The British Red Cross Centre
2 Lower Chantry Lane,
Canterbury,
Kent CT1 1UF

Assessment report

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Summary

Data recovered from an archaeological investigation carried out by Canterbury Archaeological Trust (CAT) at the site of the British Red Cross Centre, 2 Lower Chantry Lane, Canterbury CT1 1UF between May and August 2011 has been assessed on behalf of the British Red Cross Society. The results indicate that the recovered data is of significant heritage value at both local and regional levels, and warrants further analysis and publication.

Archaeological investigation revealed the presence of multi-phase intercutting features, dominated by large pits. The available dating evidence indicated that these features spanned the Anglo-Saxon, medieval and post-medieval periods. Evidence for activity predating the Anglo-Saxon period was limited to residual artefacts from the late prehistoric Iron Age and Romano-British periods; no features could be attributed to these periods or the preceding early prehistoric Palaeolithic to Bronze Age.

The earliest activity on site appears to date to the mid or late Anglo-Saxon period (phase 1), and is evident through a series of linear features, some of which might represent the remnants of a field system, and an extensive series of intercutting pits. Two distinct pit groups were identified, one group utilised for the disposal of domestic and industrial refuse (primarily pottery, animal bone and metalworking residues), the second group lined with timbers and filled with cess-like deposits containing mineralized plant remains. Other isolated pits included one containing an oven. The bulk of the pottery suggested a mid eighth- to mid-tenth-century date range for activity during this phase.

Use of the site resumed during the early medieval period (phase 2a), with further evidence for refuse and cess pit cutting and some limited evidence for the establishment of a timber building. Structural elements comprised post-holes, a potential beam-slot, gullies and a small oven. Dated pottery suggests this occurred during the mid twelfth century, and might represent the establishment of suburban occupation along the route of what is now Lower Chantry Lane.

Activity continued into the high medieval period (phase 2b), dated from the early thirteenth century, and intensified during the mid thirteenth and early fourteenth centuries, before declining towards the late fourteenth century. A small assemblage of late medieval pottery suggests that activity did not continue after c AD 1400 when the site reverted to an agricultural or horticultural regime. As with earlier phases, feature types were dominated by refuse and cess pits. The few other feature types dated to this period included a series of post-holes and discontinuous linear features, two of which might have formed the corners of an enclosure. The lack of evidence for buildings during this phase might indicate that the early medieval occupation did not continue, and this might coincide with the establishment of Doge's Chantry in the second half of the thirteenth century.

From the end of the fourteenth century or beginning of the fifteenth century an extensive soil horizon formed across the site, potentially representing an agricultural or horticultural land use. Recovered pottery indicates that there was none or only very limited activity during the sixteenth to mid seventieth centuries. By the later post-medieval period (phase 3), the site might have been situated on the periphery of new occupation, represented by the presence of a tile-lined drain, animal burials, a garden/horticultural feature, and a series of post-holes along the frontage of Lower Chantry Lane, all dated to the eighteenth and nineteenth centuries.

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This assessment includes contributions from Enid Allison (environmental sampling, bird remains), Luke Barber (post-Roman pottery), Rose Broadley (glass), Wendy Carruthers (plant macrofossils), Tania Kausmally (animal bone), Lynne Keys (iron slag and related high temperature debris), Alison Locker (fish remains), and Andrew Richardson (registered finds).

The post-excavation assessment was managed by Richard Helm, who peer-reviewed and edited this final report with Peter Clark and Jane Elder.

1 Introduction

1.1 Project Background

1.1.1 The Canterbury Archaeological Trust (CAT) undertook an archaeological investigation at the site of the British Red Cross Centre, No. 2 Lower Chantry Lane, Canterbury, Kent CT1 1UF between 5 May and 8 August 2011; the investigations took the form of an evaluation followed by open area excavation. The work was commissioned by Northamptonshire Archaeology (2 Bolton House, Wootton Hall Park, Northampton NN4 8BE, tel: 01604 700493), on behalf of their client Sursham Tompkins and Partners (acting for the British Red Cross Society). The development entailed the demolition of the existing building upon the site and the construction of a new two-storey building. A planning application (CA/08/01417/CAN) was submitted to Canterbury City Council as Local Planning Authority and was approved in January 2009.

1.1.2 The site falls within Canterbury's Area of Archaeological Importance (AAI) as designated by the Secretary of State on 30 March 1984 pursuant to the Ancient Monuments and Archaeological Areas Act 1979. Statutory Instruments 1285 and 1286, dated 17 August and 30 September 1984, detail the procedures that should be followed to comply with the Act to ensure that the potential archaeological resource is protected and preserved. CAT is the designated investigating authority within the AAI.

1.1.3 To supplement the initial planning application an archaeological desk-based assessment (DBA) was undertaken by Northamptonshire Archaeology (NA). The DBA established that the site lay on the outer edge of a medieval suburb of Canterbury, adjacent to the south-west boundary of the medieval Doge's Chantry, and had the potential for medieval activity of local importance (Brown 2008). As a result further archaeological mitigation measures were recommended.

1.1.4 Archaeological evaluation was undertaken by CAT in May 2011, the results of which indicated the presence of surviving archaeological features dated provisionally from the thirteenth to fifteenth centuries (Gollop 2011).

1.1.5 Further detailed archaeological investigation comprising a strip, map and sample excavation, was undertaken between 07 June and 08 August 2011 (Gollop 2012).

1.1.6 This report provides an outline of the results of the archaeological investigation works and a post-excavation assessment of their heritage significance. The works were undertaken in accordance with written schemes of investigations (WSI) prepared by NA (2010; 2011) and approved by the Canterbury City Council's Archaeological Officer.

1.2 Site location, topography and geology

1.2.1 The site (Fig 1) is located to the south-east of Canterbury city centre, outside the city walls, and within the historic parish of St Paul, on the south-eastern side of Lower Chantry Lane (NGR 61545 15740). The site is rectangular in shape, aligned roughly north-west to south-east, and covers an area of *c* 0.065 hectares (650 sq m), measuring approximately 44m long and between 14.40m to 15m wide. Current ground levels vary between +18.00 Ordnance Datum (OD) and +19.00m OD, with a slight decline towards the north-west. Non-residential properties bound the site to the north-east (Girl Guide Office), south-east (light industrial units) and to the south-west (a social club and electricity substation). Lower Chantry Lane forms the north-west boundary.

1.2.2 The former British Red Cross Centre building was demolished prior to the commencement of archaeological fieldwork; all standing buildings were removed, along with the concrete ground floor slabs. External concrete and tarmac hard standing and car parking was retained to the front and sides of the site. The rear of the site was occupied by a former garden.

1.2.3 The British Geological Survey (BGS) shows the site as lying on superficial Head deposits of clay and silt (brickearth), overlying bedrock geology comprising Margate Chalk (BGS 2016).

1.3 Programme of archaeological work

1.3.1 The archaeological investigation comprised the following work stages:

Evaluation (project code: RCCC EV 13)

1.3.2 An evaluation was undertaken between 5 and 6 May 2011 and comprised a single trench measuring 30.80m long by between 1.80m and 2.20m wide, representing an approximate 9.4 per cent sample. The evaluation identified significant archaeological features and deposits across the complete length of the trench (Gollop 2011). Dated provisionally to the thirteenth, fourteenth and fifteenth centuries, these remains were deemed to be of local significance, due to the site's close proximity to the site of the medieval Doge's Chantry.

Excavation (project code: RCCC EX 11)

1.3.3 The excavation, undertaken between 7 June and 8 August 2011, encompassed the entirety of the area of the proposed new building footprint, and beyond it to the existing street frontage along Lower Chantry Lane. The total area investigated covered 411 sq m, measuring approximately 41m in length by up to 12m wide.

1.4 Objectives

1.4.1 The archaeological investigations were undertaken in accordance with professional standards, and followed the WSIs produced by NA (2010; 2011) and approved by the Canterbury City Council Archaeological Officer, and in accordance with the general methods of archaeological good practice as outlined by the Chartered Institute for Archaeologists (1999). CAT is a registered organisation with the Chartered Institute for Archaeologists and conforms to their by-laws, standards and policy statements.

1.4.2 The principal objective of the investigations was to ensure the preservation by record, by archaeological excavation, of the buried archaeological resource where the proposed development would result in its permanent loss. To fulfill this objective the excavations sought to identify any subsoil features or deposits of archaeological interest, to ascertain their extent, character, date, and to place and assess their relative importance in a local, regional and/or national context.

1.5 Methodology

1.5.1 The archaeological investigations incorporated an initial topsoil strip and map assessment followed by sample excavation.

1.5.2 Strip and map comprised the machine reduction of the excavation areas to the top of significant archaeology or underlying geology, whichever was the higher (Plate 1 and 2). All exposed archaeology was then mapped using a differential global positioning system (GPS) and their relative positions digitally plotted using AutoCAD. Survey data was located to a digital Ordnance Survey tile (reproduced by permission of Ordnance Survey on behalf of HMSO © Crown Copyright 2001. All rights reserved. Licence No. AL100021009).

1.5.3 Following initial stripping of topsoil and mapping of archaeological features, a sampling strategy was employed to examine those archaeological features where the recovery of stratigraphic data and associated datable artefacts could provide sufficient information to characterise past activity on the site. Excavation was directed in particular towards the understanding of the chronological development, function, status and landscape setting of the identified features.

1.5.4 Archaeological features and deposits were excavated by hand, in stratigraphic order where possible, to determine extent, form, character and date. Recording of all contexts was undertaken using standard CAT pro-forma sheets following the conventions set out in the CAT site recording manual (CAT 1996). Plans of all excavated deposits were made at a scale of 1:20 and sections were recorded at a scale of 1:10. Photographic coverage employed colour digital images. Site levels were tied to the Ordnance Datum (OD) using an Ordnance Survey bench mark with a value of +16.58m OD located on the front elevation of 20 Ivy Lane.

1.5.5 Where identified, all artefacts were retrieved from stratified archaeological contexts. Retrieval of finds from non-stratified deposits was carried out on an opportunistic basis. Artefacts recovered during the excavation were cleaned and marked with relevant site and context references, provisionally identified and dated. Finds processing was undertaken concurrently with the excavation to ensure the rapid identification and spot dating of artefacts. This information was communicated to field staff at the earliest possible time to assist in the successful completion of the excavation objectives. Where required, finds were conserved during the course of the excavation works.

1.5.6 Bulk soil samples were taken from archaeological deposits and features under advisement from a qualified environmental archaeologist, following on-site discussion of the date and quantity of artefacts and environmental evidence present.

1.6 Project archive

A project archive was prepared in accordance with Appendix 3 of *Management of Archaeological Projects 2* (English Heritage 1991, 30–31), *Management of Research Projects in the Historic Environment* (MoRPHE, English Heritage 2006), and *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (AAF 2011). The project archive is presently held at the office of the Canterbury Archaeological Trust (92a Broad Street, Canterbury, Kent CT1 2LU).

Documentary archive

1.6.1 A summary of the documentary archive is given in Table 1.

Table 1. Documentary archive

Contents	Descriptions	Quantity/Comments
Primary context records	Context registers	26 (EX)/4 (EV) A4
	Context record sheets	584 (EX)/73 (EV) A4
Synthesised context records	Matrices	IADB only (Not Complete)
Catalogue of drawings	Plan and section registers	6 (EX)/1 (EV) A4
Primary drawings	Plans/sections	129 A3 sheets (182 feature plans; 93 sections)
Primary finds data	Small finds record sheets	9 A4
Catalogue of photographs	Digital photo record sheets	22 A4 (867 images)
	Colour print record sheets	13 A4 (444 images
Primary environmental records	Soil sample sheets	38
	Soil sample register sheets	2

1.6.2 All context record sheets have been checked and collated. The site plans and section drawings have been scanned and digitised in AutoCAD. All photographic records have been catalogued and cross-referenced with the context data where appropriate**.** A digital copy of the of the documentary archive has been prepared using the Integrated Archaeological Database (IADB), a secure password protected online resource available at http//www.iadb.co.uk/cat under the project code: RCCC.

Material archive

1.6.3 All retained artefacts recovered during the project have been catalogued, processed and packaged in accordance with the United Kingdom Institute for Conservation Guidelines (UKIC 1983; 1990). The finds have all been washed and marked where appropriate. The finds are stored in polybags within either 'standard' (17×12×9' with 4' deep lift off lid, capacity 0.03 cubic metres) or 'half sized' (17×12×4' with 4' deep lift off lid, capacity 0.015 cubic metres) brass wire-stitched box (1900 micron double kraft-lined, pH 6.5–8) supplied by the Ryder Box Co. Some small finds (including all metal finds) are stored in sealable plastic tubs; tubs with metal finds contain silica gel and a humidity indicator strip.

1.6.4 A catalogue of all recovered finds to pre-assessment level has been entered into the IADB. This comprises over 5700 objects or fragments recovered during the fieldwork recorded as 774 separate bulk and small finds entry records. The range and quantity of finds are summarised by material in Table 2 below.

Table 2. Summary of material archive

Material	Find Category	No. of Boxes	No. of IADB Records	No. of Objects or Fragments	Weight (kg)	Comments
Animal bone	Bulk	5.5	191	2689+	31.3	Mammal, bird, fish, amphibian
Marine shell	Bulk	<0.5	7	11	0.08	Oyster (hand-collected)
CBM	Bulk	5	156	986	75	Roman, medieval, post-medieval
Pottery	Bulk	2	160	1387	22.7	Roman, medieval, post-medieval
Other ceramic	Small	<0.5	1	1	0.2	Loom weight
Flint	Bulk	<0.5	44	68	3.2	Worked, burnt, some unworked/unburnt

Material	Find Category	No. of Boxes	No. of IADB Records	No. of Objects or Fragments	Weight (kg)	Comments
Stone (non-flint)	Bulk/Small	<0.5	22	30	8.3	Structural fragments, sandstone, limestone, chalk, slate
Industrial residues and by-products	Bulk/Small	4	134	310+	72.7	Slag, hammerscale, furnace lining, vitrified CBM
Glass	Bulk/Small	<0.5	7	129	1.9	Vessel and window
Wood	Bulk	<0.5	4	15	0.02	Charcoal fragments
Iron	Small	<0.5	38	71	0.8	Horseshoe, nails and fragments
Copper Alloy	Small	<0.5	10	21	0.02	Roman, Anglo-Saxon, Medieval
Lead	Small	<0.5	1	1	0.03	Hook
Other	Bulk	1	1	2	?	Two fragments of shaped concrete
Unident. Material	Bulk/Small	<0.5	2	3	0.03	
TOTAL		**18.5+**	**774**	**5721+**	**216.28kg**	

Environmental data

1.6.5 Thirty-three bulk sediment samples (Dobney *et al* 1992) were taken from a range of features and deposits, and have been processed for recovery of biological remains and cultural material (see Table 3). This comprised a total volume of 348.75 litres of sediment, with individual sample volumes ranging between 9–20 litres depending on the type and extent of the deposit sampled.

1.6.6 Eight smaller samples with volumes of 0.25–1 litre were collected from a series of deep pits using a hand auger, and a single, one litre 'spot' sample was taken from a possible degraded wood deposit (subsequently shown to consist largely of faecal concretions and mineralised woody material).

Table 3. List of bulk samples

Sample	Context	Set	Group	Description	Residue (kg)	Flot (ml)
<100>	216	**217**	7	Lower fill of rectangular pit [217]	1.05	150
<101>	239	**240**	28	Lower mixed silty deposits towards side/base of large pit [240]	0.45	
<102>	279	**283**	29	Charcoal-rich fill of large pit [283]	1.13	400
<103>	282	**283**	29	Primary silting in pit [283]	0.44	45
<104>	375	**364**	5	Charcoal-rich deposit in pit [364]	4.05	1300
<105>	382	**364**	5	?Cessy deposit in pit [364]	2.04	400
<106>	373	**364**	5	Charcoal-rich deposit in pit [364]	1.05	300
<107>	407	**386**	4	Charcoal fill in pit [386]	1.05	375
<108>	421	**388**	3	Charcoal layer in pit [386]	0.73	100
<109>	424	**364**	5	Possible degraded wood layer	0.05	10
<110>	425	**364**	5	Auger sample from deep pit [364]. Depth 1.93–2.33m	0.014	<5
<111>	426	**369**	27	Auger sample from deep pit [369]. Depth 1.80–2.30m	0.007	<5
<112>	293	**253**	28	Auger sample from deep pit [253]. Depth 1.45–2.67m	0.02	5
<113>	319	**320**	10	Auger sample from deep pit [320]. Depth 1.27–3.77	0.032	5
<114>	319	**320**	10	Auger sample from deep pit [320]. Depth 3.77–3.96	0.007	5
<115>	323	**324**	28	Auger sample from deep pit [324]. Depth 1.36–2.07	0.007	<5
<116>	329	**315**	10	Auger sample from deep pit [315]. Depth 2.04–3.28	0.028	<5
<117>	497	**498**	7	Lowest excavated deposit in pit [498]		200
<118>	514	**431**	30	Black silty deposit in drain [431]	0.41	400
<119>	568	**570**	5	Green silty deposit, ?cess	n/r	10
<120>	591	**592**	21	Grey ash/burning deposit	0.69	175
<121>	585	**586**	28	Basal deposit in [586]	0.4	40
<122>	497	**599**	10	Lowest excavated deposit in pit [498]	1.84	125
<123>	535	**541**	5	Bone and charcoal-rich fill of [541]	0.17	1500
<124>	537	**541**	5	Bone and charcoal-rich fill of [541]	0.62	150
<125>	540	**541**	5	Lowest excavated deposit in [541]	0.23	30
<126>	608	**599**	10	Fill of [599]	0.05	<5
<127>	609	**599**	10	Fill of [599]	0.015	1
<128>	635	**639**	6	Fill of [639] with burnt material	0.56	200
<129>	638	**639**	6	Fill of [639], carbonised wood deposit	0.68	500
<130>	673	**688**	5	Charcoal-rich deposit in [688]	0.35	450

Sample	Context	Set	Group	Description	Residue (kg)	Flot (ml)
<131>	676	**688**	5	Soft silts below dumped re-deposited natural in [688]	0.33	25
<132>	709	**711**	4	Black silty deposit in [711]	0.29	850
<133>	652	**653**	7	Fill of oven [653]	0.6	125

1.6.7 All the samples have been processed for recovery of biological remains and cultural material using standard methods of wet-sieving with flotation (Kenward *et al* 1980), with flots collected on 0.5mm mesh, and residues onto nested 2mm and 1mm sieves. The resulting flots and residues have been sorted and entered onto the IADB to be cross-referenced with the context data.

1.7 Assessment methodology

1.7.1 Post-excavation assessment was initiated following the documentation of the site archive. The archaeological assessment forms part of the post-excavation requirement as set out in section 4 of the WSI (NA 2010; 2011). In addition to the general aims and objectives set out in the project WSI, the assessment sought to define project specific research aims with reference to regional research strategies (e.g. the South East Research Framework) and national guidelines (e.g. English Heritage 2005a; 2005b). The Anglo-Saxon and early medieval archaeology recorded within the site has the potential to be of regional significance and will further our understanding of the development of Canterbury's historic parish of St Paul and the medieval borough of Longport. The purpose of this report is to define an Updated Project Design for a programme of post-excavation analysis.

1.7.2 This assessment has been prepared in accordance to English Heritage Management of Archaeological Projects 2 (1991) and Management of Research Projects in the Historic Environment (2006) standards (assessment being equivalent to MoRPHE review point R3.2; see English Heritage 2008).

1.7.3 The various materials recovered via excavation, including finds and environmental and other samples, have been assessed with respect to archaeological context by subject specialists. This work has included preliminary quantification and cataloguing of the material, and the provision of a scoping opinion, based on expertise, as to its contribution to the site interpretation. The intrinsic significance, appropriate level of publication required, and strategies for achieving publication have also been considered.

1.7.4 Specialist submissions have been further qualified by the Project Team with reference to national, regional and local research frameworks and in accordance with definitive criteria as set out in Management of Archaeological Projects (MAP) 2 (English Heritage 1991, 6.16).

1.7.5 Formal assessment and the updated project design have been construed, as necessary, within a threat-led, developer funded environment taking account of attendant funding limitations and limited scope.

1.7.6 A minimum but entirely appropriate publication requirement is therefore proposed, with the focus on material crucial for interpreting the site. In terms of material, this is taken to comprise quantification, typology, chronology and such qualitative data as better informs an understanding of archaeological contexts, sets, groups and phases, sufficient for the production of an integrated site narrative and interpretation.

1.8 Archaeological background

1.8.1 The previous archaeological and historical potential of the site has been assessed and summarised in the DBA (Brown 2008), evaluation report (Gollop 2011) and the interim report (Gollop 2012).

1.8.2 Since the completion of the fieldwork, archaeological investigations have been undertaken by Archaeology South-East (ASE) at 1–7 New Dover Road (Stevens 2013), less than 40m to the south-west of the site at National Grid Reference (NGR) 615420 157456, and by CAT at No 41 St Georges Place (Jarman 2011) *c* 150m to the west (NGR 615250 157500). Discoveries made at these sites have been added below, where appropriate.

Prehistoric (Neolithic to Iron Age)

1.8.3 There are no known archaeological sites of prehistoric date within the immediate vicinity of the site. A 'background' scatter of worked flints was retrieved from later deposits at the 1–7 New Dover Road site (Stevens 2013, 8).

Romano-British

1.8.4 Evidence of Roman surfaces associated with outdoor yards or trackways have been discovered at St George's Place *c* 230m west-south-west of the site (NGR 615220 157550, Canterbury City Historic Environment Record (HER) 1845).

1.8.5 Roman cremation burials have been found in Albert Road *c* 150m east-north-east of the site (NGR 615580 157550, HER 431 and 1949) and between Old Dover Road and New Dover Road *c* 125m south-south-west of the site (NGR 615390 157400, HER 2044). Inhumation burials have also been found at 8 Vernon Place *c* 300m west-south-west of the site (NGR 615180 157390, HER 1906).

1.8.6 Residual Romano-British pottery was evident in later deposits at both 1–7 New Dover Road and 41 St Georges Place, although two sinuous features at the New Dover Road site have been provisionally dated to this period (Heppell 2013, 8).

Anglo-Saxon

1.8.7 The street pattern of this part of Canterbury, although relating to the medieval suburb, may have been the focus for Anglo-Saxon settlement activity. Ivy Lane and Dover Street both have eleventh-century origins (Brown 2008, 18). The site of St Augustine's Abbey, established in AD 598, is located at the northern end of Lower Chantry Lane *c* 250m north of the site, and the contemporary barton or home farm located at Barton Court Grammar School immediately to the north-east.

1.8.8 A small quantity of residual Anglo-Saxon pottery was retrieved during the work at the 1–7 New Dover Road site (Stevens 2013, 9).

Medieval

1.8.9 Medieval activity, including evidence for buildings, domestic occupation and industrial activities, have been identified in archaeological evaluations at Lower Chantry Lane Car Park *c* 100m north-north-east of the site (NGR 615500 157600, HER 40), on the corner of Ivy Lane *c* 70m north of the site (NGR 615440 157570, HER 70), and at the Two Sawyers Public House, Ivy Lane, *c* 125m north-east of the site (NGR 615370 157600, HER 199).

1.8.10 The site is adjacent to the Girl Guide's Office which occupies the former grounds of the medieval Doge's Chantry (Brown 2008, 2). The Chantry was founded by Hamo Doge in 1264; Hasted noted in 1801 that part of the building was surviving and had been converted into a cottage (Brown 2008, 7)

1.8.11 Two phases of medieval activity were present at the 1–7 New Dover Road site. This comprised in the first phase pits containing domestic refuse, and in the second phase further unidentified pits, a cess pit and gullies. Three large clay quarries were dated to the fourteenth to sixteenth centuries (Stevens 2013, 9–10).

1.8.12 A concentration of early medieval pits, dated to *c* AD 1050–1250, was identified at 41 St George's Place. After an apparent hiatus in activity, occupation resumed in the late fifteenth century with evidence for at least one building established by the sixteenth century (Jarman 2011, 3–4).

Post-medieval and later

1.8.13 Historic map regression indicated that the site was used as agricultural land until it was occupied by the British Red Cross Centre from the 1950s.

