008 at the rear of 71 St. Dunstan's Street (House of Agnes) where one undated inhumation burial cutting an earlier Roman metalled road was found (Robertson and

Wilson 2010). Earlier archaeological investigations at Cranmer House and 27 St Dunstan's Terrace revealed elements of an extensive early Roman cremation cemetery (Rady, J. 2000, Diack, M. 2003). The St. Dunstan's Terrace site uncovered 90 cremation burials and a small number of inhumations (Sparey-Green 2002). An archaeological evaluation in 2008 at Nos. 21-24 St. Dunstan's Street (Gollop 2012) was followed by a two phase open area excavation on the site of Hallet's Garage, Nos. 25-27 St. Dunstan's Street (Gollop A. 2012). The interim report of this latest excavation is still pending therefore the resulting data has not been available for this report.

However, information regarding significant archaeological remains from the excavation at Nos. 25-27 St. Dunstan's Street was reported in the historical background within the CAT evaluation report for 6-8 Station Road West (Gollop 2012). This information included part of the 3rd or 4th century Romano-British inhumation cemetery comprising 137 burials, pre-cemetery Roman clay and gravel extraction quarries and possible settlement activity, Anglo Saxon refuse disposal, medieval and post medieval buildings and occupation debris and extensive quarrying, most likely for brickearth. It is worth noting that there was some evidence of care and respect for the Roman burials by the undercutting of the medieval pits and the reinterment of displaced skeletal elements. This would also be a feature in the excavation at 6-8 Station Road West.

5.3 Archaeological Evaluation at 6-8 Station Road West

Between 27 March and 3 April 2012 a three trench evaluation was undertaken by CAT at 6-8 Station Road West (Gollop 2012). The results are provided below:

Trench 1 was located centrally along and parallel with the south western edge of the site and measured 5m by 1.2m. Excavation revealed the naturally occurring geology, a very firmly compacted 'brick earth' 1.01m-1.05m below the present ground level. Several features were identified cutting through the subsoil including seven sub-rectangular features, one of which [126], was fully sampled with a further three [120], [122], and [124] partially sample excavated. Feature [126] was positively identified as an inhumation grave with the remains of a skull left in situ. Pottery from [126] spanned the late second to third centuries AD. Sealing these features and the exposed natural brick earth at the south east end of the trench was a layer of moderately compacted dark grey brown clayey silt loam with frequent chalk flecking.

A number of large pit-like features were also exposed in Trench 1, some of which had been truncated by post-holes. Sealing these features was a deposit of dark blackish grey brown clayey silty loam up to 0.50m thick. Material from this deposit probably dates from the 18th-19th centuries?

A brick built wall at the north-west end of the trench ran across the trench parallel with Station Road West some 0.25m below the present ground level. This was dated to the mid 19th century.

Trench 2 was located towards the front of the site and parallel with the south-western edge. It measured 5m by 1.2m. Excavation exposed the same naturally occurring geology observed in Trench 1 at a depth of 0.84m-0.94m below the present ground level.

Cutting the natural were a number of features which included post holes, pits and at least two possible graves. Overlaying these features was dark grey compacted silt that was interpreted as the remnants of a buried soil horizon.

At the south-western end of Trench 2 a brick wall similar in construction to the wall seen in Trench 1 was also revealed.

Trench 3 was located to the rear of the site beside Kirby's Lane and parallel with the south-western edge of the site. Due to safety constraints it was not possible to access the trench but the naturally occurring geology was the same as recorded in Trenches 1 & 2 and at a depth of 1.12m-1.28m below the present ground level.

5.4 Results from the Evaluation

Late Iron Age

There were no archaeological features were associated with the late Iron Age. However, residual sherds of flint and grog-tempered ware were found in grave [126] in Trench 1 and in two large medieval pits in Trench 2.

Romano-British

Features from this period included at least one inhumation burial [126] and eight possible grave cuts. This suggests that the 3rd- 4th century inhumation cemetery continues to expand in a southerly direction. However, it is possible that the graves represent outliers to the main body of the cemetery further to the north on both sides of St. Dunstan's Street. In addition to the burials a series of post and stake holes were exposed and these have tentatively been dated to the Roman period.

Medieval

A soil layer was identified in parts of Trenches 1 and 2. This may represent a plough horizon originating from an accumulation of soil after the abandonment of the Romano British cemetery.

13th century pits were found in Trenches 1 and 2 and are thought to be associated with dwellings fronting St. Dunstan's Street and Kirby's Lane.

Post-medieval

Cultivated (garden?) soils occurred in trenches 1 and 2. These soils sealed the medieval features. Truncating this soil horizon were two pits (Trench 1), which have been interpreted as possible quarry pits, later used for the disposal of refuse. They have been dated to the 16th and 17th centuries, although the artefactual evidence may be residual.

Late Post-medieval/Modern (c 1800+)

Brick built walls and ragstone facing in Trenches 1 and 2 identified the Victorian terraced property at Number 6. This was constructed after the building of Canterbury West Station and the approach road.

5.5 Historic Environment Record (HER) Entries

HER Ref: TR 15 NM 257 – Located on the western corner of Station Road West; two inhumations, buried side by side with heads placed to the southwest. Entry by F. Jenkins in *Archaeologia Cantiana*; 1951. No trace of coffins or grave goods was found with the remains, and Jenkins interpreted the burials as possible outliers from the main Romano-British cemetery.

HER Ref: TR 15 NW 73 – Human skeletal remains from the Roman period, found at the St. Dunstan's end of Kirby's Lane in 1983 when a service trench was dug. These remains may also be related to the larger cemetery which lies further to the northwest.

HER Ref: TR 15 NW 479 – Romano-British rubbish pits, road metalling and side drains from a Roman street behind St. Dunstan's Street on the opposite side of the road from Kirby's Lane. Also; pottery, fragmentary remains from two 1st- 2nd century pottery kilns, two inhumation burials and medieval pits were found during salvage excavation during the construction of two new homes in the mid 1980s at Linden Grove.

6. Site Narrative

6.1 The following narrative is based on the stratigraphic Harris Matrix (Appendix 1) and the information provided by the ceramic assemblage (Appendix 2). The phasing of individual features and feature groups has been based on this data. Phased plans of the site have been included (Figs 4 - 9) showing feature location and their stratigraphic relationships.

Based on the data, the majority of the features can be grouped into three main periods; Roman-British, Medieval and Post-Medieval/Modern. Pre-inhumation cemetery activities, the inhumation cemetery and industrial activities (quarrying and pottery manufacture) fall into the Romano-British Period. Continued quarrying, refuse disposal, and possible arable activity have been identified as Medieval. Further refuse disposal and possible quarrying preceded the construction of a dwelling fronting Kirby's Lane and Nos. 6 and 8 fronting Station Road West. This can be attributed to the Post-Medieval/Modern period.

6.2 Pre-Roman

There are no recognisable archaeological features attributed to the prehistoric periods on the development site, although residual pottery from the Bronze Age and the Iron Age was found in many of the Roman-British, Medieval and post medieval features. Contamination of deposits by later interventions was a reoccurring theme throughout the site with residual fragments of ceramic and occasionally, struck flints, from earlier periods appearing in later features. Even with the absence of Pre-Roman archaeology, it is clear that there was a Pre-Historic 'background' on site and that archaeology from this period exists in the St. Dunstan's area.

6.3 Roman (Figure 8)

There were three main phases of Romano-British archaeology recognised during the excavation; pre-inhumation cemetery activities, inhumation burials connected to the cemetery and industrial activities (primarily quarrying and pottery manufacture). These activities were present in both Areas 1 and 2.

Pre-inhumation cemetery activities

Intensive quarrying for brickearth and the underlying gravels beyond Canterbury's city wall in the Romano-British period is well documented and recent excavations at Rhodas Town (Augustine House) demonstrate this (Helm 2009). The excavation at 6–8 Station Road West also revealed that probable small scale quarrying, primarily for brickearth, had taken place. This was demonstrated by several groupings of pits. One such group, located along the street frontage of Station Road West (Area 1) consisted of pit [174] truncating pit [177], which in turn cut pit [179]. Pit [174] contained pottery that produced a date range c.80-200 AD. Pit [177] had a date range c.70-170 AD. A separate pit [250], also situated on the street frontage of Station Road West, had a ceramic assemblage that dated this feature c.50-150 AD. Within the centre of the site (still Area 1) another pit [183] truncated pit [165]. Pit [165] produced pottery dating c.40-200 AD. A single, isolated pit [278] was located in the northeast corner of Area 2. It was rectangular in shape and measured 0.50m by 0.32m. It had a depth of 0.16m and was filled with material dating from the mid-late second century AD. This feature may have been a post hole.

The ceramic data from these pits suggests that the activity of possible quarrying for brickearth began during the latter half of the first century AD and continued until the end of the second century AD.

Another early feature, ditch [375], was located in Area 2 (**plate 1**). This ditch, aligned northeast-southwest, measured +8.80m in length. It had a maximum width of 1.16m and had a depth of 0.67m, producing a roughly 'V-shaped' profile. The primary fill (374) produced pottery, giving a date range of c.100–200 AD. This suggests that the ditch was in use at the beginning of the second century, slowly filling with material until it finally went out of use at the beginning of the third century AD.

This ditch may have been part of a larger ditch system that existed along the northeast side of St. Dunstan's Street (a major Roman road). This has been observed during excavations at Hallett's Garage (Gollop 2012) and at 28 St. Dunstan's Street in 2011 (Holmes, *pers comm*). This ditch system branched off from the Roman road, forming plots, albeit property boundaries or small land holdings. It is possible that this ditch system may have influenced the location of the inhumation cemetery at its foundation.

The pre-inhumation cemetery phase therefore comprises of a series of features representing several activities that share a date range spanning the late first century AD up to the end of the second century AD / beginning of the third century AD.

The inhumation cemetery (Figure 10)

The excavation produced complete, partial or disturbed graves of 14 inhumation burials. Nine of these were adults (6 males, 1 female and 2 unknown) and 4 were children (3 juveniles and 1 infant). The fourteenth grave [165] was empty. Six of the graves were aligned roughly northwest-southeast and four were roughly aligned northeast-southwest. One was aligned north-south [339] and one was 'redeposited' in pit [073]. Each burial, where identified, was given a unique 'skeleton number'. They are as follows:

Skeleton 1

A juvenile, aged between 5-6 years. The body was aligned northwest-southeast in grave cut [134]. This grave was severely truncated.

Skeleton 2

An adult female, aged between 25-34 years. The body was aligned northwest-southeast in grave cut [130]. A shallow, circular-shaped stain in the backfill (129) was

identified above the location of the skull. This may have been a post hole for a grave marker.

Skeleton 3

An adult male, aged between 18-24 years. The body was aligned northwest-southeast in grave cut [156]. This burial was a later addition to the cemetery as it overlapped Skeleton 10 in grave cut [349].

Skeleton 4

An adult male, age unknown. The body was aligned southwest-northeast in grave cut [221]. This grave was severely truncated. This burial was a later addition to the cemetery as it overlapped Skeleton 6 in grave cut [219].

Skeleton 5

Unknown. The body was aligned southeast-northwest in grave cut [137]. This grave was severely truncated.

Skeleton 6

An adult male, aged between 18-29 years. The body was aligned southwest-northeast in grave cut [219]. This burial was truncated by [114] and was overlapped by Skeleton 4 in grave cut [221].

Skeleton 7

An adult female, age unknown. The body was aligned southeast-northwest in grave cut [102]. This grave was severely truncated.

Skeleton 8 (Plate 2)

An adult male, aged between 25-34 years. The body was aligned roughly west-east in grave cut [270]. A coin (SF10) of Constantine I was recovered from the grave fill (269). The coin was issued between AD 324-330.

Skeleton 9

An adult male, aged between 25-34 years. The body was roughly aligned north-south in grave cut [339]. This grave was severely truncated.

Skeleton 10 (Plate 3)

An infant, aged 2.5-3 years. The body was aligned roughly west-east in grave cut [349]. This burial included amphora fragments as grave furniture. This burial was overlapped by Skeleton 3 in grave cut [156].

Skeleton 11 (**Plate 4**)

A female, age unknown. Only fragmentary traces of the spine survived. The body was placed in grave cut [390] and had been buried with a copper alloy bracelet (SF17) and a small necklace/bracelet of jet beads (SF18).

Skeleton 12

A juvenile, aged 4-5 years. This body was placed within quarry pit [073].

Skeleton 13

An adult male, aged between 18-24 years. This body was redeposited as a mass of disarticulated bone in medieval pit [196].

'Skeleton' 14

This was grave [165] was severely truncated during the medieval period. The surviving elements of the grave cut were empty. It is possible that the disarticulated remains of Skeleton 13, deposited in medieval pit [196], originated from the grave.

Industrial activities (Quarrying? and Pottery Manufacture)

In Area 2 a group of large circular and rectangular pits were discovered, suggesting a number of industrial usages and activities. This group included a well preserved pottery kiln (**Plate 5**) (albeit truncated by a modern service trench [247]) and a series of pits related to it, situated in the northeast corner of the site.

The pottery kiln was situated within a circular-shaped cut [306], 1.08m in diameter. The main body of this kiln (322) was formed from a fired clay/daub material, which would have risen to form a dome. The interior of the kiln featured a central 'bollard'-type pedestal formed by a 'ring-shaped' cut in the natural brickearth. The pedestal had a diameter of 0.63m. The height of this pedestal had been subsequently increased by three successive deposits (318), (319) and (320) of fired clay/daub material during its use. This increased the height of the chamber to 0.37m. Pottery recovered from (320) gave a date range of c.270 AD-370 AD. The surviving raised oven floor, which was devoid of air-vents, was also constructed from a burnt clay/daub material and was intergrated with the pedestal during this final stage. The resulting oven space survived to a height of 0.24m and was backfilled with kiln material (315). Pottery from this context suggests that the demolition of the oven occurred during the fourth century AD.

The kiln was fed by a 'stoke pit' [312] located immediately north of the kiln's stoke hole. This pit was an irregular square-shaped feature with vertical sides. It Measured 1.20m by 1.10m and had a minimum depth of 0.80m. The backfills (309) and (311)

contained kiln material and pottery dated to the late fourth century AD. The 'stoke pit' was situated within a linear feature [296] aligned northeast-southwest. It measured 2.15m by 2.10m and had a depth of 0.90m, forming a stepped profile along its edge. Its function is unknown. The backfills (292)-(295) also contained kiln material. The pottery dates from the mid-late fourth century AD.

A group of pits [263] and [279], located to the north of the 'stoke pit' also contained debris associated with the kiln. Pottery recovered from contexts (259), (260), (261), (262), (264) and (284) also dates from the mid-late fourth century AD. A single, large pit [238], located to the northeast of the kiln contained kiln debris throughout and pottery from the late third century AD in the primary deposit (331) and mid-late fourth century AD pottery in its upper fill (239). This large pit may have acted as a water tank. A vertical sided, linear channel/gully [340], 2.50m by 0.65m, leads away or feeds into the pit. The backfill (341) also contained kiln material and mid-late fourth century AD pottery.

The ephemeral remains of a second pottery kiln [332], situated in the extreme northeast corner of Area 2, had a similar base to kiln [306]. There was no trace of a pedestal or other internal features due to the severity of the truncation by medieval ditch [327]. The remnants suggested that this kiln would have had an approximate diameter of 1.50m, with an internal chamber 0.53m high. No dating evidence was recovered.

The presence of so many pits containing kiln material and dating from the late third century AD to the mid-late fourth century AD probably represents the facilities required of the potter responsible for the operation and maintenance of the kilns.

6.4 Saxon

There is one feature possibly dating to this period on the site at No.6-8 Station Road West (Fig. 7). It is possible that other features once existed but have been completely destroyed by medieval and post-medieval activities.

6.5 Medieval (Figure 6)

The majority of the medieval features were consistent with brickearth quarrying, and may form part of the larger network of pits found on the site at Hallett's Garage (Gollop 2012). Excavation in Area 1 at Station Road West revealed a series of very large pits. Disturbed and redeposited human bone within the fills of the pits, originating from the Romano-British inhumation cemetery, was a recurring feature.

The largest of these pits [112] was situated slightly back from the street front of Station Road West in Area 1. This pit, originally excavated in the CAT evaluation in

2011, was backfilled with tips of clean redeposited brickearth (115) and (116). This feature extended south-west beyond the limit of excavation, under No.4 Station Road West. It measured +3m by 2m and had a minimum depth of +0.83m.

Situated slightly east of pit [112] was a group of intercutting pits. Located within the centre of Area 1, this group included [123], [128], [132], [144] and [196]. Pits [123], [128], [144] and [196] were large sub-circular pits. Pit [132] was linear in shape. The earliest pit in this group [196] though severely truncated, measured 1m by 0.60m. It survived to a depth of 0.60m. Most of the northern element of this pit was destroyed in the 19th century during the construction of the cellar for No.8. Pit [196] was also severely truncated by pit [123]. This pit had a 'bell-shaped' profile and measured 2.30m by 1m. It had a depth of 0.80m. This feature was also truncated by the cellar of No.8. The north-western edge of [123] was truncated by a post medieval cesspit [106] and its south-western edge by pits [132] and [144]. Pit [132] measured 1.88m by 0.84m and it had a depth of 0.80m. Truncating [132] to the south-west was a large circular pit [144]. This measured 2.14m by 1.84m and it had maximum depth of 0.54m. The latest feature in this sequence was pit [128]. This feature was severely truncated by post-medieval/modern features. Pit [128] measured 1.55m by 1m and had a depth of 0.65m. In section pit [128] was seen to cut the fills of pits [130], [132] and [134].

Southeast of the pit group were two discrete pits [201] and [209]. These have been interpreted as cess pits. Pit [201] was located northeast of pit [209] and was relatively circular in plan. The north eastern edge was truncated by post-medieval pit [114]. Pit [201] measured 1.20m by 0.80m and had a depth of 1.06. This feature contained four deposits (197)–(200) of cess-like material. Pit [209] was oval in plan and measured 1.10m by 0.84m. It had a depth of 0.87m and was filled by five deposits (204)–(209) which appeared to tip down to the west. This fill also comprised of a cess-like material. A third cess pit [099], located northwest of pit [144], measured at +1.80m by 0.52m and had a depth of 0.38m. This feature was truncated by pits [066], [097] and [106]. Pit [097] is thought to be a fourth cess pit.

Three further cess pits [291], [302] and [289] were located within the centre of Area 2. Feature [291] was rectangular, though it had been truncated at its southern end by the modern service trench [247]. This cess pit measured 0.88m by 0.65m and had a minimum depth of + 0.90m. Full excavation did not occur due to health and safety concerns. South of cess pit [291] was a second possible cess pit [302]. This feature was also rectangular in plan. It measured 1.10m by 1.07m and had a depth of 0.75m. This pit was cut by another cesspit [289] which measured +1m by 0.63m. It had a surviving depth of 0.83m. This feature truncated pit [307], a long sub-rectangular

feature that measured 1.80m by 1.05m. Though only 0.50m deep, it has been interpreted as a possible quarry pit.