2 Fieldwork results

2.1 Introduction

2.1.1 A total of 657 context numbers were assigned during the fieldwork events, of which 73 (Context nos 100–172) were recorded during evaluation, and 584 (Context nos 200–783) were recorded during excavation. Of these, 210 contexts represent cuts and interfaces, with 438 contexts representing deposits or masonry walls (4 records have been voided). Each cut (or archaeological intervention) and their associated fill deposits have been combined into stratigraphic sets, along with deposits not identifiable to cut features such as soil horizons. Currently 215 sets have been defined, equating to 178 separate cut archaeological features and five soil horizons.

2.1.2 The majority of features comprised pits, post-holes and stake-holes. Other features included short linear ditches/gullies, a potential field oven, a tile-lined drain, modern brick walls and soil horizons (Table 4).

Table 4. Set/feature types

Feature type	Set number
Brick soak away	771
Brick walls	162, 166 and 170
Depressions	389
Ditches/gullies/linear features	134, 201, 203, 207, 213, 276, 300, 391, 531, 543, 563, 56, 577 and 754
Garden features	211
Oven	561
Pits	148, 205, 217, 220, 225, 228, 230, 232, 235, 248, 250, 253, 260, 262, 264, 267, 271, 273, 283, 285, 289, 292, 302, 304, 312, 315, 320, 324, 328, 331, 347, 357, 364, 367, 369, 385, 386, 387, 388, 394, 396, 398, 420, 436, 445, 452, 457, 475, 489, 491, 492, 498, 507, 525, 541, 553, 555, 559, 570, 586, 592, 599, 602, 607, 618, 620, 622, 634, 639, 641, 643, 648, 653, 664, 666, 688, 695, 701, 704, 708, 711, 738, 756, 758, 760, 624, 742, 762, and 769
Post-holes	104, 113, 119, 121, 144, 209, 256, 307, 423, 428, 438, 440, 442, 448, 460, 466, 470, 464, 472, 476, 480, 482, 484, 486, 500, 504, 512, 527, 529, 545, 588, 616, 691, 713, 727, 740, 777, 779 and 781
Small pits/post-holes	297, 371, 488, 502 547, 549, 655, 657, 659, 661, 663, 740, 745, 747, and 775
Stake-holes	305
Service trench	434
Soil horizon	257, 725, 171 and 172
Tile-lined drain	431
Unidentified feature	478, 773 and 783

2.1.3 Where context numbers are referred to in this report they have been placed in parenthesis, i.e. (150), with squared parenthesis used for individual cuts, i.e. [151]. Set numbers have been highlighted in bold, i.e. **152**. Group numbers are prefixed with a G.

2.2 Stratigraphic data

2.2.1 The site records have been checked and stratigraphic integrity assessed. The 657 recorded contexts have been sorted into hierarchical levels comprising 215 sets, 39 groups and 5 phases. The excavation results are described by group and phase below.

2.2.2 During machine ground reduction and surface cleaning, removed contexts and associated artefacts were allocated as unstratified (set **0**, group 0).

2.2.3 Assessment indicated that modern truncation of buried archaeological features and deposits was low, with the level of impact higher on the north-west limits of the excavation area were the site fronts on to Lower Chantry Lane. Intrusive material (later material located within earlier deposits or features) was moderate to high throughout the excavated contexts. Residual material (the presence of earlier material in later deposits or features) was moderate to high, particularly within the high medieval phase 2b contexts.

2.3 Phase overview

2.3.1 Five phases of on-site activity have been defined (Table 5).

Table 5. Summary of phases

Phase	Period	Date-range
1	Anglo-Saxon	AD 750–1050
2a	Early medieval	AD 1050–1250
2b	High medieval	AD 1250–1400
3	Late post-medieval	AD 1700–1900
4	Modern	AD 1900–present

2.3.2 Residual finds dated to the later prehistoric, Iron Age and Romano-British periods were also recovered, but no direct evidence for on-site activity was recorded.

2.3.3 These comprised several fragments of burnt and worked flint, one flint-tempered Iron Age pottery sherd, and an assemblage of Roman pottery, ranging in date from the first through to the late third or early fourth centuries. A residual third- to fourth-century Roman coin was also recovered from a Phase 2a post-hole **476** (G13C). The presence of several sizeable fragments of Roman brick and tile (often found in association with assemblages of animal bone, metalworking debris and large flint nodules) in the fills of later Anglo-Saxon and medieval pits suggests this material was purposefully re-used.

2.4 Undated features

2.4.1 Several features remained undated during the fieldwork but have subsequently been assigned to groups and phases through stratigraphic relationships and in some cases by spatial associations alone. In the following phase discussion, group tables detail any dating evidence available and stratigraphic relationships.

2.5 Modern truncation

2.5.1 The degree of modern truncation was slight with minimal damage to underlying deposits and features recorded through modern intrusions and service trenches associated with the 1950s development of the British Red Cross Centre building.

2.5.2 Agricultural activities during the later medieval, post-medieval and early modern periods almost certainly would have had some impact on any potential higher surviving stratigraphic sequences: this possibly accounted for the limited evidence for structural and building elements. Further horizontal truncation is evident along the Lower Chantry Lane street frontage.

2.6 Geology

(Not illustrated)

2.6.1 A geological Head deposit of compacted mid bright orangey brown, slightly sandy fine-grained silt clay, mottled with occasional darker lenses of mid grey orangey brown silt/clay extended across the full excavated area at an approximate depth of between +17.50 OD and +18.50m OD.

2.6.2 Underlying chalk bedrock was encountered during hand auguring at an approximate depth of between 3m below ground level at the south-eastern end of the site and 4m below ground level at the north-western end of the site.

2.7 Phase 1 Anglo-Saxon (c AD 750–1050)

(Fig 2)

2.7.1 The earliest activity was dated to the mid or late Anglo-Saxon period. This was represented by ditches, possibly forming the remnants of a field system (G1 and G8), linear features (G2 and G9), and pits (G3, G4, G5, G6 and G7). Pit groups (G3 and G4) appear to have been for the disposal of domestic and industrial refuse, while pit groups (G5 and G6) appear to have been for the disposal of cess. Five further pits (G7) were also possible refuse pits, though one contained a potential oven.

2.7.2 *Group 1 ditches (sets **543** and **300**)*

2.7.3 Ditch **543** was aligned north-east to south-west and extended for a length of 3.30m from the northern limit of excavation. The ditch measured 1.48m wide by 0.18m deep, with an extended 'U'-shaped profile. Potentially, this ditch might originally have extended across the excavation area, continuing as

300. Ditch **300** was exposed for a length of 2.30m before extending beyond the southern limit of excavation, and measured 0.82m wide by 0.27m deep.

Table 6. Group 1 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
543	Ditch, cut by [541]	543	542		3.41+	1.48	0.12
300	Ditch	300	299		2.30+	0.82	0.27

2.7.4 *Group 8 ditch (set **531**)*

2.7.5 A single south-west to north-east aligned ditch **531**, located 1.20m to the west of, and parallel with ditch **543** (G1). The feature was visible for a length of 3.20m, extending beyond the northern limit of excavation.

Table 7. Group 8 feature

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
531	Ditch, cut by [498]	531	530		3.04+	0.34	0.28

2.7.6 *Group 2 linear feature (set **565**)*

2.7.7 Linear feature **565**, aligned roughly east-south-east to west-north-west, had a visible length of 2.40m. The feature measured 0.82m wide by 0.32m deep, and had a 'V'-shaped profile.

2.7.8 Dateable cultural material comprised a single sherd of mid to late Anglo-Saxon (*c* AD 775–850) pottery and a small fragment of intrusive medieval or post-medieval tile. Other finds included animal bone (cattle and domestic cat), and metalworking residues, including a hearth bottom, hearth lining and iron slag.

Table 8. Group 2 feature

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
565	Linear feature, cut by [592], cuts [570]	565	565	AD 775–850	2.4+	0.81	0.32

2.7.9 *Group 9 linear feature (sets **391** and **754**)*

2.7.10 Feature **391** was located towards the centre of the excavation area, aligned east to west, parallel to the G1 and G8 linear features. The feature had a length of 1.45m and measured 1.18m wide by 0.27m deep, with an extended 'U'-shaped profile.

2.7.11 No cultural material or environmental samples were collected.

2.7.12 Feature **754** had a visible length of 2.15m, its east end continuing beyond the limit of excavation, its west end truncated by a medieval pit (G10), and measured 1.34m wide. The feature was not excavated.

Table 9. Group 9 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
391	Linear feature, cut by [385]	391	390		1.45	1.18	0.17
754	Linear feature, cut by [452]	754	753		2.15	1.34	?

2.7.13 *Group 3 refuse pits (sets **388, 634, 648, 701**, **708** and **758**)*

2.7.14 Six moderate- to large-sized pits were interpreted as domestic refuse pits. Non-uniform in shape, the largest pit **388** measured over 3.3m in length and exceeded 2.30m in width, while the smallest, pits **648**, **701** and **736** measured between 1.36 and 1.41m in length by between 0.93m and 1.20m wide. Where excavated, profiles were 'U'-shaped with uneven irregular sides and bases. The largest pits **388** and **758** were isolated from the smaller pits (**634, 648, 701** and **708**) which were clustered in the eastern corner of the site.

2.7.15 No pottery was recovered from these features. Fragments of re-used Roman tile were collected from pits **701** and **708**. An assemblage of animal bone (126 fragments) of which only 16 fragments were

identifiable to species, was entirely cattle. Metalworking debris was also present, including hearth bottoms (in **634** and **708**), furnace slag and hammerscale (from deposits (632), (633) in **634** and (705) in **708**), along with a single worked flint, an iron nail (SF33 from **634**), a fragment of quern stone (SF35 from **708**) and an unidentified structural element.

2.7.16 An environmental sample <108> was taken from a charcoal-rich deposit (421) in pit **388**. This produced further small fragments of ceramic building material (daub?), animal bone and slag/hammerscale along with oyster shell and fish bones. The washovers contained moderate quantities of charcoal and charred plant remains (including barley, free-threshing wheat, hazelnut shell and large pulses).

Table 10. Group 3 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
388	Large shallow pit, cut by [364], [386] and [389]	388	416, 421		3.31+	2.29+	0.36
634	Pit	634	629, 630, 631, 632, 633		1.38	1.3	0.60
648	Pit cut by [643]	648	644, 645, 646, 647		1.41	0.93	0.56
701	Largish pit, contains/cut by [653], cut by [704]	701	697, 698, 699, 700		1.24+	1.6	1.08
708	Pit, cut by [704]	708	705, 706, 707		1.36	1.2	0.66
758	Shallow scoop/step to/cut by [386], cuts [423]	758	757		2.78+	1.6	0.15

2.7.17 *Group 4 refuse pits (sets **386**, **387**, **704** and **711**)*

2.7.18 Four small refuse pits, measuring between 0.46m and 2.10m long by between 0.44m 1.37m wide, and between 0.26m and 1.3m deep, truncated the G3 pits.

2.7.19 Finds included six sherds of late Anglo-Saxon (*c* AD 850–950) pottery from pit **386**, and a single sherd of mid to late Anglo-Saxon (*c* AD 800–950) pottery from pit **711**. Eleven fragments of Roman ceramic building material were present, of which ten fragments came from pit **386**.

2.7.20 An assemblage of animal bone (213 fragments) included cattle (20 fragments) and dog (3 fragments).

2.7.21 Two environmental samples were collected: <107> from a charcoal-rich fill (407) in pit **386**; and <132> from a black silty deposit (709) in pit **711**. These produced further traces of pottery, ceramic building material and animal bone, along with slag/hammerscale, oyster shell, fish bones and three fragments of iron (SF948) from an unidentified object. The washovers contained frequent quantities of charcoal and charred plant remains (including barley, free-threshing wheat and oat).

Table 11. Group 4 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
386	Large pit, cut by [387], cuts [388]	386	401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413	AD 850–950	2.10+	2.71	1.3
387	Shallow pit cuts [386]	387	414, 415		1.45	1.37	0.45
704	Small pit, cuts [701] and [708]	704	702, 703		0.72	0.70	0.32
711	Small pit	711	709, 710	AD 800–950	0.46	0.44	0.26

2.7.22 *Group 5 cess pits (sets **357**, **364**, **367**, **541**, **570** and **688**)*

2.7.23 Six pits (note: **367** is not shown in plan), of square or rectangular shape, shared a degree of uniformity both in their size and morphology. The largest, pit **357** measured 1.95m by 1.47m, while the smallest, pit **570**, measured 1.40m by 1.10m. These pits were markedly deeper than other pit groups, with pit **570** being the shallowest at 1.20m deep, whilst both pits **357** and **364** exceeded 1.90m in depth (the base of pit **364** was established at a depth of 2.33m by hand auguring). The pits all had vertical sides, with thin layers of silt/degraded wood against the edges potentially indicating timber lining or shoring. Where exposed, bases were flat.

2.7.24 Several pits contained 'organic' and cess-like fills, notably deposit (568) in pit **570**. Other fills were particularly rich in charcoal (deposits (535) and (537) in pit **541**, and (673) in pit **688**) or contained large assemblages of animal bone ((535) and (537) in pit **541**) and metalworking debris (particularly deposits (374), (375) and (376) in pit **664**).

2.7.25 Dateable cultural material included thirty-seven sherds of middle to late Anglo-Saxon pottery, the majority (twenty-nine sherds from pits **364** and **688**) are dated to *c* AD 800–925. Pit **541** produced three sherds of slightly earlier material dated to *c* AD 775–850. Later early medieval pottery was evident in pit **364** where two individual sherds are dated to *c* AD 950–1100 and *c* AD 1150–1200; both sherds were interpreted as being intrusive.

2.7.26 A small assemblage of ceramic building material included seven fragments of undatable daub, five fragments of (residual/re-used) Roman ceramic building material including *tegula*. A single fragment of intrusive medieval or post-medieval tile was collected from pit **541**.

2.7.27 A large assemblage of animal bone (1495 fragments) was recovered, mainly from pits **364**, **541**, and **688**. For the majority of this material (approximately 1200 fragments), the species could not be identified, although nearly a third (560 fragments) are from large- or mid-sized mammals. Of the identifiable species, cattle were the most prevalent (88 fragments), followed by dog, horse, hare and 32 fragments (including skull and mandible) from a single cat.

2.7.28 Metalworking debris (weighing over 5kg) was present, comprising fragments of smithing hearth bottoms (from pits **664** and 5**70**), furnace slag and hammerscale. Iron nails and unidentified iron fragments (SF14, 15, 25 and 27) came from pits **634**, **541** and **570**, and a fragment of a glass bead (SF28), dated to *c* AD 530–580 was retrieved from pit **541**. Other cultural material present included oyster and mussel shell.

2.7.29 Three bulk environmental samples <104>, <105> (from charcoal rich deposit (375)) and <106> (from 'cessy' deposit (382)) and two smaller spot environmental samples (<109> and <110>) were taken from the fills of pit **364**. The bulk samples produced further pottery, slag/hammerscale and animal bone, along with oyster shell, bird and fish bones and an iron nail or rod (SF975); whilst the washovers contained frequent quantities of charcoal, charred plant remains (including barley, free-threshing wheat, pea and rye) and fish bones. Two spot samples were taken from a postulated degraded wood lining <109> and from a hand augur sample at a depth between 1.93m and 2.33m. Both contained faecal concretions, fish bone, traces of bird and large mammal bone (some burnt), mineralised fruit pips, other mineralised seeds and from the washovers, frequent bran-rich mineralised concretions, mineralized pea and/or beans.

2.7.30 Mineralised concretions form where cess deposits have decayed under damp conditions, against a surface/barrier such as a timber lining (Enid Allison, pers comm). Further environmental samples were taken from **541** (<123>, <124> and <125>), **570** (<119>) and **688** (<130> and <131>). These produced a similar assemblage to the samples from **364** (above), along with further feacal concretions with bran from deposits recorded as 'cess-like', and iron fragments (SF971 and SF973).

Table 12. Group 5 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
357	Large square pit, cut by [331] cuts [364]	357	350, 351, 352, 353, 354, 355, 356	AD 800–900	1.95	1.47	1.90+
364	Large square pit, cuts [367] and [388], cut by [357]	364	358, 359, 360, 361, 362, 363, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 424, 425	AD 800–925, AD 950–1100	1.72	1.68	1.90+
367	Shallow pit, remnants of, cut by [364]	367	365, 366		n/a	n/a	1.8
541	Large rectangular pit, cuts [543]	541	533, 534, 535, 536, 537, 538, 539, 540	AD 775–850	1.68	0.98	1.25
570	Large square/oval pit, cut by [565]	570	567, 568, 569, 578, 579, 580		1.4	1.09	1.2
688	Large square (?) pit, cut by [756]	688	667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724	AD 800–925, AD 850–950	1.7	1.7	1.38

2.7.31 *Group 6 cess pits (sets **331**, **639**, **641** and **756**)*

2.7.32 Four small pits truncated the G5 cess pits. The pits are poorly dated and their association with the cess pits is tenuous. However, as with the G4 pits they are seen as further use of the site during the Anglo-Saxon period after a potential hiatus in which the G3 refuse and G5 cess pits have gone out of use.

2.7.33 Dateable material was restricted to three sherds of pottery from pit **639**. This comprised a single sherd of middle to late Anglo-Saxon date (*c* AD 775–875) found in the base of the pit, and two sherds of early medieval material retrieved from the upper fill. A sizeable assemblage of undated ceramic building material was present in pit **639**; comprising 43 fragments of daub (including one piece with a plastered face) and a single piece of burnt mortar.

2.7.34 An assemblage of animal bone (40 fragments), included four fragments identifiable as cattle.

2.7.35 Two environmental samples <128> and <129> were collected from deposits (635) and (638) (recorded as potentially carbonised wood) in pit **639**. These produced further traces of ceramic building material (brick/tile and daub?) and animal bone, along with slag/hammerscale, burnt flint, mussel shell, fish bones and two potential Roman hobnails (SF931 and SF933). The washovers contained frequent quantities of charcoal (including large fragments of probable oak from <129>), charred plant remains (including barley, free-threshing wheat, oat/brome, pea and rye), and unidentified iron-rich heat affected material (HAM).

Table 13. Group 6 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
331	Small pit, cuts [357]	331	330		0.68	0.48	0.13
639	Pit, cuts [641]	639	635, 636, 637, 638	AD 775–875, AD 1200–1275	1.1	1.1	0.6
641	Pit, cut by [639]	641	640		1.1	1.1	0.19
756	Pit?, unexcavated feature, cut by [620], cuts [688]	756	755		0.68+	0.85	unex

2.7.36 *Group 7 miscellaneous pits* (sets **217**, **492**, **498**, **525** and **653**)

2.7.37 Five pit-like features could not be confidently assigned to either cess or refuse pit group, and are potentially later in date containing material from the mid ninth to eleventh centuries. Of these, pit **525** was possibly a cess pit being rectangular or oval in shape with a depth of 1.92m; however there was no evidence of cess-like deposits within its fills. Pit **498**, which was excavated to a depth of 1.40m, also had no evidence for cess-like deposits, though it was thought that this pit may originally have been a cess pit which had collapsed and its upper limits then utilised for refuse disposal. The remaining three pits were subjected to secondary use for refuse disposal but the presence of furnace bottoms in pit **217** and **492** (also present in **498**), and an oven in pit **653** cut into the backfill of G3 pit **701**, suggest a primary use directly associated with industrial or domestic activities.

2.7.38 Dateable cultural material included nine sherds of middle to late Anglo-Saxon pottery, dated to *c* AD 850–950/1050, from pits **498**, **525** and **653**. Pit **653** also contained two early medieval pottery sherds, dated to *c* AD 1175–1250, in its upper fill. Eleven fragments of re-used Roman ceramic building material was also recovered.

2.7.39 Other cultural material included a moderate assemblage of animal bone (557 fragments), the majority of which was unidentifiable to species, with only 32 fragments identified as cattle and two from an amphibian. A large assemblage of metalworking debris was also present including fragments from a smithing hearth bottom and vitrified hearth lining in pits **217** and **498,** and a large fragment (6.8kg) of furnace base comprised of smelting slag in pit **492**. Registered finds included a mid to late Anglo-Saxon type loom weight (SF23) from pit **498**, and three copper alloy objects (SF930, 935 and 943) from pits **498**, **653** and **217**.

2.7.40 Environmental samples <100>, <117> and <133> were taken from pits **217**, **498** and **653**. These produced further traces of ceramic building material (daub with wattle impressions from **653**), animal bone and slag/hammerscale, along with mussel shell, bird bones, fish bones and a fragment of copper alloy (SF940). The washovers contained frequent quantities of charcoal, several charred plant remains (including barley, emmer/spelt wheat, free-threshing wheat, hazelnut shell, pea and rye), HAM, and sandy concretions.

Table 14. Group 7 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
217	Pit, cut by [213]	115	114		1.3	1.2	.8+
		217	214, 215, 216		1.3	1.2	.8+
492	Pit, cut by [431] and [512]	492	508, 509, 510		0.96+	0.72+	0.57
498	Large square/ oval pit, cuts [531]	132	131	AD 850–950/1050	2.01	1.62	1.40+
		498	493, 494, 495, 496, 497				
525	Large rectangular/oval pit, cut by [527]	525	519, 520, 521, 522, 523, 524	AD 850–950/1050	1.62	1.04	1.92
653	Oven in/cuts pit [701], cut by 618	653	649, 650, 651, 652	AD 850–1100, AD 1175–1250	1.47	.56+	0.29

2.8 Phase 2A early medieval (c AD 1050–1250)

(Fig 3)

2.8.1 Following a hiatus in activity, use of the site for the digging of cess (G10), refuse (G11) and other miscellaneous pits (G12) resumed during the early medieval period, with recovered pottery suggesting this occurred during the mid twelfth century, with some minimal earlier activity potentially occurring from the late eleventh century. The spatial distribution of pits appears to form a rough north-west to south-east alignment through the centre of the site, perpendicular to Lower Chantry Lane. A remnant soil horizon, possibly part of a more widespread cultivated soil (G15) survived towards the front of the site. Limited evidence for the establishment of fence lines and potential timber buildings was recorded, with structural elements comprising post-holes (G13A–C), a small oven (G14), stake-holes (G16), and a potential beam-slot (G17) indicating the establishment of land plots and associated dwellings fronting the road.

2.8.2 *Group 10 cess pits* (sets **315**, **320**, **347**, **452**, **489** and **599**)

2.8.3 Six cess pits were identified, with a similar morphology to the earlier Phase 1 (G5) cess pits. The pits were truncated by later features. Pit **315** was sub-rectangular in shape, measuring 2.36m by 1.20m, with a depth of 2.05m. Pit **320** was rectangular and measured 1.67m by 1.08m, with a depth hand excavated to 1.27m, but later augured to its base at 3.96m. Hand auguring in pit **599** also established the base at 2.35m. All six pits had vertical sides, although the upper limits of pit **315** had collapsed before being re-used for refuse disposal, and they were all seemingly timber-lined with thin layers of silt/degraded wood against their edges. Where exposed, the pits had flat bases.

2.8.4 Dateable cultural material included 127 sherds of mid to late twelfth- to mid to late thirteenth-century pottery. The majority (115 sherds) of this assemblage derived from pit **315**, and was dated to *c* AD 1200–1275. A smaller assemblage recovered from pit **320** comprised of five sherds dated to *c* AD 1175–1225. Potentially later pottery came from pit **452** which contained four sherds dated to *c* AD 1225–1325. Pit **599** had five sherds dated to *c* AD 1150–1225 or *c* AD 1175–1225, and a single sherd dated to *c* AD 1275–1350. Seventeen fragments of medieval ceramic building material, and six fragments of re-used Roman ceramic building material, including a *tegula* roofing tile, were also recovered.

2.8.5 Animal bone included 5 fragments identified as cattle and 52 fragments unidentifiable to species. An iron horseshoe (SF8) and two fragments of worked stone were recovered from pit **315**.

2.8.6 Three environmental samples <122>, <126> and <127> were taken from (497), (608) and (609) in pit **599**. The bulk samples produced further pottery, ceramic building material (tile/brick) and animal bone, along with oyster shell, amphibian, bird and fish bones, slag/hammerscale and traces of faecal concretions/coprolite. Washovers contained frequent quantities of charcoal, abundant charred plant remains (almost pure barley, with occasional pea and rye) and 'ashy' slag. Small spot environmental samples were taken during the hand auguring of pit **320** (<113> at depths between 1.27 and 3.77m, and <114> between 3.77 and 3.96m) and 315 (<116> at depths between 2.04 and 3.28m). These produced further traces of animal bone and hammerscale, and the washovers contained occasional quantities of charcoal and charred plant remains (including frequent chaff, free-threshing wheat and possible oat).