Southwest of this feature were two pits [363] and [371]. These sat within [360]. Pit [363] had an irregular shape and measured 1.10m by +0.72m. It had a depth of 0.70m. Pit [371] was a shallow, roughly circular-shaped feature that measured 0.88m by 0.85m. It had a maximum depth of 0.16m. These pits abutted each other suggesting that they may be contemporary. Feature [360] was a large oval-shaped pit, which continued beyond the limit of excavation under No.4 Station Road West. It measured +1.60 by 1.27m and had a minimum depth of +0.55m. It was not fully excavated due to the possibility of destabilising the adjoining party wall of No.4. This feature's profile and shape in plan suggests a large brickearth quarry pit, though the two smaller pits within it are of unknown usage.

Features [291], [302], [289], [307] and [360] form a line of features aligned roughly northeast-southwest. This alignment forms a 090° angle with St. Dunstan's Street and is parallel to Kirby's Lane. It is probable that their location on the site was dictated by property boundaries branching off St. Dunstan's Street. One possible boundary, ditch/culvert [327], was located at the extreme northeast corner of Area 2. This feature was also parallel with Kirby's Lane, where it continued beyond the limit of excavation. The southwest terminus of the ditch was square. The portion excavated measured +1.72m by 0.60m. The sides were vertical and it had a maximum depth of 0.80m. This feature truncated the second Roman kiln [332].

The remaining medieval archaeology comprised of two isolated features. Feature [186] was located c.2m east of pit [201] and c.2.50m northwest of pit [307]. This small, oval-shaped feature was a post hole. The second isolated feature [266] was a probable well shaft. This was located in the northwest corner of Area 2. It comprised of a circular shaft with a diameter of roughly 1.40m. The well was dug to a depth of 1.10m but due to health and safety issues it was not fully excavated.

6.6 Post-medieval/Georgian (Figure 5)

The activity on site during the post-medieval period increased. A succession of intercutting rubbish and cess pits within this small area truncated the earlier Medieval and Roman features. The activity is limited to cess and rubbish pits and the appearance of two wells. There appears to be no evidence of brickearth quarrying during this period. This suggests that the site became solely domestic; the features relating to dwellings fronting Kirby's Lane sometime in the 17th century or early 18th century.

Rubbish Pits

The excavation identified two types of post-medieval rubbish pit; relatively shallow pits expressly dug for the deposition of household waste and the re-use of medieval (possibly early post-medieval) quarry pits of great size and depth.

In the extreme north corner of Area 1 sub-rectangular rubbish pit [059] extended beyond the limit of excavation and truncated Roman pit [174]. This post-medieval pit measured 0.90m by 0.70m and had a depth of 0.57m. Pit [035], which was truncated by an interior wall foundation for No. 6, was roughly circular in shape. It measured 1.16m by 0.88m and it had a depth of 0.30m. A group of rubbish pits truncated the top of well [053]. This pit [039] was ovoid in shape and measured 1.40m by 1.20m and had a depth of 0.40m. This pit was, in turn, truncated by rubbish pit [037]. This was a circular feature that had a diameter of 0.60m and a depth of 0.29m. A large rubbish pit [090], located to the north, was severely truncated by the cellar of No. 8. The remaining element measured +2.06m by 0.83m and was 0.50m deep.

There were a number of pits in Areas 1 and 2 what did not appear to have an obvious usage. These may have been merely rubbish pits or even horticultural features backfilled with domestic waste.

Cess Pits

Ten cess pits were identified during the excavation. They may also have been associated with the properties fronting Kirby's Lane.

Area 1 contained the following: cess pit [051], which extended into the cellared area of No.8. The surviving portion of this rectangular-shaped pit measured 1.09m by 0.53m and was 1.16m deep. It contained what appeared to be a lens of concreted crystals of uric acid. Cutting this pit was another rectangular cess pit. Pit [042] measured 1.58m by 1.40m and had a depth of +1.10m. An intercutting group of cess pits were located southeast of pits [042] and [051]. This group comprised of rectangular-shaped cuts. Pit [097] measured 1.48m by 0.86m and had a depth of 0.48m. Pit [106] measured 1.64m by 1.06m and was 0.88m deep. Pit [046] measured 2.30m by 2.12m and had a depth of 0.58m. Two further cess pits were found in Area 1. Pit [095] to the southeast of the pit group measured 1.76m by 1.00m. This had a depth of 1.30m. Pit [224], located in the extreme northeast corner of Area 1, measured 1.18m by 0.90m and had a depth of 0.25m. Three cess pits were identified in Area 2. Pit [154] was rectangular in shape and measured +0.77m by 0.80m. This had a depth of +1.00m deep. Pit [150] was roughly circular in shape and measured 1.40m by +1.00m. It had a depth of 0.65m. Pit [305] was located along the

northeast edge of the site and extended beyond the limit of the excavation. This feature measured at +0.40m by 0.90m and it had a depth of 1.07m.

Wells

Two wells were identified during the excavation, one in each area. The well in Area 1, [053], was located in the south eastern corner and had a diameter of 1.90m. Due to health and safety concerns this feature was only excavated to a depth of 1.20m. Excavation of the well revealed a series of steps or revetments, cutting into the shaft, suggesting the possible use of support beams during its construction. The well in Area 2 was constructed of chalk blocks (274). These measured 0.20m by 0.17m by 0.10m. The chalk lining sat within a circular construction cut [271], which had a diameter of 1.50m. The internal diameter of the well measured 0.70m. This well was not excavated beyond a depth of 0.60m.

A ditch [114] may have been associated with well [053]. It was aligned roughly east-west and it entered the well from the northeast. The ditch measured at least 1.40m in length and was 0.61m wide. Its profile was 'V-shaped' with a flat base and it had a depth of 0.66m.

6.7 Victorian (Figure 4)

Construction of the brick terraced dwellings of Nos.6-8 Station Road West occurred sometime after the development of the approach road to Canterbury West railway station, which opened in 1846. Early photographs show that No.6 was constructed with bay windows on the ground and first floor, fronting the new approach road. Bomb damage during the Second World War led to the eventual demolition of the terrace, as noted in the 1956 Ordnance Survey map.

The archaeology pre-dating the construction of No.6-8 comprised of domestic rubbish pits. Three of these pits were cut by the foundation trenches [018] during the construction of No.6. Pit [073] was partially exposed under the bay window of No. 6 and extended into the approach road suggesting it was dug sometime before the 1840s. It measured +2.00m by 0.86m and was 1.40m deep. Pit [073] was dug purely for the dumping of domestic waste, as was pit [044]. This feature had an oblong shape and it measured 1.24m by 0.70m. It had a depth of 0.60m.

Other features, primarily in Area 2, included service trenches [246] and [247] and an associated manhole in the northern part of the site and two large square post holes [378] and [380]. The post holes truncated the foundation trench [376] = [397] for a masonry wall (395). This was aligned northeast-southwest and it survived to a height of 1.00m. Another square post hole [286] located at the southeast edge of the site near Kirby's Lane truncated a large rectangular square bottomed feature [280] which

measured 3.00m by 1.95m. This had a depth of 0.35m. The function of this feature may have been structural. The main fill (281) comprised of broken bricks which may have come from the demolition of a shed or 'out-house' at the rear of No.6's garden. A sub rectangular rubbish pit [367] at the southern limit of the excavation and was cut by the southern party wall between Nos.4 and 6. This feature measured 1.50m by 0.60m and had a depth of 0.12m. It was filled by (368) which contained 19th century pottery and brick and oyster shell.

6.8 Modern (20th-21st c) (Figure 3)

After the bombing raids over Canterbury during the Second World War, the corner of St. Dunstan's Street and Station Road West was cleared of the damaged buildings. After the levelling of No.6-8 (including the cellar) the area was left as a vacant lot, eventually being used for parking and small scale commercial ventures. The only recognisable modern feature on the site was a machine cut engineering trial hole [031] cut to investigate the depth of the party wall between Nos.4 and 6.

7. The Finds

7.1 The Ceramic Assemblage

Introduction

An overall total of 2,070 sherds of pottery, kiln wares and ceramic building material (cbm) weighing 81.106kgs were recovered from the excavation. Residual pottery from the pre Roman period was recovered from a number of features throughout the site. Pottery from throughout the Roman period was also present as well as Roman brick and tile. There was a particular concentration of pottery in a number of features in Area 2 dating from the mid-late fourth century AD suggesting that these features were contemporary with the kiln activity on site. The ceramic assemblage then continues from the 12th century up to the present.

The Ceramic Assessment (Roman-Medieval) by Malcolm Lyne

A table of the ceramic assemblage is included in the appendix. Malcolm Lyne has been commissioned to write a specialist report on the Roman kiln discovery which is to be published in an academic journal This will entail five days work and additional drawings. In addition further work on the ceramic assemblage has been offered free by a PhD student at the Vrije Universiteit Brussels.

The Ceramic Assessment (Post Medieval) by Nigel Macpherson-Grant

A small assemblage was derived from 2 contexts consisting of 23 sherds weighing 490gms, which contained predominantly Late Post-Medieval and a few residual Post-Medieval elements. The condition and sherd sizes in one context-assemblage, (145),

suggested they were derived from a contemporary discard group. The overall ceramic range is fairly typical of most moderately wealthy later eighteenth-earlier nineteenth century households – the only marginally unusual element was a fragment from a late c1800AD ‘Red Basaltes’ stoneware tea-pot with neatly wavy-rilled engine-turned shoulder decoration, sharp sprig-moulded floral body décor and a thin twisted strand handle. A table of the ceramic assemblage is included in the appendix. No additional work on this assemblage has been recommended.

7.2 Other Bulk Finds

Evidence of non-ceramic artefacts was limited to mainly post-Medieval contexts, including glass and clay pipe fragments.

In Area 2, context (145) contained three fragments of Late post-Medieval claypipe stem (weighing 6gms) dating from 1775-1840. One fragment was burnt. Also included in this context were three fragments of post-Medieval/Late post-Medieval glass bottles (weighing 148gms) representing two bottles, one fragment of a green-black base and two fragments of a dark green body. The base fragment had a vertical body wall and dated from around c.1770-1800.

7.3 Small Finds

Introduction

Eighteen small finds were retrieved during the excavation of which three have been fully analysed at the time of the writing of this report. All three artefacts came from within graves in Area 2.

Analysis of Two Grave Goods from Station Road West by Simon Holmes

Description

Bracelet (389) SF 17

Copper alloy bracelet (incomplete). This specimen comprises of two interlaced wires that have been twisted to form a ‘rope’ effect. Both wires have a thicker central section, forming the main body of the bracelet. The wires become thinner as they form the bracelets’ terminals. Both terminals are damaged. L: 115mm W: 6mm T: 6mm.

Jet Bead Necklace/Bracelet (389) SF 18

This necklace/bracelet comprises of 35 jet beads. Each bead is roughly circular in shape. The thickness of the beads varies and they are more or less flat with slightly

bevelled edges. Each bead has a central, circular perforation and they are roughly of the same size and dimension. D: 12mm T: 3.5mm

Discussion

Both of these objects form the grave goods of Burial [390], an inhumation of an adult/child female. Traditionally attributed to sources at Whitby and Port Mulgrave (on the North Yorkshire coast), the use of jet in the Roman period appears in the second century AD and reaches its zenith in the third and fourth centuries AD. It is during this later period that there is an increase in cosmetic implements and jewellery.

The small jet bead necklace/bracelet within Burial [390] is a fairly common feature of the late 3rd and 4th Centuries AD. Numerous examples have been recorded in Britain, such as; Walmgate, York (Allason-Jones 1996), Giltspur Street, City of London (Holmes 1997) and Poundbury, Dorset (Farwell and Molleson 1993). Examples of jet bead necklaces of this date have also been found in Germany, most notably from the Rhineland, such as; Cologne (Allason-Jones 1996).

Additional work on the assemblage will take three days.

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Coin (269) SF 10

Constantine I.

Type: Copper alloy *Nummus*

Obv: CONSTAN[TI]NVS AVG Head r. Dia.

Rev: VIRTU S AVGG Camp gate with four turrets, star above. No doors.

Mint: Arles. T/F in field. In exergue: PCO[NST]

RIC VII Ref: No.337. Date issued: AD 324-330

8. Environmental Samples

8.1 Environmental soil samples

Some 42 separate samples were taken but a rapid analysis suggests that most features were so mixed with pottery from a number of phases that it will be unlikely to be able to obtain a definitive date for most of the environmental samples. However if required, to process the 42 samples will take five days with an additional four days for analysis and reporting.

8.2 Animal Bone Assessment

SRW-EX-12, Station Road West, Canterbury, Animal Bone Assessment Report

Julia E M Cussans

Introduction

An assemblage of over 800 bone fragments from approximately 60 contexts was assessed. The findings of the bone scan are reported below, followed by suggestion for future work. Overall the potential of the assemblage is limited to informing on the economy of the site and its immediate locality. The small size of the assemblage limits its potential in terms of informing on broader regional or national research agendas.

Method

The animal bone assemblage was assessed on a context by context basis and the results recorded on a bone scan pro-forma. The pro-forma took into account observations on bone condition including general preservation, colour, abrasion, fresh breaks and gnawing. Mammal bones were quantified by species where possible or by size category where large indicates cattle or horse sized, medium is sheep/goat, pig or large dog sized and small mammal is cat or hare sized. Sheep and goat bones were only identified to species where identifiable skull fragments, particularly horn cores were present; for the majority of cases they were simply recorded as sheep/goat. The presence of bird, fish and other small fauna could also be noted. For the identified mammal species the dominance of particular body parts was noted as was the presence of butchery, ageable mandibles and teeth, unfused epiphyses, measurable bones and those displaying pathologies. The presence of such features was noted in a semi-quantitative manner (none, few, some, many). Further to this, notes were made on any particular points of interest. A number of human bone fragments were also present in this assemblage, the numbers of these were recorded along with a note of elements present and these bones were then extracted from the animal bone assemblage for separate analysis; a brief statement on the human bones present is included as part of this report.

Once the bone data were collected the contexts were assigned to date groups with the aid of the site interim report (SWAT Archaeology 2013) and the pottery date assessment (Lyne 2013). Contexts were assigned as pre-Roman, Roman, late Roman, medieval, post medieval or unknown. These date groups are subject to change once full site phasing data are available.

Animal bone data were quantified in two ways, firstly by a basic fragment count of identified specimens (NISP) and secondly by counting the number of contexts a species was present in for each date group (frequency). The use of the frequency method offers a counterbalance to NISP figures which can be inflated where articulated remains are present and hence a single individual is represented by a large number of bones, or where some species are more likely to be butchered than others and hence broken down into a greater number of pieces.

Results

Bone preservation was in the majority of cases rated as ok or good with a small number of contexts rated as having poor preservation on a scale ranging from very poor (bones very fragmented and largely unidentifiable) through to excellent (bones extremely fresh in appearance with little or no surface damage), bone abrasion was fairly common and in some cases quite severe, but fresh breakages and canid gnawing were less abundant. Bone fragmentation rates were relatively low as attested to by the high proportion of identifiable elements; however as a hand collected assemblage it is expected that there will be some bias towards larger (potentially more easily identifiable) elements; this should also be taken into account when looking at the species represented.

A total of 752 animal bone fragments were recorded from 58 contexts and three unstratified groups (Table 1). The majority of the bones came from the Roman, Late Roman and Medieval date groups, with a significant number also belonging to the unphased group. A small quantity of bones came from the pre-Roman and post medieval groups. Domestic mammal species present, in order of overall abundance, were cattle, sheep/goat, pig, horse, cat, and dog. Fallow deer were represented by a single bone. A small number of bird bones were present, most of which were identified as chicken or chicken sized and one was deemed to be from a larger, goose sized, bird.

The three principal food taxa, cattle, sheep/goat and pig, were present in all date groups except the pre-Roman group, which is very small. Their relative proportions in the other four date groups are shown in Figure 1. Cattle are the most abundant taxa in every group, followed by sheep/goat and then pig. However in the medieval group the proportion of sheep/goat increases and cattle decreases. The current sample sizes are quite small but these may be increased if the unphased group can be redistributed when phasing data are available. A significant proportion of the assemblage could only be identified as large or medium mammal. Much of this group was made up of rib and vertebra fragments which are difficult to reliably

identify to species but can offer useful economic information on butchery practices and pathology. As cattle are by far the most abundant of the large mammals present it is likely that the majority of the bones assigned as large mammal belong to this species. In two cases sheep/goat bones could be assigned to species, both of these were goat horn cores, one from (096) assigned as medieval and one from (191) assigned as late Roman. None of the sheep/goat bones were positively identified as sheep. Medium mammal bones may belong to sheep, goat, pig or fallow or roe deer, one medium mammal ulna fragment was noted as possibly belonging to sheep/goat or roe deer.

Horse bones were present in the Roman, post medieval and unphased groups, the majority of the bones coming from a single unphased deposit (067) containing the articulating bones of a full hind limb from femur down to distal phalange. Cat was also largely represented by what is likely to have been the articulated or semi-articulated remains of a single animal (124), also belonging to the unphased group; the small mammal bones from this context are ribs and vertebrae which likely belong with this cat. A single cat bone was also found in the medieval group. Dogs were represented by a very small number of bones from the pre-roman and Roman groups.

Butchered elements were fairly common with cut, chop and saw marks all being noted. No butchery was noted on the horse, dog or cat bones. One butchery mark of particular interest was a cattle axis vertebra from context (172) which had been chopped through the cranial articulation, indicating the decapitation of the animal as part of the butchery process. Ageable elements, including mandibles and some loose teeth and unfused long bone epiphyses were present and will allow for some analysis of the age of the animals found at the site; however the samples were too small to allow for the construction of detailed age profiles. Some determination of animal sex is possible for the pigs at the site due to the presence of a number of canine teeth; during the bone scan both male and female canines were identified.

A very small number of measurable elements of cattle, sheep/goat and horse were present, which may allow for inter-site comparisons but no statistically significant analysis. One particularly large cattle jaw was noted from context (124), which may make for an interesting comparison with a known dataset. A fairly high proportion of the dog and cat bones were measurable due to their relative completeness, but as these only represent one or two individuals, statistical analysis would not be possible. Only one pathological bone was noted which was a cattle horn core with dimples or depressions in its surface.

A small number of deposits were of particular interest in their own right. Contexts (328) and (341), assigned to the Roman group, were both largely comprised of cattle horn cores and may represent some form of industrial processing. Finally deposit (191), assigned to the late Roman group, was the largest deposit and contained a

reasonable number of butchered and ageable elements and hence is probably one of the better indicators of site economy.

Potential of the assemblage

The small size of this assemblage, in particular when looking at individual date groups, and the abraded nature of many of the bones somewhat limit its usefulness in terms of informing on regional and national research agendas. The assemblage does however have the potential to inform on the site economy, particularly in the Roman and medieval periods and possibly contribute to the understanding of the economy of the wider locality. This potential would be greatly increase if the un-phased group of bones could be assigned to specific date groups, increasing the sample size of phased bones. The addition of context descriptions would also make for a more useful dataset. Particular questions that could be addressed would be relating to the economic value of the three main food taxa, based on age and sex data and the location and nature of butchery marks as well as the representation of specific body parts. Some indication of animal stature may be possible with comparison to known data sets.

Future work

Any further work on the animal bone assemblage would have to start with the assignment of the material to its correct stratigraphic phase, followed by detailed recording of all bone belonging to the Roman, late Roman and medieval phases; bone groups from other phases were too small to warrant further analysis.

Individual bones will be identified to element, species, bone part (proximal, distal etc.) and body side and recorded in an MS Access database using codes provided by NABONE (NABO 2008). Data on bone zone, fusion state, butchery, gnawing, bone erosion and weathering, sex, pathology (including non-metric traits), biometrics and tooth wear will also be gathered where possible. Bone identifications will be made using the in house reference collection at Archaeological Solutions and with the aid of reference manuals (e.g. Schmid 1972, Pales & Lambert 1971 a & b, Pales & Garcia 1981 a & b, Hillson 1992, Cohen & Serjeantson 1996). Bone fusion, butchery, burning and gnawing will be recorded following the NABONE guidelines (NABO 2008); bone weathering will be recorded following Behrensmeyer (1978) and erosion following McKinley (2004). Bone measurements will be taken where appropriate following the guidelines of von den Driesch (1976). Tooth eruption and wear will be recorded following Grant (1982).

Following recording the data will be sorted and analysed by phase and species. Species will be quantified by NISP and minimum number of individuals (MNI). Age data from tooth eruption and wear and long bone fusion will be assessed. Bone fusion data will not be assigned to specific ages due to differences in maturation between modern and ancient populations but will rather be assigned to fusion groups (early, intermediate, late, final) following O'Connor (1989) to allow relative

age to be assessed. Tooth eruption and wear age stages will be assigned following the methods of Halstead (1985) for cattle, Payne (1973) for sheep/goat and Hambleton (1999) for pig. The occurrence of gnawing, erosion and weathering will be assessed on a context by context basis and may help inform on site formation and taphonomy. Butchery marks will be analysed to determine methods of carcass processing and any differences in the treatment of different taxa. Where appropriate biometrical data will be gathered to allow for comparisons with other sites or standard datasets (e.g. Johnstone & Albarella 2002) and gain an impression of animal stature at the site.

A full report on the animal bone assemblage would include a method statement, an analysis of the recorded data on species quantification, age and sex of the principal economic species, a description of butchery practices and an indication of animal stature where possible. The report would conclude with a discussion of the site economy in relation to other appropriate sites from the local area.

Time estimate for completion of full recording, analysis and report writing

Recording – 5 days. Analysis – 2 days. Research – 2 days. Write up – 5 days

Note on Human Bone

A total of 85 human bone fragments from 18 contexts were extracted from the animal bone assemblage. A wide range of elements was present including skull, vertebrae, ribs, limb bones and metapodials. Bones from context (228) were noted as being from a child, due to their unfused epiphyses and small size. Human bones from context (180) were noted as being more poorly preserved than the animal bones in the same context, possibly indicating redeposition of the human bones; it seems this is also likely the case for many of the other human bones found in this assemblage. Human bones were recovered from all date groups except the pre-Roman group.

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9. Interpretation

The archaeological excavation at No.6-8 Station Road West produced a mass of information regarding the use of the site from the Romano-British period onwards. Some of the data also alludes to activity beyond the confines of the excavation.

The archaeological sequence begins with the ephemeral presence of pre-historic material on site. The excavation produced fragments of ceramic material and knapped flint artefacts, though there were no pre-historic features. This ephemeral material presence has been observed on other excavations in the Parish of St. Dunstan's, most recently at Hallett's Garage in 2010 and 28 St. Dunstan's Street in 2011 (Holmes, *Pers Comm*). Such data, though small, indicates that there is pre-historic archaeology in the area.

Archaeological features do not occur at No.6-8 Station Road West until the mid-late 1st century AD. The presence of the Roman road (St. Dunstan's Street) acts as the western boundary of a large system of ditches that criss-cross the landscape west of the road. One of these ditches was present on site and it is believed to part of the network observed at Hallett's Garage (Gollop 2012) and 28 St. Dunstan's Street (Holmes, *Pers Comm*). This ditch system is quickly replaced (in places) by small scale brickearth extraction activities. Several quarry pits were identified on site for this purpose, most are of a mid 1st century AD – 2nd century AD date. The extraction of brickearth would seem to cease at the end of the 2nd century AD.

The archaeological record suggests that from the 3rd century, part of the parish of St. Dunstan's become an extensive inhumation cemetery. Occasional burials have been found at the House of Agnes, 71 St. Dunstan's Street (Robertson and Wilson 2010) and 21-24 St. Dunstan's Street (Jenkins 1951). The recent excavation at Hallett's Garage recorded a total of 137 burials (Gollop 2012). The discoveries by Jenkins and Gollop demonstrate that the size of this cemetery is substantial. The excavation at No.6-8 Station Road West produced a further 14. This group comprised of both sexes and were a mix of adults and children. Most were aligned northwest-southeast.

Towards the end of the 3rd century AD a second industrial phase took place. This industrial phase was for the manufacture of pottery. The excavation discovered two kilns, similar in style to the Wattisfield-type from East Anglia (Swan 1984). Both were 'semi-sunken' with a central, integral 'bollard' to support the upper chamber. The position of the kilns and the related features surrounding them, respected the earlier

burials. This may indicate that the rear of the site, fronting Kirby's Lane, was situated on a boundary between the area used by the cemetery and that used for other purposes.

The archaeology at No.6-8 Station Road West produced ephemeral evidence of features belonging to the post-Roman period (Fig. 7) where a sunken feature has some of the attributes of a Saxon grubben house. However, the absence of secure Anglo-Saxon archaeology is in contrast to that at Hallet's Garage (Gollop 2012) and 28 St Dunstan's Street (Holmes, *Pers Comm*). Both of these sites had an ephemeral presence, including both features and artefacts. It would seem that most of the area by No.6-8 Station Road West site was left fallow until the medieval period.

Human activity did not take place on site again until the 12th century. This activity comprised of brickearth extraction and the deposit of domestic refuse in a series of pits. There is some evidence that land division took place due to the appearance of ditches. The intensity and location of the medieval quarry and refuse pits disturbed the underlying Romano-British cemetery. Several of these features contained redeposited human bone. There was evidence however that some degree of reverence may have been observed as there were instances of careful brickearth extraction around particular graves. This was also a feature at Hallet's Garage (Holmes, *Pers Comm*).

The increase of domestic dwellings and other buildings fronting St. Dunstan's Street resulted in an increase in activity on the site during the post-medieval period. The features excavated reflected the need to dispose of domestic refuse on the site. This culminated with the appearance of a series of intercutting pits and several cess pits.

The archaeological sequence at No.6-8 Station Road West terminates with the construction of the houses themselves, sometime after the 1840s. The rear of the property was utilised as garden with a probable 'out-house' situated at the very end of the property.

10. Conclusion

To conclude, the archaeological excavation at No.6-8 Station Road West confirmed the continued presence of a Romano-British inhumation cemetery on the eastern side of St. Dunstan's Street. This cemetery and the presence of pottery manufacture reinforce the archaeological evidence recovered from other sites along the line of this major Roman road. The archaeological presence from the Anglo-Saxon period is scarce within the area, so it's possible absence at this particular location is not unusual. The rejuvenation of St. Dunstan's Street from the medieval period through

to the modern day was responsible for a high concentration of domestic features recorded during the excavation. This prolonged period of activity is also reflected by previous archaeological investigations within the area.

11.0 Methodology for further work

A final report will be prepared following the format outlined below. The article for publication will be this excavation phase of work on the site. Information supplied by the various specialists will be included within the publication, and appropriate plans and maps will illustrate the text. The extent and content of the publication will be agreed with the Canterbury City Council Archaeological Advisor.

11.1 The Finds

The ceramics, Roman and medieval tile will undergo additional research, which will attempt to refine their identifications, dates and understand them from a functional and depositional basis. In addition, if felt applicable additional work will be commissioned for the human and animal bone assemblages, and the environmental samples.

12.0 Publication and Archiving proposals

12.1 Publication Synopsis

9.1.1 It is proposed that the findings are worthy of publication as an article in the county archaeological journal, *Archaeologia Cantiana*. The article will present the results of this archaeological work in relation to other investigations undertaken in the area. Reference will be made to other Roman cemeteries in the area and beyond, in an attempt to put the results into a regional and national context.

Given the limited potential of the finds, it is not proposed to have stand-alone finds reports but to integrate the information derived from the finds with the site narrative. This will enable the material to be considered in context with the archaeological remains. However, the Roman kiln assemblage will be published separately.

The article will include appropriate maps, plans and illustrations. It is proposed the article will follow the publication synopsis to be agreed with the City of Canterbury Archaeological Advisor, resulting in an article of c.4500 words. Upon completion a copy of the report will be sent to CCC for comment prior to submission for publication. Archive of the finds will be subject to discussion with the developer and CCC Archaeological Advisor.

13. Acknowledgements

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15. Plates



Plate 1. Area 2. Early Roman ditch [375]. Looking south. Scale: 2m.



Plate 2. Area 2. Skeleton 8 in secondary grave [270] with earlier grave [258] to the northwest. Looking northwest. Scale: 1m.



Plate 3. Area 2. Coffin furniture within juvenile grave [349], Skeleton 10. Looking north. Scale: 0.5m



Plate 4. Area 2. *In situ* torc and jet beads. Grave [370]. Scale: 0.10m



Plate 5. Area 2. Kiln [306]. Looking south-southwest. Scale: 1m



Plate 6. Area 1. Medieval quarry pit [144]. Looking southwest. Scale: 1m

16. Tables

SPOT-DATING OF THE POTTERY FROM STATION ROAD WEST, CANTERBURY (SRW EX 12).

By Malcolm Lyne

Fabrics

Prehistoric.

P1. Black handmade fabric with profuse protruding ill-sorted 1.00<2.00 mm. calcined flint filler

P2. Black handmade fabric with profuse <1.00 mm. calcined-flint filler, fired rough brown

'Belgic' Late Iron Age

B1. Fine 'Belgic' grog-tempered ware

B2/R1. Transitional 'Belgic' grog-tempered/Native Coarse Ware

Roman

R1. Native Coarse Ware

R5. Canterbury Greyware

R6.1. Sand-tempered orange Canterbury fabric with profuse <0.30 mm. multi-coloured quartz-sand filler

R6.3. Sand-tempered buff Canterbury fabric with profuse <0.30 mm. multi-coloured quartz-sand filler

R8.3 Fine-sanded buff Canterbury Dane John kiln fabric

R13. BB1

R14. North Kent BB2

R16. North Kent Fine Ware

R17. Hoo St Werburgh white-slipped ware

R25. Cologne colour-coated whiteware

R35. Central Gaulish Black Colourcoat fabric

R36. Moselkeramik

R42. South Gaulish Samian

R43. Central Gaulish Samian

R46. East Gaulish Samian

R50. Baetican DR20 fabric
R61A. Gillam 238 mortarium fabric
R98. Miscellaneous amphorae
R99. Miscellaneous mortaria
R109. Miscellaneous coarse wares
R110. Miscellaneous finewares
R200. Silty buff-brown fabric with gilt mica external wash
R201. Grey mortarium fabric fired rough cream with thick pink margins. Sparse angular red slate and red ferrous inclusions. Profuse <1.00 mm. white quartz trituration grits. Rhineland source

Late Roman

LR1. Late Roman Grog-tempered ware
LR1.1. Late Roman Grog-tempered ware with siltstone grog.
LR2.1. Fine-sanded Thameside greyware
LR2.2. Fine-sanded Thameside greyware with surface 'scorching'
LR2.3. Coarse-sanded late Thameside greyware
LR2.4. Coarse-sanded late Thameside greyware with surface 'scorching'.
LR5. Alice Holt/Farnham Greyware
LR5.1. Preston kiln imitative Alice Holt/Farnham greyware
LR6. Overwey/Portchester D fabric
LR7. Oxfordshire Parchment ware
LR10. Oxfordshire Red Colour-coat
LR11. Lower Nene Valley Colour-coat
LR13. Hadham Oxidised Ware
LR14. Streak-burnished ware
LR17. Argonne ware
LR19. Mayen ware
LR200. Wheel-turned silty grey fired polished black
LR201. Bubbly dirty grey-brown fabric with profuse <0.20 mm. black ferrous inclusions and some grog filler
LR202. Blue-grey mortarium fabric fired grey with profuse <0.30 mm. white quartz-sand filler and large flint trituration grits

Kiln wares

K1. Grey-black fabric with profuse ill-sorted up-to 0.50 mm. quartz sand (mostly finer) and sparse angular white <1.00 mm. alluvial flint
K2. Handmade and wheel-turned grey-black fabric with profuse ill-sorted up-to 0.50 mm. multi-coloured quartz-sand filler (mostly finer).
K3. Similar fabric but with black-burnished surfaces

- K4. Silty reddish-black fabric fired polished black to chocolate-brown
K5. Handmade black fabric with profuse <0.50 mm. white and colourless quartz-sand filler and pimply goose flesh finish. Some grog.

Kiln fabrics

- KF1. Grass-tempered kiln fabric used to build perforated oven floors
KF2. Grog-tempered kiln fabric with occasional flint inclusions
KF3. Grog-tempered kiln fabric

Medieval

- EM3B. Shell-tempered brown-black fabric
EM55. Black lumpy fabric fired brown with shell and sand filler
EM.M1. Grey fabric with profuse <0.30 mm. multi-coloured quartz-sand filler and surface sprinkling of fine shell fragments.
M1A. Grey fabric with profuse <0.50 mm. multi-coloured quartz-sand filler
M1B. Similar but with splashed apple-green glaze
M1C. Grey fired rough pink with profuse <0.30 mm. multi-coloured quartz sand filler
M1D. Similar but with splashed apple-green glaze
MX. Grey fabric with profuse multi-coloured and white quartz-sand filler

- LM1. Late Medieval hard silty pink-orange fabric with profuse <0.10 mm. quartz-sand filler
LM9. Raeren stoneware

Post Medieval

- PM1 Kentish red earthenware, panceon base
PM2 Kentish red earthenware
PM3 Staffordshire type combed slipware
PM/LPM1 Staffordshire type white stoneware
PM/LPM2 Creamware
PM/LPM3 Staffordshire type 'Red Basaltes' stoneware
LPM1 Later creamware
LPM2 Pearlware
LPM3 Red earthenware flower pot

Catalogue

Context	Fabric	Form	Date-range	No of sherds	Wt in gm	Comments
u/s	B2/R1	Stire-jar	c.70-200	4	83	
	R1	Jar	c.170-300	1	12	
	R5	Misc	c.80-175	4	68	
	R8	Flagon	c.150-200	2	13	
	R14	Cl 5D bowl	c.130-180	1	26	
	R16	Rouletted beaker	c.190-300	1	18	
	R43	Dr 36	c.120-200	1	8	
	R46		c.140-260	1	6	
	R109			9	67	
	LR1.1	Beaded and fl bowl	c.270-420	2	64	
	LR2.3	Necked jar	c.270-370	2	66	
	LR2.4	Jar	c.270-370	1	9	
	LR5	Open form	c.270-420	8	83	
	LR10	Bowl	c.240-400+	2	38	
	MISC			1	7	
KF1			1	20		
Tile			1	53		
				42	641g	
u/s Area 1 SE Room	R16	Closed	c.43-300+	1	6	Fresh
	M1A	Cooking-pot	c.1200-1250	1	9	Abraded
				2	15g	
u/s Area 2 near 290	LR2.3	Jar	c.270-370	1	9	
	LR5	6A-13 dish	c.300-420	1	29	
	K1	Thick-walled pot	c.340-370	2	140	
	K2		c.340-370	8	154	
	K3		c.340-370	4	44	
	KF1			13	516	
MISC			3	19		
				32	911g	
u/s Area 2	Tile	Pegtile	Post Med	1	66g	
016	R14	Open form	c.130-250	1	8	Fresh
	R16	Beaker		1	1	Fresh
	R109			1	4	Abraded
	LR2.3	Jar	c.270-370	1	4	Fresh
	LR5	Jar	c.270-420	3	23	Abraded
	LR10	C51 bowl	c.240-400+	1	5	Fresh
	MISC			4	25	
	EM55	Cooking-pot	c.1150-1250	1	31	Fresh
	M1A	Cooking-pot	c.1200-1350	5	25	Fresh
	M1B	Jug	c.1200-1350	1	6	Fresh
	M1C	Cooking-pots	c.1250-1350	7	100	Fresh
	M1D	Cooking-pots	c.1250-1350	2	11	Fresh
					28	243g
040	LR19	Lid-seated jar	c.350-400	1	72	Fresh
	MISC		c.70-200	14	137	Abraded
	EM3B	Cooking-pot	c.1100-1250	1	8	Abraded
	M1A	Cooking-pots	c.1200-1350	11	97	Fresh
	M1B	Pitchers	c.1200-1350	2	16	Fresh
	M1C	Cooking-pots	c.1150-1250			Fresh
		Cooking-pot	c.1250-1300	19	254	Fresh
	MX	Cooking-pots	c.1300-1350	7	58	Fresh
	LM1	Cooking-pot	c.1350-1550	6	87	Fresh
	PMED	Closed form	c.1450-1550	2	10	Fresh
	Tile			1	23	Abraded
				64	762g	
041	MISC			4	30	Abraded
	LR5	Open form	c.270-420	2	11	v.abraded
	EM55	Cooking pots	c.1200-1300	1	5	fresh
	M1C	Cooking-pots	c.1250-1550	15	166	fresh
				22	212g	
049	MISC		Roman	1	9	
	EM55		c.1200-1300	1	1	Sl abraded
	M1A	Bowl	c.1300-1350	3	10	Sl abraded
	M1C	Cooking-pot	c.1200-1250	1	11	Abraded
			?Residual	6	31g	
050	M1C	Cooking-pots	c.1200-1350	4	32	Fresh
	M1D	Jug	c.1200-1350	3	7	Fresh