Table 15. Group 10 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
315	Large pit, cuts [385]	315	313, 314, 329		2.36	1.2	2.05
320	Large square pit, cut by [317] and [324]	320	319	AD 1175–1225	1.67	1.08	1.27–3.96
347	Large pit, heavily truncated, cut by [343] and [369]	347	344, 345, 346, 399		2.52	1.46	1.17
		349	348, 392, 400		2.52	1.46	1.17
		383	418		2.52	1.46	1.17
		764	763		2.52	1.46	1.17
452	Large square pit, cut by [457], cuts [754]	452	449, 450, 451	AD 1200–1250/75, AD 1225–1325	1.09+	1.33	1.2
489	Square pit, cut by [457] only N/W corner survives in plan	489			0.28+	0.70+	0.18
599	Large circular/square pit , cut by [602]	102	101	AD 1275–1350	1.94	1.60	1.20–2.35
		599	595, 596, 597, 598, 608, 609	AD1150–1200, AD 1175–1225			

2.8.7 *Group 11 refuse pits* (sets **289**, **292**, **457**, and **694**).

2.8.8 Four large refuse pits were identified. These pits were circular in shape, with shallower (non-vertical) edges, in contrast to the G10 cess pits. However, they were still quite deep, with pits **289**, **292** and **457** measuring between 0.92m and 1.13m deep, whilst hand auguring in pit **694** identified the base at 3.80m deep.

2.8.9 Pottery (315 sherds) was dated to the late twelfth to late thirteenth century. This included 128 sherds from pit **292**, of which 88 sherds were dated to the first half of the thirteenth century (*c* AD 1200–1250) and 40 sherds were later transitional material dated to *c* AD 1225–1300. Pit **457** contained 72 sherds dated between *c* AD 1175 and 1275.

2.8.10 Other material included 22 fragments of medieval ceramic building material and six fragments of re-used Roman ceramic building material. Animal bone (81 fragments) included eight fragments identified as cattle, one as deer and 14 from an amphibian. Undiagnostic iron rich slag/hammerscale and oyster shell was also present, along with fragments of worked stone, an iron pin (SF21), and iron strip (SF22), both from pit **457**, and unidentified iron fragments (SF 925) from pit **694**.

Table 16. Group 11 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
289	Large circular pit, cut by [138] and [285], cuts [142] and [292].	140	139	AD 1175–1250	1.91	1.67	0.92
		289	286, 287, 288	AD 1200–1250, AD 1225–1275	1.91	1.67	0.92
292	Large circular pit, cut by [140] and [289], cuts [396]	142	141	AD 1225–1300	1.74	1.56	0.92
		292	290, 291	AD 1200–1250/75	1.74	1.56	0.92
457	Large circular pit, cuts [452] and [489]	457	453, 454, 455, 456, 461	AD 1175–1250, AD 1200–1275	1.83	1.52	1.13
694	Large oval/circular pit, cut by [620], [664] and [695]	694	692, 693, 730, 731, 732		2.95	2.05	1.30–3.80
		696	692, 693, 730, 731, 732		2.95	2.05	1.30–3.80

2.8.11 *Group 12 miscellaneous pits* (sets **220**, **228**, **230**, **273**, **285**, **304**, **312**, **385**, **389**, **396**, **420**, **507**, **553**, **555**, **559**, **602**, **664**, and **760**)

2.8.12 Eighteen miscellaneous pits were identified. The profiles were not steep enough to be seen as forming cess pits and no evidence of cess-like deposits were observed. Similarly, fewer finds and the general smaller size and shallower depth (the majority being between 0.30m and 0.60m deep) of these pits differentiated them from the G11 refuse pits. Pit **220** exceeded 1m in depth, whilst pit **602** was 0.98m deep. Pit **760** was excavated to a depth of 0.50m, but was not bottomed.

2.8.13 An assemblage of 117 sherds of pottery was recovered from these features, the majority of which was dated to the late twelfth to late thirteenth century. Pit **285** contained 24 sherds of later transitional material dated to *c* AD 1225–1275, while pit **430** contained a single sherd dated to *c* AD 1200–1325. Further dateable cultural material included a small assemblage (32 fragments) of medieval ceramic building material, of which 15 fragments came from pit **228**.

2.8.14 Other material included a small assemblage of animal bone (61 fragments), of which seven fragments could be identified as cattle. Metalworking debris was present in pit **389** and pit **507**, including fragments from a smithing hearth bottom from pit **507**. Worked stone was also present in pit **228** and pit **668**.

Table 17. Group 12 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
220	Pit	220	218, 219	AD 1175–1225, ×1 AD 1275–1375	1.32	1.10	1.08
228	Smallish pit, cut by [769]	136	135	AD 1075–1150	1.08	0.98	0.57
		228	226, 227	AD1200–1275	1.08	0.98	0.57
230	Smallish pit	230	229		1.22	0.74	0.33
273	Pit, cut by [260] and [271]	273	272	AD 1200–1250	0.35+	>28+	0.38
285	Pit, cuts [140] and [289]	138	137		1.12	0.80	0.32
		285	284	AD 1225–1275	1.12	0.80	0.32
304	Small pit, cut by [305]	304	303	AD 1175–1250	0.72	0.56	0.16
312	pit	312	311		0.77+	0.75	0.25
385	Pit, cut by [315], cuts [391]	385	384	AD 1200–1250,	1.18	0.83	0.44
389	Shallow pit/depression, cuts [388]	389	417	AD 1275–1350	1.37	1.06	0.3
396	Small pit, cut by [292]	396	395		1.30	0.84	0.23
420	Small pit	420	419	AD 1200–1325	0.50	0.43	0.18
507	Smallish pit, cut by [504]	507	505, 506	AD 1200–1250/75	1.28	1.22	0.4
551	Pit?, cuts [555]	551	550		1.03	0.15+	0.34
553	Pit, cuts [561]	553	552	AD 1150–1225	1.50	0.80	0.46
555	Pit, cut by [547] and [551], cuts [559] and [561]	555	554, 571, 572		0.6+	0.69	0.36
559	Pit, cut by [555], cuts [561]	559			0.72+	0.38+	0.27
602	Pit?, cuts [599] and [616]	602	600, 601	AD 1150–1225	0.30+	0.80	0.98
664	Large pit, cuts [694]	664	667, 668, 766, 767	AD 1200–1250/75	1.10	1.04	0.9
760	Pit, cut by [283]	154	153		0.61+	1.16	0.5
		760	759				

2.8.15 *Group 15 soil horizon* (set **725**)

2.8.16 The remnant of a soil horizon was located towards the front of the site, forming an apparent south-west to north-east alignment. Its surviving extents measured *c* 5m by 1m, being between 0.05 and 0.15m thick. Interpreted as a cultivated or developed soil, formed through either agricultural or horticultural activities (ie ploughing), it possibly originally extended to the south-east to occupy the majority of the site. A post-hole alignment (G13A) located along its north-western limits, potentially represented a fence line which helped to preserve the soil.

2.8.17 Two sherds of pottery dated to *c* AD 1150–1225 and AD 1225–1350 were retrieved. The soil was truncated by the G13A post-holes/pits.

Table 18. Group 15 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
725	Soil horizon, cut by [655], [727], [729], [742] and [748]	725		AD 1150–1225, AD 1225–1350			

2.8.18 *Group 13A fence line* (sets **504**, **655**, **691**, **727**, **729**, **746** and **748**).

2.8.19 A line of seven post-holes (**504**, **655**, **691**, **727**, **729**, **746** and **748**) formed a potential fence line extending for approximately 9m on a south-west to north-east alignment. The post-holes measured between 0.2m and 0.66m in diameter and between 0.08m and 0.23m deep. The fence line extended parallel to Lower Chantry Lane, and potentially acted as a boundary between land on the road frontage and pit digging on land to the rear.

Table 19. Group 13A features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
504	Post-hole, cut by [478], cuts [507]	504	503		0.66	0.47	0.17
655	Post-hole, cuts layer (725)	655	654		0.42	0.42	0.13
691	Post-hole	691	689, 690		0.54	0.38	0.23
727	Post-hole, cuts 725	727	726		0.22	0.2	0.08
729	Post-hole, cuts 725	729	728		0.44	0.41	0.09
746	Post-hole, unexcavated, cut by [744], cuts 725	746	745		0.62	0.56	unex
748	Post-hole, unexcavated, cuts 725	748	747		0.6	0.54	unex

2.8.20 *Group 13B fence line* (sets **428, 448, 488, 750** and **751**)

2.8.21 Three post-holes (**428**, **448** and **488**) formed a potential fence line extending for approximately 5m on a north-west to south-east alignment. The post-holes measured between 0.47m and 0.73m in diameter and between 0.19m and 0.37m deep. The fence line extended perpendicular to the G13A fence alignment, and might represent a subdivision of land fronting onto Lower Chantry Lane. Two further post-holes, **750** and **752**, were tentatively attributed to this group, extending the fence line 13m further to the south-east. Pottery recovered from post-hole **488** was dated to *c* AD 1075–1200, while an unidentified lead object (SF18) was collected from post-hole **428**.

Table 20. Group 13B features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
428	Post-hole	428	427		0.57	0.52	0.19
448	Post-hole, cut by [500]	448	446, 447		0.73	0.68	0.3
488	Post-hole	488	487, 490	AD 1075–1200	0.53	0.47	0.37
750	Unexcavated pit/post-hole	750	749		0.61	0.49	unex
752	Unexcavated pit/post-hole, cut by [577]	752	751		0.78	0.62	unex

2.8.22 *Group 13C miscellaneous post-holes* (sets **119**, **121**, **134**, **371, 464**, **472**, **474**, **476, 480**, **482**, **484**, **486**, **545**, **547**, **549, 616**, **626**, **628**, **643**, **659**, **657**, **661, 663** and **666**)

2.8.23 A further 24 post-holes were recorded for which no clear alignments could be determined. Post-holes **628**, **643**, **657**, **659**, **661**, **663** and **666** were focused towards the frontage with Lower Chantry Lane. Post-holes **464**, **472**, **476**, **480**, **482**, **484**, **486**, **545**, **547**, and **549** were focused around a potential oven (G14). Post-holes **119**, **121**, **134**, **371** and **616** were scattered across the rear of site within the area of pit digging.

2.8.24 Pottery from post-hole **371** was dated to *c* AD 1225–1325. A Roman copper alloy coin (SF20), dated to the third or fourth century, was recovered from post-hole **476**.

Table 21. Group 13C features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
119	Post-hole	119	118		0.29	0.23	u/x
121	Post-hole	121	120		0.18	0.17	u/x
134	Posthole	134	133		0.75	0.49	u/x
371	Post-hole, cuts [328] and [343]	371	370	AD 1250–1325	0.7	0.6	0.31
464	Post-hole, cut by [445]	464	462, 463		0.46	0.27	0.33
472	Post-hole	472	471		0.29	0.29	0.11
474	Post-hole	474	473		0.29	0.21	0.09
476	Post-hole	476	475		0.29	0.18	0.09
480	Post-hole	480	479		0.25	0.29	0.06
482	Post-hole	482	481		0.28	0.26	0.09
547	Post-hole, cuts [549] and [555]	547	546		0.43	0.2+	0.13
549	Post-hole, cut by [547], cuts [561]	549	548		0.4	0.2+	0.29
484	Post-hole/stakehole	484	483		0.2	0.13	0.1
486	Post-hole	486	485		22	0.2	0.05
545	Post-hole, cuts [561]	545	544		0.22	0.18	0.12
616	Post-hole, cut by [602], partly seen	616	615		0.23	0.6+	0.19

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
628	Post-pipe in [628]	626	625		0.4	0.3	0.35
	Post-hole, cuts [634]	628	625, 626, 627		0.4	0.3	0.35
643	Post-hole, cuts [648]	643	642		0.78	0.62	0.09
657	Post-hole	657	656		0.2	0.2	0.11
659	Post-hole	659	658		0.85	0.85	0.18
661	Post-hole	661	660		0.35	0.35	0.12
663	Post-hole	663	662		0.36	0.36	0.14
666	Post-hole	666	665		0.9	0.75	0.11

2.8.25 *Group 14 oven feature* (set **561**)

2.8.26 A potential oven **561**, with surviving burnt clay superstructure (532), was partly exposed against the northern edge of excavation, where its base and flue survived. Possibly an external small bread oven, the pit in which it was constructed was later used for refuse disposal.

2.8.27 Two sherds of pottery from a jug, dated to *c* AD 1200–1300, were recovered; however the oven was truncated by pit **553** (G12) which contained four sherds of pottery dated to *c* AD 1150–1225, suggesting a thirteenth-century date. The only other dateable cultural material was a single sherd of undiagnostic Roman ceramic building material. Thirteen fragments of animal bone were also recovered, of which twelve were identified as pig.

Table 22. Group 14 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
561	Oven in pit [561], cut by [545] [549] [553]	532			0.6	0.43+	0.13
		561	573, 574, 575	AD 1200–1300	1.64	1.16	0.5

2.8.28 *Group 16 stake-holes* (set **305**, **307** and **594**)

2.8.29 Three miscellaneous stake-holes were identified. Two (**305** and **307**) were situated adjacent to each other on the south side of the site, the third (**594**) was located on the east side of the site.

Table 23. Group 16 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
305	Stake-hole, cuts [304]	305			0.08	0.06	0.06
307	Stake-hole	307	306		0.16	0.16	0.1
594	Stake-hole, cut by [577]	594	593		0.17	0.17	0.36

2.8.30 *Group 17 potential beam slot* (set **478**)

2.8.31 A short linear feature, aligned roughly north-west to south-east, was recorded as a potential beam slot, though its full extents were truncated by a modern wall to the south-west.

Table 24. Group 17 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
478	?Beam slot, cuts [504]	478	477		0.50+	0.3	0.08

2.9 Phase 2B high medieval (c AD 1250–1400)

(Fig 4)

2.9.1 Activity within the site appears to have continued from the earlier phase, intensifying during the mid thirteenth and early fourteenth centuries, but declining towards the late fourteenth century. The small amount of late medieval pottery present suggests that activity did not continue after *c* AD 1400.

2.9.2 An increase in the number and distribution of pits is evident, with both cess (G28), refuse (G29) and miscellaneous (G21 and G27) pit groups defined. A midden-like soil layer (G25) was seemingly laid down to consolidate the loosely infilled G27 pits. Other features included small groups of post-holes (G22 and G22a) and linear features (G18, G23 and G24).

2.9.3 *Group 28 cess pits* (sets **240**, **253**, **324**, **328** and **586**)

2.9.4 Five cess pits were identified, being similar in morphology to the earlier Phase 1 (G5) and Phase 2a (G10) cess pits, and containing variable organic or cess-like fills. Re-cutting within individual pits was evident, indicating reuse through to the later part of the fourteenth century. Four of the pits (**240**, **253**, **324** and **328)** show similar square or rectangular shapes and vertical profiles with (augured) depths exceeding 2m (pit **240** was hand excavated to a depth of 1.46m). Pit **586** was more sub-rectangular or oval, measuring 3.09m long by 1.08m wide and 1.05m deep, and may represent two separate pits. Except for pit **586**, the cess pits appeared to have been originally timber-lined with thin layers of silt/degraded wood against their vertical edges. Where exposed, the pit bases were all flat.

2.9.5 A moderate assemblage (248 sherds) of pottery came from the five pits. This included 110 sherds from pit **586**, all dated to *c* AD 1350–1450. Pit **253** contained seventy-four sherds, the majority of which dated to *c* AD 1325–1400, the remainder to *c* AD 1300–1375. Twenty sherds recovered from pit **324** were all dated to *c* AD 1300–1375. Whilst pit **328** produced five sherds of the same date and nine sherds dated to *c* AD 1325–1400; earlier residual material included fifteen sherds dating to *c* AD 1175–1225, and one sherd of ninth-century date. Pit **240** also contained three sherds of late Anglo-Saxon date (*c* AD 800–900) along with mid thirteenth- to mid fourteenth-century material.

2.9.6 Ceramic building material (121 fragments), mainly comprising medieval tile, included two fragments of (re-used) Roman tile and six fragments of medieval glazed tile.

2.9.7 Recovered animal bone (260 fragments) included 131 fragments identified as large- or mid-sized mammals, 21 cattle, 14 pig, 14 sheep, two deer, and four frog. Other material included fragments of undiagnostic iron-rich slag from pit **328**, which also contained oyster shell and three iron nails (SF11, 12 and 13), a copper alloy pin (SF9) and a fragment of worked stone from pit **324**, and an iron knife (SF5), ten iron nails and three fragments of worked stone from pit **240**.

2.9.8 Environmental samples were taken from pit **240** (<101>) and pit **586** (<126>). These produced further pottery, ceramic building material (tile/brick), animal bone, slag/hammerscale and oyster shell, along with mussel shell, bird and fish bones, mineralized fruit pips, bran, stem fragments, faecal concretions (which comprised approximately 90% of the residue from sample <101>) and an iron nail (SF 972). Washovers contained moderate quantities of charcoal, frequent charred plant remains (including barley, emmer/spelt wheat, free-threshing wheat, hazelnut shell, oat/brome, pea and rye), bran curls and apple seeds. One small spot environmental sample was also taken during the auguring of pit **253** (<112> at depths between 1.45 and 2.67m) and pit **324** (<115> at depths between 1.36 and 2.67m). These produced further traces of animal bone including fish bone; the washovers contained occasional quantities of charcoal, charred plant remains (including barley, free-threshing wheat, oat and large pulses) and mineralized concretions with bran curls.

Table 25. Group 28 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
240	Large pit, cut by [130], [220], [225] and [232], cuts [235], [283] and [295]	127	126		2.16	1.5	146+
		240	236, 237, 238, 239, 241, 242, 243, 244, 245, 254	AD 1250–1350, ×1 intrusive C15th?, ×3 residual C9th–10th	2.16	1.5	146+
		309	308	AD 1225–1325	2.16	1.5	146+
253	Large square pit, cuts [248], [250], [295] and [395]	253	251, 252, 293	AD 1300–1375, AD 1325–1400	1.28	1.26	1.45–2.69
324	Large pit, cut by [317], [328] and [398], cuts [320]	324	321, 322, 323	AD 1300–1375	1.8	1.4	1.36–2.07
328	Large square pit, cuts [324], [347] [349] and [369], cut by [338], [371] and [398].	328	325, 326, 327	AD 1300/25–1375, residual C13th	1.47	1.27	1.36–2.08
		343	339, 340, 341, 342	AD 1175–1225	1.47	1.27	1.36–2.08
586	Large square oval pit, cut by [607]	586	581, 582, 583, 584, 585	AD 1350–1450	3.06	1.08	1.05

2.9.9 *Group 29 refuse pits* (sets **283**, **295** and **607**)

2.9.10 Three refuse pits **283**, **295** and **607** were defined. Pit **283** cut pit **235** (G21), and pit **607** cut cess pit **253** (G28), which contained pottery dated to *c* AD 1350–1450, possibly indicating activity extending up to the end of the fourteenth century.

2.9.11 A moderate assemblage (226 sherds) of pottery came from the three pits. Pit **283** contained 119 sherds, of which 110 sherds were dated to *c* AD 1325–1400, the remainder to *c* AD 1250–1350. Seventy-four sherds from pit **607** were dated to *c* AD 1325–1400. Pit **295** contained 30 sherds dated to *c* AD 1325–1375 and two sherds dated to *c* AD 1275–1350.

2.9.12 There were 283 fragments of ceramic building material collected from the three pits, comprising 164 fragments from pit **607**, and 101 fragments from pit **283**, and included three fragments of medieval glazed tile.

2.9.13 Animal bone (184 fragments) included nine fragments identified as sheep, two fragments identified as cattle and pig, and a further 42 fragments identified from large- or mid-sized mammals.

2.9.14 Other finds included fragments of undiagnostic iron-rich slag, iron nails, worked stone, and a copper alloy object (SF940) from pit **283**.

2.9.15 Two environmental samples <102> and <103> were collected from a charcoal rich deposit (279) and the primary silting (282) from pit **283**. These produced further fragments of pottery, ceramic building material (brick/tile/daub), animal bone (mostly burnt) and slag/hammerscale, along with oyster shell, bird and fish bones, a copper alloy fragment (SF283) and two iron nails (SF974 and 976). The washovers contained frequent quantities of charcoal, charred plant remains (including barley, free-threshing wheat, hazelnut shell, pea and rye), and frequent ashy/mineralised faecal concretions.

Table 26. Group 29 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
283	Large pit, cuts [320], [324] and [760].	283	278, 279, 280, 281, 282	AD 1325–1400	2.4	1.8	0.85
		317	316	AD 1175–1225	2.4	1.8	0.85
295	Shallow pit, cut by [253] and [309]	295	294	AD 1275–1350	1.19+	1.17	0.22
607	Large pit, cut by [614], cuts [586], [773] and [775]	123	122		3.16	1.82	0.86
		607	603, 604, 605, 606, 610, 611, 612	AD 1325–1400			

2.9.16 *Group 21 miscellaneous pits* (sets **148**, **205**, **225**, **232**, **235**, **248**, **250**, **394**, **592**, **620**, **695** and **773**)

2.9.17 Twelve pits could not be confidently defined as either cess or refuse pits. The pits were in general smaller in size and shallower, measuring between 0.08m and 0.70m deep. One notable exception was pit **695**, which though heavily truncated, had a single fill recorded to a depth of 1.20m.

2.9.18 Pottery (76 sherds) from these pits spanned the twelfth to fifteenth centuries, with a significant majority dating to the early fourteenth- to mid-fifteenth-century. This included two sherds from pit **235** and three sherds from pit **592** dated to *c* AD 1350–1450. Fifteen sherds from pit **620** were dated to *c* AD 1325–1400 and eleven sherds from pit **225** were dated to *c* AD 1300–1400.

2.9.19 Eighty-one fragments of medieval ceramic building material was recovered, including seven fragments of glazed medieval tile.

2.9.20 Recovered animal bone (71 fragments) included 14 fragments identified as horse, pig (1 fragment) and deer (1 fragment). Other finds comprised metalworking debris, including furnace slag, worked flint and oyster shell.

2.9.21 An environmental sample was taken from a grey ash deposit (591) infilling pit **592** (<120>). This produced further pottery, animal bone, slag/hammerscale and oyster shell, along with mussel shell, bird and fish bones, mineralized fruit pips, bran and an iron nail; no faecal concretions were present. Washovers contained moderate quantities of charcoal, frequent charred plant remains (including barley, beans, emmer/spelt wheat, free-threshing wheat, hazelnut shell, oat/brome, pea and rye), bran curls and apple seeds.

Table 27. Group 21 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
148	Shallow pit, possible subsoil\garden feature, cuts [152]	148	147		1.3	0.98	u/x
205	Shallow pit/depression, cuts [152] and [207]	150	149		1.14	0.74	0.08
		205	204		1.14	0.74	0.08

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
225	Pit, cuts [240]	225	221, 222, 223, 224	AD 1250–1350, ×2 AD 1350–1450	0.84	0.64	0.7
232	Pit, cuts [240]	125	124		1.1	0.8	0.4
		232	231, 277, 310	AD 1350–1425	1.1	0.8	0.4
235	Pit, cuts [127], cut by [240]	130	128, 129	AD 1250–1350	.90+	0.88	0.55
		235	233, 234	AD 1350–1425	.90+	0.88	0.55
248	Pit, cut by [395]	248	246, 247	AD 1250–1325, AD 1275–1375	1.08	0.9	0.46
250	Shallow pit, cut by [253]	250	249	AD 1350–1450	0.86	.52+	0.23
394	Small pit to S/E of/cut by [253], cuts [248]	394	393		0.71	0.56	0.3
592	Pit, cuts [565] and [577]	592	591	AD 1350–1450	0.99	0.73	0.22
620	Pit, cut by [695], cuts [694] and [756]	620	619, 734, 735, 736	AD 1325–1400	1.43	1.22	0.3
695	Large squarish pit, partly excavated, cuts [620] and [694]	695	733		1.14	1.12	1.20+
773	Unidentified feature, cut by [607]	773	772		1.06	0.61	unex

2.9.22 *Group 27 miscellaneous pits* (sets **260**, **262**, **264**, **267**, **269**, **271**, **302**, **369**, **398, 445, 491** and **783**)

2.9.23 Twelve pits could not be confidently defined as either cess or refuse pits. The pits were in general smaller in size and shallower, measuring between 0.27 and 0.75m deep. Pit **267** measured 1.14m deep; its profiles did not conform to the steep (near vertical) sided cess pits. Pit **369** measured 2.30m deep (established by hand auger), and might represent the remnants of a cess pit but an environmental sample produced no evidence for cess-like deposits.