	MISC			2	8	
			c.1200-1350	9	47g	
052	B2/R1	Combed store jar	c.70-150	1	16	
	R1	Jars	c.170-300	3	57	
	R43	Dr 31	c.150-200	1	6	
	LR5	Jar	c.270-420	1	1	
	LR7	Bowl	c.240-400+	1	1	
	LR17	Bowl	c.350-400	1	1	
	MISC			3	18	
	EM55	Cooking-pot	c.1200-1300	1	8	
	M1A	Cooking-pot	c.1200-1350	5	84	
	M1C	Jug	c.1200-1350	6	97	
	PMED	Closed	c.1800-1900	1	4	
	PMED	Open form	c.1700-1900	1	5	
	PMED	Closed	c.1800-1900	1	4	
			19th c.	26	302g	
054	M1C	Cooking pot	c.1250-1550	1	21	Abraded
	PMED	Open form	c.1450-1600	1	17	Fresh
			c.1450-1600	2	38g	
057	R1	Jar	c.170-300	1	18	Fresh
	R5	Jar	c.80-175	3	35	Fresh
	R50	DR20	c.170-300	1	29	Sl abraded
	R109	Jars		3	23	Fresh
	LR1	Jar	c.270-420	1	18	Fresh
			c.200-300	9	123g	
065	B2/R1	C4 jar	c.30-100	6	112g	Fresh
069	LM1	Cooking-pot	c.1370-1500	1	28	Fresh
		Jug		2	21	Fresh
			Late Med-1500+	3	49g	
070	LM1	Cooking-pots	c.1370-1550	7	205	Fresh
		Jug	c.1370-1550	1	59	Fresh
			Late Med-1500+	8	264g	
078	B2/R1		c.70-200	1	12	Fresh
	LR5	Jar	c.270-400+	1	5	
	K2	Jar	c.340-370	3	52	Fresh. Inc 1 spall
			c.270-400+	5	69g	
080	M1A	Closed	c.1250-1550	1	13	Sl abraded
	LM1	Closed	c.1370-1550	2	12	Fresh
			c.1370-1550	3	25g	
084	R1	Jar	c.170-300	1	6g	Sl abraded
087	M1A	Cooking-pot	c.1250-1350	1	6g	Fresh
089	P1		Early Iron Age?	1	1	Abraded
	LR11	Closed form	c.270-400	1	3	Fresh
	LM1	Jug	c.1370-1550	1	7	Fresh
			c.1370-1550	3	11g	
096	EM55	Cooking-pot	c.1150-	1	5	Fresh
	EM M1	Cooking-pot	1250/1300	1	44	Fresh
	M1A		c.1150-1250	2	9	Fresh
	M1B	Jug	c.1200-1350	1	5	Fresh
	M1C	Cooking-pots	c.1250-1350	3	12	Fresh
	MISC		c.1250-1350	3	26	
			c.1250-1350	11	101g	
098	B2/R1			1	11	Abraded
	R1			1	15	Abraded
	M1A	Cooking-pot	c.1200-1250	2	14	Fresh
			c.1200-1250	4	40g	
100	B2/R1	Combed store-jar	c.70-150	3	89	Fresh
	R5	Jar	c.130-175	1	9	Fresh
	R14	Ac latticed c'pot	c.130-200	1	16	Fresh
	R16	Beaker		1	2	Fresh
	M1C	Cooking-pot	c.1200-1350	1	6	Abraded
				7	122g	
101	Fired clay			1	6g	
105	MISC		Roman	8	86	
	EM3B	Cooking pot	c.1100-1225	2	33	Abraded
	M1A	Cooking pot	c.1250-1350	15	324	Fresh
	M1C	Cooking pot	c.1250-1350	1	53	Fresh
	M1D		c.1250-1350	1	3	
			c.1250-1350	27	499g	
107	B2/R1	Jar	c.70-200	10	104	Abraded
	R5	Lyne 5/1 jar	c.100-175	4	37	Abraded
	R8	Flagon	c.150-200	1	6	Sl abraded
	R16	Beaker		2	7	Abraded
	R25	Roughcast beaker	c.130-250	1	1	

	R42 R50 R99 R110 LM1	Dr 18 DR20 Mortarium Cooking-pot	c.43-90 c.1370-1550	2 2 1 1 1	9 84 43 11 3	Fresh V abraded Fresh Fresh Fresh
			Late medieval	25	305g	
111	R16 MISC M1C	Flask Bowl Cooking-pot	 c.1300-1400 c.1300-1350	2 4 12	33 119 215	 Fresh Fresh Fresh
			c.1300-1350	18	367g	
117	B2/R1 R1 R5 R14 R16 MISC	Storage jars Jar Jar Open form Closed	c.70-200 c.170-300 c.80-175 c.130-250	6 1 2 2 1 2	102 17 11 9 5 25	Fresh and abraded Abraded Fresh Fresh Abraded
			c.130-250	14	169g	
120	MISC EM55 M1A M1C	Necked jar Cooking pot Jar Cooking-pot	Roman c.1150-1300 c.1200-1350 c.1200-1250	1 1 2 4	22 16 9 39	Sl abraded Fresh Fresh Fresh
			c.1200-1300	8	86g	
122	B2/R1 R5 R14 R16 R42 R43 R109 R110 LR10 LR11 Tile	Combed jars Open form Poppyhead beaker Dr 27 Dr 37 Unguentarium Bowl C51 bowl Beaker Tile	c.70-150 c.80-175 c.130-250 c.160-230 c.43-110 c.120-200 c.300-400 c.240-400 c.160-400	2 4 1 1 1 1 1 2 2 1	22 18 10 6 1 10 22 5 42 33 6	Abraded Fresh Sl abraded Fresh Fresh Abraded Abraded Fresh Very abraded Very abraded
			?Residual	17	173g	
126	B2/R1 R6.3 R16 R43 R109 LR2.3 LR201 Fired clay Tile	Jar Closed Beaker Dr 31 Jar base Ev rim jar Tile	c.70-200 c.70-150 c.150-200 c.300-370	2 1 1 2 3 1 1 1 1	46 6 9 9 12 13 9 24 8	Abraded Fresh Abraded Abraded Abraded Fresh
			?Residual	13	136g	
127	R14 R16 LR2.3	Open form 2G2 biconical Pollard 203 jar	c.130-250 c.43-100 c.250-370	2 2 1	12 18 20	Fresh Fresh Fresh
				5	50g	
129	B2/R1 R14 R16 R17 R109 LR5 K2	Combed jar Open form Beaker base Flagon Closed Open form	c.70-150/200 c.130-250 c.43-250 c.270-420 c.340-370	2 1 2 1 2 1 1	10 3 30 22 19 2 10	Abraded Fresh Fresh Abraded Abraded Fresh Fresh
			c.370+	10	96g	Skeleton 0 2
131	R1 R13 R109 LR5	Ev rim jar Cooking-pot Jar	c.170-300 c.200-300 c.270-420	1 1 1 2	23 14 4 10	Fresh Abraded Fresh Fresh
			c.270-300	5	51g	
133	R50	Dr 20	c.43-250	1	301g	Skeleton 01
136	B2/R1 R1 R5	Storage jar	c.50-150 c.170-300 c.80-175	6 1 1	152 6 2	Abraded Fresh
			c.300+	8	160g	Skeleton 05
143	P1 B2/R1 R5 R6.1 R14 R16 R109	Jars Jar Closed	E.I..A c.50-200 c.80-175 c.70-150 c.130-250	2 5 1 1 1 1 8	8 98 4 6 14 1 51	Abraded Fresh Fresh Abraded Sl abraded

	R110	Bowl	c.300-400	1	10	Sl abraded
	LR2.1	Beaker	c.250-400	1	4	
	LR2.2	3H4 jar	c.170-270	5	27	
	LR5	Jar	c.180-270	1	4	
	LR11	Ev rim jar	c.270-400	3	31	Fresh
	LR200	Indented beaker	c.250-300	2	8	Fresh
		Indented beaker	c.250-350	3	32	Fresh
			c.250-300/350	35	298g	
145	PM2	Chamber pot	c.1700-1750/75	2		
	PM3	Press-moulded	c.1700-1750/75	1		
	PM/LPM1	dish	c.1725-1780	1		
	PM/LPM2	White stoneware	c.1740-1780	1		Chipped
	LPM1	Bowl	c.1775-1825	3		1 soot-stained
	LPM2	Incl. plate rim	c.1780-1825	9		8 from same plate
		Blue shell edged				
			c.1775-1800	17	374g	Possibly later
151	MISC		Roman	5	35	
	MX	Cooking-pots		3	36	
	LM1	Cooking-pots	c.1370-1550			
		Jugs	c.1370-1550	16	999	
	LM9	Jug	c.1480-1550	1	7	
	Tile			9	74	
			c.1480-1500/50	34	1151g	
153	Misc	Jar	?	1	21g	
155	PM1	Panceon base	c.1660-1650/75	1		
	PM/LPM2	Condiment	c.1740-1780	2		
	PM/LPM3	pot/plate	c.1765-1800	1		Engine turned
	LPM2	Tea pot	c.1780-1825	1		décor.
		Tankard, colour				Engine turned
	LPM3	banded	c.1825-1875	1		décor.
		Flower pot type				
			c.1800-1825	6	116g	Fresh except for
						17th c sherd
157	B1	Closed	c.50BC-AD.70	1	7	Abraded with hole
	B2/R1	Jar	c.50-200	2	15	Fresh
	?R14	Open form	c.130-200?	1	11	Abraded
	R109			4	16	Abraded
	Fired clay			1	18	
			?Residual	9	67g	
164	Iron slag			1		
172	B2/R1	Combed jars	c.50-150	5	139	Abraded
	R1	Jar with int resin	c.170-300	1	11	Fresh
	R5	13/3 bowlsx2	c.150-175/200			Fresh
		Cl 11 bowl	c.80-150			Fresh
		17/3 lid	c.80-200	7	251	Fresh
	R6.3	Flagon	c.70-150	1	18	Fresh
	R8	Flagon	c.150-200	3	17	Fresh
	R16	Indented beaker	c.140-260			Fresh
		4J1 necked bowl?		7	144	Fresh
	R109	Closed		1	7	Fresh
	LR10		c.240-400	1	2	
	Tile			1	62	
			c.100-200/50	27	651g	
173	B2/R1	Combed jars	c.50-150	7	100	
	R5	13/2 bowl	c.120-175			Fresh
		17/3 lid	c.80-200	3	128	
	R16	2G0 biconical	c.80-120	3	17	Fresh
	R109	Lid-seated jar		1	17	Sl abraded
	MISC			2	37	
			c.80-150	16	299g	
175	R43	Dr 33	c.140-170	1	40g	APRILIS.F
178	P1	Jar	LBA	1	14	Abraded
	P2	Bead-rim jar	c.100-0BC	1	10	Abraded
	B1	Flask		1	43	Fresh
	B2/R1	Storage jarsx2	c.50-150			Fresh
		Necked jars etc	c.50-150	37	962	Fresh
	R1	Jars	c.170-300	3	35	Fresh
	R5	3/1 jar	c.80-160			Fresh
		13/3 bowl	c.120/50-200			Fresh
		17/3 lid	c.80-200	31	638	Fresh
	R6.1	Flagon	c.70-150	2	26	Fresh
	R6.3	Flagon	c.70-150	3	125	Fresh
	R14	Cl 5C bowl	c.150/70-250	4	15	Sl abraded
	R16	2G0 biconical	c.70-120	24	197	Fresh

	R42 R43 R50 R109 MISC Tile	Dr 42 DR20 Necked jar	c.70-110 c.120-200 c.43-250	2 1 1 2 11 2	6 3 72 65 53 18	Fresh Abraded Fresh
			c.70-150/70	126	2282g	
180	B2/R1 R16	Jar Beaker base	c.50-200 c.43-250	1 1	138 22	Fresh Fresh
			Not closely datable	2	160g	
185	R16	Poppyhead beaker	c.70-200+	5	95g	
188	PMED	Open form	c.1600-1800	1	15g	Abraded
191	R1 R14 R16 LR5 K2	Jar Open form Beaker Jars Jar HM	c.170-300 c.130-350 c.270-420 c.340-370	1 1 1 2 1	8 28 2 15 10	Abraded SI abraded Abraded Fresh and abraded Fresh
			c.270-420	6	63g	
192	B2/R1 R6.3 R42 R109	Combed jar Flagon base Open form Closed	c.50-150 c.70-150 c.43-70	1 1 1 1	14 32 31 2	Fresh Fresh Fresh
			c.43-100/50	4	79g	
193	R5 R14 R16	Jar Jar Beaker	c.80-175/200 c.100/50-200	1 1 2	19 11 4	Fresh Fresh
			c.100-200	4	34g	
194	B2/R1 R16 R109	Combed store jar Closed Closed	c.50-150	1 1 1	88 4 4	Fresh Fresh SI abraded
			c.50-150	3	96g	
197	LR5.1 K2	Ac latticed jar Spalled jar	c.270-370 c.340-370	1 1	20 18	Fresh SI abraded
			c.340-370	2	38g	
198	B2/R1 R14 R16 Fired clay	Combed store-jar Open form Bowl	c.50-150 c.130-200	3 2 1 1	41 31 13 10	Fresh Abraded
			c.130-200	7	95g	
199	B2/R1		c.50-200	2	55g	SI abraded
205	R1 R109	Jar	c.170-300	1 2	23 52	SI abraded Abraded
			?residual	3	75g	
206	P1 B2/R1 R16 R50 MISC Tile	Jars Beaker DR20	c.50-200	1 2 1 1 1 1	4 50 4 53 9 1	Abraded Abraded Abraded Abraded Abraded
			Residual	7	121g	
207	B2/R1 R1 R16 tile	Storage jar Knife-trimmed jar Jar	c.50-150 c.170-300 c.150-200	1 1 1 2	7 8 11 54	Fresh SI abraded Fresh
			c.100-200	5	80g	
208	B2/R1 R36 R109	Necked jar Beaker Open form	c.50-80 c.200-275	1 1 1	10 1 3	Abraded Abraded Abraded
			Residual	3	14g	
214	B2 R14 R110 LR2.4 LR5 LR14 LR200 K1 K2 KF1	5C bowl 5F dish Flagon Necked jar Jar Bowl Closed Jars Jars	c.25BC-AD.70 c.150/70-250 c.130-300 c.300-370 c.270-420 c.250-350 c.340-370 c.340-370	1 7 1 1 1 1 1 2 6 3	10 56 15 9 3 11 5 37 85 63	Abraded Fresh SI abraded Abraded Fresh Fresh WT and HM Fresh
			c.270-370	24	294g	
216	LR2.3 R14	Hook-rim jar	c.270-370	7 2	57 14	Fresh SI abraded

	R16 KF1	2A5 beaker	c.160-200+	3 3	15 36	Abraded
			c.270-370	15	122g	
220	B2 R14 R16 K5 LM1?	Open form 4J1 bowl Ev rim jar Closed	c.130-350 c.43-120 c.340-370 c.1370-1550	2 2 2 1	75 32 20 13 8	Abraded SI abraded Fresh SI abraded Fresh
			c.370+ ?c.1370-1550 sherd intrusive	8	148g	Skel 6
222	R5 R43 K2	Jar Dr 37 Jar	c.80-175/200 c.120-200 c.340-370	1 1 2	12 5 11	Fresh Abraded Fresh
			c.370+	4	28g	Skel 4
223	B2/R1 R5 R35	Combed store jar Necked jar Beaker	c.50-150 c.80-175/200 c.150-200	3 2 1	40 17 2	SI abraded Fresh
			c.150-200	6	59g	
226	R5 R14 R43 R56 LR5 MISC	Necked jar Reeded-rim bowl Open form Dr 67 beaker GAUL 4 Open form	c.80-175/200 c.150-175/200 c.130-250 c.120-150 c.270-420	2 1 2 1 1 1	118 22 38 11 7 5	Fresh Fresh Fresh
			c.80-400	8	201g	
228	R1 R5 R16	Jar Lid Beaker	c.170-300 c.80-175/200	1 2 3	130 41 29	Fresh
			c.80-200/300	6	200g	
233	B2.1 B2/R1 R5 R14 R16 R17 R42 R109 R110 LR10 MISC	Jar basal Jars Jar Ev rim jar Beakers Closed Dr 18 Dr 37 Bowl	c.25BC-AD.70 c.50-200 c.80-175 c.130-170 c.43-250 c.43-90 c.43-110 c.240-400	1 15 2 1 10 2 3 4 1 1 1	17 150 7 6 22 7 9 29 9 4 1	Fresh Fresh Fresh Fresh Fresh Fresh Fresh Fresh Abraded
			c.50-200 with OXRC sherd intrusive	41	261g	
237	KF1			1	12g	
239	R16 R43 LR2.3 LR202 MISC AMPH K1 K2 K3 K4 KF1	Necked jar Dr 46 Necked jar Mortarium Painted jar Latticed jar HM ev rim jar HM jar Oxford C83 bowl copy	c.110-200 c.120-200 c.270-370 c.340-370 c.270-400 c.340-370 c.340-400	5 2 3 1 1 1 4 22 3 1 5	37 56 46 176 13 180 106 235 46 15 102	Fresh Abraded Abraded and fresh Abraded Fresh Fresh Fresh Fresh Fresh SI abraded
			c.340-370	48	1012g	Top fill of Pit 238
242	R13	Str-sided dish	c.200-270/300	1	7g	Abraded
243	R16 LR1 LR1.1	Beaker Necked jar	c.270-420 c.270-420	1 1 1	2 46 6	Fresh Fresh Fresh
			c.270-420	3	54g	
245	R1 R8 R14 R43 R109 LR13 K2	Ev rim jar Flagon 5C4.2 bowl Dr 31 Dr 33 Jar Dish Perf base	c.170-300 c.150-250 c.150/70-250 c.150-200 c.120-200 c.250-400 c.340-370 c.340-370	4 9 5 2 1 1 4	106 99 76 30 7 6 80	V abraded Fresh 1 flagon Fresh Fresh SI abraded Abraded Abraded

	KF1 Tile			8 1	152 27	Fresh
			c.150-420	35	583g	Fill of Pit 238 below 330
248	R16 R109 LR5.1 LR200 K1 K3	Beaker Jar Jar Jar Jar	 c.270-370 c.340-370 c.340-370	2 4 1 1 4 2	53 24 17 120 32 20	Fresh Fresh Fresh Fresh Fresh Fresh
			c.270-370	14	266g	
249	B2/R1 R5 LR1	Combed jar Jar Ev rim jar	c.50-150 c.80-175/200 c.270-420	1 1 1	10 22 19	Abraded Abraded Fresh
			c.270-420	3	51g	
257	R5 LR10	Jar	c.80-175/200 c.240-400	1 1	8 5	Fresh
			c.240-400	2	13g	
259	LR13 K2 K3 KF1 Tile	Closed Jar Flagon Bag-beaker Beaded+fl bowl Refired imbex	c.250-400 c.340-370 c.340-370 c.340-370 c.340-370	1 6 12 7 1	6 81 263 162 86	Fresh Fresh Fresh Fresh Fresh Fresh
			c.340-370	27	598g	Fill of Pit 263
260	K2 HM K2 WT KF1 Fired clay	Dish Jar	c.340-370 c.340-370	5 3 24 4	80 81 914 273	Fresh Fresh Fresh Fresh pedestal frags
			c.340-370	36	1348g	Fill of Pit 263
261	KF1		c.340-370	4	240g	Fill of Pit 263
262	R14 R109 LR1 LR10 MISC K1 K2 K3 KX KF1 KF3 Tile Fired clay	5C bowl C51 bowl Ev rim jar HM Bead-rim jar HM Str-sided dish HM Beaded+fl bowl Storage jar Jug Str-sided dish	c.150/70-250 c.270-420 c.240-400 c.340-370 c.340-370 c.340-370 c.340-370 c.340-370 c.340-370 c.340-370	1 3 1 3 1 6 48 3 4 80 5 4 9	10 17 13 167 2 194 861 78 75 2879 296 220 595	Fresh Fresh Heavily worn in use Fresh Fresh Fresh Fresh Fresh Fresh Fresh Fresh
			c.340-370	168	5407g	Fill of Pit 279
264	LR10 LR200 K1 K2 K3 K5 KF1 Fired clay	C51 Bowl Jar base Hook rim jar Bead-rim jar Ev rim jar Hook rim jar	c.240-400 c.340-370 c.340-370 c.340-370 c.340-370 c.340-370	1 1 4 34 3 16 12 1	18 4 116 992 58 400 351 6	Fresh Fresh Fresh Fresh Fresh Fresh Fresh Fresh
			c.340-370	72	1945g	Fill of Pit 279
265	MISC LR6 LR11 EM55 M1C M1D PMED	Jar base Closed Cooking pot Jug Bowl Jugs Trencher Jar	Roman c.330-420 c.270-400 c.1150-1250 c.1200-1350 c.1200-1350 c.1200-1350 c.1700-1800	17 1 1 4 24 5 3	207 11 2 34 194 63 65	Abraded Fresh Fresh Fresh Fresh Fresh Abraded Abraded
			Post Med	55	576g	
269	P1 B2/R1 R1 R16	Urn Jars Poppyhead beaker	Late Br Age c.50-200 c.170-300 c.130-200	2 5 2 6	20 28 22 20	V abraded V abraded Fresh

	LR1 LR2.3 LR2.4 LR10 MISC Tile KF1	Jar basal Necked jars Jar base C82 bowl	c.270-420 c.270-370 c.270-370 c.325-400	2 4 1 3 1 1 2	18 84 7 12 4 66 16	Fresh Fresh Fresh Fresh
			c.270/325-370	27	297g	
277	B2/R1 R43	Storage jar Dr 31	c.50-150/200 c.150-200	2 1	48 2	Fresh Fresh
			c.150-200	3	50g	
288	R14.1	Jar base		1	14g	Fresh
290	B2/R1 R1 R16 R17 R109 LR1 K1 K2 K3 KF1 Fired clay	Combed store jar Jar Flagon ?Face pot Jars Jar Jars	c.50-150 c.170-300 -300 c.270-420 c.340-370 c.340-370 c.340-370	1 1 1 1 1 5 12 7 2 2	165 34 4 3 5 85 153 75 26 52	Abraded Abraded Abraded Sl abraded Fresh
			c.340-370	34	627g	
292	R109 K2 K5 KF1 Fired clay	Jars Pot spacer	c.340-370 c.340-370 c.340-370	1 10 1 3 3	2 101 13 120 66	Abraded Fresh
			c.340-370	18	302g	
293	R1 R109 LR1 LR5 K1 K2 K3 KF1 Fired clay Tile	Jar Open form Jar Ac latticed jar HM Ev rim jar HM Latt b+fl bowl HM Str-sided dishes Ev rim jarsx3 Bead-rim beaker Str-sided dishesx3 Beaded+fl bowl Bead rim beaker	c.170-300 c.270-420 c.270-420 c.340-370 c.340-370 c.340-370 c.340-370 c.340-370 c.340-370 c.340-370 c.340-370	1 1 1 1 9 116 15 51 14	7 9 59 7 258 2004 428 1608 507	Abraded Fresh Sl abraded Fresh Fresh Fresh Fresh Fresh Fresh Fresh Fresh Fresh Fresh
			c.340-370	210	4914g	
294	R109 LR1 MISC K1 K2 K4 KF1 Fired clay	Jar Jar basal Ev rim jar ?Sagger Lid-seated jar Dish Oxford C83 bowl copy	c.270-420 c.340-370 c.340-370 c.340-370 c.340-370 c.330-370 c.340-400	2 1 1 1 15 6 7 1	15 7 2 30 331 142 152 20	Fresh Abraded Fresh Fresh Fresh Fresh Fresh Fresh
			c.340-370	34	699g	
295	K1 K2 KF1	Necked jar HM Necked jarsx2 HM	c.340-370 c.340-370	2 9 3	26 264 90	Fresh Fresh Fresh
			c.340-370	14	380g	
297	B2 LR2.4 LR5 LR200 MISC	Combed store-jar Jar Wavy combed jar Closed form Indented beaker Jar	c.25BC-AD.70 c.300-370 c.350-420 c.250-400	1 1 1 1 2 1	9 5 7 8 7 6	Abraded Fresh Sl abraded Sl abraded

	K1 K2 KF1 KF2	Hook-rim jar Thick-walled jar HM	c.340-370 c.340-370	8 2 1 1	51 63 41 8	Fresh Fresh Fresh Abraded
			c.340-370/420	19	205g	
303	R1 R16 R200 Tile K1 K2 KF1 M1C M1A M1D	Jar Poppyhead beaker Closed Beaded+fl bowl Necked jar Cooking-pots Spouted pitcher Pitchers	c.170-300 c.160-230 ?Medieval c.340-370 c.340-370 c.1200-1350 c.1000-1150 c.1200-1350	1 1 1 1 1 9 9 9 1 1	8 6 5 111 11 224 232 78 32 38	Abraded Sl abraded Sl abraded Fresh Fresh Fresh Fresh Fresh Abraded Fresh
			c.340-370 and 1200-1350	34	745g	
306	R200 K2 K3 KF1 Kiln lining	Closed Lower part jar Jar base	c.340-370 c.340-370	2 6 2 6 35	12 167 63 297 404	Fresh Fresh
			c.340-370	51	943g	Kiln top layer
308	R1 R14 R16 R43 LR2.1	Jar 5C bowl Closed Dr 31 3H7 jar	c.170-300 c.170-250 c.150-200 c.170-230	2 1 1 1 2	21 5 4 13 10	
			c.170-250	7	53g	
309	R1 R43 LR11 LR2.3 LR10 K2 K3 K4 KF1 Tile Fired clay Iron slag	Jars Unguentarium Hook-rim +necked jars C52 bowl Deep dish Necked jar Necked jar Beaded+fl bowl Hook-rim jar	c.170-300 c.120-200 c.270-400 c.300-370 c.350-400 c.340-370 c.340-370 c.340-370 c.340-370 c.340-370	4 2 1 17 2 20 5 6 7 1 10 1	61 11 14 159 24 327 53 77 319 18 94	Abraded Fresh Fresh and abr Fresh Fresh Fresh Fresh Fresh Fresh
			c.350-370	76	1157g	Fill of Pit 312
311	K2 KF1 AHFA?	Spalls Obt latticed jar	c.340-370 c.340-370 c.270-420	1 2 2	12 22 6	Fresh Fresh Fresh and abraded
			c.270-420	5	40g	Fill of Pit 312
315	LR1	Necked jar	c.270/250-420	1	27g	Fresh. Top fill of Kiln 1
316	K2 KF1	Ac latticed jar	c.340-370	3 2	109 124	Fresh Fresh
				6	233g	Lower Fill of kiln 1
317	K2 K3 KF1	Thick jar base Str-sided dish	c.340-370 c.340-370	1 2 2	187 114 179	Abraded Fresh
			c.340-370	5	480g	= 316
320	R14 R16 R109 LR2.3 LR5 LR5.1	Dr 31 copy Rouletted beaker Jar 5F dish Jar 90 degr.latticed jar	c.190-350 c.270-370 c.270-300 c.270-420 c.270-370	1 1 2 3 1 1	49 11 12 121 6 34	Fresh Fresh Sl abraded Fresh Fresh Fresh
			c.270-300/70	9	233g	
328	R1 R5 R14 R16	Jar Jar Ev rim jar 5D4.1 Bowl 5C4.2 Bowl 5E1.4 Dish Closed forms	c.170-300 c.80-175/200 c.170-250 c.120-200 c.170-250 c.160-200	3 3 13 2	60 43 340 44	Fresh Fresh Fresh Fresh Fresh Fresh sl abraded

	R109 MISC			1 3	120 19	sl abraded
			c.170-250	25	626g	
330	B2/R1 R14 R43	Store jar base Open form Open form	c.50-200 c.130-200 c.120-200	1 1 1	47 27 11	Sl abraded Fresh Fresh
			c.130-200	3	85g	Fill of Pit 238 below 239
331	R1 R14 R16 LR202 K5 KF1 KF3	Ev rim jar 5C3 bowl Closed Mortarium Bead-rim dishx2 Kiln furniture	c.170-300 c.170-250 ?late 3rd-e.4th c.	1 1 1 1 7 1 1	18 12 15 74 114 16 43	Fresh Fresh Fresh Sl abraded Fresh Fresh
			c.170-300+	13	292g	Fill of Pit 238
341	R14 R43 LR11 K1 K2	5C4.3 bowl 5C4.2 bowl 5F dish Dr 31x2 Beaker Jar Jar	c.180-250 c.170-250 c.130-300 c.170-250 c.160-270 c.340-370 c.340-370	 5 2 1 2 1	 148 29 6 41 18	Fresh Fresh Fresh Fresh
			c.170-370	11	242g	
345	R17 LR5 EM3B	Flagon Closed Cooking-pot	 c.1150-1200	1 1 1	5 4 44	Fresh Fresh
			c.1150-1200	3	53g	
348	B8 B2/R1 R5 R16 R42 R50 R110 MISC	Combed jars Jars Closed DR 20 Bag beaker	c.50-150 c.80-175/200 c.43-110 c.130-250	2 6 3 2 1 5 2 1	15 62 10 9 5 2329 6 3	Abraded Abraded and fresh Abraded and fresh Fresh Abraded
			Early Roman	22	2439g	
351	R1 R16 K2	Knife trimmed jar Jar Jar	c.170-300 c.340-370	1 1 1	9 7 13	Fresh Fresh Fresh
				3	29g	
354	B2/R1 R5 R8 R14 R16 R200 MISC	Jars Jar Flagon Dish Rouletted beaker Closed form	c.50-200 c.80-175/200 c.150-200 c.170-230 c.190-230	3 1 1 1 2 1 5	40 5 1 8 34 1 18	Fresh Fresh Fresh
			c.150-230	14	107g	
356	B2/R1	Jar	c.50-200	1	54g	
365	R5 R42	Jar Dr 18/31	c.80-175/200 c.120-150	3 1	23 10	Fresh Fresh
			c.120-150	4	33g	
370	R109	Jar	c.80-150	1	8g	Sl abraded
373	B2/R1 R5 R6.3 R14 R16 R43 R99 R109 Fired clay	Combed store jar Jar 6/5 jar 13/3 bowl Mortarium Flask Poppyhead beaker Mortarium jar	c.50-200 c.100-150 c.120/50-200 c.100-150 c.130-200 c.120-200 c.150-200	4 7 6 1 2 5 1 1 2 2	662 122 155 89 34 23 35 76 9 25	Fresh Fresh Fresh Fresh Fresh Fresh Fresh Fresh Fresh
			c.100-200	31	1230g	Fill of 375
379	R1 R16 R43	Jar Jar Bowl	c.170-300 c.120-200	1 2 1	22 18 18	Fresh Fresh Fresh
			c.150-200	4	58g	
385	K2 KF1	Jar	c.340-370	1 5	8 205	Fresh
				6	213g	
386	R5	Jar	c.80-175/200	1	7g	Fresh

388	LR5 K2	Jar Jar	c.270-420 c.340-370	1 1	7 4	Abraded Abraded
			c.270-420	2	11g	
389	B2/R1 R1 R5 LR10 K1	Storage jar Jar Jar Rouletted bowl Knife-trimmed jar	c.50-150 c.170-300 c.80-175/200 c.300-400 c.340-370	1 1 1 1 1	18 9 12 2 6	Abraded Abraded Fresh Fresh Fresh
			c.300-400	5	47g	
394	R14	Necked jar Beaded+fl bowl	c.270-350 c.270-350			Fresh Fresh
Fill of 396 SFB?	B6 R109 M1C	Bead-rim jar Cooking-pot	c.43-80 Roman c.1200-1350	6 1 2	30 3 10	Abraded Abraded Abraded
			Residual	9	43g	

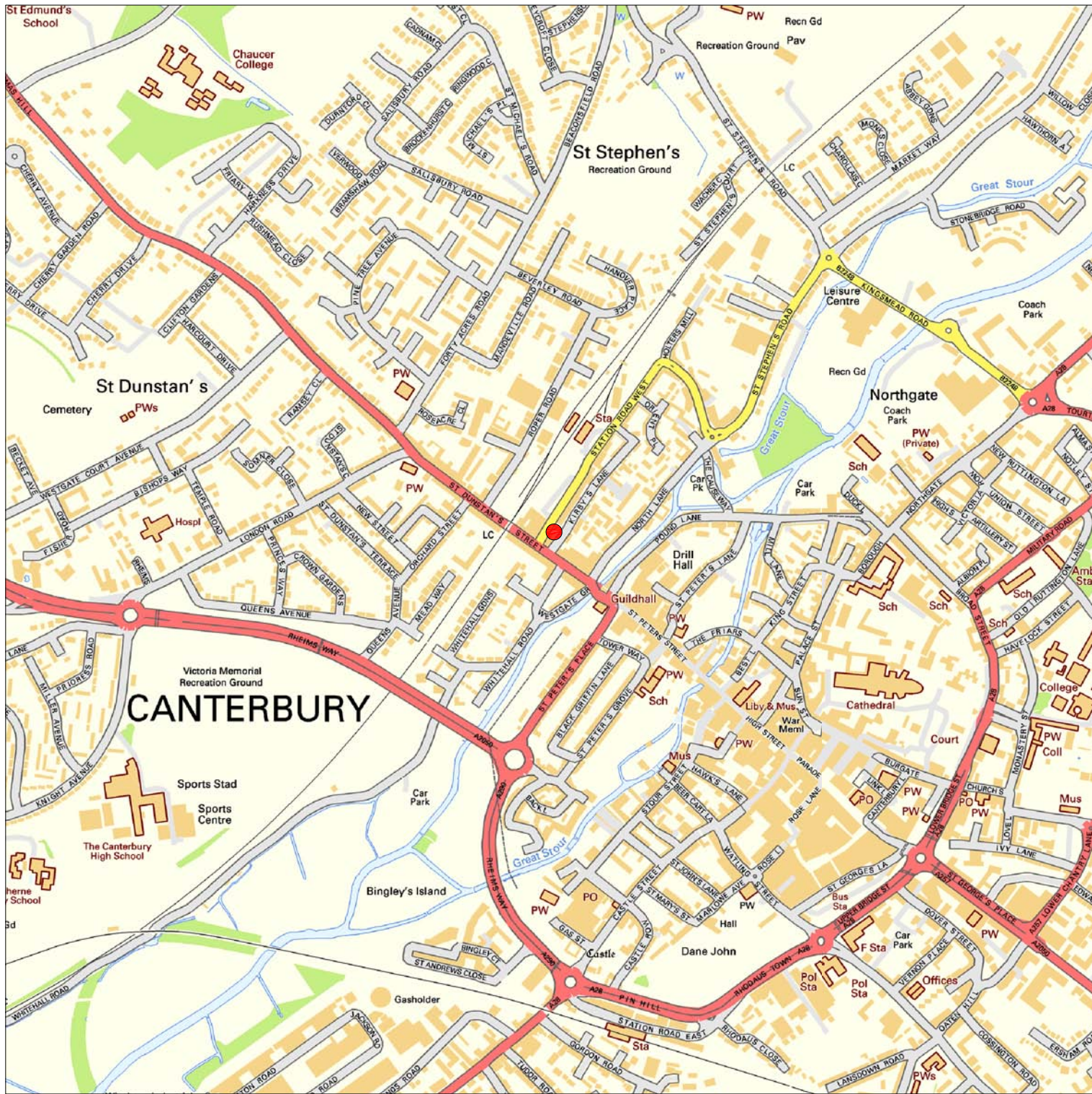
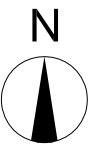
Small Finds

S F Number	Context Number	Material/Description	Area
1	040	Copper alloy pin shaft	1
2	045	Copper alloy/lead? Hair pin	1
3	041	Copper alloy pin	1
4	050	Iron object – hook	1
5	148	Iron object	2
6	175	Samian vessel base with artisan stamp	1
7	175	Small metal blade/object	1
8	172	Iron nail	1
9	233	Iron object – not a nail	1
10	269	Copper alloy coin from grave fill – Skeleton 08	2
11	328	Copper alloy button	2
12	328	Copper alloy? Hair pin	2
13	341	Copper alloy button	2
14	348	Iron coffin nail fragments x 5 – Skeleton 10	2
15	385	Copper alloy object	2
16	388	Iron pin	2
17	389	Copper alloy small torc – bracelet w/out terminals	2
18	389	Jet beads x 35 – Robbed out grave [390]	2

Animal Bone

	Pre-Roman (1)		Roman (21)		Late Roman (7)		Medieval (11)		Post Medieval (2)		Unphased (16)		Unstrat (3)		Total NISP
	NISP	freq.	NISP	freq.	NISP	freq.	NISP	freq.	NISP	freq.	NISP	freq.	NISP	freq.	
Cattle			42	16	44	2	27	9	9	2	23	7	14	2	159
Sheep/Goat			11	5	19	4	25	8	3	2	23	6	8	3	89
Pig			9	7	16	3	9	6	2	2	6	4	5	1	47
Horse			3	3					1	1	12	1	1	1	17
Dog	1	1	2	1											3
Cat							1	1			21	2			22
Fallow deer									1	1					1
Large mammal	4	1	74	13	91	4	46	9	18	2	70	12	25	3	328
Med. Mammal			11	6	19	2	10	6	6	2	17	7	3	1	66

Small mammal									14	1		14	
Bird		1	1			3	2			2	2	6	
Total animal NISP	5	153		189		121		40		188		56	752
Human		56	8	2	1	14	5	9	1	4	3		85
Total NISP	5	209		191		135		49		192		56	837

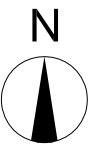


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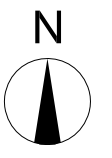
Figure 1: Location of Site within Canterbury, Kent



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Figure 2: Location of Site



Site Boundary



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Figure 3: Site Plan; Post House Demolition



Site Boundary

(399) cellar wall
(400) cut for cellar wall

Manhole

Drain

Lead pipe

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Figure 4: Site Plan; 19th Century House/Victorian