2.9.24 Pottery (72 sherds) from these pits was in general dated to the mid thirteenth to late fourteenth centuries. This included transitional wares (AD 1225–1300) from pit **267** (10 sherds) and pit **302** (4 sherds) which span the early to high medieval periods. Pit **260** (8 sherds) and pit **262** (3 sherds) had pottery dated to *c* AD 1250–1325. Pit **491** had six sherds dated to *c* AD 1275–1350, and pit **398** had 24 sherds dated to *c* AD 1300–1375.

2.9.25 Medieval ceramic building material (74 fragments) was recovered, including a single fragment of glazed medieval tile from pit **360**.

2.9.26 Animal bone (38 fragments) was recovered, from which a third came from sheep, and four fragments could be identified as from cattle; a further twenty fragments are from large- or mid-sized mammals. Other finds included fragments of undiagnostic iron-rich slag from pit **267** and pit **398**, and oyster shell. Registered finds include an iron brooch (SF7) from pit **302**, a copper alloy lozenge-shaped pendant mount decorated with fleur-de-lys (SF24) from pit **491** and fragments of worked stone from pit **398** (SF954) and pit **445** (SF 19).

2.9.27 A single small spot environmental sample <111> was collected at a depth of between 1.80m and 2.30m during hand auguring of pit **369**. This produced traces of further animal bone and mineralised straw/stem fragments; the washover contained occasional charred plant remains (poorly preserved free-threshing wheat).

Table 28. Group 27 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
260	Pit, cuts [273] and [276]	260	258, 259	AD 1250–1325	0.99	0.8	0.67
262	Pit, cut by [256], sealed by (257), cuts [267]	262	261		1.04	0.87	0.64
264	Pit, cut by [256], sealed by (257), cuts [271]	264	262		0.79	0.4	0.3
267	Pit, cut by [262], cuts [271] and [276]	267	265, 266	AD 1225–1300	1.2	1.07	1.15
271	Pit, cut by [264] and [267], cuts [273], [343] and [347], sealed by (257).	108	107		2.06	1.8	0.75
		271		AD 1200–1250	2.06	1.8	0.75
		338	332, 333, 334, 335, 336, 337	AD 1175–1225	2.06	1.8	0.75
302	Small pit	302	298, 301	AD 1225–1300	0.8	0.78	0.23
369	Large square pit, cuts [383], cut by [338] and [343]	369	368, 426	AD 1250–1325	1.02	0.96	1.85 – 2.30
398	Small pit, cuts [328] and [320]	398	397	AD 1300–1375	0.87	0.65	0.36
445	Oval pit with chalk blocks, cuts [464]	445	443, 444	AD 1250–1350	1.7	1.08	0.27
491	Pit	491	516, 517, 518	AD 1275–1350	1.7	0.6	0.7
783	Feature, unexcavated.	783	782		1.24	0.64	unex

2.9.28 *Group 25 midden layer* (set **257**)

2.9.29 A soil horizon **257** containing frequent crushed marine shell fragments, chalk and flint potentially represented a midden or waste dump thrown over the upper fills of pits **262**, **264**, **271** and **338** (G27), perhaps to level off or stabilise the disturbed ground. Its surviving extents measured 4m by 1.5m.

2.9.30 Thirty-four sherds of pottery were recovered, dated to *c* AD 1325–1400. These included fragments from bowls and jugs. Three residual sherds of late Anglo-Saxon (*c* AD 850–1000) pottery were also recovered. Ceramic building material (36 fragments) included two fragments of glazed medieval tile.

2.9.31 Animal bone (7 fragments) included two fragments identified as cattle; the rest were from large or mid-sized mammals.

2.9.32 No environmental samples were collected.

Table 29. Group 25 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
257	Midden layer, cut by [256], seals [262], [264], [271] and [338]	109		AD 850–1000	4.0	1.5	
		257		AD 1325–1400			

2.9.33 *Group 22 post-holes* (sets **104**, **113**, **144**, **209**, **256**, **297**, **423**, **438**, **502**, **529**, **588**, **590**, **614**, **527**, **740**, **775**, **777**, **779**, and **781**)

2.9.34 Nineteen post-holes were identified. Of these, 12 post-holes were sample excavated (sets **104**, **113**, **209**, **256**, **297**, **423**, **438**, **502**, **529**, **588**, **590** and **614**). No clear alignments could be determined.

2.9.35 Pottery included 11 sherds dated *c* AD 1250–1350 from post-holes **423**, **438** and **502**; and a single sherd each from post-hole **588** and post-hole **590** dated to *c* AD 1325–1400. Ceramic building material (81 fragments) included three fragments of glazed medieval tile. Animal bone (3 fragments) included two fragments identified as pig. A fragment of smithing hearth bottom was recovered from post-hole **423**.

Table 30. Group 22 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
104	Post-hole	104	103		0.49	0/46	0.22
113	Post-hole	113	112		0.52	0.42	0.18
144	Post-hole	144	143		0.28	0.22	unex
209	Post-hole	209	208		0.26	0.23	0.16
256	Post-hole, cuts (257), [262] and [264]	256	255		0.36	0.3	0.56
297	Small pit/post-hole	297	296		0.46	0.47	0.23
423	Post-hole, cut by [758]	423	422	AD 1225–1325	0.29	0.26	0.18
438	Post-hole	438	437	AD 1225–1325	0.57	0.51	0.42
502	Post-hole	502	501	AD 1250–1350	0.8	0.75	0.39
529	Post-hole	529	528		0.29	0.26	0.15
588	Post-hole, cut by [577]	588	587	AD 1325–1400	0.6	0.34	0.09
590	Post-hole, cut by [577]	590	589	AD 1325–1400	0.44	0.37	0.14+
614	Pit/post-hole, cuts [607]	614	613		0.44	.17+	0.31
527	Post-hole, cuts [525]	527	526		0.29	0.26	unex
740	Post-hole	740	739		0.51	0.44	unex
775	Post-hole, unexcavated, cut by [607]	775	774		0.39	0.32	unex
777	Post-hole, unexcavated.	777	776		0.41	0.36	unex
779	Post-hole, unexcavated.	779	778		0.39	0.35	unex
781	Post-hole, unexcavated.	781	780		0.37	0.34	unex

2.9.36 *Group 18 linear features* (sets **213**, **276** and **563**)

2.9.37 Three short linear features defined a potential enclosure. Linear features **213** and **276** formed two discontinuous segments of a potential enclosure's south-west side, aligned north-west to south-east, with an overall length of 7.10m. A third linear feature **563**, was aligned perpendicular to linear features **213** and **276**, and formed the enclosure's potential south-east side. Each segment measured between 1.20 and 2.60m in length and between 0.37 to 0.54m wide, with steep sided 'V'-shaped profiles up to 0.33m deep.

2.9.38 Four sherds of twelfth- to fourteenth-century pottery were recovered from linear feature **213**. Other finds included two fragments of animal bone (one large mammal, one cattle) retrieved from linear feature **276**, and metalworking debris from linear feature **213**, including iron-rich slag and vitrified hearth lining.

Table 31. Group 18 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
213	Linear feature, cuts [115] and [217]	117	116	AD 1100–1200	2.3	0.52	0.28
		213	212	AD 1250–1325			
276	Linear feature, cut by [260] and [267]	156	155		2.63	0.54	0.33
		276	274, 275				
563	Linear feature	563	562		1.2	0.37	0.19

2.9.39 *Group 23 linear features* (sets **201**, **203** and **207**)

2.9.40 Two linear features (**203** and **207**) located towards the south-eastern corner of the site form a potential north-east corner of an enclosure extending south beyond the limits of excavation. Linear feature **207** was a slightly curved narrow ditch or gully, aligned roughly east to west, and exposed for a length of 3.20m. Linear feature **203**, aligned north-east to south-west, had a visible length of 4m. A 1.6m wide gap between the two features might represent an entrance into the enclosure. Linear feature **203** appeared to have been recut along part of its length by **201**.

2.9.41 Finds were limited to a single sherd of pottery dated *c* AD 1250–1325 from linear feature **207**.

Table 32. Group 23 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
201	Short linear ditch/gully, cuts [203]	201	200		1.5	0.37	0.1
203	Short linear ditch/gully, cut by [201]	203	202		2.35	0.4	0.09
207	Short linear ditch/gully, cut by [148], [150] and [205]	152	151	AD 1250–1325	2.95	0.7	0.1
		207	206				

2.9.42 *Group 24 possible ditch* (set **577**)

2.9.43 The terminal end of a potential ditch (**577**) extended from the northern limit of excavation, on a north-east to south-west alignment, for a length of 2.36m. The ditch measured 1.78m wide and had a depth of 0.28m with an extended 'U'-shaped profile.

2.9.44 The ditch truncated post-hole **588** (G22), which produced one sherd dated to *c* AD 1325–1400.

2.9.45 Fifty-four sherds of pottery, dated to *c* AD 1250–1350, were recovered from the ditch, including 12 sherds from a single jug. Other finds included 15 fragments of ceramic building material, three fragments of animal bone, of large or mid-sized mammals.

Table 33. Group 24 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
577	Ditch, cut by [592], cuts [588], [590], [594] and [752]	577	576	AD 1250–1350	2.36+	1.73	0.28

2.9.46 *Group 26 ploughsoil* (set **157**) (not illustrated)

2.9.47 While no absolute date could be attributed to the abandonment of the site, activity appears to have ceased around the end of the fourteenth, or beginning of the fifteenth century. This abandonment coincided with the development of a cultivated or developed ploughsoil horizon, which formed over the full site extents, surviving up to 0.42m thick. The ploughsoil comprised a moderately compacted mid grey to brown clay silt loam with moderate to frequent chalk fragments, occasional small flint fragments and charcoal flecking. Occasional fragments of animal bone, oyster shell and tile were also present.

Table 34. Group 26 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
157	Ploughsoil	157					0.42

2.10 Phase 3 Post-medieval (c AD 1650–1900)

(Fig 5)

2.10.1 Medieval activity appeared to cease after *c* AD 1400. Dated finds suggest only very limited activity on site until the mid seventeenth century. Features dated to this phase comprise a tile-lined drain (G30), animal burials (G31), a garden/horticultural feature (G32), and post-holes (G33 and G34).

2.10.2 *Group 30 tile-lined drain* (set **431**)

2.10.3 A tile-lined drain (**431**) was partially exposed running along the north-western edge of the site. Aligned south-west to north-east, parallel with Lower Chantry Lane, the drain presumably drained surface water from the slightly higher ground that is now occupied by New Dover Road towards the north-west. The drain was exposed for a length of 8.90m, and was truncated to the south-west by a modern pit **738** (G42). The drain was constructed with thin-walled ceramic tiles placed flat along its base and vertically on edge, two deep along the drain's exposed eastern side. The tiles themselves are of eighteenth- or nineteenth-century date and showed no indication of being re-used from a building. The drain was infilled with a coal/clinker rich deposit (514).

2.10.4 Apart from the tiles, no dateable finds were recovered. An environmental sample <1182> collected from fill (514) produced traces of pottery, slag/hammerscale, ceramic building material, animal bone and a fragment of undated clear glass (SF942). The washover contained frequent quantities of charcoal, but only traces of charred plant remains (including possible hazelnut shell.

Table 35. Group 30 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
431	Tile drain, cut by [434], [713] and [738], cuts [492] and [512]	431	429, 430, 514, 515		8.88	0.22	0.42

2.10.5 *Group 33 post-holes* (sets **436**, **440**, **442**, **460**, **500** and **512**)

2.10.6 Six post-holes were potentially associated with tile-lined drain (G30). Four post-holes (**436**, **440**, **460** and **512**) formed a rough alignment parallel to the drain's south-eastern edge extending for a distance of 5m and potentially representing a fenceline. Post-holes **442** and **500**, while stepped out from the drain edge, were also roughly parallel, and were tentatively interpreted as forming part of the same boundary. All six features were similar in shape and size, varying in diameter between *c* 0.33 and 0.48m and between 0.12m and 0.48m deep.

2.10.7 One sherd of pottery was recovered from post-hole **440**, dated to *c* AD 1750–1900. Late post-medieval tile and brick was recovered from post-holes **436** and **713**. Both post-holes **436** and **460** cut through the ploughsoil **157** (G26). Post-hole **512** was truncated by the tile-lined drain **431** (G30).

Table 36. Group 33 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
436	Post-hole, cuts ploughsoil 431	436	435		0.36	0.25	0.25
440	Post-hole	440	439	AD 1750–1900	0.33	0.22	0.12
442	Post-hole	442	441		0.23	0.23	0.14
460	Post-hole, cuts ploughsoil horizon 431	460	458, 459		0.48	.10+	0.48
500	Post-hole, cuts [448]	500	499		0.36	0.26	0.24
512	Post-hole, cut by [431], cuts [492]	512	511		0.48	0.37	0.32

2.10.8 *Group 31 animal burials G31* (sets **618** and **622**)

2.10.9 Two animal burials (sets **618** and **622**) were located at the north-western edge of the site, close to the frontage with Lower Chantry Lane. Both burials were badly truncated by modern activity. Pit **618** contained the articulated remains of a sheep/goat, while pit **622** contained the articulated remains of a piglet.

2.10.10 Pit **618** contained fragments of olive green bottle glass dated to *c* AD 1650–1720, along with two sherds of residual pottery, dated to *c* AD 1125–1250.

Table 37. Group 31 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
618	Pit, with animal burial, cuts [653]	618	617	AD 1650–1720, ×2 residual AD 1125–1250	0.54	0.39	0.15
622	Pit, with animal burial	622	621		0.48	0.48	0.19

2.10.11 *Group 32 garden feature* (set **211**)

2.10.12 An irregular curved feature containing a high concentration of ash was interpreted as a garden or horticultural feature.

2.10.13 Dated finds included six sherds of pottery (*c* AD 1775–1825), and glass (*c* AD 1770–1840).

Table 38. Group 32 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
211	Garden feature	146	145		2.93	0.75	.06+
		211	210	AD 1770–1840	2.93	0.75	.06+

2.10.14 *Group 34 post-holes* (sets **466**, **470** and **713**)

2.10.15 Three post-holes, located at the front of the site were rectangular in shape, 0.6m long by between 0.36m and 0.5m wide, by between 0.28m and 0.56m deep.

2.10.16 Post-hole **446** produced fragments of late post-medieval tile and brick. Post-hole 713 cut the tile-lined drain **431** (G30).

Table 39. Group 34 features

Set	Description	Cut	Filled by	Pottery spot dates	Length	Width	Depth
466	Post-hole	466	465		0.62	0.36	0.44
470	Post-hole	470	467, 468, 469		0.6	0.5	0.28
713	Post-hole, cuts [431]	713	712		0.6	0.45	0.56

2.11 Phase 4 Modern (c AD 1900+)

(Fig 6)

2.11.1 Limited modern activity was recorded across the site, most of which can be directly associated with the former Red Cross building. These comprised brick wall foundations (G41), drainage runs and soakaways (G40), demolition horizons (G42), and modern topsoil (G44), in addition to six pits and post-holes (G43).

2.11.2 These features are summarised in tabular form only.

Table 40. Group 40 features

Set	Description	Cut	Filled by	Spot date	Length	Width	Depth
434	Modern service trench, cuts [431]	434	432, 433		3.32	0.6	0.5
771	Modern soakaway, cuts pit [228]	771	770		1.71	1.49	unex

Table 41. Group 41 features

Set	Description	Cut	Filled by	Pottery spot dates	Length	Width	Depth
162	Construction cut for wall 1	162	159, 160, 161				
166	Construction cut for wall 2	166	163, 164, 165				
170	Construction cut for wall 3	170	167, 168, 169				

Table 42. Group 42 features

Set	Description	Cut	Filled by	Pottery spot dates	Length	Width	Depth
171	Demolition horizon						

172	Dumped topsoil						

Table 43. Group 43 features

Set	Description	Cut	Filled by	Pottery spot dates	Length	Width	Depth
624	Modern feature	624	623		1	9	0.77
738	Pit, unexcavated, probable garden feature, cuts [431]	738	737		2.78+	0.38+	unex
742	Pit/post-hole, modern/unexcavated	742	741		0.41	0.36	unex
744	Post-hole, modern, cuts [746]	744	743		0.41	0.34	unex
762	Modern pit	762	761		.94.	0.88	unex
769	Pit, modern part of walls, cuts pit [228]	769	768		1.4	1.01	unex

Table 44. Group 44 features

Set	Description	Cut	Filled by	Pottery spot dates	Length	Width	Depth
158	Topsoil	158					

3 Post-Roman pottery (Luke Barber)

3.1 Introduction

3.1.1 The archaeological work at the site recovered 1368 sherds of post-Roman pottery, weighing 22,213g, from 132 individually numbered contexts. This total includes sixty-five sherds (139g) from one of 14 environmental residues. An estimated 837 vessels are represented in the assemblage. The bulk of the assemblage relates to the 2011 excavation, with just 16 sherds (216g) coming from the initial evaluation.

3.1.2 The overall assemblage is of variable condition with a great range of sherd sizes. Although there is a relatively large average sherd size for most periods the overall trend is toward medium sized sherds (ie up to 60mm across) with a notable scatter of larger pieces (ie over 150mm), including at least one full profile. Most of the pottery is in reasonably good condition, exhibiting no or only minor signs of abrasion. However, this may be in part due to the hard-fired nature of a significant proportion of the assemblage. As such, although some material appears to be in its primary place of deposition, a notable proportion has been subjected to a degree of reworking prior to becoming incorporated into the archaeological features.

3.1.3 Although a number of periods are well represented the majority of refuse disposal appears to have been occurring between the end of the early medieval period and start of the late medieval period (*c* AD 1175/1200 to AD 1375/1400). The overall site assemblage is characterised at a basic level in Table 45 in order to give a rough idea of quantities by period. The exact division between periods is approximate as the CAT fabric groups, prefixed with a period letter code and used in this report, often cross the actual dates allocated. This is most notable with the early medieval (EM) and Medieval (M) fabrics (EM1 and M1 in particular) and the Medieval and late medieval (LM) fabrics (M1 and LM1 in particular). Sherds that appear to fall within these 'transitional' phases have been allocated double fabric codes, the most common of which is M1/LM1, used for hard-fired M1 sherds that are virtually LM1 but have earlier traits.

3.1.4 The assemblage has been fully quantified (number of sherds/weight/estimated number of vessels) by fabric and form, using the CAT fabric series, and spot dated for archive. The results of this work have been used to create a Microsoft Excel spreadsheet as part of the digital archive.

3.2 Results

3.2.1 Overall the date range of the post-Roman pottery from the site spans the late eighth/ninth to nineteenth centuries, though two peaks of activity are notable: the earliest spanning *c* AD 775/800 to AD 925/50, and the latter main activity spanning *c* AD 1175/1200 to AD 1375/1400. Post-medieval pottery is notably scarce on the site suggesting no or minimal refuse disposal from at least the early/mid fifteenth century onwards. Due to a moderate degree of residuality on the site and the provisional nature of the site phasing, the ceramics are discussed by ceramic period rather than provisional site phase. This approach gives a good indication of the chronological run of activity, even where a period is largely represented by residual sherds.

Table 45. Characterisation of pottery assemblage by period/CAT fabrics.

Period	Date	Count	Weight (g)	Average weight (g)	No. of different fabric groups	No. of contexts provisionally dated to each period
Mid-late Anglo-Saxon (MLS fabrics)	*c* AD 750–950	69	1053	15.3	Local – 6, Regional – 1 Imported – 2	20
Early medieval (EM fabrics)	*c* AD 1066–1250	230	3,792	16.5	Local – 8 Imported – 2	27
High medieval (M fabrics)	*c* AD 1250–1400	965	15,705	16.3	Local – 5, Regional – 2 Imported – 1	51
Late medieval (LM fabrics)	*c* AD 1400–1550	96	1288	13.4	Local – 2	22
Early post-medieval (PM fabrics)	*c* AD 1550–1750	1	1	1	Local – 1	0
Late post-medieval (LPM fabrics)	*c* AD 1750–1950	7	374	53.4	Local – 2 Regional – 2	2
Total		1368	22213	n/a	n/a	n/a

NB. Totals include all residual/intrusive and unstratified material. Local equates to Kent wares; Regional to other English wares

3.3 Mid to late Anglo-Saxon (*c* AD 750–950)

3.3.1 The 69 sherds attributed to this period have a relatively large average sherd size (Table 45), particularly considering the low-fired nature of much of the ceramics. This, together with the unabraded condition of the sherds themselves suggests the assemblage has not been subjected to any notable degree of reworking, despite some sherds being residual in later deposits. The vast majority of sherds were recovered from one of several refuse pits but groups are never large. Pits **386** (G4) and **688** (G5) produced the largest groups at just 10 sherds (271g) and 17 sherds (242g) each respectively.

3.3.2 The assemblage includes 16 definite sherds (294g) of Canterbury-type sandy ware MLS2. These are typical jars or sooted cooking pots with simple unburnished everted rims and patchy horizontal burnish on the bodies. Early medieval pit **694** (G11), fill (693) produced a residual bodysherd with bossed decoration, another classic type in this fabric. The presence of these wares shows mid Anglo-Saxon activity at the site, quite possibly an expansion of the same activity noted at the nearby St Augustine's Abbey sites (Barber 2015; Macpherson-Grant 1986). Although these vessels could be as early as the later eighth century, the complete absence of earlier fabric types such as MLS1 and MLS4 suggests a start date at the beginning of the ninth century is perhaps more likely. There are a further 26 sherds (256g) that are probably MLS2, but bear some characteristics of the slightly later LS1 Canterbury sandy ware type. Although some of these are knife-trimmed, a later characteristic, the majority still exhibit burnishing and the rim forms are as those for the MLS2 vessels. It is likely these represent transitional vessels of the mid/later ninth century. Associated with the mid Anglo-Saxon assemblage is a scatter of Ipswich sherds (4/86g) from large vessels, though no feature sherds are present. However, their presence shows a similar trade network to that seen at the St Augustine's Abbey sites.

3.3.3 Activity appears to have extended from the mid ninth to early/mid tenth century as there are 14 sherds (269g) of Canterbury Sandy Ware LS1 (cooking pots/jars again), a few shell tempered sherds (LS2 and LS3, 2/42g and 1/38g respectively) together with a scatter of imports. The latter consist of Flemish/North French sandy LS15 type (1/10g) and fine sandy LS16 type (4/38g) from well-fired fine reduced pitchers, often with a crude lattice burnish.

3.3.4 Activity appears to have ceased at some point in the first half of the tenth century and there are no definite Late Anglo-Saxon sherds that can be attributed to a period between the mid tenth and mid eleventh centuries.

3.4 Early medieval (*c* AD 1066–1250)

3.4.1 The 230 sherds ascribed to this period include just 37 definite EM1 Canterbury Sandy Ware sherds (621g). Early rim types are rare but include a flaring example in G11 pit **292** and a residual beaded flaring example from G12 pit [136] (set **228**). These indicate some activity between *c* 1050 and 1175 but this is negligible with all the sherds potentially relating to mid twelfth-century activity. Certainly the bulk of the EM1 sherds appear to be of the second half of the twelfth century, with typically bulbous flaring rims and a few glazed jug sherds. In keeping with this there is a single rouletted sherd from an EM1.BCR Brittoncourt Farm pitcher in G10 pit **315**. There are also a few odd sherds of transitional EM1/M1 and EM1 variants (EM1A and EM1B with sparse chalk or flint grits).