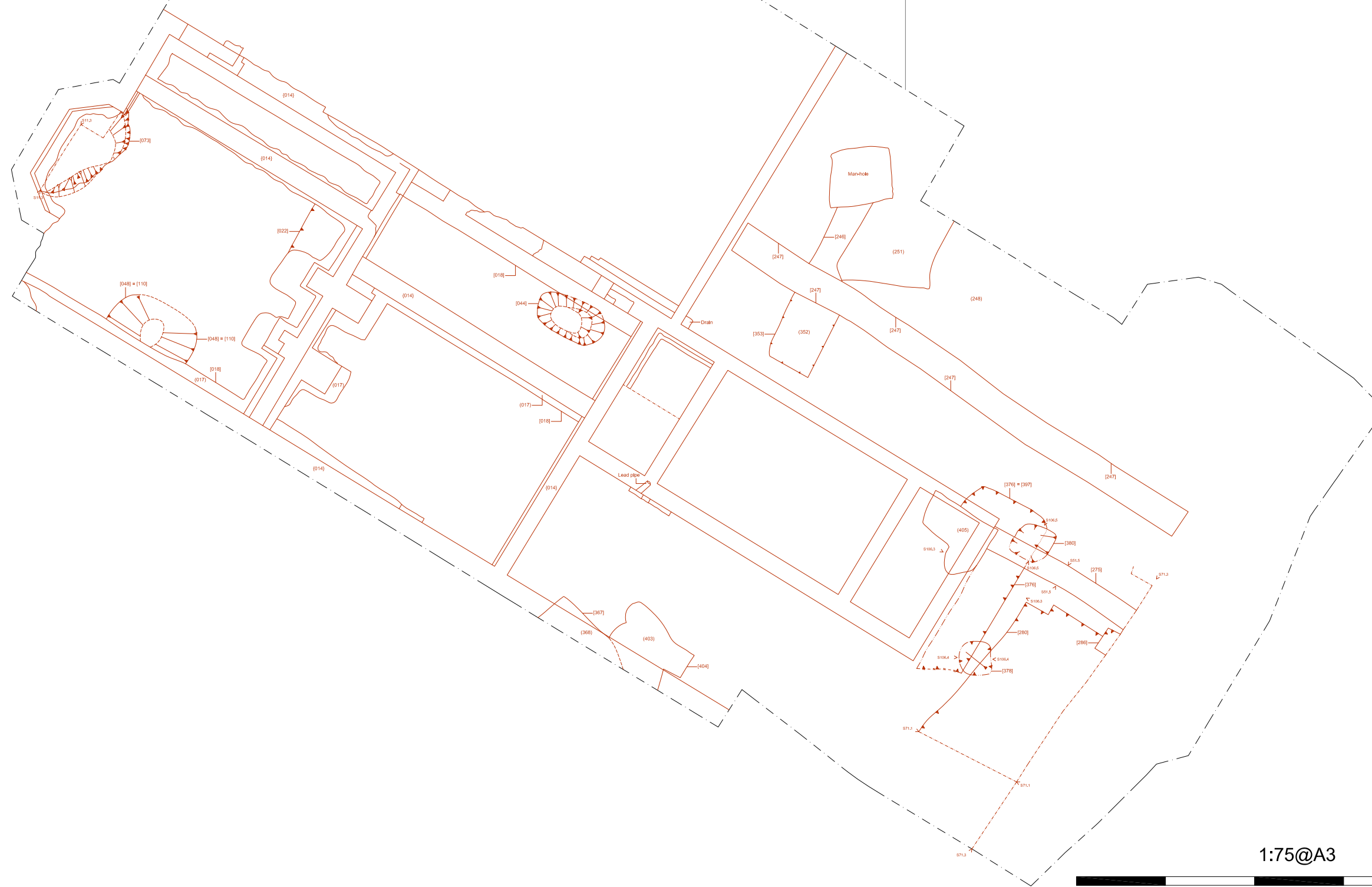
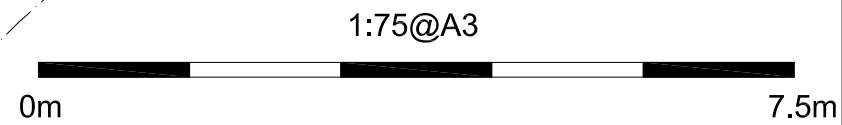




Figure 5: Site Plan; Post Medieval





Site Boundary

Catar Back

Concrete foundation

Drain

Drain Pipe

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0m

7.5m

Figure 6: Site Plan; Medieval

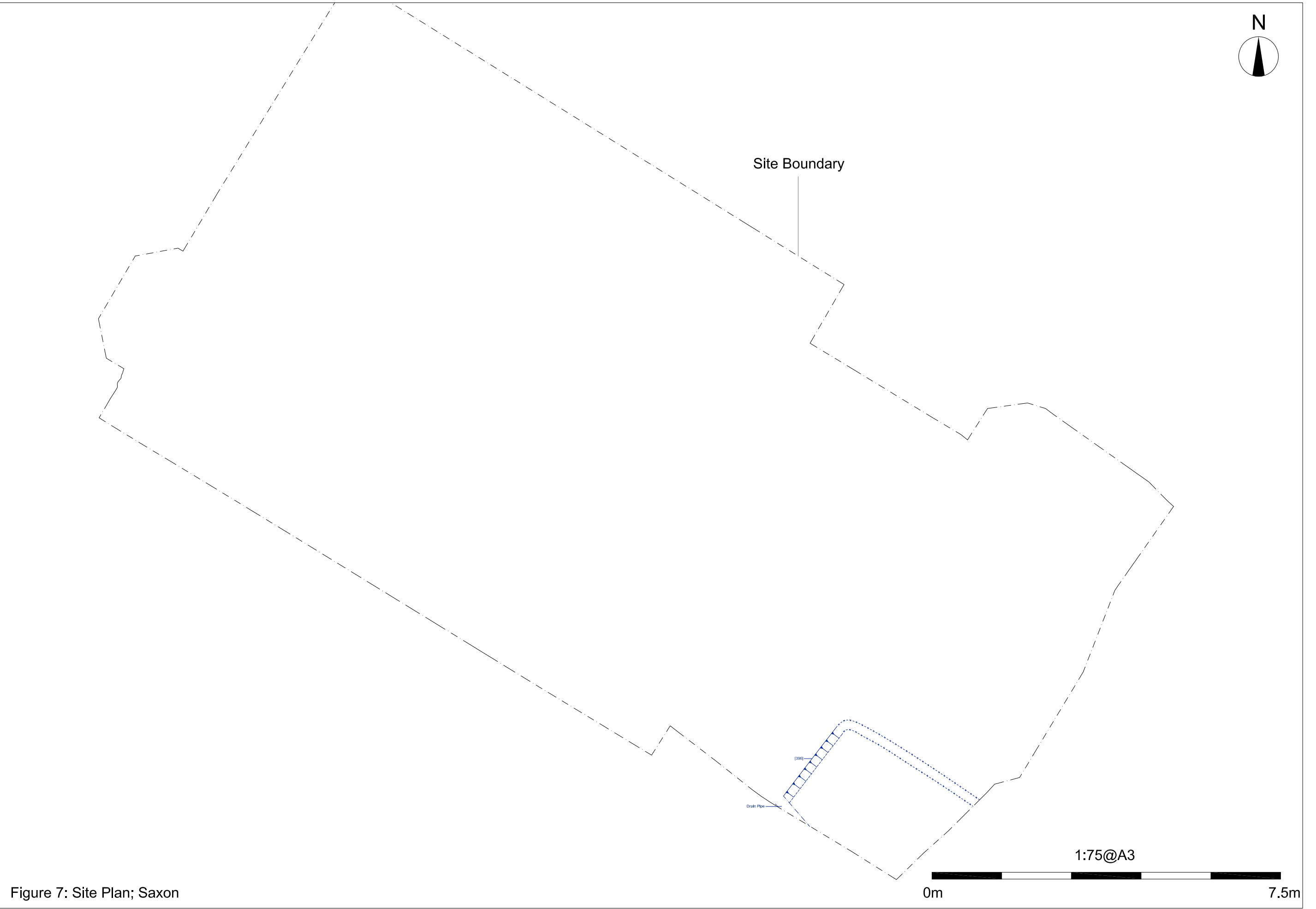


Figure 7: Site Plan; Saxon



Figure 8: Site Plan; Roman

0m

7.5m



Site Boundary



Legend:

-  Post House Demolition
-  19th Century/Victorian
-  Post Medieval
-  Medieval
-  Saxon
-  Roman

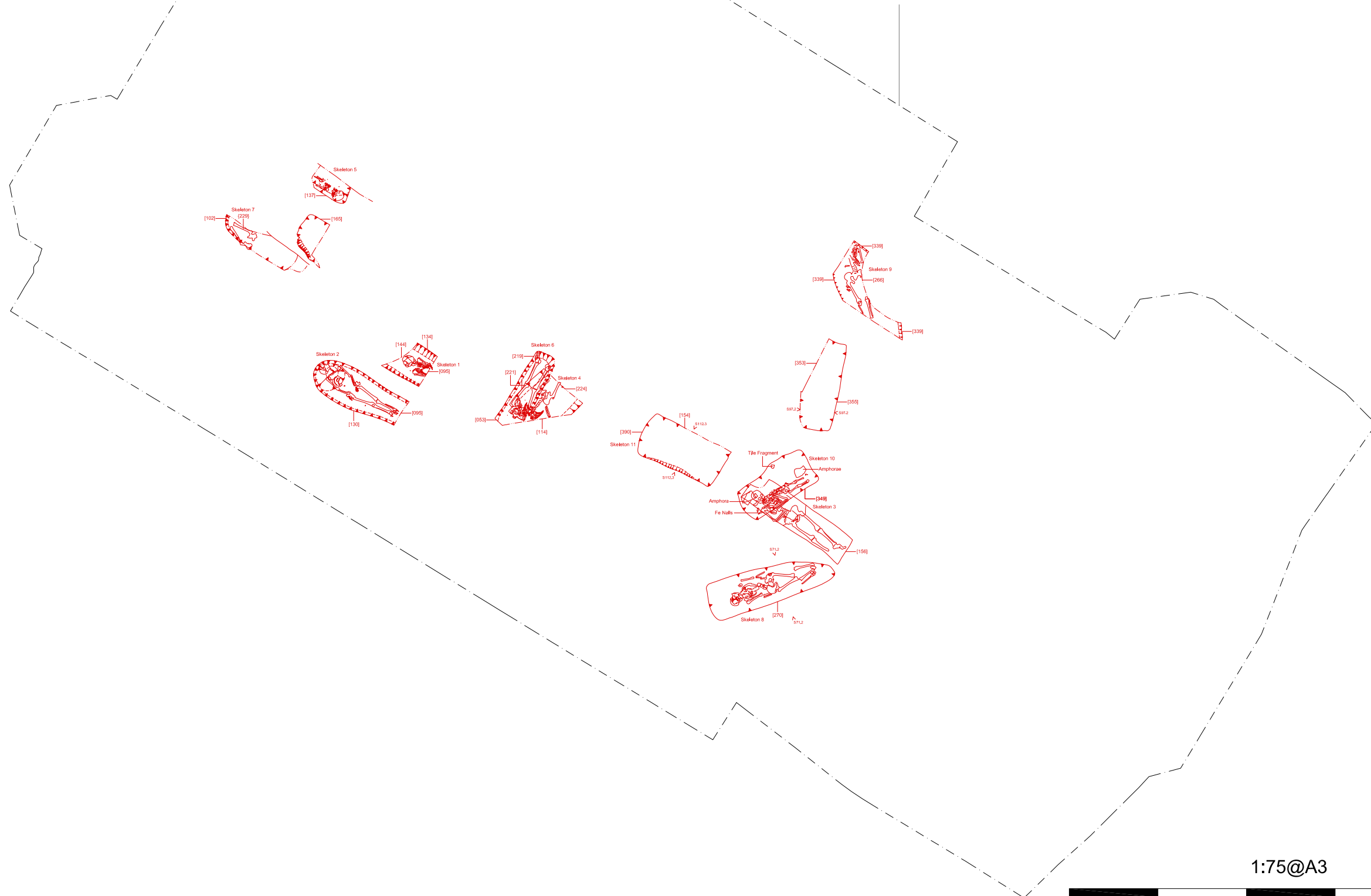
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Figure 9: Site Plan; All Periods



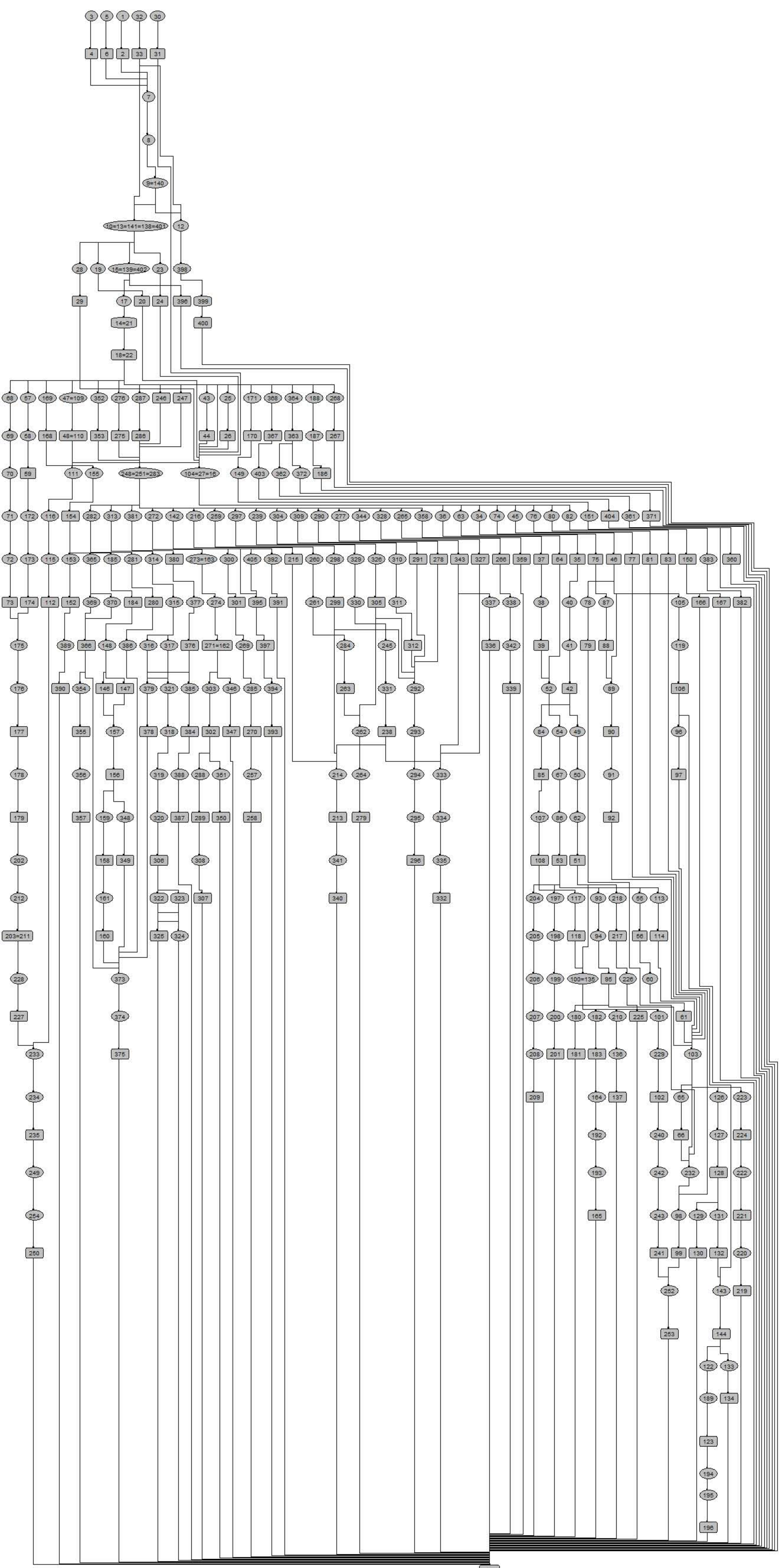
Site Boundary



1:75@A3



Figure 10: Site Plan; Burials





**Osteological Analyses of Human Remains from
6-8 Station Road West, Canterbury**

*A report for
SWAT Archaeology
2013*

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1. PROJECT BACKGROUND

1.1 SITE LOCATION

August through October 2012 SWAT Archaeology carried out an archaeological excavation on the site of 6-8 Station Road West, Canterbury, Kent. Station Road West (SRW-EX-12) was a multi period site (Late Iron Age- Post Medieval) with a partial cemetery dating to the mid to late Roman period (2013 Interim Archaeology Report supplied by SWAT Archaeology). This report gives a detailed osteological analysis of the human remains recovered during this excavation.

1.2 PRESERVATION

Preservation for the inhumations ranges from very well preserved (SK3), to individuals represented by only bone fragments (SK4). Level of preservation was recorded as a percentage, compared to a complete skeleton (Table 1).

Table 1: Preservation of skeletons

	Number of individuals
Less than 25%	2
25% - 50%	4
50% - 75%	4
Greater than 75%	1
Total	11

2. METHODS

2.1 ESTIMATION OF AGE AT DEATH

Methods to estimate the age at death were based upon the pubic symphysis, auricular surface, cranial suture closures and dental wear. Five juvenile and four adult age categories were created (Table 2). When estimating the age at death for individuals, certain variables must be considered, the most important being the life history of the individual (Cox, 2000). Disease and dietary differences can also affect the estimation of age at death. Therefore, consideration must be given to the region and populations that are being assessed (Deter, 2009; Mahoney, 2006; Schwartz, 1995).

Table 2: Age Categories

Juvenile	Adult
<ul style="list-style-type: none">• Perinate = 3 mts to Birth• Infant = 1wk to 1 year• Early Childhood = 2 to 6 years• Late Childhood = 6 to 12 years• Adolescence = 13 to 16 years	<ul style="list-style-type: none">• Young Adult = 17-24 years• Middle Adult = 25-34 years• Middle Adult 2 = 35-44 years• Old Adult = 45+ years

2.1.1 Pubic symphysis

The morphological degeneration of pubic symphysis surface (Brooks and Suchey, 1990) is considered to be among the most reliable criterion for estimating age-at-death in adult human remains (Buikstra and Ubelaker, 1994). The KORA age estimates were based on the Brooks and Suchey (1990) method, which is summarised in Buikstra and Ubelaker (1994).

2.1.2 Auricular Surface

Morphological changes accumulate with age. The changes in the sacro-iliac joint are usually independent of osteoarthritic or osteophytic change (Schwartz, 1995). As the sacro-iliac joint is very complex, an estimation of age-at-death from the auricular surface is more difficult to assess than the pubic symphysis. It is, however, very important for bioarchaeologists, as it is often very well preserved archaeologically (Buikstar and Ubelaker, 1994; Krogman and Isçan, 1986; Schwartz, 1995). The left auricular surface, (right side was used if left was not present or unable to assess) was assigned one of the eight phases described by Ubelaker (1989), based upon earlier work by Lovejoy *et al.* (1985) and Meindl and Lovejoy (1989).

2.1.3 Cranial assessment

Ectocranial vault suture closure is associated with more advanced age than the previous two methods and is more accurate in the higher age categories. While suture closures do not appear to be sexually or racially biased, it does have the disadvantage of broad age

ranges (Key *et al.*, 1994). They are based on the degree of ectocranial suture closure of the cranial vault and lateral aspect of the skull (Schwartz, 1995). Most researchers believe that age estimates based on suture closure are only useful when other methods cannot be used, or utilised in conjunction with other methods (Buikstra and Ubelaker, 1994; Key *et al.*, 1994; Meindl and Lovejoy, 1995). The latter stance is adopted by KORA using Meindl and Lovejoy (1985).

A composite score was taken for the vault sites (mid-lambdoid, lambda, obelion, anterior sagittal and bregma) and the lateral-anterior sites (pterion, midcoronal, sphe-no-frontal, inferior sphe-no-temporal, superior sphe-no-temporal). Compiled scores from these vault landmark sites were compared to Meindl and Lovejoy (1985) to estimate the age at death. This method cannot be used on cranial fragments.

2.1.4 Dental attrition wear

Dental wear independent of diet, can be used to estimate age. Miles (1963) devised a scheme which relates the wear of the lower molar teeth to the age of the individual. In order to use this method, one must ensure that the skeleton has a normal pattern of dental eruption and occlusion, and that the wear gradient along the molar row is similar to that established by Miles (1963); i.e. M1, M2 and M3 should give roughly similar age estimates. Dental attrition wear can give a reliable age range if all three molars are present.

2.1.5 Juvenile age estimation

The most accurate method to estimate juveniles is based on the dental development. KORA uses Smith (1991) for all juveniles with developing deciduous and adult dentition and Mahoney (2011, 2012) for infants under 13 mts.

All techniques used to estimate age were used independent of each other. For a final age at death estimation, a composite score of methods used and a age group assigned.

2.2 ESTIMATION OF BIOLOGICAL SEX

Biological sex estimation depends on the reliable detection of sexually dimorphic characteristics in the human skeleton (Brothwell, 1981; Cox and Mays, 2000; Krogman and Isçan, 1986). Assessment of the morphological features of the cranium was by direct observation (Krogman, 1955). When data from the cranium and pelvis are combined, the accuracy of the sex estimation is increased (Mays and Cox, 2000). Sex-based characteristics are partially age related, appearing or becoming more pronounced at puberty, and many are affected by extreme old age (Krogman and Isçan, 1986; Buikstra and Ubelaker, 1994; Schwartz, 1995). KORA uses morphological features of both the pelvis and the cranium when possible for estimation of biological sex. In very fragmented individual where morphological analysis could not be done, metric analysis of the femur was used.

2.2.1 Pubis assessment

The pelvis has several reliable features for sex estimation. The scored morphological features in the pelvis were:

- Overall shape/structure
- Ventral arch
- Greater sciatic notch
- Width of sacral ala
- Anterior sacral curvature
- Sacral auricular surface
- Iliac tuberosity
- Iliac blade
- Iliac crest
- Auricular surface
- Preauricular sulcus
- Pubic symphysis height
- Pubic rami
- Sub-pubic concavity
- Inferior ramus
- Obturator foramen
- Ischial tuberosity
- Ischial spine
- Medial ischio-pubic ridge

2.2.2 Cranial assessment

Cranial sex estimation was primarily based on morphology. Certain morphological features of the cranium tend to be larger or more robust in males than in females (Buikstra and Ubelaker, 1994). The main attributes of the cranium used were:

- Overall shape/structure
- Glabellar profile
- Frontal slope
- Supraorbital ridges
- Orbital outline
- Nasal bones
- Mastoid process
- Nuchal area
- Occipital protuberance
- Mandibular condyles
- Mandibular ramus
- Mental protuberance
- Angle of mandible

Sex classifications for the cranium and for the pelvis were based on a 1–5 scale (stage 1, definitely female – stage 5, definitely male) from *Standards for Data Collection from Human Skeletal Remains* (Buikstra and Ubelaker, 1994). Sex estimation techniques were scored independently of one another and a composite score was given.

2.2.3 Metric assessment

When morphological features cannot be assessed, metric analysis was used to estimate biological sex. Measurements that were taken are the vertical diameter of the femoral head (Stewart 1979), femoral bicondylar breadth (Krogman and Iscan, 1986), circumference of femoral mid-shaft (Black, 1978), and scapula glenoid cavity (Holman et. al.,1991).

Table 3: Metric assessment for biological sex

Dimensions (mm)	♂	♂	♂ ? ♀	♀	♀
Femoral vertical head diameter	>47.6mm	46.6-47.5mm	43.6-46.5mm	42.6-43.5mm	<42.5mm
Femoral bicondylar breadth	Males greater than 78mm		72.5-77.5mm	Females less than 72mm	
Femoral mid-shaft circumference	Males greater than 86mm		84.5-85.5mm	Females less than 84mm	
Scapula - length of glenoid cavity	Males greater than 28mm		26.5-27.5mm	Females less than 26mm	

2.3 STATURE

2.3.1 Stature estimation

Stature was estimated using several methods. These methods were applied when preservation allowed. The methods used by KORA are the long bone length (Trotter, 1970), femur/stature ratio (Feldsman *et al*, 1990) and Fully's method (Fully, 1956). The long bone length (Trotter, 1970) uses the length of all available long bones, taking the maximum length. Tables are then used to estimate the stature of each bone, and a medial result is used to best estimate stature. Femur/ stature ratio is estimated by $3.74x$ (bicondylar length of femur) (Feldsman *et al*, 1990). The Fully method (Fully, 1956) stature is estimated by measuring the: (cranial height) + (vertebral body heights) + (femoral bicondylar length) + (tibia length) + (height of talus and calcaneus) + soft tissue correction. When necessary, stature was estimated from fragmented long bones (femur, tibia), using the regression equations devised by Jacobs (1992).

2.4 PATHOLOGY

2.4.1 Health and disease

Several methods are available to record palaeopathology from the skeletal and dental remains. Methods used by KORA are provided by Buikstra and Ubelaker (1994), and Hillson, (2000; 2001). These systems account for some of the previously discussed problems, such as an individuals age, sex and the location of dental disease upon individual dentition. The methods used by KORA also includes the recording of other dental conditions such as dental enamel hypoplasia and attrition by incorporating existing and appropriate recording methods (Molnar *et al.*, 1983).

3. INDIVIDUAL SKELETAL REPORTS

SKELETON 1

OVERVIEW

SRW-EX-12 SK 1 was 5-6 yrs old juvenile (early childhood age group). This individual was recovered from Area 1 with the head orientated to the northwest.

PRESERVATION

The upper body was recovered with 25-50% of the individual.



Image 1: Dentition present for SK1



Image 2: Bones present for SK1

INVENTORY OF BONES AND DENTITION

Table 4: Bones present for SK 1

Cranium	L	R	P	Vertebrae	P
Mandible	X	X		C1	X
Frontal			X	C2	X
Parietal	X	X		C3	X
Occipital			X	C4	X
Temporal	X	X		C5	X
Sphenoid	X	X		C6	X
Zygomatic	X	X		C7	X
Maxilla	X	X		T1	X
Palatine	X	X		T2	X
SHOLDER AND PELVIC GERDLE LONG BONES				T3	X
Scapula	X	X		T4	X
Clavicle	X	X		T5	X
Humerus	X	X		T6	X
Radius	X			T7	X
Ulna	X			T8	X
				T9	X
				T10	X
				T11	X
				T12	X
				L1	X
				Rib Frags	23
				1 st rib	2
				2 nd rib	2
				11 th rib	L

Table 5: Dentition present for SK 1

Upper Right			MIXED DENTITION										Upper Left		
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
	X	X											X	X	
			dm2	dm1	dc	di2	di1	di1	di2	dc	dm1	dm2			
			X	X			X	X	X		X	X			
			X	X	X	X				X	X	X			
			dm2	dm1	dc	di2	di1	di1	di2	dc	dm1	dm2			
		X								X			X		
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
Lower Right								Lower Left							

ESTIMATION OF AGE AT DEATH

Juvenile age estimation from remains in Tables 4 and 5:

Dentition:

$$M1 = R1/2 = 3.6 \text{ yrs}$$

$$M2 = Cr3/4 = 5.6 \text{ yrs}$$

$$C = R1/4 = 5.6 \text{ yrs}$$

Fusion of bones:

Cervical arches fused to bodies = 3-4 yrs

Lumbar arches fused to bodies = 5-6 yrs

Greater tubercle on humerus fused = 4-5 yrs

Long bone length:

Humerus

$$\text{Left} = 169\text{mm} = 5-6 \text{ yrs}$$

$$\text{Right} = 168\text{mm} = 5-6 \text{ yrs}$$

Age estimation is between 5-6 yrs early childhood age group.

INVENTORY OF BONES AND DENTITION

Table 6: Bones present for SK 2

Cranium	L	R	P	Foot	L	R
Mandible			F	Talus	X	X
Frontal			F	Calcaneus	X	X
Parietal	X	X		Navicular	X	X
Occipital			X	Cune1	X	---
Temporal	X	X		Cune 2	---	X
Sphenoid			F	Mt1	X	X
Zygomatic			F	Mt2	---	X
Maxilla	F	X		Mt3	X	F
Palatine			F	Mt4	X	X
Nasal			F	Mt5	X	F
Lacrimal			F	Hand		
In.concha			F	Lunate		X
Ethmoid			F	Mc1	X	F
Vomer			F	Mc2	X	X
Shoulder, pelvic and long bones				Mc3	X	X
Scapula	F	F		Mc4	X	X
Clavicle	F	F		Mc5		F
Humerus	F	F	Missing proximal heads	P.prox		2
Radius	F	F		P.int		2
Ulna	F	F		Rib fragments present		
Acetabulum	F	F		X = Present, -- = Not present, F = Fragment		
Femur	F	F				
Patella	---	X				
Tibia	X	X				
Fibula	F	F				

Table 7: Dentition present for SK 2

Upper Right													DENTITION			Upper Left		
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3			
--	--	--	--	--	X	--	--	--	X	X	X	X	--	--	--			
--	X	--	X	X	X	X	--	X	X	X	X	X	--	X	--			
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3			
Lower Right													Lower Left					

ESTIMATION OF AGE AT DEATH

Table 8: Adult age estimation for SK 2

Method	Age group
Auricular surface	Stage 2-3 = 20-30yrs
Dental wear	28-32 yrs
Composite score	24-35 yrs = Middle Adult

ESTIMATION OF BIOLOGICAL SEX

Table 9: Biological sex estimation for SK 2

Pubic assessment			
• Overall shape/structure	2	• Anterior sacral curvature	2
• Greater sciatic notch	2	• Sacral auricular surface	2
• Width of sacral ala	2	• Iliac tuberosity	2
Cranial assessments			
• Overall shape/structure	2	• Nuchal area	4
• Glabellar profile	1	• Occipital protuberance	5
• Frontal slope	1	• Mandibular ramus	2
• Supraorbital ridges	1	• Mental protuberance	1
• Mastoid process	1	• Angle of mandible	1
Composite score	2	Possible female	

STATURE ESTIMATION

Table 10: Stature estimation for SK 2

Method	Stature estimation
Long bone length	Tibia 316mm = 153cm (60in) Femur 414mm = 156cm (61in)
Femur /stature ratio	414mm+316mm=730mm = 155cm (61in)
Composite stature	153-156cm (60-61in)

PATHOLOGY

Dental caries lower right M2 and upper left I2.

Healed anti-mortem tooth loss, lower right socket for the M1.

SKELETON 3

OVERVIEW

SK 3 was recovered from Area 2, with the head aligned in the northwest direction. This individual was a young adult (18-24 yrs) male (?) that was between 170-176cm (66-69in) in stature.

PRESERVATION

SK 3 was very well preserved greater than 75% present recovered. Cortical surface of bone was damaged possibly due to taphonomic process.



Image 5: Bones present SK3

INVENTORY OF BONES AND DENTITION

Table 11: Bones present for SK 3

Cranium	L	R	P	Foot	L	R	Vertebrae	P	
Mandible	X	X		Talus	X	X	Cervical	4	
Frontal	X	X		Calcaneus	X	X	Thoracic	8	
Parietal	X	X		Cuboid	X	X	Lumbar	3	
Occipital	X	X		Navicular	X	X	S1	X	
Temporal	X	X		Cune1	X		S2	X	
Sphenoid			Frag	Cune 2	X	X	S3	X	
Zygomatic			Frag	Cune 3	X	X	S4	X	
Maxilla	X	X		Mt1	X		S5	X	
Palatine	X	X		Mt2		X	Rib Frags	23	
Shoulder, pelvic and long bones				Mt3		X	1 st rib	--	
Scapula	X	X		Mt4		X	2 nd rib	1	
Clavicle	X	X		Mt5	F	X	11 th rib	--	
Humerus	X	X		P.prox	X	X			
Radius	X	X		P.int	4				
Ulna	X	X		P.dist	9				
Acetabulum	X	X		Hand					
Ilium	X	X		Mc2	X				
Pubis	----	X							
Femur	X	X		X = Present , -- = Not present, F = Fragment					
Patella		X							
Tibia	X	X							
Fibula	X	X							

Table 12: Dentition present for SK 3

Upper Right						DENTITION						Upper Left			
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
Lower Right								Lower Left							

ESTIMATION OF AGE AT DEATH

Table 13: Adult age estimation for SK 3

Method	Age group
Pubic symphysis	Phase 1 = 15-24 yrs (partial pubis)
Auricular surface	Phase 1 = 20-24 yrs
Dental wear	12-18 yrs
Composite score	Young Adult 18-24

---Fusion lines still present on most long bones.
 ---M3 is not in full occlusion

ESTIMATION OF BIOLOGICAL SEX

Table 14: Biological sex estimation for SK 3

Pubic assessment			
• Overall shape/structure	4	• Greater sciatic notch	4
• Auricular Surface	4	•	
Cranial assessments			
• Overall shape/structure	4	• Occipital protuberance	4
• Glabellar profile	5	• Mastoid process	4
• Frontal slope	5	• Orbital outline	4
• Supraorbital ridges	4	• Mental protuberance	4
• Nuchal area	4	• Angle of mandible	4
Composite score 4.2		Possible Male	

STATURE ESTIMATION

Table 15: Stature estimation for SK 3

Method	Stature estimation
Long bone length	Left tibia = 364mm = 170cm (66in) Left femur = 483mm = 176cm (69in) Right femur = 474mm = 174cm (68in)
Composite stature 170-176cm (66-69in)	

NOTES

Additional finds:

Juvenile cranial bone

Animal bone

Metal (Iron?) fragment

Cremated human bone – Adult long bone

SKELETON 4

OVERVIEW

Within Area 1, SK 4 and 6 were recovered next to one another. Skeleton 4 was orientated south-southwest. SK 4 was between 6.5-8 years old and grouped into the late childhood age group.

PRESERVATION

This individual, SK 4 was very poorly preserved with less than 25% recovered.



Image 6: Bones present SK4

INVENTORY OF BONES AND DENTITION

Table 16: Bones present for SK 4

	L	R	Vertebrae	P
Scapula		X	Thoracic 5 transverse processes	
Clavicle	X		Lumbar 5 Transverse processes	
Humerus	X	X	Rib Frags	20
Radius	X	X	1 st rib	2
Ulna	X	X	X = Present F = Fragment	
Acetabulum	X	X		
Ilium	X	X		
Ischium	X	X		
Femur	X	X		

ESTIMATION OF AGE AT DEATH

Juvenile age estimation is based on fusion of bones (Table 16).

- Humeral head and greater tubercle fully fused = 4-5 yrs
- Lumbar vertebra fused = 6 yrs
- Ulna olecranon fused = 7 yrs
- Pelvis not fused = less than 13 yrs

This individual would be between 6.5-8 yrs late childhood group.

NOTES

Additional finds:

Adult bones:

Left and right proximal phalanx (foot)

Right third (distal end only) and fourth metatarsal

SKELETON 5

OVERVIEW

SK 5 was recovered from Area 1 with the head was aligned southeast. This individual was a middle adult 2 (34-44 yrs) male that was approximately 171cm (69in) in stature.

PRESERVATION

Skeleton 5 was well preserved with 50-75% of the individual recovered. Damage to the outer cortical bone was significant possibly due to the taphonomic burial process.



Image 7: Bones present SK 5

INVENTORY OF BONES AND DENTITION

Table 17: Bones present for SK 5

Cranium	L	R	P	Foot	L	R	Vertebrae	P
Mandible	X	X		Calcaneus	X		C1	X
Frontal			X	Mt2		X	C2	X
Parietal	X	X		Mt3	X	X	C3	X
Occipital			X	P.prox	2		C4	X
Temporal	X	X		P.int	5		C5	X
Sphenoid			Frag	Hand			C6	X
Zygomatic			Frag	Scaphoid		X	C7	X
Maxilla	X	X		Lunate	X	X	T1	X
Palatine	X	X		Triquetral	X		T2	X
Nasal			Frag	Hamate	X	X	T3	X
Lacrimal			Frag	X = Present, F = Fragment			T4	X
In.concha			Frag				T5	X
Manubrium			Frag				T6	X
Scapula	X	X	X = Present, F = Fragment				T7	X
Clavicle	X	X				T8	X	
Humerus	X	X				T9	X	
Radius	X	X				T10	X	
Ulna	X	X				T11	X	
Acetabulum	X	X				T12	X	
Ilium	X	X				L1	X	
Ischium	X	X				L2	X	
Femur	X	X				L3	X	
Tibia	X	X				L4	X	
						L5	X	

Table 18: Dentition present for SK 5

Upper Right			DENTITION										Upper Left		
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
Lower Right							Lower Left								

ESTIMATION OF AGE AT DEATH

Table 19: Adult age estimation for SK 5

Method	Age group
Auricular surface	Stage 4 = 35-39 yrs
Dental wear	M1 = 35-40 yrs M2 = 37-42 yrs
Composite score	Middle adult 35-44 yrs

ESTIMATION OF BIOLOGICAL SEX

Table 20: Biological sex estimation for SK 5

Pubic assessment			
• Overall shape/structure	4	• Iliac tuberosity	4
• Greater sciatic notch	4	• Iliac crest	4
Cranial assessments			
• Overall shape/structure	4	• Occipital protuberance	5
• Glabellar profile	5	• Mandibular ramus	5
• Frontal slope	5	• Mental protuberance	5
• Orbital outline	5	• Angle of mandible	5
• Mastoid process	4	•	
Composite score	average score of 4.5	Possible male	

STATURE ESTIMATION

Table 21: Stature estimation for SK 5

Method	Stature estimation
Long bone length	Right femur = 475mm= 174cm (68in) Left femur = 472mm= 174cm (68in)
Composite stature	approximately 174cm (68in)

NOTES

Additional disarticulated bones not belonging to SK 5

- mandible with lower left P2- right P2
- distal left humerus
- left ulna and radius
- right scapula
- right humerus

Additional finds:

Pot rim with black slip

SKELETON 6

OVERVIEW

SK 6 was a young adult (18-24 yrs) male (?) that was between 173-175cm (68in) in stature. This individual was buried next to SK 4 with the same south-southwest head alignment.