3.4.2 Shelly wares are represented by a scatter of EM2 (9/71g) and rather more sandy-shelly ware EM3 (32/532g). Although the former produced no feature sherds, there are a number of bowl and cooking pot rim types in EM3. The dominance of EM3 would very much be in keeping with a starting date for early medieval activity in the second half of the twelfth century. This is strengthened by the dominance of the shell-dusted Canterbury-type Sandy Ware EM.M1 fabric that totals 141 sherds weighing 2434g. Although potentially starting as early as the mid twelfth century, most appears to relate to a period between *c* AD 1175 and *c* AD 1225. A typical range of cooking pots and bowls with rectangular clubbed rims (often stabbed) is present. Many vessels have applied thumbed strips. G11 pit **457** produced a complete profile from a small cooking pot with stabbed everted rim though this has so little shell it is virtually the early Tyler Hill M1 fabric. Certainly the end date of the EM.M1 type is not fully understood and it is quite likely the fabric is subsumed into the M1 type in the second quarter of the thirteenth century.

3.4.3 Imports are not common, but include a possible EM12 Andenne-type spouted pitcher with rouletted decoration (Anglo-Saxon G7 pit **525**) and a North French EM38 glazed jug from G13B pit **488**. Further

work is needed on the EM12 sherd to confirm this provisional attribution as unfortunately it was not associated with any other pottery.

3.4.4 Although the majority of sherds were recovered from one of several pits, material of this date was also recovered from other context types, including ditches and layers. Context assemblages are not large, by far the largest one coming from pit **457** (G11), which produced seventy-two sherds (Table 46).

3.5 High medieval (*c* AD 1225–1400)

3.5.1 As with the previous period a range of feature types produced high medieval pottery but pits totally dominate. On the whole, sherds are of medium size with low to slight signs of abrasion. The majority of the larger pit assemblages are attributed to this period (Table 45). The high medieval assemblage of 965 sherds is typically dominated by Tyler Hill sandy wares (M1) which accounts for 798 (12,535g) sherds. The earliest M1 sherds chronologically overlap with the preceding period: the gradual development of EM1 into M1 is notoriously difficult to pin down closely. Generally the M1 vessels tend to be thinner walled with a denser fabric. The current assemblage appears to span the entire high medieval period, suggesting unbroken activity throughout. There are a number of lower fired sherds of the thirteenth century that probably represents a continuation of activity from AD 1200/1225 to at least 1275/1300 as well as later harder fired M1 vessels that are more in keeping with a fourteenth-century date. The latest of these begin to merge with the LM1 vessels of the late medieval period between 1350 and 1375 and 150 sherds (2988g) have been allocated a M1/LM1 fabric grouping as a result.

3.5.2 The majority of M1 vessels appear to consist of cooking pots (ENV 263), usually with triangular, squared concave, rectangular or horizontal club rims. There are also a few sherds from cauldrons, curfews, pipkins, frying pans and dishes but these are not well represented. There is an undecorated vessel fragment from G29 pit **283** that may be from a small jug or bottle (42mm diameter base) but further work to find a parallel is needed. Decoration on the coarsewares is rare and usually in the form of incised lines. Many vessels have applied thumbed strips, sometimes across the base, together with spots and splashes of, usually, unintentional glaze. At least 207 sherds are from jugs (ENV 134), some of which may well relate to activity in the first quarter of the thirteenth century. The jugs usually have thumbed bases and patchy clear or green glazes. Decoration on these is limited, but when it does occur shows a wide range of types. Incised lines, rilling, applied strips and white slip are represented. Although many of these jugs are of thirteenth-century type, many are also better fired and likely to be of the fourteenth century, where they begin to merge with the LM1 jugs around *c* AD 1350.

3.5.3 Although there are a few M1 variant sherds (M1A with chalk and M1B in a smooth matrix) these are only present in negligible quantities. Other Kentish wares include three sherds of Ashford/Wealden Sandy Ware with chalk/shell from cooking pots in pits **225** (G21) and **295** (G29) and two sherds from buff fine sandy M53 Wealden jugs (pits **225** (G21) and **328** (G28)). English regional wares are confined to four generally small sherds of fine London Ware (M5). The sherds are all from different vessels, one of which is decorated with white slip strips and pellets (G29 pit **283**). A general thirteenth-century date is probable for these vessels. The only imported sherds all come from one of two green glazed M22 French Saintonge jugs (4/11g) of mid thirteenth- to mid-fourteenth-century date.

3.6 Late medieval (*c* AD 1350–1550)

3.6.1 The assemblage of this period is notably smaller than that of the high medieval period (Table 45). However, the ninety-six sherds merely represent a continuation of refuse disposal through the later fourteenth century and, possibly, into the early/mid fifteenth century. The complete absence of any of the more refined wares such as LM2 clearly demonstrate that activity had ceased by *c* 1450/75. The single 6g sherd of LM1.2 Canterbury Transitional Sandy ware from early medieval G28 pit **240** is quite possibly an intrusive stray, but could be as early as the mid fifteenth century. Putting this sherd to one side the remainder of the assemblage is entirely composed of the hard-fired LM1 Late Tyler Hill Ware. Vessels consist of a mix of cooking pots, usually with spots of clear/green-glaze and thickened or squared club rims and jugs/pitchers. The latter are often undecorated save for a few patches of clear/green glaze and heavily thumbed bases. There is nothing in the LM1 assemblage that has to be fifteenth century, but equally there is nothing to prove all is of the last quarter of the fourteenth century. However, considering the low numbers involved and the seamless join with the high medieval assemblage it is suspected activity did not continue after *c* AD 1400.

3.7 Early post-medieval (*c* AD 1550–1750/1800)

3.7.1 The lack of activity in the fifteenth century noted above continues through the sixteenth and seventeenth centuries with no pottery from these centuries being present. Early medieval G12 Pit **385** produced a 1g intrusive sherd of eighteenth-century glazed red earthenware (PM1) but it is clear no refuse disposal was occurring throughout this period.

3.8 Late post-medieval (*c* AD 1750/1800–1900)

3.8.1 Late post-medieval pottery is slightly better represented to that of the preceding periods (Table 45) but the assemblage is still very small. The fill of garden feature **211** (G32) produced the majority. This group is of the late eighteenth to early nineteenth centuries and included fragments from a glazed red earthenware PM1 bowl, an unglazed red earthenware LPM2 flower pot, an English stoneware LPM10 bottle with salt glaze and iron wash and part of an LPM11 creamware bowl. The remaining two sherds are probably intrusive in earlier features.

3.9 The assemblage

3.9.1 The majority of the ceramic assemblage was derived from pits, many of which intercut. However, there was a scatter of ditches, post-holes and layers that produced ceramics, again, many of which intercut, or were cut by other features. As such there is a moderate/high chance of groups containing residual or intrusive sherds. The assemblages would in general be in keeping with this in exhibiting low to moderate residuality and sometimes low intrusiveness. Despite this there are some clean groups, most easily recognised for the Anglo-Saxon period. The assemblage is dominated by small- to medium-sized context groups with a few notable exceptions. However, if all fills from individual pits are combined then several much larger groups can be created. These are shown in Table 46.

Table 46. Post-Roman pottery

Feature	Group	Phase	No. sherds	Weight (g)	Spot date
Ditch **577**	24	2B	54	386	*c* AD 1250–1350
Pit **253**	28	2B	75	1368	*c* AD 1325–1400
Pit **283**	29	2B	110	2288	*c* AD 1325–1400
Pit **289**	11	2A	89	622	*c* AD 1200–1275
Pit **292**	11	2A	124	1280	*c* AD 1200–1275
Pit **315**	10	2A	115	1186	*c* AD 1200–1275
Pit **457**	11	2A	72	2924	*c* AD 1175–1250
Pit **586**	28	2B	110	1468	*c* AD 1350–1450
Pit **607**	29	2B	74	1150	*c* AD 1325–1400

3.9.2 The preliminary stratigraphic phasing suggests there is more residuality than the ceramics themselves suggest, however, this is likely to change during the analysis as the ceramic dating is considered in full. As can be seen from Table 46, the larger groups are of the early and high medieval periods. Despite their size most of these groups are not well supplied with sherds worth illustrating

3.10 Potential of the ceramic assemblage

3.10.1 The post-Roman ceramic assemblage is considered to hold variable potential for further analysis depending on the period in question. On the whole there are few outstanding context groups for the study of Canterbury ceramics in their own right, particularly considering previous publications of high medieval assemblages from the city. The assemblage does however shed light on the nature of the occupation in different periods. The regional wares and imports also offer the opportunity, when presented as percentages of each sub-period's assemblages, to compare with others from the city with the view to establishing which areas had good access to these wares and thus potentially the status/connections of the occupants.

3.10.2 The Anglo-Saxon assemblage is perhaps the most interesting archaeologically as it demonstrates early activity at the site, thus expanding the area of the known mid/late Anglo-Saxon settlement. Ceramically the assemblage is not that significant as it contains nothing that the St Augustine's Abbey assemblage has not already published. However, it is suggested a few vessels are illustrated and a summary of the assemblage be published in the final report.

3.10.3 The early and high medieval assemblages form the bulk of the pottery but are largely composed of local wares well known in Canterbury. There are no useful groups ceramically, but the largest and cleanest ought to be tabulated for the final report to demonstrate the nature of the refuse being discarded. A little

further work is required on some vessels and a selection of pieces worthy of illustrating should be made. A summary text ought to be produced to outline the nature of these assemblages in order to shed light on the associated households. The percentage of regional and foreign imports can usefully be compared with others from the city.

3.10.4 The late medieval assemblage has limited potential for further analysis as not only is it dominated by well-known local wares, there are no good groups and very few drawable sherds. However, a brief overview of the assemblage will provide evidence for the end of activity at the site.

3.10.5 The post-medieval assemblages are insignificant and no further analysis is proposed.

3.11 Recommended pottery analysis

3.11.1 It is proposed that the pottery assemblage be subjected to some targeted further analysis work and a summary report be produced for publication. The final report will give a brief overview of the Anglo-Saxon and Medieval assemblages, outlining their size, periods represented and range of fabrics. Much of this will be derived from the above factual statement, but additional work will be undertaken to check certain sherds/fabrics, tabulate the cleanest high medieval groups and look at comparable assemblages. Production of a small illustrated catalogue of the most interesting pieces is also proposed. Up to 20 vessels are considered worth illustrating.

4 Ceramic building material (Adrian Gollop)

4.1 Introduction

4.1.1 Nine hundred and seventy-six fragments of ceramic building material were recovered from the evaluation and excavation; these are listed by context in Table 47. This material includes tiles (mostly roof tiles) and bricks, as well as smaller quantities of daub, plaster (including some painted wall plaster) and mortar. Some of the material was burnt or vitrified. Most of the material appears to be of medieval or post-medieval (841 fragments), but Roman brick and tile (approximately 70 fragments) is also present in the assemblage.

Table 47. Ceramic building material

Context	Set	Group	Quantity	Weight (g)	Provisional period	Notes
103	104	23	11	17	Medieval or post-medieval	
107	271	27	2	24	Medieval or post-medieval	
112	113	23	1	81	Medieval or post-medieval	
128	235	21	2	64	Medieval or post-medieval	
129	235	21	5	420	Medieval or post-medieval	
135	228	12	2	29	Medieval or post-medieval	
145	211	32	5	794	Medieval or post-medieval	
210	211	32	5	633	Post-medieval	includes 1 x blue patterned wall tile,
216	217	7	2	415	Roman	2 x tile
218	230	12	4	109	Medieval	x4 fragments splash glazed, roof tile.
221	225	21	23	2059	Medieval or post-medieval	x23 tile fragment
223	225	21	5	469	Medieval or post-medieval	x 5
227	228	12	15	535	Medieval or post-medieval	x14 tile fragment
231	232	21	13	938	Medieval or post-medieval	x13 tile fragment
233	235	21	3	199	Medieval or post-medieval	x3 tile fragment
234	235	21	1	206	Medieval	x 1 glazed
236	240	28	3	116	Roman and medieval or post-medieval	x1 Roman 2x m/pm, worked tufa
238	240	28	1	556	Roman	
246	248	21	3	162	Medieval or post-medieval	
247	248	21	6	364	Medieval or post-medieval	
249	250	21	9	489	Medieval or post-medieval	9 + 1 medieval glazed
251	253	28	47	3570	Roman and medieval or post-medieval	25 + 1 Roman tile
252	253	28	16	1733	Roman and medieval or post-medieval	16 + 2 medieval glazed, 1 + Roman
257	257	25	36	2483	Roman and medieval or post-medieval	34 + 2 medieval glazed, 1 + Roman
258	260	27	1	63	Medieval	1 medieval glazed
261	262	27	2	100	Medieval or post-medieval	
266	267	27	7		Roman	mortar
272	273	12	1	41	Medieval or post-medieval	
278	283	29	72	7526	Medieval or post-medieval	
279	283	29	15	1121	Medieval or post-medieval	16 + 2 medieval glazed,
280	283	29	3	378	Medieval or post-medieval	
281	283	29	7	527	Medieval or post-medieval	
284	285	12	3	192	Roman and medieval or post-medieval	2 Roman. 1 medieval or post-medieval
287	289	11	2	41	Medieval or post-medieval	1 plus daub
290	292	11	4	191	Medieval or post-medieval	
291	292	11	7	142	Medieval or post-medieval	
293	253	28	15	825	Medieval or post-medieval	15 + 3 medieval glazed,
295	295	29	20	1401	Medieval or post-medieval	19 + 1 medieval glazed,
308	240	28	14	909	Medieval or post-medieval	
313	315	10	17	688	Roman and medieval or post-medieval	11 + 1 medieval glazed, 4 + Roman
314	315	10	1	68	Medieval or post-medieval	
316	283	29	4	432	Medieval or post-medieval	
321	324	28	19	833	Medieval or post-medieval	
325	328	28	2	69	Medieval or post-medieval	
327	328	28	12	1172	Medieval or post-medieval	9 + 1 medieval ridge,
329	315	10	1	3	Roman	
339	328	28	10	483	Medieval or post-medieval	
368	369	27	5	353	Medieval or post-medieval	5 + 1 medieval ridge,
370	371	13C	1	36	Medieval or post-medieval	1 green glazed
373	364	5	4	748	Roman	1 and daub
376	364	5	1	467	Roman	1 and daub
378	364	5	2	1265	Undated	
393	394	21	2	33	Medieval or post-medieval	
397	398	27	16	1050	Medieval or post-medieval	

Context	Set	Group	Quantity	Weight (g)	Provisional period	Notes
401	386	4	1	20	Roman	
404	386	4	6	204	Roman	2 and daub
410	386	4	2	148	Roman and medieval or post-medieval	1 + 1 Roman
413	386	4	1	197	Roman	
417	389	12A	3	162	Medieval or post-medieval	
422	423	22	4		Medieval or post-medieval	4 + 1 medieval splash glazed
427	428	13B	2		Medieval or post-medieval	
430	431	30	8	1704	Medieval or post-medieval	
435	436	33	1	2692		Modern
443	445	27	32	3033	Medieval or post-medieval	
449	452	10	1	29	Medieval or post-medieval	
450	452	10	2	63	Roman	Flue tile?
455	457	11	1	119	Roman	
456	457	11	1	97	Medieval or post-medieval	
462	464	13C	1	10	Roman	
465	466	33	5	99	Medieval or post-medieval	2 tile 3 brick
487	488	13B	1	4	Undated	
494	498	7	7	1266	Roman	1 fragment + 4 heavily vitrified
501	502	22	45	3670	Roman and medieval or post-medieval	40 + 2 medieval glazed, 3 + Roman including tegula
506	507	12	1	5	Undated	
516	491	27	16	1752	Roman and medieval or post-medieval	16=1 + Roman
523	525	7	2	90	Roman	1 floor tile + daub
533	541	5	2	416	Roman and medieval or post-medieval	1 + 1 tegula
537	541	5	1	33	Roman	
564	565	2	1	43	Medieval or post-medieval	
574	561	14	1	133	Roman	
576	577	24	15	697	Medieval or post-medieval	1
581	586	28	10	391	Medieval or post-medieval	
582	586	28	11	732	Medieval or post-medieval	9 + 1 medieval ridge,
583	586	28	18	1105	Medieval or post-medieval	
584	586	28	31	1464	Medieval or post-medieval	
585	586	28	14	987	Medieval or post-medieval	
591	592	21	1	120	Medieval or post-medieval	
595	599	10	4	137	Medieval or post-medieval	
598	599	10	1	188	Roman	
603	607	29	71	5604	Medieval or post-medieval	71 all light burnt
604	607	29	66	4388	Medieval or post-medieval	64 + 1 medieval glazed,
610	607	29	27	1393	Medieval or post-medieval	19 + 6 medieval glazed + 1 medieval ridge,
617	618	31	1	1	Undated	Possible daub
619	620	21	8	252	Medieval or post-medieval	
635	639	6	30	736	Undated	1 plus daub
636	639	6	13	222	Undated	Daub one with plastered face
638	639	6	1	6	Undated	Burnt mortar
673	688	5	1	14	Undated	Daub
675	688	5	1	10	Undated	Daub
676	688	5	1	9	Undated	Daub
692	694	11	7	123	Roman and medieval or post-medieval	3 + 1 medieval glazed ridge + Roman
693	694	11	1	64	Medieval or post-medieval	
697	701	3	1	129	Roman	
705	708	3	1	99	Roman	
709	711	4	1	432	Roman	
712	713	33	2	564	Medieval or post-medieval	1 tile 1 brick

4.1.2 At this stage the material has not been subjected to full assessment to clarify interim identification and dating. Therefore a large majority of the material is provisionally dated as medieval or post-medieval.

4.2 Discussion

4.2.1 Roman material was identified in seventeen features. Of these ten (sets **217**, **364**, **386**, **498**, **525**, **541**, **599**, **701**, **708** and **711**) are dated to the Anglo-Saxon period, five (sets **315**, **452**, **457**, **464** and **561**) to the early medieval period, and two (sets 240 and 267) to the high medieval period. Material from these features is therefore seen as residual or as being re-used during the post-Roman periods; their observed lack of abrasion and clustering in Anglo-Saxon features points to the later reuse. It is noted that with the exception of features **452**, **457**, **464** and **561** the material derived from features which produced large

fragments of metalworking debris in their individual artefact assemblage, and it is possible that the building material (primarily tile) was being utilised in some form during industrial processes.

4.2.2 Only three features (sets **230**, **235** and **260**) produced exclusively medieval material; all are either early or high medieval in date. Feature **211**, a G32 garden feature dated to the eighteenth century, contained exclusively post-medieval material.

4.2.3 Of the material that is currently seen as either medieval or post-medieval the majority (826 fragments) was retrieved from features currently dated to either the phase 2A and 2B medieval periods. Until this material has been assessed and their dates confirmed the nature of this material is unclear. To fit the current phase narrative this material is either medieval in date or is intrusive material within earlier features; the quantity of material in the assemblage suggests the latter option is highly unlikely and that therefore it is medieval or the features are post-medieval in date.

4.2.4 Similarly three fragments of medieval or post-medieval tile were retrieved from Anglo-Saxon features **386**, **541** and **565**; however in these instances the small quantity of material suggests it is intrusive.

4.3 Recommendation for further work

4.3.1 It is recommended that for the purposes of the final analysis, confirmation of assemblage dating be undertaken.

5 Iron slag and related high temperature debris (Lynne Keys)

5.1 Introduction and methodology

5.1.1 Four boxes of material weighing 30.2kg were examined and quantified for this report; this is approximately half the total assemblage. The slag is stored in 8 'half sized' brass wire stitched museum boxes. The assemblage is currently in a stable state.

5.1.2 The slag was examined by eye and categorised on the basis of morphology; a magnet was used to test for iron-rich material and detect smithing microslags in the soil adhering to slags. Each slag or other material type in each context was weighed except for the smithing hearth bottoms, which were individually weighed and measured for statistical purposes.

5.1.3 Quantification data and details are given in Table 48, in which weight (wt) is shown in grams, and length (len), breadth (br) and depth (dp) in millimetres.

Table 48. Slag/high temperature debris quantification details

Context	Set	Group	Sample	sf	bf	slag type	wt	len	br	dp	comment
212	213	18			341	iron-rich undiagnostic	33				
212	214	18			342	vitrified hearth lining	15				
214	217	7			563	iron-rich undiagnostic	16				
215	217	7			541	iron-rich undiagnostic	128				
215	217	7			541	undiagnostic	249				7
216	217	7	100	903		sample residue	17				all is hammerscale flake & spheres
216	217	7	100	966		sample residue	238				Undiagnostic, cindery runs; undiagnostic; red heat-magnetised stone (roasted ore? - removed & bagged separately); hammerscale flakes & some misshapen spheres; one tiny piece of copper alloy
234	235	21			348	iron-rich undiagnostic	17				
236	240	28			401	undiagnostic	35				
236	240	28			503	undiagnostic	40				cindery run
237	240	28			431	undiagnostic	100				
237	240	28			431	undiagnostic	38				
238	240	28			143	undiagnostic	197				
239	240	28	101	902	531	sample residue	3				broken flake hammerscale & some tiny spheres
239	240	28	101	960	531	sample residue	46				moderate quantity of flake hammerscale; slag runs; undiagnostic; fired clay
239	240	28			531	furnace slag	124				voids from burnt-out charcoal
242	240	28			473	iron-rich undiagnostic	68				
266	267	27		6		iron-rich undiagnostic	221				1
278	283	29			388	iron-rich undiagnostic	162				
279	283	29	102	917		sample residue	7				broken hammerscale flake & spheres
279	283	29	102	968		iron	4				flat
279	283	29	102	968		sample residue	41				highly magnetic residue of grit; iron flake; tiny cinder; tiny undiagnostic slag
282	283	29	103	914		sample residue	7				broken hammerscale flake & moderate amount of tiny spheres
282	283	29	103	965		sample residue	38				some flake hammerscale; misshapen microslags; iron-rich undiagnostic; iron flakes
291					322	undiagnostic	100				
293					576	smithing hearth bottom	299	110	85	50	Very glassy: from flint silica inclusion as flux?
308					298	undiagnostic	262				Furnace slag?
323				10		iron-rich undiagnostic	16				
329	315	10	116	907		sample residue	0.5				some broken hammerscale flake
339	328	28			436	iron-rich undiagnostic	68				
358	357	5			226	undiagnostic	53				
372	364	5			555	iron-rich undiagnostic	470				
372	364	5			555	smithing hearth bottom	562	115	85	60	
372	364	5			555	undiagnostic	203				smelting?
373	364	5			591	smithing hearth bottom	1251	140	140	80	** ?possibly small furnace slag
373	364	5	106	900		sample residue	26				all is hammerscale flake & spheres
373	364	5	106	962		sample residue	352				one large sphere; some flake hammerscale & smaller spheres; tiny undiagnostic
374	364	5			5??	iron-rich undiagnostic	13				

Context	Set	Group	Sample	sf	bf	slag type	wt	len	br	dp	comment
375	364	5	104	950		sample residue	250				large quantity of broken flake hammerscale and many spheres (small).
375	364	5	104	964		sample residue	3200				lots of flake hammerscale & largish spheres; non-magnetic dense slag runs; vitrified hearth lining; undiagnostic; dense slag; cinder; occ. Small iron flakes; other misshapen microslags
375	364	5	104	964		undiagnostic	533				
376	364	5			515	smithing hearth bottom	483	90	80	50	fragment
376	364	5			515	smithing hearth bottom	290	100	0	50	
376	364	5			515	undiagnostic	177				
378	364	5			554	undiagnostic	518				furnace slag?
382	364	5	105	904		sample residue	85				all is hammerscale flake & spheres
382	364	5	105	961		sample residue	631				only a few hammerscale flakes; rest is possible furnace slag; run/tap slag fragments one large sphere; non-magnetic misshapen microslags & spheres
382	364	5	105	961		sample residue	323				moderate quantity of hammerscale flakes & non-magnetic spheres; small undiagnostic; iron-rich undiagnostic
397	398	27			396	iron-rich undiagnostic	24				
407	386	4	107	901		sample residue	73				all is hammerscale flake & spheres
407	386	4	107	963		sample residue	771				large unbroken hammerscale flakes; largish spheres (magnetic & non-magnetic); undiagnostic; fired clay; cindery slag dribbles
417	389	12			288	undiagnostic	115				
421	388	3	108	922		sample residue	62				tiny spheres & broken hammerscale flake
421	388	3	108	958		sample residue	398				large quantity of flake hammerscale & occas. spheres; other misshaped microslags; small undiagnostic; cinder
422	423	23			571	smithing hearth bottom	178	85	55	25	
487	488	13C			361	cinder	1				
494	498	7			174	vitrified hearth lining	94				cindery
494	498	7			464	iron	41				from ironworking
494	498	7			464	iron-rich vitrified hearth lining	102				
494	498	7			464	smithing hearth bottom	374	90	70	40	
494	498	7			464	undiagnostic	76				
497	498	7	122	905		sample residue	21				all is broken hammerscale flake & spheres
497	498	7	117	924		sample residue	32				all is broken hammerscale flake & spheres
497	498	7	122	945		sample residue	199				fired clay; large hammerscale flakes; one very large non-magnetic sphere; tiny undiagnostic; vitrified hearth lining; cindery runs
497	498	7	117	947		sample residue	169				iron-rich undiagnostic (incorporates hammerscale flake); vitrified hearth lining
497	498	7	117	947		sample residue	244				small undiagnostic
497	498	7	117	947		sample residue	205				moderate quantity of hammerscale flakes & largish spheres; iron-rich undiagnostic; undiagnostic
506	507	12			552	smithing hearth bottom	139	0	55	35	incomplete
506	507	12			552	undiagnostic	42				
509	492	7			593	furnace slag	6800	250	250	100	furnace bottom
514	431	30	118	911		sample residue	3				broken hammerscale flake & spheres
514	431	30	118	939		sample residue	31				non-magnetic spheres; very occasional flake hammerscale; iron flakes; undiagnostic
535	541	5	123	921		sample residue	8				broken hammerscale flake & spheres
535	541	5	123	937		sample residue	61				iron-rich undiagnostic; hammersale flakes; iron lumps
537	541	5	124	906		sample residue	40				all is broken hammerscale flake & spheres
537	541	5	124	969		sample residue	128				tiny undiagnostic; magnetic & non-magnetic spheres; cinder; iron-rich undiagnostic
540	541	5	125	910		sample residue	3				broken hammerscale flake & tiny fired clay