PRESERVATION

SK 6 was adequately preserved with 25-50% of the individual recovered during excavation. Like many of the other individuals from this excavation the outer cortical bone was significantly damaged possibly due to the taphonomic process.



Image 8: Bones present SK 6

INVENTORY OF BONES AND DENTITION

Table 22: Bones present for SK 6

	L	R	P	Foot	L	R	Vertebrae	P
Shoulder, pelvic and long bones				Talus	X	X	L1	X
Radius	--	F		Calcaneus	X	X	L2	X
Acetabulum	X	X		Cuboid	X	--		
Ilium	F	F		Navicular	X	F		
Ischium	F	F		Cune1	X	--		
Pubis	F	F		Cune 2	X	--		
Femur	X	X		Cune 3	X	--		
Patella	--	X		Mt1	X	X		
Tibia	X	X		Hand				
Fibula	F	--		Mc1	--	F		
X = Present, -- = Not present, F = Fragment				Mc2	--	F		
				Mc3	F	F		
				Mc4	--	F		
				P.prox	5			
				P.int	4			
				P.dist	4			

ESTIMATION OF AGE AT DEATH

Table 23: Adult age estimation for SK 6

Method	Age group
Pubic symphysis	too much surface damage
Auricular surface	Phase 1 20-24 yrs
Fusion lines on long bones still present = 17-20 yrs	
Composite score	18-24 yrs Young Adult

ESTIMATION OF BIOLOGICAL SEX

Table 24: Biological sex estimation for SK 6

Pubic assessment					
• Overall shape/structure	4		• Pubic rami	4	
• Ventral arch	4		• Subpubic concavity	4	
• Greater sciatic notch	4		• Inferior ramus	4	
Metric analysis					
• Femoral head	49.2	Male	• Bicondylar width	81.2	Male
Composite score	4		Possible Male		

STATURE ESTIMATION

Table 25: Stature estimation for SK 6

Method	Stature estimation
Long bone length	Left femur = 476mm = 175cm (68in) Left tibia = 376mm = 173cm (68in) Right tibia = 380mm = 174cm (68in)
Femur /stature ratio	$476\text{mm} + 376\text{mm} = 852 = 174\text{cm}$ (68in)
Composite stature	173-175cm (68in)

SKELETON 8

OVERVIEW

Skeleton 8 Grave 285 was aligned east-northeast in Area 1. This individual was a secondary burial found with grave goods in the grave fill (269), (Constantine II Roman coin, dating 329-330AD) (See 2013 Interim Archaeological Report). SK 8 Grave 285 was a middle adult (25-34 yrs) male between 161-163cm (63-64in) in stature.



Image 9: Skeleton 8 *in situ*.
(Image from 2013 Interim Archaeological report)

PRESERVATION

Skeleton 8 was well preserved with about 50-75% of the remains recovered during excavation.



Image 10: Bones present SK 8

INVENTORY OF BONES AND DENTITION

Table 26: Bones present for SK 8

Cranium	L	R	P	Foot	L	R	Vertebrae	P
Frontal			F	Talus	--	X	T1	X
Parietal			F	Calcaneus	X	X	T2	X
Occipital			F	Mt1	X	X	T3	X
Temporal			F	Mt3	--	X	T4	X
Zygomatic			F	Mt5	--	X	T5	X
Shoulder, pelvic and long bones				P.prox	Frag		T6	X
Scapula	F	F		P.int	Frag		T7	X
Clavicle	--	F		Hand			T8	X
Humerus	X	X		Lunate	X		T9	X
Radius	X	X		Mc1	X	X	T10	X
Ulna	X	X		Mc2	X	X	T11	X
Acetabulum	X	X		Mc3	X	X	T12	X
Ilium	X	X		Mc4	--	X	L1	X
Ischium	--	X		Mc5	X	X	L2	X
Femur	X	X		P.prox	1		L3	X
Patella	X	X		P.int	3		L4	X
Tibia	X	X					L5	X
Fibula	X	X					S1	---
X = Present, -- = Not present, F = Fragment							S2	X
							S3	X
							S4	X
							S5	X
							Rib Frags	19
							1 st rib	1
2 nd rib	1							

ESTIMATION OF AGE AT DEATH

Table 27: Adult age estimation for SK 8

Method	Age group
Auricular surface	Phase 2 = 25-29 yrs
Composite score	Middle adult = 25-34 yrs

ESTIMATION OF BIOLOGICAL SEX

Table 28: Biological sex estimation for SK 8

Pubic assessment					
• Overall shape/structure	4		• Anterior sacral curvature	4	
• Greater sciatic notch	4		• Medial ischio-pubic ridge	4	
• Width of sacral ala	4		•		
Cranial assessments					
• Overall shape/structure	4		• Supraorbital ridges	4	
• Glabellar profile	4		• Orbital outline	4	
• Mastoid process	4		•		
Metric analysis					
• Femoral head	49.88	Male	• Scapula glenoid cavity	39.6	Male
• Femoral bicondylar width	83.36	Male	•		
Composite score 4			Possible Male		

STATURE ESTIMATION

Table 29: Stature estimation for SK 8

Method	Stature estimation
Long bone length	Right femur = 428mm = 163cm (64in) Left femur = 425mm = 163cm (64in) Right tibia = 328mm = 161cm (63in) Left tibia = 327mm = 161cm (63in)
Femur /stature ratio	423mm+328mm =756mm = 161cm (63in)
Composite stature 161-163cm (63-64in)	

SKELETON 9

OVERVIEW

SK 9 was recovered from Area 2, with a north-northwest by south-southeast head alignment. This individual was a middle adult (25-34 yrs) male, between 166-168cm (65-66in) in stature with a partially healed vertebral fracture of the 5th lumbar.

PRESERVATION

Overall preservation of SK 9 was moderately complete with 25-50% of the individual recovered.



Image 11: Bones present SK9

INVENTORY OF BONES AND DENTITION

Table 30: Bones present for SK 9

	L	R	P	Foot	L	R	Vertebrae	P
Shoulder, pelvic and long bones				Navicular	X	--	T6	X
Scapula	X	--	Frag	Hand			T7	X
Clavicle	X	--		Mc1	--	X	T8	X
Humerus	X	--		Mc3	--	X	T9	X
Radius	X	--		Mc5	--	X	T10	X
Ulna	X	--		P.prox	3		T11	X
Acetabulum	--	X					T12	X
Ilium	X	X	Frag				L1	X
Ischium	--	X					L2	X
Femur	--	X					L3	X
Patella	X	X					L4	X
Tibia	X	X					L5	X
Fibula	F	X					S1	X
X = Present, -- = Not present, F = Fragment							S2	X
							S3	X
							S4	X
							S5	X
							Rib Frags	16

ESTIMATION OF AGE AT DEATH

Table 31: Adult age estimation for SK 9

Method	Age group
Auricular surface	Stage 3 30-34 yrs
Composite score	Middle adult 25-34yrs

ESTIMATION OF BIOLOGICAL SEX

Table 32: Biological sex estimation for SK 9

Pubic assessment			
• Overall shape/structure	5	• Preauricular sulcus	5
• Greater sciatic notch	5	• Obturator foramen	4
• Width of sacral ala	4	• Ischial tuberosity	4
• Anterior sacral curvature	4	• Ischial spine	5
• Sacral auricular surface	4	• Iliac crest	4
• Iliac tuberosity	5	• Auricular surface	4
• Iliac blade	4	•	
Composite score 4.38		Possible male	

STATURE ESTIMATION

Table 33: Stature estimation for SK 9

Method	Stature estimation
Long bone length	Femur = 440mm = 166cm (65in) Tibia = 355mm = 168cm (66in)
Femur /stature ratio	
Composite stature 166-168cm (65-66in)	

PATHOLOGY

Partially healed fracture of the right transverse process arch of the 5th lumbar vertebra.



Image 12: Partially healed fracture SK 9 posterior view.



Image 13: Partially healed fracture SK 9 superior view.

NOTES

Pottery with red and black slip found with remains.

SKELETON 10

OVERVIEW

Skeleton 10 Grave 359 was recovered from Area 2 with east-northeast alignment. This individual was between 2.5-3yrs, early childhood age group.



Image 14: Skeleton 10 *in situ*.
(Image from 2013 Interim Archaeological Report)

PRESERVATION

Skeleton 10 was moderately preserved with 50-75% recovered.



Image 15: Mandible, maxilla and dentition present for SK 10.



Image 16: Bones present for SK 10

INVENTORY OF BONES AND DENTITION

Table 34: Bones present for SK 10

Cranium	L	R	P	Foot	L	R	Vertebrae	P
Mandible	X	--		Talus	X	--	Cervical	2
Frontal			Frag	Calcaneus	X	X	Thoracic	5
Parietal			Frag	Hand			Sacrum	2
Occipital			Frag	Lunate	X		Rib Frag	8
Temporal			Frag	Mc1	X			
Sphenoid			Frag	Mc2	X			
Zygomatic			Frag	Mc3	X			
Maxilla			Frag	Mc4	X			
Palatine			Frag	Mc5	X			
Nasal			Frag	P.prox	4			
Shoulder, pelvic and long bones				P.int	2			
X = Present, -- = Not present, F = Fragment								
Humerus	X	--						
Radius	X	--						
Ulna	X	--						
Acetabulum	X	X						
Ilium	X	X						
Ischium	X	X						
Pubis	X	X						
Femur	X	X						
Tibia	X	X						
Fibula	X	X						

Table 35: Dentition present for SK 10

Upper Right			MIXED DENTITION										Upper Left		
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
													X		
			dm2	dm1	dc	di2	di1	di1	di2	dc	dm1	dm2			
					X	X	X	X	X	X	X	X			
								X		X	X	X			
			dm2	dm1	dc	di2	di1	di1	di2	dc	dm1	dm2			
									X				X		
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
Lower Right								Lower Left							

ESTIMATION OF AGE AT DEATH

Juvenile age estimation is based on fusion of bones (Table 34) dental development (Table 35) and long bone length.

Ilium, ischium, pubis not fused = less than 6

Mesotopic suture present but bones fused = 2 yrs

Cervical vertebrae bodies line present = 3-4yrs

Dental Development:

M1=Crc = 2.2 yrs

I2 = C $\frac{1}{3}$ = less than 5 yrs

Femur length 185mm= 2-3 yrs

Sk 10 was a between 3-4 years old, the early childhood age group.

SKELETON Pit [73] (071)

OVERVIEW

SRW-EX-12 Pit [73] (071) was a juvenile 4-5yrs (early childhood group). This individual was recovered from Area 1 and possibly a secondary burial.

PRESERVATION

This individual was between 25-50% recovered with the upper body and cranium recovered.



Image 17: Cranium SRW-EX-12 Pit [73] (071)



Image 18: Mandible SRW-EX-12 Pit [73] (071)



Image 19: Bones present for SRW-EX-12 Pit [73] (071)

INVENTORY OF BONES AND DENTITION

Table 36: Bones present SRW-EX-12 Pit [73] (071)

Cranium	L	R	P	Vertebrae	P
Mandible	X	X		C1	X
Frontal			X	C2	
Parietal	X	X		C3	X
Occipital			X	C4	X
Temporal	X	X		C5	X
Sphenoid	X	X		C6	X
Zygomatic	X	X		Rib Frags	12
Maxilla	X	X		2 nd rib	R
Palatine	X	X			
Nasal			X		
Scapula	X	X			
Clavicle	X	X			
Humerus	X	X			

Table 37: Dentition present SRW-EX-12 Pit [73] (071)

Upper Right			MIXED DENTITION										Upper Left		
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
		X					X	X					X		
			dm2	dm1	dc	di2	di1	di1	di2	dc	dm1	dm2			
			X	X	X	X			X		X	X			
			X	X	X	X				X	X	X			
			dm2	dm1	dc	di2	di1	di1	di2	dc	dm1	dm2			
		X					X	X					X		
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3
Lower Right								Lower Left							

ESTIMATION OF AGE AT DEATH

Age estimation based on bones and dentition from Tables 36 and 37:

Dental development:

C = Ri = 4.8 yrs

M1 = R3/4 = 5.2 (estimated development tooth still in jaw)

I1 = Cc = 5 yrs (estimated development tooth still in jaw but crown is not in full occlusion)

PM1 = Cc = 4.5 yrs (estimated development, tooth still in jaw, dm1 still in occlusion)

Fusion of bones:

Cervical vertebra arches fused to bodies = 3-4 yrs

Greater tubercle of humerus is not fused = 4 yrs

Length of long bones:

Humerus: right = 162 mm = 4 yrs

left = 160 mm = 4 yrs

Estimated age of SRW-EX-12 [73](71) was between 4-5 yrs (early childhood age group).

SKELETON SRW-EX-12 (196)

OVERVIEW and PRESERVATION

This individual was with the disarticulated finds, however is most likely one individual. Although less than 25% of the individual was recovered it was estimated as a young adult male.



Images 20 and 21: Bones and mandible present for SRW-EX-12 (196)

INVENTORY OF BONES AND DENTITION

Table 38: Bones present for SRW-EX-12 (196)

Cranium	L	R	P
Mandible		F	
Frontal			Frag
Shoulder, pelvic girdle and long bones			
Scapula		X	
Humerus	X	X	
Ulna		X	

Table 39: Dentition present for SRW-EX-12 (196)

Upper Right						DENTITION						Upper Left				
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3	
	X	X	X	X	X											
M3	M2	M1	P2	P1	C	I2	I1	I1	I2	C	P1	P2	M1	M2	M3	
Lower Right								Lower Left								

ESTIMATION OF AGE AT DEATH

Table 40: Adult age estimation SRW-EX-12 (196)

Method	Age group
Dental wear	18-22
Composite score	Young adult 18-24

ESTIMATION OF BIOLOGICAL SEX

Table 41: Biological sex estimation SRW-EX-12 (196)

Cranial assessments			
• Overall shape/structure	5	• Supraorbital ridges	5
• Glabellar profile	5	• Orbital outline	5
• Frontal slope	5	•	
Composite score		Possible male	

Disarticulated Finds:

SRW-EX-12 (96)

Animal bone-vertebra

SRW-EX-12 (113)

Human Bone:

Cranial fragments:

3 occipital

3 parietal

SRW-EX-12 (122)

Human Bone:

Left:

3rd, 4th and 5th metatarsal

3rd and 5th metacarpal

2 tibiae

femur

ulna

2 humeri

clavicle

mandible fragment with

I1-C

mandible fragment (gonial
angle and ramus)

temporal bone

zygomatic bone

Right

2nd, 3rd, and 5th metatarsal

tibia

fibula

femur (2 fragments)

2 radii

2 ulnae

2 humeri

2 clavicles

scapula

temporal bone

Single bones

mandible

maxilla

sacrum

3 lumbar vertebra arches

4 lumbar vertebra bodies

4 thoracic vertebra

4 ilium fragments

5 frontal bone fragments

2 occipital bone fragments

10 mixed parietal bone
fragments

15 mixed rib fragments

Additional finds

animal bone 4 fragments

SRW-EX-12 (131):

Human Bone:

Left

tibia

femur

radius

parietal (3 fragments)

talus

lower P1

Right

tibia

mandible with C-M2 and
roots of M3

talus

fibula

4th metatarsal

Single Bones

thoracic vertebra

sacrum frag

occipital bone (3 frags)

sphenoid frag

rib

Additional finds:

animal bone

SRW-EX-12 (133):

Human Bone:

left ilium (crest not fused around 16yrs)

tibia (proximal fragment fusion line still present less than 20yrs)

Additional finds:

animal bone

SRW-EX-12 (143):

Human Bone:

2 crania (fragmented)

- 1 young adult male
- 1 young adult female

Right tibia

Left tibia

Right fibula

3 fibula shaft fragments

Right calcaneus

Left 5th metatarsal

2 Mandibles with teeth

3 Right humeri

2 Left humeri

2 Right radii

3 Left radii

3 Left ulnae

Right ulna

Right and left scapula

Right and left clavicle

Lumbar vertebra

Several rib fragments

Minimum number of individuals: 4

- Bag 1 contains cranium, mandible and dentition from a young adult (18-24 yrs based on dental development and wear) male.
- Bag 2 contains cranium, mandible and dentition from a young adult (18-24 yrs based on dental wear and development) female.
- Bag 3 contains right and left tibia, right fibula, right calcaneus, and left 5th metatarsal. Tibial tuberosity was fused with the line present which suggests 10-13 yrs, but distal ends of both tibia were not fused which suggests an individual less than 16 years.
- Bag 4 contains a right and left scapula and clavicles. On the right clavicle the acromion process was not completely fused, which suggests an individual around 10-14 yrs, while the acromion process on the left scapula is not fused at all.

Additional finds:

animal bone

2 pottery fragments

SRW-EX-12 (197)

Human Bone:

right femur (fusion line still present 18-20yrs)

SRW-EX-12 (269) Area 2:

Human Bone:

rib fragments (4)

metacarpal distal fragment

left hamate

Additional finds:

animal bone and teeth

pottery fragments

metal

SRW-EX-12 (338)

Human Bone:

right ulna

right radius

left 4th and 5th metatarsal

cranial fragments

long bone fragments

rib fragments

Additional finds:

animal teeth

SRW-EX-12 (373) Area 2:

Human Bone:

tibia

scapula

long bone fragments

Additional finds:

animal bone

SRW-EX-12 (389) Area 2:

Human Bone:

patella

left temporal bone

scapula

cranial fragments

long bone fragments

4. PROJECT SUMMARY for SRW-EX-12

SK	Age group	Biological Sex	Stature	Per cent present	Pathology
SK1	Early childhood	---	----	25-50%	none
SK2	Middle adult	Female	153-156cm (60-61in)	50-75%	dental
SK3	Young adult	Male (?)	170-176cm (66-69in)	>75%	none
SK4	Late childhood	----	-----	<25%	none
SK5 (210)	Middle adult 2	Male	≈171cm (69in)	50-75%	none
SK6	Young adult	Male (?)	173-175cm (68in)	25-50%	none
SK8 (285)	Middle adult	Male	161-163cm (63-64cm)	50-75%	none
SK9	Middle adult	Male	166-168cm (65-66in)	25-50%	Partially healed fracture vertebra
SK10	Early childhood	-----	-----	50-75%	none
Pit [73] (071)	Early childhood	----	-----	25-50%	none
(196)	Young adult	Male (?)	-----	<25%	none

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