Context	Set	Group	Sample	sf	bf	slag type	wt	len	br	dp	comment
540	541	5	125	959		sample residue	5				hammerscale flake; iron-rich tiny undiagnostic
540	541	5	125	970		sample residue	80				cindery undiagnostic; iron-rich undiagnostic; undiagnostic
564	565	2			226	iron-rich undiagnostic	307				
564	565	2			226	smithing hearth bottom	163	60	50	35	incomplete
564	565	2			226	undiagnostic	39				cindery
564	565	2			226	undiagnostic	479				
564	565	2			226	vitrified hearth lining	17				grey; could be furnace lining
567	570	5			572	undiagnostic	546				furnace slag?
567	570	5			572	undiagnostic	170				very cindery
567	570	5			572	vitrified hearth lining	32				
568	570	5			114	smithing hearth bottom	412	90	80	50	
568	570	5			114	undiagnostic					
568	570	5	119	915		sample residue	3				occasional broken flake & spheres; fired clay
568	570	5	119	944		sample residue	6				fired clay; misshapen microslags; tiny undiagnostic; a couple of broken hammerscale flakes
585	586	28	121	916		sample residue	3				some broken hammerscale flake & spheres; heat-magnetised grit
585	586	28	121	967		sample residue	13				misshapen microslags; undiagnostic; heat magnetised grit
591	592	21	120	908		sample residue	20				moderate broken flake & spheres
591	592	21	120	932		sample residue	20				fired clay; some tiny undiagnostic; one hammerscale flake
596	599	10			558	iron-rich undiagnostic	11				
608	599	10	126	912		sample residue	0.5				a very few broken hammerscale flakes & some microslags
619	620	21			480	undiagnostic	9				
631	634	3			212	undiagnostic	350	140	90	45	elongated smithing hearth bottom or furnace slag
632	634	3			99	furnace slag	1688	185	165	65	furnace bottom; voids from burnt-out charcoal inclusions
632	634	3			99	furnace slag	813				two pieces with voids from burnt-out inclusions
635	639	6	128	909		sample residue	15				large hammerscale flakes & moderate size spheres
635	639	6	128	938		sample residue	202				iron-rich undiagnostic; lots hammerscale flake & moderate quantity of spheres; very occasional large non-magnetic spheres; undiagnostic
638	639	6	129	918		sample residue	16				broken hammerscale flake & spheres
638	639	6	129	934		sample residue	108				hammerscale flakes & spheres (magnetic & non-magnetic); tiny undiagnostic
652	653	7	133	923		sample residue	27				broken flake & spheres
652	653	7	133	936		sample residue	120				one hammerscale sphere; cinder; tiny iron-rich undiagnostic; undiagnostic
652	653	7	133	936		sample residue	38				lots of flake hammerscale & some misshapen spheres; iron-rich undiagnostic; a few iron flakes
673	688	5	130	920		sample residue	13				broken hammerscale flake; no spheres
673	688	5	130	928		sample residue	149				some large flakes & misshapen microslags; iron-rich undiagnostic; undiagnostic; cindery runs
676	688	5	131	913		sample residue	3				some broken hammerscale flake; fired clay; some spheres
676	688	5	131	929		sample residue	13				a couple of hammerscale flakes; one misshapen sphere; small undiagnostic; fired clay
705	708	3			178	smithing hearth bottom	155	80	65	30	
705	708	3			178	smithing hearth bottom	510	140	90	35	
705	708	3			178	undiagnostic	327	90	65	45	with large voids from burnt-out charcoal
705	708	3			178	undiagnostic	793	130	90	55	smithing hearth bottom?
709	711	4	132	919		sample residue	4				broken hammerscale flake & moderate amount of tiny spheres
709	711	4	132	941		sample residue	52				occasional spheres; misshapen microslags; iron-rich undiagnostic; a very few flakes

5.2 Results

Explanation of terms

5.2.1 Activities involving iron can take two forms: smelting or smithing

Table 49. Slag types present in the assemblage

Slag type	Weight (g.)	Process
Furnace slag	9425	Smelting
Iron-rich undiagnostic	1554	Smelting or smithing
Undiagnostic	4918	Smelting or smithing
Sample residue	8623	Smithing
Smithing hearth bottom	4816	Smithing
Vitrified hearth lining	260	not diagnostic

5.2.2 *Smelting* is the manufacture of iron from ore and fuel in a smelting furnace. The products are a spongy mass called an unconsolidated bloom consisting of iron with a considerable amount of slag still trapped inside, and slag (waste). The slag produced varies depending on the technology used in different phases: furnace slags (including slag blocks and furnace bottom cakes), run slag, tap slag, dense slag or blast furnace slag.

5.2.3 Furnace bottoms resemble smithing hearth bottoms (see *smithing*, below) but are very much larger and usually weigh many kilos. Furnace slag is a general term used for slag which can be recognised as having been produced by smelting but which is incomplete or has no particular morphology which can identify the furnace type or technological method used. Dense slag is of low porosity like tap slag but lacks the flowed surface; it too represents smelting activity.

5.2.4 *Smithing* involves the hot working (using a hammer) of the bloom to remove excess slag (primary smithing) or, more commonly, the hot working of one or more pieces of iron to create or to repair an object (secondary smithing). As well as bulk slags, including the smithing hearth bottom (a plano-convex slag cake which builds up under the tuyère hole – the hottest area – where the air from the bellows enters the hearth), smithing generates micro-slags. The latter can be silver-grey hammerscale flakes from ordinary hot working of a piece of iron (making or repairing an object) and/or tiny silver-grey spheres from bloom smithing or high temperature welding used to join or fuse two pieces of iron. Hammerscale, because of its tiny size, is usually only recovered by taking soil samples from fills and deposits but it is very magnetic and its presence can be detected using a magnet. It is most prevalent (thickest) in the immediate area of smithing, ie in the vicinity of the anvil and between it and the smithing hearth. Much of the flake hammerscale recovered from the Red Cross site is still large or not too broken-up so the focus of smithing cannot have been far away.

Table 50. Statistical data smithing hearth bottoms (12 examples)

	Range	Average	Standard deviation.
Weight (g)	139–1251	401	305
Length (mm)	60–140	92	37
Breadth (mm)	50–140	71	33
Depth (mm)	25–80	45	15

5.2.5 Slag described as undiagnostic cannot be assigned to smelting or smithing either because of morphology or because it has been broken up during deposition, re-deposition or excavation. Other types of debris in an assemblage may derive from variety of high temperature activities – including domestic fires – and cannot be taken on their own to indicate iron-working was taking place. These include fired clay, vitrified hearth lining and cinder. If found in association with iron smelting and/or smithing slag they are almost certainly products of the process,

5.3 Key groups

Phase 1

5.3.1 Anglo-Saxon pits 492 and 217 (G7) which contain furnace bottoms and other furnace slag, including a possible ore fragment. Also pits 364 and 541 (G5); subsequent examination of the remaining slag from further pits may throw up more groups of interest in this period.

Phase 2a

5.3.2 Large pits with slag.

5.4 Discussion

5.4.1 The assemblage contains both smelting and smithing slags. The smelting slags are most complete and definitive in the Anglo-Saxon pits 217, 492 (G7) and 634 (G3); they are not associated with microslags that suggest smithing. Other furnace slags from these pits may be amongst the yet-to-be examined slag. A burnt, heat-magnetised fragment of stone (SF966), which may be representative of ore which was roasted (prepared) prior to entering the furnace, was retrieved from environmental sample <100>, deposit (216) in pit 217. It is essential to identify it in order to know whether ore was being prepared on site and what type of ore it is. Analysis may also suggest a source for the ore.

5.4.2 It is worth noting that when undiagnostic types that may be smelting slags appear in later phases, they are more fragmentary and are often associated with smithing bulk slags and microslags. It may be they are residual material.

5.4.3 Although the number of complete smithing hearth bottoms recovered from the site was small (12), the quantity of microslags recovered by sampling indicates the focus or foci of smithing lay somewhere near the features in which they were deposited.

Anglo-Saxon (Phase 1)

5.4.4 In the Anglo-Saxon G5 pit **364** the material so far examined weighs 9.4kg and contained two smithing hearth bottoms and a great deal of smithing microslags. It also, however, contained many small fragments that may include smelting slag. Pit **541** (G5) contained a large quantity of smithing microslags and cannot be far from the focus of smithing. Other pits in this phase also contained smaller amounts of smithing material and microslags.

Early medieval (Phase 2A)

5.4.5 Phase 2A continued with large pits in which slag had been deposited.

High medieval (Phase 2B)

5.4.6 Large square pit **283** (G29), especially deposit (279), contained significant quantities of hammerscale which suggest smithing activity was continuing in the area. Other pits contained less but support the supposition.

5.5 Significance

5.5.1 The assemblage is of local, and possibly regional, significance.

5.6 Recommendations for further work

5.6.1 The rest of the assemblage needs to be examined, quantified, and added to the slag data spreadsheet.

5.6.2 Laboratory analysis of the furnace bottoms and other possible smelting slags should be carried out. The fragment of roasted stone from pit **217** was bagged separately and should be examined by a geologist for identification and ore source, and should then be sent with the furnace bottoms to undergo laboratory analysis and determine whether it was the ore being used in the process that produced the furnace bottoms.

5.6.3 A report on analysis suitable for publication should be prepared.

6 Registered finds (Andrew Richardson)

6.1 Introduction

6.1.1 This report assesses the metal (iron, copper alloy and lead), ceramic and stone (excluding flint but including other types of worked stone) registered finds recovered from the project site.

6.1.2 The finds of stone discussed here exclude flint but include some objects recorded as bulk, rather than registered, finds. Registered finds of glass, flint and industrial residues and by products (such as slag and hammerscale) are reported elsewhere.

6.1.3 All the finds have been entered in the CAT Integrated Archaeological Database (IADB). The finds have all been washed and marked where appropriate. The finds are stored in perforated sealable plastic bags with foam inserts, and these in turn are stored in sealable plastic tubs. Tubs with metal finds contain silica gel and a humidity indicator strip.

6.2 Methodology

6.2.1 All registered finds from the site were examined individually, preliminarily identified, and then assessed by material group. The finds have been individually bagged and labelled and recorded (with the prefix SF). The assessment was undertaken in cognisance of the procedures of assessment as set out in MAP 2 (English Heritage 1991), to provide both a quantification of the assemblage and a qualitative overview of its potential for further analysis.

6.3 Quantification

6.3.1 A total of over 124 registered finds were recovered during the evaluation and excavation. These have been recorded into the IADB as seventy-two separate records. The finds are quantified by material in Table 51, and by type in Table 52 below.

Table 51. Quantitative summary of registered finds by material

Material/Class	No. of Records	No. of Objects/Fragments	Weight (g)	Comments
Copper alloy	10	21	15.6	Finger-ring, strap-end, coin, mount, needle
Lead	1	1	34.4	Horseshoe, nails and fragments
Iron	38	71	795.8	Hook
Ceramic	1	1	213.5	Loomweight
Stone (non flint)	22	30	8313	Structural fragments, quern
Total	72	*124*	9372.3	

Table 52. List of registered finds

Find No	Context	Set	Group	Material	Type	Quantity	Weight (g)
SF 2	279	283	29	Iron	Nail	1	
SF 3	294	295	29	Iron	Nail	1	
SF 4	239	240	28	Iron	Nail	1	
SF 5	239	240	28	Iron	Knife	1	
SF 6	266	267	27	Metalworking Residue	Slag	1	
SF 7	298	302	27	Iron	Brooch	1	
SF 8	314	515	10	Iron	Horse Shoe	1	
SF 9	323	324	28	Copper Alloy	Pin	1	
SF10	323	324	28	Metalworking Residue	Slag	1	
SF11	325	328	28	Iron	Nail	1	
SF12	325	328	28	Iron	Nail	1	
SF13	342	328	28	Iron	Nail	1	
SF14	372	364	5	Iron	Nail	2	
SF15	372	364	5	Iron	Unidentified Object	1	
SF16	403	386	4	Copper Alloy	Strap End	1	
SF17	0	0	0	Unidentified Material	Finger Ring	1	
SF18	428	428	13B	Lead	Unidentified Object	1	
SF20	476	476	13E	Copper Alloy	Coin	1	
SF21	455	457	11	Iron	Pin	1	

Find No	Context	Set	Group	Material	Type	Quantity	Weight (g)
SF22	453	457	11	Iron	Strip	1	
SF23	493	498	7	Fired Clay	Loom weight	1	
SF24	518	491	27	Copper Alloy	Pendant	1	
SF25	568	570	5	Iron	Nail	1	
SF26	583	586	28	Iron	Nail	1	
SF27	535	541	5	Iron	Unidentified Object	1	
SF28	540	541	5	Glass	Unidentified Object	1	
SF29	540	541	5	Copper Alloy	Unidentified Object	1	
SF30	604	607	29	Iron	Nail	3	
SF31	610	607	29	Iron	Nail	1	
SF32	603	607	29	Iron	Nail	3	
SF33	631	634	3	Iron	Nail	1	
SF900	373	365	5	Metalworking Residue	Hammerscale	1	
SF901	407	386	4	Metalworking Residue	Hammerscale	1	
SF902	239	240	28	Metalworking Residue	Hammerscale	1	
SF903	216	217	7	Metalworking Residue	Hammerscale	1	
SF904	382	365	5	Metalworking Residue	Hammerscale	1	
SF905	497	498	7	Metalworking Residue	Hammerscale	1	
SF906	537	541	5	Metalworking Residue	Hammerscale	1	
SF907	329	315	10	Metalworking Residue	Hammerscale	1	
SF908	591	592	21	Metalworking Residue	Hammerscale	1	
SF909	635	639	6	Metalworking Residue	Hammerscale	1	
SF910	540	541	5	Metalworking Residue	Hammerscale	1	
SF911	514	431	30	Metalworking Residue	Hammerscale	1	
SF912	608	599	10	Metalworking Residue	Hammerscale	1	
SF913	676	688	5	Metalworking Residue	Hammerscale	1	
SF914	282	283	29	Metalworking Residue	Hammerscale	1	
SF915	568	570	5	Metalworking Residue	Hammerscale	1	
SF916	585	586	28	Metalworking Residue	Hammerscale	1	
SF917	279	283	29	Metalworking Residue	Hammerscale	1	
SF918	638	639	6	Metalworking Residue	Hammerscale	1	
SF919	709	711	4	Metalworking Residue	Hammerscale	1	
SF920	673	688	5	Metalworking Residue	Hammerscale	1	
SF921	535	541	5	Metalworking Residue	Hammerscale	1	
SF922	421	388	3	Metalworking Residue	Hammerscale	1	
SF923	652	653	7	Metalworking Residue	Hammerscale	1	
SF924	497	498	7	Metalworking Residue	Hammerscale	1	
SF925	692	694	11	Iron	Unidentified Object	1	
SF926	295	295	29	Stone	Worked	1	
SF927	591	592	21	Iron	?nail	1	
SF928	673	688	5	Metalworking Residue	Slag/hammerscale	1	148
SF929	676	688	5	Metalworking Residue	Slag/Hammerscale	1	13
SF930	497	498	7	Copper Alloy	Copper Alloy Fragment	1	
SF931	635	639	6	Iron	?nails	2	6
SF932	591	592	21	Metalworking Residue	Slag	1	19
SF933	638	639	6	Iron	?nails	6	32
SF934	638	639	6	Metalworking Residue	Slag/Hammerscale	1	106
SF935	652	653	7	Copper Alloy	Copper Alloy Fragments	3	1
SF936	652	653	7	Metalworking Residue	Slag/Hammerscale	1	162
SF937	535	541	5	Metalworking Residue	Slag/hammerscale	1	62
SF938	635	639	6	Metalworking Residue	Slag/hammerscale	1	200
SF939	514	431	30	Metalworking Residue	Slag/Hammerscale	1	30
SF940	279	283	29	Copper Alloy	Copper Alloy Fragment	1	0
SF941	709	711	4	Metalworking Residue	Slag/hammerscale	1	52
SF942	514	431	30	Glass	Glass	3	
SF943	216	217	7	Copper Alloy	Copper Alloy Fragments	1	1
SF944	568	570	5	Metalworking Residue	Slag/hammerscale	1	6
SF945	497	498	7	Metalworking Residue	Slag/hammerscale	1	204

Find No	Context	Set	Group	Material	Type	Quantity	Weight (g)
SF946	497	498	7	Iron	Iron Fragments	3	30
SF947	497	498	7	Metalworking Residue	Slag/hammerscale/iron Fragments	1	695
SF948	709	711	4	Iron	Iron Fragments	3	1
SF949	497	498	7	Glass	Glass	1	
SF950	375	365	5	Metalworking Residue	Hammerscale	1	250

6.4 Discussion

6.4.1 The registered finds are summarised below by functional category.

Dress accessories

6.4.2 A small number of dress accessories were present in the assemblage, including a copper alloy strap end (SF16) of Thomas' Class A (Thomas 2001) which dates to the ninth century AD, recovered from the fill of phase 1 G4 pit **386**. A copper alloy finger ring (SF17, unstratified) and iron pin (SF21) in early medieval G11 pit **457**, are probably of medieval date. SF931 from Phase 1 G6 pit **639**, may be two Roman hobnails. All these objects should be catalogued and all except the hobnails merit illustration.

Household equipment

6.4.3 The only objects in the assemblage identifiable as items of household equipment were two knives (SF5 from G28 pit **240** and SF22 G11 pit **457**) and fragments of lava stone (SF35 from Anglo-Saxon G3 pit **708**, and SF956 from high medieval G28 pit **240**) which are probably parts of querns of Roman date. The knives are probably of medieval date. All should be catalogued, but none are sufficiently complete or in good enough condition to merit illustration.

Textile and sewing equipment

6.4.4 A fired clay loom weight (SF23) of middle Anglo-Saxon date was recovered from the fill of G7 pit **498**, whilst high medieval G28 pit **324**, contained a copper alloy needle (SF9). Both finds should be described and catalogued and both merit illustration.

Commercial activity

6.4.5 The only numismatic find was a copper alloy coin (SF20) from the fill of early medieval G13C pit **476**. It is a radiate or nummus of third- to fourth-century date. Both sides are largely illegible due to wear, but it may be possible to further refine this dating. The coin should be catalogued, but does not merit illustration.

Transport

6.4.6 A single iron horseshoe (SF8) was recovered from the fill of G10 pit **315**, which is dated to the early medieval phase 2A. It is largely complete, although heavily corroded, and should be catalogued and illustrated.

Structural fittings and building materials

6.4.7 Some thirty fragments of worked stone were recovered and these are listed in Table 53. This assemblage includes a range of stone types, including chalk, limestone, sandstone, slate and lava stone. Most of the pieces probably represent structural fragments, most dating to medieval phases 2A and 2B. Few if any of these fragments are likely to merit illustration.

Table 53. List of worked stone fragments

Find	Context	Set	Group	Material	Type	Quantity	Weight (g)	Comments
BF2	101	599	10	Stone	Chalk	1	2	
BF301	223	225	21	Stone	Ironstone	1	25	Unworked
SF1	227	228	12	Stone	Fossil	1	0.4	Fossil(?) shaft
SF956	236	240	28	Worked stone	Worked	1	226.3	Lava quern?
BF387	278	283	29	Worked stone	Stone	3	115	Burnt or lava stone
SF957	278	283	29	Worked stone	Structural fragment	1	489	Limestone
SF955	287	289	11	Worked stone	Worked	1	16.1	
SF978	290	292	11	Worked stone	Stone	2	250.4	
BF328	291	292	11	Worked stone	Slate	1	2	
BF306	295	295	29	Worked stone	Stone	1	83	

Find	Context	Set	Group	Material	Type	Quantity	Weight (g)	Comments
SF926	295	295	29	Worked stone	Worked	1	141	Sandstone
BF138	313	315	10	Worked stone	Sandstone	1	58	
BF357	323	324	28	Worked stone	Stone	2	557	
BF440	329	315	10	Worked stone	Slate	1	1	
SF954	397	398	27	Worked stone	Worked	1	94.8	
SF19	443	445	27	Worked stone	Mortar	1	1075	
BF66	496	498	7	Stone	Stone	1	307	
BF31	582	586	28	Stone	Sandstone	1	66	
BF345	668	664	12	Worked stone	Slate	1	26	
BF194	693	694	11	Worked stone	Slate	4	294	
BF217	693	694	11	Worked stone	Chalk, Slate	2	10	
BF179	705	708	3	Worked stone	Structural fragment	1	2191	
SF35	705	708	3	Worked stone	Quern	1	2285	
TOTAL						30	8313	

Other fixings and fittings

6.4.8 A large number of metal fixings and fittings formed the largest single functional group within the registered finds assemblage, with the majority of these being iron nails. The medieval or undated nails are listed below. Several nails (SF14, 25, 33, 931 and 933) are of probable Anglo-Saxon date and it is recommended that these be catalogued individually, although none merit illustration. In addition a possible iron rim binding or clip (SF7) was recovered from the upper fill of high medieval G27 pit **302**, whilst a lead hook (SF18) was found in the fill of G13B post-hole **428**. The fill of high medieval G27 pit **491** contained a medieval lozenge-shaped mount decorated with a fleur-de-lys (SF24). These objects should be catalogued and SF7 and SF24 should be illustrated.

6.4.9 Uncatalogued medieval or undated *iron* nails: SF2 (x1, 22.2g), context (279), set [**283**]; SF3 (x1, 18.5g), context (294), set **295**; SF11 (x1, 21.6g), context (325), set **328**; SF12 (x1, 8.2g), context (325), set **328**; SF13 (x1, 11.1g), context (342), set **328**; SF30 (x1 and x2 fragments, 18.3g), context (604), set [**607**]; SF31 (x1, 15.3g), context (610), set **607**; SF32 (x3, 36.6g), context (603), set **607**; SF33 (x1, 20.4g), context (631), set **634**; SF927 (x1, 0.7g), context (591), set **592**, environmental sample <120>; SF946 (x2 nails and fragment, 28.8g), context (497), set 498, environmental sample <117>; SF952 (x1, 8.6g), context (667, set **664**; SF972 (x2, 3.5g), context (585), set **586**, environmental sample <121>; SF974 (part) (x1 nail), context (279), set **283**, environmental sample <102>; SF976 (x1, 3.9g), context (282), set **283**; SF979 (x1, 15.9g), context (290), set **292**; SF981 (x2, 15g), context (288), set **289**.

Undiagnostic objects, fittings and fragments

6.4.10 A number of undiagnostic objects, fittings or fragments of metal and stone were retrieved during the excavation. Most can be simply listed (see below), but a small number merit full catalogue entries (namely SF14, SF27 and SF29), although none need be illustrated.

6.4.11 Uncatalogued Anglo-Saxon *iron* fragments: SF15 (fragment, 68.9g), context (372), set **364**; SF948 (x3 fragments, 0.4g), context (709), set **711**, environmental sample <132>; SF971 (x4 fragments, 4.7g), context (540), set **541**, environmental sample <125>; SF973 (fragment, 0.6g), context (537), set **541**, environmental sample <124>; SF975 (rod or nail, 3.9g), context (382), set **364**, environmental sample <105>.

6.4.12 Uncatalogued medieval or undated *copper alloy* fragments: SF930 (x1 fragment, 0.1g), context (497), set **498**, environmental sample <122>; SF935 (x3 fragments, 0.7g), context (652), set **653**, environmental sample <133>; SF940 (length of twisted wire, 0.1g), context (279), set **283**, environmental sample <102>; SF943 (multiple fragments, 0.4g), context (216), set **217**, environmental sample <100>.

6.4.13 Uncatalogued medieval or undated *iron* objects and fragments: SF26 (rod, 16.9g), context (583), set **586**; SF925 (x1 fragment, 6.1g), context (692), set **694**; SF953 (object, 32g), context (239), set **240**; SF974 (part) (multiple lengths of wire), context (279), set **283**, environmental sample <102>; SF982 (object or fragment, 13g), context (516), set **491**.

6.4.14 Uncatalogued medieval or undated unworked *stone*: SF1 (x1 fossil? 0.4g), context (227), set **228**; BF301 (x1 ironstone, 25g), context (223), set **225**.

6.5 Recommendations for further work

6.5.1 This small assemblage is largely of only local significance, but does include some objects of intrinsic academic value, such as the ninth-century copper alloy strap end. Selected objects merit the completion of full catalogue entries and, in some cases, illustration, as recommended above. The remaining objects (forming the bulk of the assemblage) can simply be listed rather than catalogued.

7 **Glass** (Rose Broadley)

7.1 Introduction and methodology

7.1.1 A small assemblage of glass (sixteen fragments) from the archaeological investigations at the British Red Cross Centre was assessed. This is detailed below with an accompanying catalogue.

7.2 Catalogue

1 SF28, deposit (540) in G5 pit **541**. Fragment of a large translucent deep blue melon bead. Dates to *c* AD 530–580. Length 22mm, weight 3.2g.

2 BF76, deposit (617) in G32 pit **618**. Olive green bottle glass, stable. Length 31mm, width 28mm, thickness 3.1mm, weight 3.2g.

3 BF481, deposit (617) in G32 pit **618**. Olive green bottle glass fragment from shoulder, laminating. Mid-seventeenth to early eighteenth century (*c* AD 1650–1720). Length 73mm, width 61mm, 4.3mm, weight 28.3g.

4 SF942, deposit (514) <118> in G30 feature **431**. Colourless sherd with surface damage. 15mm, 5.9mm, 1.3mm. Weight 0.0g.

5 SF949, deposit (497) <122> in G7 pit **498**. Colourless/very pale blue green. 15.8mm, 9mm, 1.4mm. Weight 0.0g.

6 Large group of post-medieval utility bottle fragments from (210) in G32 garden feature **211**.

(a) Bottle neck. Olive green (appears black). Two wider rings at the rim. Obvious twisting in the surface of the metal. Rim diameter 31.3mm, height 98.9mm. Weight 68g.

(b) Bottle neck. Olive green (appears black). Two wider rings at the rim. Obvious twisting in the surface of the metal. Rim diameter 32.9mm, height 101.1mm. Weight 101.6g.

(c) Amber coloured neck fragment with both rim and body cracked off. Height 85.4mm. Weight 43.2g.

(d) Base of utility bottle. Dark olive green. Large bubble in the metal. Hemispherical shape to the concave base, and traces of a ‘sand’ pontil scar. Base diameter 88.7mm, height 87.8mm. Weight 370.9g.

(e) Base of utility bottle. Dark olive green. Large bubble in the metal. Conical profile to the concave base and indications of a ‘disc’ pontil scar. Base diameter 83.6mm, height 132.6mm. Weight 405.9g.

(f) Base of utility bottle. Dark olive green, appears black. Conical profile to the concave base, with a ‘disc’ pontil scar. Base diameter 82.5mm, height 49.6mm. Weight 175.2g.

(g) Fragment from the base of a utility bottle. Dark olive green. Large bubble in the metal. Height 83.9mm. Weight 85.3g.

(h) Amber coloured body fragment from bottle. Length 40.5mm, width 26.4mm, thickness 5.6mm. Weight 11.2g.

(i) Amber coloured body fragment from bottle. Length 68.1mm, width 29.9mm, thickness 4mm. Weight 10.7g.

(j) Colourless body fragment from bottle. Length 42.5mm, width 17.8mm, thickness 1.4mm. Weight 1.5g.

(k) Fragments from 'black' Post Medieval utility bottles: total weight 496g.

7.3 Discussion

7.3.1 A fragment from a translucent deep blue melon bead (1) is the oldest glass in the site assemblage by more than a thousand years. This type of bead dates to the sixth century, specifically *c* AD 530–580, during the lifetime of King Aethelberht but before the Augustinian Mission of AD 597. It was found in context (540), in the fill of a G5 pit **541** dated to the Anglo-Saxon period. Deep blue melon beads were more common in continental Europe than in Anglo-Saxon England, although this fragment is part of a small cluster of finds in East Kent. This bead would have been one of the largest of its kind, with an estimated diameter of 3cm.

7.3.2 The rest of the assemblage consists entirely of post-medieval utility bottles usually used to contain wine or beer. The earliest in date is an olive green fragment from the shoulder of an English wine bottle (3), dating approximately to the mid-seventeenth to early eighteenth century (*c* AD 1650–1720). It is not possible to be more precise as only parts of the neck and shoulder survive. Another post-medieval bottle fragment of interest is an amber coloured bottle neck dating to the later eighteenth century, *c* AD 1760–1800 (6c). This colour is much more unusual that the standard dark olive green, and suggests a continental origin. Utility bottles of this colour and form were usually made in Belgium for the Dutch market. This sherd is the earliest amongst the large group of post-medieval bottle fragments from context 210, the fill of a post-medieval cut described as a 'garden feature' (G32, set **211**). Two other sherds from the group are body sherds of the same distinctive amber colour (6h and 6i), and one is a colourless body sherd (6j). The remaining fragments are all from bottles that were olive green but appeared black in reflected light. As a group the olive green necks and bases from deposit (210) in **211** date to the late eighteenth to early nineteenth century, *c* AD 1770–1840 (6k).

7.4 Recommendations for further work

7.4.1 No further work is recommended.

8 Charred plant macrofossils (Wendy Carruthers)

8.1 Introduction

8.1.1 Soil samples were taken from a range of features and processed using standard methods of flotation/wash-over by CAT staff. A 250 micron mesh was used to catch the flot/wash-over and 1mm mesh was used to retain the residue. Flots and > 1mm residues from the most promising samples (22 samples) were selected and were sent to the author for assessment (sample volumes ranging from nine to twenty litres of soil). In addition seven auger samples taken from pits too deep to safely excavate were assessed (sample volumes ranging from 0.25 to 1 litre).

8.2 Assessment methods

8.2.1 In order to assess the potential for further analysis each flot was firstly stack-sieved (dry) through 3mm, 1mm and 250 microns so as to make rapid scanning more efficient. No plant remains were removed from the sample bags but some were placed in glass tubes during scanning in order to protect them.

8.2.2 Each fraction was rapidly scanned and an estimation of frequency was made for the charred plant remains (CPR);

(+=occasional (1–4 items); ++ = several (5–20 items); +++ = frequent (21 to 100 items); ++++ = abundant (>100 items).

8.2.3 The potential for further analysis was coded as follows:

A*= exceptional either through state of preservation and/or types of remains – full analysis is highly recommended for both archaeobotanical and archaeological reasons.

A= well-preserved and/or significant, frequent identifiable remains present – worth analysing in order to recover economic and/or environmental information

B= CPR may not all be well-preserved or abundant, but are present in sufficient numbers to be useful, especially when a number of contexts are examined together.

C= poorly preserved and/or infrequent CPR. Would only be useful if specific questions need to be asked concerning the deposit, or a radiocarbon date is required.

D= very few, poor or no CPR present. No further potential.

8.2.4 Sixteen residues were selected for scanning on the basis of records made by Enid Allison (CAT) when selecting samples for assessment. Findings made during assessment of the flots were also taken into consideration. Factors such as the presence of mineralised millipedes, worm cocoons and seeds and the presence of very large residues with abundant fawn-coloured concretions are indicative of mineralised faecal material in a sample. Sub-samples of the >1mm residues were rapidly scanned until an overall impression of the amount of faecal material present was obtained.

8.3 Results

8.3.1 The results of the assessment are presented in Table 55. It should be noted that identifications given at this stage are provisional (hence Latin binomials are not always given) as this level of information will be provided at the full analysis stage.

8.3.2 **Contamination, state of preservation and frequency of the plant remains**.

8.3.3 In comparison with some sites in Canterbury (e.g. Augustine House (Carruthers 2014a), Marlowe Arcade (Carruthers 2014b)) evidence of contamination was scarce. Unlike at Augustine House, fragments of coal, slaggy and other heat affected materials (HAM) were not ubiquitous or abundant although HAM was common in some of the refuse pits that had obviously received waste from metal-working. Modern-looking uncharred seeds and insect fragments were very rare, and the uncharred elderberry seeds (*Sambucus nigra*) present in low numbers in some of the samples were considered to be contemporary and at least partially mineralised. In any case, these tough-coated seeds can survive for many centuries in an uncharred state.

8.3.4 The charred plant remains (CPR) were variable in their state of preservation, suggesting that some charred grain had been swept up from floors and re-deposited whilst other grain may have become charred and deposited in pits more rapidly, perhaps having been accidentally dropped into hearths

during cooking preparations. It was noticeable that the barley grains were often present in an eroded condition, but this needs to be looked into in more detail during the full analysis. As is usual on post-Roman sites, chaff fragments were very scarce and weed seeds were infrequent, indicating that the charred waste derives from the domestic use of fully processed crops. However, more evidence of crop contaminants may be found during full analysis since they are less easy to spot during scanning than cereal grains and large pulses (peas and beans).

8.3.5 Mineralised plant, arthropod and earthworm remains (cocoons) were recovered from 16 of the samples. Calcium phosphate mineralisation occurs in the presence of moisture and high nutrient levels, preserving softer tissues in preference to those with thickened cell walls (Green 1979; Carruthers 2000). Their presence is usually associated with the deposition of faecal waste, although confirmation of this is only possible if concretions containing bran 'curls' are present and/or mineralised food remains such as fruit stones and pulse testa. Calcium and phosphate are in plentiful supply where high concentrations of organic waste and ash have been deposited, particularly on calcareous soils. Where moisture levels and/or mineral levels are not optimal mineralisation either does not occur (particularly where soils are too dry) or sometimes plant macrofossils are too poorly preserved to be identifiable. On this site it is likely that some of the possible cess pits were too well-drained to produce well preserved mineralised plant remains while others were reasonably well preserved. However, none were as moist as those found nearer the river on Stour Street (Allison and Carruthers, in preparation) where abundant fruit stones and insects were preserved by a combination of waterlogging and mineralisation.

8.3.6 Five of the selected samples contained frequent to abundant charred plant remains and the rest contained lower concentrations. Mineralised plant remains were not abundant but even small amounts are important in providing direct evidence for foods consumed by the occupants including foods such as imported fruits that are rarely preserved by charring. As an example of this, two fig seeds (*Ficus carica*) were recovered from the small auger sample from the bottom of early medieval cess pit **364** providing the only evidence so far of imported 'luxury' foods on the site.

8.3.7 **Interpretation and comparisons between different types of pit**

8.3.8 The assemblages contain evidence for the use of all four cereals; free-threshing wheat (*Triticum aestivum/turgidum*), hulled barley (including six-row barley, *Hordeum vulgare*), rye (*Secale cereale*) and oats (*Avena* sp.). Rye and oat grains were not frequent but were present in very similar proportions in all three phases of occupation. It is likely that they represent minor crops or fodder crops, but this needs to be investigated further in the full analysis. Since no oat chaff was recovered it is possible that oats were only present as weed contaminants. However, their large size and plump profiles suggest that they were a crop plant at this site.

8.3.9 Evidence for the use of pulses was relatively common, with nine of the twenty-two samples containing pea or probable pea and three samples producing cf. bean. One sample, <120> from ashy deposit (591), contained several very large bean cotyledon fragments similar in size to modern-day broad beans. Pulses were present in all three phases. The role of pulses in the medieval period will be investigated further during full analysis, since they were valued both as fodder crops and for human consumption (e.g. in pottages and stews). Hazelnut shell in a few of the samples indicates a further source of food being gathered from woodland margins and hedgerows, or bought at market.

8.3.10 The remains of other foods were present in the mineralised assemblages, though the importance of these was likely to be under-represented due to the poor state of preservation in most of the cess pits. Because selected residues need to be fully sorted before the full range of mineralised remains is known, more food items are likely to be identified at the full analysis stage. Testa (seed coat) fragments and hila of pulses were present in addition to traces of apple seed (*Malus* sp.), a type of cherry/damson/plum stone kernel (*Prunus* sp.) and a possible fragment of flax seed (cf. *Linum usitatissimum*). Cereal bran fragments, often embedded in faecal concretions, were the most widespread items preserved by mineralisation, suggesting that cereal-based foods such as bread were very important in the diet. Mineralised fly puparia were not frequent, though millipede fragments were more common, perhaps due to the poor mineralisation in the pits, probably due to lack of moisture. It may be interesting to obtain information about which of the large square pits had been wood-lined to see if this affected the drainage of the features and state of preservation. It should be noted that, although some of the features are thought to have been originally used as cess pits they may subsequently have been used for general rubbish disposal.

8.3.11 The following samples (Table 54) contain the most useful amount of information, particularly when examined together. These are recommended for full analysis. Samples have been selected so that comparisons to be made between phases and between pit types as described below.

Table 54. List of samples recommended for full analysis

Phase	Sample	Context	Set	Group	Pit type	Assemblage type	Evidence for faeces
1	107	407	**386**	4	domestic & industrial waste	charred mixed grain & weeds	-
1	108	421	**386**	3	domestic & industrial waste	charred mixed grain, weeds & HNS	-
1	124	537	**541**	5	cess pit	charred mixed grain with *Prunus* sp. (trace of mineralisation only)	-
1	125	540	**541**	5	cess pit	no charred cereals but some evidence for deposition of faeces (concretions with bran, earthworm cocoon)	✓
1	128	635	**639**	6	cess pit	charred mixed grain, weeds	-
1	129	638	**639**	6	cess pit	charred mixed grain with cf. pea, no evidence of cess	-
2A	122	497	**498**	11	cess pit	Abundant barley grains, almost pure crop with some cf. peas and rye	-
2A	110	425	**364**	10	cess pit	Auger sample – no charred cereals but frequent mineralised bran, pulse testa, apple seed frag.	✓
2B	101	239	**240**	28	domestic & industrial waste	trace of charred grain with frequent faecal concretions, mineralised bran, straw, occasional fruit seeds	✓
2B	102	279	**283**	29	domestic waste	charred mixed grain with cf. pea & mineralised worm cocoon but no faecal material preserved	-
2B	103	282	**283**	28	domestic waste	frequent charred mixed grain with peas, weeds, mineralised millipedes but no evidence for faeces	-
2B	112	293	**498**	28	cess pit	Auger sample – charred mixed grain and mineralised fig seeds	✓
2B	120	591	**592**	21	?metal-working hearth within pit	Frequent charred mixed grain with HNS, peas and large bean fragments. Traces of mineralised bran & apple in residue, worm cocoon	✓
2B	121	585	**586**	28	refuse pit	frequent charred mixed grain, cf. cultivated vetch, bean	-

8.4 Recommendations for further work

8.4.1 It is recommended that the samples listed above should be fully analysed to enable comparisons to be made through the phases and also between pit-types. In the early medieval phase (2A) where both round pits and large, sometimes wood-lined pits were excavated a selection of both types has been made so that the samples can be compared. Fourteen samples including two small auger samples are listed. Analysis will need to include both flots and residues for all five samples producing evidence for faecal material.

8.4.2 Comparisons will be made with samples from other sites of a similar date from Canterbury, such as Whitefriars (Anne Davis, forthcoming), Stour Street (Allison & Carruthers in preparation) and Marlowe Arcade (Carruthers 2014b unpublished assessment).

Table 55. Plant macrofossil summary

Remains recovered from bulk soil samples. Abundance of remains has been estimated on a four-point scale where weighing was inappropriate as + present, ++ common, +++ abundant, ++++ very abundant.

Sample	Context	**Set**	Group	Description	Litres washed	Residue (kg)	Contents >2mm residue	Flot (ml)	Contents flot/washover	Charred (CPR) & mineralised (MPR) plant remains
<100>	216	**217**	7	Lower fill of rectangular pit [217]	20	1.05	Slag and hammerscale 247g, Cu alloy waste/fragments <1g, large mammal 21g, fish +	150	Charcoal ++++, trace hazelnut shell, earthworm granules +, mineralised millipedes +; bone frags++; trace of coal	Several CPR: barley grain +; cf. emmer/spelt wheat +; indeterminate grains++; cf. pea ++ RESIDUE CHECKED
<101>	239	**240**	28	Lower mixed silty deposits towards side/base of large pit [240]	20	0.45	Burnt flint 2g, daub 2g, pot 1g, slag and hammerscale 47g, large mammal 57g, small mammal ++, trace indet bird bone, fish +++, oyster 1g, trace mussel, mineralised fruit pips, bran and stem frags +; *c* 90% faecal concretions	130	Charcoal (small frags) ++; abundant fawn dusty poorly preserved faecal concretions, fish bone ++; mineralised millipedes, straw/stem frags ++, bran curls ++, cf. mole skull, bone frags	Several mineralised and occasional CPR; CHARRED : FTW +; poor cereal frag +; MINERALISED (*c* 90% faecal concretions) cf. Prunus sp. kernal +; cf. flax seed kernal +, cereal cf. barley grain frag + RESIDUE CHECKED
<102>	279	**283**	29	Charcoal-rich fill of large pit [283]	20	1.13	Brick/tile frags 74g, daub 15g, pot 32g, slag and hammerscale 46g, [7.8g hammerscale], Fe nail and thin nails/pins 9g, Cu/bronze twisted wire frag, large mammal bone (mostly burnt) 55g, bird +, fish +++, oyster 13g	400	Charcoal ++++; frequent heat-afftected material plus grey (silicified) ash; twisted (Ericaceae?) stems common	Frequent CPR: poor vacuolated barley +++; rye +; FTW +; cf. pea +++; Mineralised worm cocoon +; frequent ashy/mineralised grey/fawn ? faecal concretions RESIDUE CHECKED
<103>	282	**283**	229	Primary silting in pit [283]	20	0.44	Brick/tile frags 30g, pot 22g, slag and hammerscale 38g [7.3g hammerscale], Fe nail 4g, large mammal bone 18g, small mammal +, fish ++, oyster shell x1 10g. Concretion, probably not faecal.	45	Charcoal +++, bone frags & small bones ++, Mineralised millipede frags ++	Frequent CPR: FTW +++; barley ++; rye+; cf. pea++; Anthemis cotula +; HNS+; RESIDUE CHECKED
<112>	293	**253**	28	Auger sample from deep pit [253]. Depth 1.45–2.67m	0.5	0.01	common small bones including fish +++; charcoal +;	5	small charcoal frags ++; common bone including fish +++	MINERALISED fig (Ficus carica) +; CHARRED FTW++, barley ++; oat +; large pulse+
<113>	319	**320**	10	Auger sample from deep pit [320]. Depth 1.27–3.77	1	0.005	common bone frags+++; includes fish, occasional charcoal	5	bone common including fish, occasional charcoal	Occasional CPR: cereal frag+; oat awn+
<114>	319	**320**	10	Auger sample from deep pit [320]. Depth 3.77–3.96	0.25	0.004		4	bone common including fish, occasional charcoal	Frequent fine chaff fragments, unidentified (no floret bases) but possibly oat, FTW++, Bromus+, Rumex +
<115>	323	**324**	28	Auger sample from deep pit [324]. Depth 1.36–2.07	0.5	0.01		3	Frequent knobbly mineralised concretions with occasional bran visible	Only charcoal + and occasional bran curls seen in concretions +
<116>	329	**315**	10	Auger sample from deep pit [315]. Depth 2.04–3.28	0.5	0.005	[0.9g hammerscale]	2	occasional charcoal	Only charcoal +
<106>	373	**364**	5	Charcoal-rich deposit in pit [364]	20	1.05	Slag and hammerscale 356g, pot 12g, large mammal 29g, fish +	300	Charcoal ++++, mineralised millipedes, trace mussel, bone ++, orange slaggy HAM, silver HAM, trace of coal	Several CPR, poor preservation; FTW++, poor barley +; rye +; cf. pea +; Bromus sp, +; uncharred Sambucus nigra +; RESIDUE CHECKED

Sample	Context	**Set**	Group	Description	Litres washed	Residue (kg)	Contents >2mm residue	Flot (ml)	Contents flot/washover	Charred (CPR) & mineralised (MPR) plant remains
<105>	382	**364**	5	?Cessy deposit in pit [364]	20	2.04	Slag and hammerscale 972g, daub 38g, burnt flint 1g, Fe nail frag 3g, large mammal; 180g, bird ++, fish ++, oyster 605g, mussel 1g	400	Charcoal ++++ some very large frags, mineralised fly puparia +, mineralised millipedes +; oyster frags, reddish slag, small bone +	Occasional CPR; poorly preserved barley +; no mineralised remains seen; RESIDUE CHECKED
<107>	407	**386**	4	Charcoal fill in pit [386]	20	1.05	Slag and hammerscale 776g, trace pot, large mammal (trace burnt) 74g, fish +, trace oyster; frequent small bones.	375	Charcoal ++++, traces large mammal and indet fish, oyster, mineralised fly puparia, mineralised ?fly egg, mineralised millipede, foram x1 (?fossil)	Several CPR; poor barley ++; FTW+; Avena/Bromus +; Galium aparine+; <2mm Vicia/Lathyrus sp. +; uncharred Sambucus +
<108>	421	**388**	3	Charcoal layer in pit [386]	10	0.73	Daub/heat affected earth 10g, slag and hammerscale 409g [61.6g hammerscale], trace glass, large mammal 21g, fish ++, trace oyster, coal	100	Charcoal +++, mineralised millipedes +	Several CPR; FTW++; HNS++; barley +; large pulse frag+; <2mm Vicia/Lathyrus sp.+
<110>	425	**364**	5	Auger sample from deep pit [364]. Depth 1.93–2.33m	0.25	0.014	Faecal concretions ++, fish bone ++, trace bird, trace large mammal bone (trace burnt), vole tooth, trace insect larval segments, mineralised fruit pips +, trace other mineralised seeds, trace mineralised plant stalks	<5	Trace faecal concretions, fish bone and charcoal	RESIDUE: frequent bran-rich mineralised concretions, MINERALISED pulse testa +; pea/bean hilum+: FLOT no CPR or MPR
<111>	426	**369**	27	Auger sample from deep pit [369]. Depth 1.80–2.30m	0.25	0.01	mineralised straw/stem frags +, bone	5	straw/stem frags +, bone+	Occ CPR; poor FTW+
<117>	497	**498**	7	Lowest excavated deposit in pit [498]	20		[34.1g hammerscale]	200	Charcoal +++, mineralised millipedes +; some large bone++; slag and textured HAM, frequent small oyster, small bones	Occasional CPR; poorly preserved grain +; rye+ Bromus sp. +; <2mm Vicia/Lathyrus sp.+
<122>	497	**599**	10	Lowest excavated deposit in pit [498]	20	1.84	Small frags brick and tile 5g, pot 3g, slag /hammerscale/Fe frags 854g [21.8g hammerscale] , Fe ?nail frags 30g, glass 1g, large mammal 216g, small mammal +, bird +, amphibian +, fish ++, oyster 11g, trace faecal concretions/coprolite	125	Charcoal +++ (some large frags), occasional ashy 'slag' and earthworm egg capsules	Abundant CPR: almost pure barley ++++; rye+; cf. small pea or vetch +++; RESIDUE SCANNED: stoney & boney with frequent metal-working debris, no faecal seen
<123>	535	**541**	5	Bone and charcoal-rich fill of [541]	9	0.17	Slag and hammerscale 61g [+8.6g hammerscale], large mammal 20g, fish +, oyster 11g	1500	Charcoal ++++, some large frags (probably mostly oak) [1/4 of flot scanned)	Occasional CPR: very poor grain +; cf. large pulse frag+
<124>	537	**541**	5	Bone and charcoal-rich fill of [541]	9	0.62	Chalk frags 102g, daub 48g, slag 52g, hammerscale and magnetic frags 78g [+38.2g hammerscale], Fe ?hobnail x1, large mammal 194g, bird +, fish ++, oyster 22g	150	Charcoal +++, mineralised millipedes +; small bones & bone frags+	Several CPR: emmer/spelt grain +; barley ++; oat ++ (plump cultivated-type); Vicia/Lathyrus+; Prunus sp. +uncharred Sambucus+; MINERALISED nodule+; RESIDUE SCANNED: stoney and boney with metal-working debris, no faecal material seen

Sample	Context	**Set**	Group	Description	Litres washed	Residue (kg)	Contents >2mm residue	Flot (ml)	Contents flot/washover	Charred (CPR) & mineralised (MPR) plant remains
<125>	540	**541**	5	Lowest excavated deposit in [541]	9	0.23	Daub 15g, slag 81g, hammerscale and small Fe frags 7g [+4.6g hammerscale], Fe frags 5g, large mammal 66g, bird +, fish ++, faecal concretions +, oyster 2g, trace mussel	30	Charcoal ++, trace of poor faecal concretions, mineralised millpedes +	Occasional CPR: MINERALISED worm cocoon +; uncharred Sambucus+; RESIDUE SCANNED: faecal concretions with bran observed but poor preservation; Agrostemma githago impression+
<119>	568	**570**	5	Green silty deposit, ?cess	10	n/r	Pot 15g, slag and hammerscale 6g [+2.4g hammerscale], large mammal 7g, indet fish bone +, trace faecal concretions	10	Charcoal +, frequent fawn/green silty faecal concretions +, mineralised ?wood and insect remains +, very small frags indet large mammal and fish bone +	Several CPR: FTW/rye +; barley +; FTW++; MPR: bran curls ++; straw/stem frags ++; RESIDUE SCANNED: dark sandy concretions *c* 20% but bran not seen (probably not faecal)
<121>	585	**586**	28	Basal deposit in [586]	9	0.4	Tiny frags brick or tile 1g, waste flint flake x1, pot 32g, slag and hammerscale 14g [+3g hammerscale], Fe nails x2 4g, large mammal 17g, bird +, fish ++, small frags oyster 1g	40	Charcoal ++, mineralised millipedes +; coal+; bready fragment+; small bones+; poor preservation	Frequent CPR; FTW+++; barley ++; oat/brome+; bean+; large vetch +; RESIDUE SCANNED: stoney & boney with no obvious faecal concretions
<120>	591	**592**	21	Grey ash/burning deposit	18	0.69	Pot 29g, slag 21g, trace hammerscale [+7.1g hammerscale], Fe nail frag 1g, large mammal 216g, fish ++, oyster 24g, mussel <1g	175	Charcoal +++, mineralised fly puparia +, mineralised millipedes +; grey ashy material	Frequent CPR: FTW+++; barley +++; rye+; culm node+; vacuolated grain +++; cf. peas++; very large pulses (cf. broad bean) +; HNS+ RESIDUE SCANNED: bran curls+; worm cocoon++; apple seed apex+, no obvious faecal concretions
<128>	635	**639**	6	Fill of [639] with burnt material	10	0.56	Trace brick/tile, daub fragments 170g, slag and hammerscale 204g [+14.4g hammerscale], Fe ?hob nail + other nail frag 4g, large mammal 26g, fish +	200	Charcoal +++, mineralised millipedes +; black HAM and blobby slag	Several CPR: FTW++; oat/brome+; rye+; oat+; Vicia/Lathyrus Sp. +; RESIDUE SCANNED: stoney and boney with metal-working debris, no faecal
<129>	638	**639**	6	Fill of [639], carbonised wood deposit	10	0.68	Daub fragments 10g, trace burnt flint, slag and hammerscale 108g [+15.7g hammerscale], Fe nails 35g, large mammal 30g, trace mussel	500	Charcoal ++++ (frequent large frags, probably oak)	Several CPR: FTW++, poor cf. pea+; poor barley+; RESIDUE SCANNED: stoney with metal-working debris and flaky charcoal
<133>	652	**653**	7	Fill of oven [653] in pit [701]	10	0.6	Daub (some frgaments with wattle impression) 110g, pot 4g, slag and hammerscale 161g [+28.3g hammerscale], cu alloy frags 1g, large mammal 23g, bird +, fish +	125	Charcoal +++ (mostly oak, knarled) occasionally vitrified, beetle (possibly modern) +, indet frags fish and small mammal bone +	Occasional CPR: poor vacuolated FTW+; poor barley+; oat+; uncharred Sambucus+; MINERALISED nodule++; RESIDUE SCANNED: metal-working debris, *c* 80% red (burnt?) sandy concretions
<130>	673	**688**	5	Charcoal-rich deposit in [688]	10	0.35	Daub/heat affected clay 11g, pot 7g, slag/hammerscale/Fe waste 155g [+12.9g hammerscale], charcoal ++, large mammal 38g, fish ++, oyster shell (x1) 36g	450	Charcoal ++++, probably mostly oak, some vitrified frags	Several CPR: FTW+; Rubus sect. Glandulosus+; cf. pea+; oat+; <2mm Vicia/Lathyrus sp.+;
<131>	676	**688**	5	Soft silts below dumped re-deposited natural in [688]	10	0.33	Hard, compacted sediment 255g, trace burnt flint, pot 2g, slag and hammerscale 14g [+2.5g hammerscale], large mammal 21g, fish ++, traces oyster and mussel	25	Charcoal ++, traces large mammal, small mammal and fish bone (identifiable frags picked out), mineralised millipede +	Occasional CPR: FTW+; poor barley+; RESIDUE SCANNED: stoney with faecal sandy fawn concretions (*c* 90%) but poor preservation. Agrostemma githago impression +;

Sample	Context	**Set**	Group	Description	Litres washed	Residue (kg)	Contents >2mm residue	Flot (ml)	Contents flot/washover	Charred (CPR) & mineralised (MPR) plant remains
<132>	709	**711**	4	Black silty deposit in [711]	10	0.29	Charcoal frags very common, slag 53g, trace hammerscale [+3.3g hammerscale], Fe ?nail frags 1g, trace brick/tile, tiny daub fragments 12g, large mammal bone 5g, trace fish, trace oyster	850	Charcoal ++++, some vitrified, range of taxa	Occasional CPR: very poor oat +; FTW+

9 Animal bone (Tania Kausmally)

9.1 Introduction

9.1.1 The aim of the report is to evaluate the animal remains excavated from the British Red Cross Centre, Canterbury, and assess their potential to contribute and broaden our understanding of animal exploitation and the environment.

9.1.2 The assessment is based on the information provided in the interim report (Gollop 2012). The report suggested the main periods of activity was the late Anglo-Saxon period (tenth–eleventh century) and early medieval period (mid eleventh–mid thirteenth century) with some activity in the high medieval period (mid to late thirteenth century ending in the fourteenth century) whereafter it converts to agricultural/horticultural land with some finds from the eighteenth–nineteenth century (Table 56).

Table 56. Number of bone producing contexts by phase in the hand collected assemblage.

Phase	Period	Number of bone producing contexts	Fragment count	Unidentified
1	Anglo-Saxon	36	920	103
2A	Early medieval	61	560	82
2B	High medieval	22	115	11
3	Post-medieval	2	24	9
Undated	Undated	7 (+ u/s)	48	13
Total		128	1667	218

9.1.3 The vast majority of animal bones were uncovered from large pits (3232/3353) (96.39%), and only in the post-medieval period (phase 3) did the feature type markedly change (Table 57).

Table 57. Type of features yielding animal bones (including both hand collected and samples)

Feature	1	2A	2B	3	Undated
Pit	✓	✓	✓		✓
Linear ditch	✓	✓			
Post hole					
Deposit			✓		
Midden			✓		
Oven	✓				
Animal burial				✓	
Garden feature				✓	
Tile drain				✓	

9.2 Assessment methodology

9.2.1 The aim of this assessment is to identify the main characteristics of the site and establish the value of bone recording. The assessment follows English Heritage MAP2 (1991) and English Heritage Guidelines for assessment of animal bones (Baker and Worley 2014, 18–20). Numbers of identifiable, ageable and measurable specimens were recorded, but not the detail of the individual bones. This was to allow an assessment of the quantity and quality of information available and its potential in a wider context.

9.2.2 The relatively small quantity of bone allowed for all fragments to be included in the assessment (excluding those not provided for assessment). The bone was identified using a comparative osteological reference collection at the Institute of Archaeology, UCL and Schmid (1972) and Hillson (1996).

9.2.3 State of preservation was recorded in a four stage system of preservation from poor (unobservable surface) to excellent (surface clearly visible). The presence of gnawing, weathering and erosion was further observed. Skeletal completeness was recorded in 20% intervals.

9.2.4 The total number of identifiable bones and teeth (NISP) was recorded for each context. Zone recording was not adopted at this stage. The number of unidentifiable fragments was counted very approximately for all examined material. At this stage no attempt was made to distinguish between certain taxonomic groups, horse, donkey or mule or sheep and goats for example and this will therefore need to be done during analysis.

9.2.5 Mandibles were considered 'ageable' if they had one or more cheek bones (4th deciduous/4th premolar-third molar) *in situ* with recognisable wear on the occlusal surface, following Grant (1982) for cattle and pigs, and Payne (1987) for sheep/goat. Isolated teeth were considered ageable if they consisted of a fourth deciduous premolar, fourth premolar or a first, second or third molar with recognisable wear. Bones were considered ageable if the state of epiphyseal fusion could be observed or if they consisted of foetal/perinatal remains.

9.2.6 Von den Driesch (1976) was used in assessment of measurable bones, excluding all unfused bones. Bones were considered measurable if one or more measurements could be taken on the bone.

9.2.7 The assessment data has been entered onto a Microsoft Excel spreadsheet (Table 58).

Table 58. Summary of animal bone by species identified and quantity

Context	Set	Group	Amphibian	Brown hare?	Cat	Cat?	Cattle	Deer	Deer?	Dog	Frog	Horse	LRG	MED	Pig	Rat?	Red deer?	Sheep/goat	SML	UI	Grand Total
210	**211**	32					1														1
214	**217**	7											3								3
215	**217**	7											1		1					5	7
216	**217**	7					4						3					3		55	65
218	**220**	12											4								4
221	**225**	21											1								1
223	**225**	21													4						4
227	**228**	12												5	1				6	8	20
233	**235**	21											2								2
234	**235**	21											6								6
236	**240**	28					9						23		2						34
237	**240**	28					1						9	2							12
238	**240**	28					5						8	12	1			3			29
239	**240**	28						2					8	7	1			2	11	25	56
246	**248**	21							1			14		2							17
247	**248**	21											1								1
251	**253**	28					3						11	1				3	1		19
252	**253**	28											1	4	1						6
257	**257**	25					2						3	2							7
258	**260**	27																1		1	2
261	**262**	27											2					1			3
266	**267**	27					2						1	2							5
270	**271**	27											2					1			3
272	**273**	12											3								3
274	**276**	18					1						1							2	4
278	**283**	29					1						4	3				1			9
279	**283**	29											5	7	1			6		75	94
280	**283**	29												1							1
281	**283**	29											2					2			4
282	**283**	29											2	1					1	50	54
284	**285**	12					1						5								6
286	**289**	11																		2	2
287	**289**	11											1								1
288	**289**	11									14		2					2	1		19
290	**292**	11					2		1					1				1		10	15
291	**292**	11					1						5	5				1			12
293	**253**	28											2		1						3
295	**295**	29											5								5
296	**297**	22													2						2
301	**302**	27											2	1							3
308	**240**	28											4								4
313	**315**	10					4						4	22	2					3	35

Context	Set	Group	Amphibian	Brown hare?	Cat	Cat?	Cattle	Deer	Deer?	Dog	Frog	Horse	LRG	MED	Pig	Rat?	Red deer?	Sheep/goat	SML	UI	Grand Total
314	**315**	10					1						1	2	4			1			9
316	**283**	29												1							1
319	**320**	10												4							4
321	**324**	28											2		1						3
323	**324**	28									4		1	2						1	8
325	**328**	28					2						4								6
327	**328**	28												3				1			4
329	**315**	10														1				3	4
334	**271**	27					1						3								4
339	**328**	28					1						1	4							6
342	**328**	28											7	1			2	1		3	14
350	**357**	5																2			2
358	**364**	5					9						21	4	2			2			38
363	**364**	5			32		1											1			34
368	**369**	27												1							1
370	**371**	13												2							2
372	**364**	5					3						9	1	1						14
373	**364**	5		1									4	1				1		77	84
374	**364**	5											1							5	6
375	**364**	5												2					4	80	86
376	**364**	5					4			3			8	19				2		3	39
378	**364**	5					7						15	9	2			2		4	39
382	**364**	5					19						62	60	11			32		141	325
384	**385**	12											3	1				1			5
393	**394**	21											1	1							2
397	**398**	27												3				1	1		5
401	**386**	4																		1	1
404	**386**	4					18			3			50	13	12			12		28	136
407	**386**	4					1							2				1		27	31
410	**386**	4					1						4	7	1			2			15
413	**386**	4											3	5				1		4	13
414	**387**	4											8	4				2			14
417	**389**	12					4						1	9							14
421	**388**	3											1	1					5	76	83
424	**364**	5																	19		19
446	**448**	13B											1								1
449	**452**	10												1						1	2
451	**452**	10											1	2							3
453	**457**	11					2														2
455	**457**	11					1						1								2
456	**457**	11											2								2
487	**488**	13C											1					1			2
494	**498**	7					11						48	5				3		35	102
496	**498**	7					9						22	30				3			64
497	**498**	7	2				6						6	18				3	3	238	276
514	**431**	30																		8	8
516	**491**	27					1						3					8			12
523	**525**	7					1						5		3			1	1	9	20
533	**541**	5											5	1				1			7
535	**541**	5					5						15	2	3			3		80	108
537	**541**	5					33					2	20	21	1			9	11	194	291
540	**541**	5					1						1	4				5		100	111
552	**553**	12												1							1
560	**561**	14												1	12						13

Context	Set	Group	Amphibian	Brown hare?	Cat	Cat?	Cattle	Deer	Deer?	Dog	Frog	Horse	LRG	MED	Pig	Rat?	Red deer?	Sheep/goat	SML	UI	Grand Total
564	**565**	2				1	1						4	1							7
567	**570**	5											2								2
568	**570**	5											4	4	7					4	19
576	**577**	24											2	1							3
581	**586**	28																1			1
582	**586**	28											3		1				1		5
583	**586**	28											2								2
584	**586**	28											4	2				3	1		10
585	**586**	28											5	2	1					30	38
589	**590**	22											1								1
591	**592**	21											7							30	37
596	**599**	10					1						2	1							4
598	**599**	10											1								1
600	**602**	12											1					1			2
603	**607**	29												2							2
604	**607**	29											2	1	1					3	7
610	**607**	29					1							6							7
617	**618**	31											3	3				8		9	23
619	**620**	21												1							1
629	**634**	3					3						8							8	19
632	**634**	3					2						3	1							6
635	**639**	6					2						5	5				3		70	85
638	**639**	6					2							2	4			1		46	55
645	**648**	3					8														8
652	**653**	7												5						35	40
667	**664**	12					1														1
668	**664**	12											2	1							3
671	**688**	5					3						9	1	1			4		8	26
673	**688**	5											8	5				5		90	108
674	**688**	5					2						2	16				2			22
675	**688**	5											4	3				1			8
676	**688**	5					1						2	16				2		30	51
692	**694**	11											1	5	1					4	11
693	**694**	11					1						4	5							10
697	**701**	3					12						6	2				1			21
705	**708**	3					4						13	3				2			22
709	**711**	4												1						2	3
U/S							1														1
Grand Total			2	1	32	1	224	2	2	6	18	16	587	421	86	1	2	163	66	1723	3353

9.3 Results

9.3.1 A total of 1667 animal bones were hand collected and a further 1686 animal bones were recovered from bulk soil samples. The hand collected bones had 13.08% unidentified specimens, whilst a much larger proportion of the sieved samples (89.25%) could not be identified due to mainly consisting of very small fragments (<0.5mm).

9.3.2 The largest number of fragments derived from phase 1 (Anglo-Saxon) (49.1% (819/1667)) followed by phase 2A (early medieval) (33.6% (560/1667)). A total of 9.1% (151/1667) of all hand collected fragments were not allocated to a specific phase.

9.3.3 The overall preservation of the hand collected assemblage was at least very good, with 86.44% (1441/1667) having an observable surface. Only very few elements exhibited signs of weathering (erosion and warping) (2.5%) (42/1667) suggesting the majority of the bones were buried relatively quickly. Gnawing was present on 2.40% (40/1667) of the bones, predominantly from carnivores.

Burning was very limited in the hand collected sample at only 0.54% (9/1667), but a higher percentage of 5.34% (90/1686) was noted in the sieved samples.

9.3.4 The overall completeness was very poor, the vast majority of elements were less than 20% complete (66.89% of the hand collected bones and 95.26% of the sampled bones).

9.3.5 A total of 17.94% of the fragments from the hand collected bones exhibited helical breaks (consistent with breakage of fresh bone such as during butchery and marrow extraction), whilst 7.31% displayed actual butchery marks in the form of chopping and knife marks. These features were noted in phase 1 to 2B. In the sieved samples these were far less observable due to very high fragmentation, only 1.13% (19/1686) had helical breaks and 0.36% (6/1686) displayed actual butchery marks.

9.3.6 A total of 69% of the hand collected fragments could not be identified to species (Table 59). 55.9% were allocated a size category (large, medium or small mammal) and may reveal information on body part distribution and butchery practices as these include elements such as ribs and vertebrae. A total of 13.1% could not be allocated to any of these categories.

9.3.7 The most dominant species throughout the periods were cattle, sheep/goat and pig. The high frequency of horse bones in phase 2B (high medieval period) is due to a single highly fragmented mandible. Cattle appear to dominate in the earlier phases 1 and 2A whilst sheep/goat become more dominant in phases 2B and 3. Deer remains were present in very small numbers (0.4%) during phases 2A and 2B, suggesting that game hunting took place during the medieval period. This relative abundance was calculated using NISP which does not take into account the fragmentation patterns and relative survival of bones from different animals. Abundance in the archaeological assemblage does not only indicate relative importance but also depends on other factors such as taphonomy, function of animals and kill patterns.

9.3.8 Dog remains were only recovered from phase 1, but gnawing marks on other bones suggest the presence of carnivores throughout at least the Anglo-Saxon and medieval periods. The preservation of the dog remains was good with one almost complete skull. This will allow metric evaluation which may provide an indication of size and species. There is an indication that dog breeds become more diverse during the later Anglo-Saxon period suggesting their role in society changes (Crabtree 2015).

Table 59. Total number of bone fragments per phase from the hand recovered assemblage

Phase	Cattle	Sheep/goat	Pig	Horse	Deer	Dog	Cat	Hare	Amphibian	Large	Medium	Small	Unidentified	Total
1	144	82	41	2	2	6	33*	1		309	196	0	103	**920**
2A	63	39	28		3				18	192	131	4	82	**560**
2B	3	4	8	14	1					41	25	8	11	**115**
3	1	8**								3	3		9	**24**
Un-phased	10	2	3							19	1		13	**48**
Total	**221**	**136**	**80**	**16**	**6**	**6**	**33**	**1**	**18**	**564**	**356**	**12**	**218**	**1667**

*Note: *32 in ABG, ** 8 in ABG*

9.3.9 The number of associated body groups (ABGs) was relatively low with only three groups identified (Table 60).

Table 60. Associated Body Groups (ABGs) found in the hand recovered assemblage

Phase	Context	Feature	Species	No. of bones	Description
1	363	large square pit	Cat	32	Cranium, mandible, humerie, pelvis, scapulae, radius, vertebrae, ribs (hind legs, lower front limbs and feet absent). Age identification possible.
2A	288	Large pit	Frog	14	Various long bones available. Species identification possible.
3	617	Pit (animal burial)	Sheep/goat	8	(Mandible?), pelvis, femur, tibia, astragalus, calcaneus

9.3.10 The Anglo-Saxon ABG of cat remains in context (363) (G5, pit **364**) were well preserved and metrical data should allow an indication on whether these were a domestic or wild cat, as both species were present during this period. During this period cats were more dominant in urban than rural settings but

are generally poorly represented in archaeological contexts with a representation of 0.2–0.8% of any assemblage (Poole 2015). It would be a valid exercise to place these findings into a wider context of cats and dogs in the Anglo-Saxon period.

9.3.11 The remains of frog/toad from an early medieval context (288) (G11, pit **289**) may be identified to species, and the remains of sheep/goat may also allow a more precise identification.

9.3.12 Pathologies were limited to two fractures in phase 1: a healed metapodial fracture from a sheep/goat and a spinous process injury of a large mammal. In phase 2, a case of osteochondritis dissecans on the proximal portion of a cattle metapodial was observed. More in-depth analysis may reveal more subtle fractures in the assemblage.

9.3.13 Due to relatively high fragmentation, the number of bones available for metric analysis is very limited (Table 61). Those available may however provide some indication of breed and size of animals present in the assemblage. Metric data may be compared with the Animal Bone Metrical Archive Project (ABMAP) (Serjeantson 2003) and to local sites with remains from the early medieval and Anglo-Saxon period.

Table 61. Total number of bones available for metrical analysis

Species	Phase 1	Phase 2A	Phase 2B	Phase 3	Total
Cattle	50	26	1		77
Sheep/goat	32	14	2	6	54
Pig	13	2	1		16
Horse	1		1		2
Deer	1	1	1		3
Dog	2				2
Hare	1				1
Cat	14				14
Total	104	43	6	6	169

9.3.14 Fusion data is likewise limited in the assemblage but will add valuable information on age together with the dental wear stages (Table 62). There are early indications of younger animals being present, suggesting breeding may have occurred on site. Holmes (2014) suggested that there was a shift in animal husbandry into the late Anglo-Saxon period with a higher proportion of consumers in urban settings and suppliers in rural locations. She also suggested cattle were dominant and were culled at a more mature age after they had served the purpose of being used for traction and milk in the later Anglo-Saxon period. The fusion data from this site and similar sites from Canterbury may help shed light on whether this pattern holds in Canterbury, which was a strong economic centre in the last part of the Anglo-Saxon period with a population of around 8000 (Lapidge *et al* 2013).

Table 62. Total number of bones that can provide information on state of fusion

Species	Phase 1	Phase 2A	Phase 2B	Phase 3	Total
Cattle	64	29			93
Sheep/goat	54	22	1	6	83
Pig	18	7	3	1	29
Horse	2		1		3
Deer	1	2	1		4
Dog	2				2
Hare	1				1
Cat	15				15
Total	157	60	6	7	230

9.4 Recommendations for further work

9.4.1 The assemblage from the British Red Cross Centre, Canterbury is very limited in size. There is none the less potential to compare this site within a context of other regional sites from the late Anglo-Saxon period and explore any shift in trends between the late Anglo-Saxon and the early medieval period in terms of husbandry, diet and butchery practices. It is also of interest to investigate the dog and cat remains from the late Anglo-Saxon period to place these within a larger framework of these species during the period (Crabtree 2015).

9.4.2 Based on the sample size and potential for further analysis it is recommended that the remains from phase 1 and 2A are fully analysed, narrowing down species identification and providing a fully comprehensive account of age, sex, body part distribution, metrical analysis and pathologies. It is recommended that all fragments from these two periods both hand collected and samples are included, but excluding those recorded as unidentified (Table 63). The recording of these two periods will allow a discussion on the rural and urban animal trade during these periods (Holmes 2014). This site may also contribute to a better understanding of the cultural complexity of the Anglo-Saxon and early medieval period, which needs to be addressed comparing different regions of the country (O'Connor 2013). This site may help add to our understanding of these two periods in Kent. Animal bone from the later phases may remain at the assessment stage, with a list of species present due to their low analytical value.

Table 63. Number of bones to be included in analysis (unidentified bones excluded)

Period	Hand collected	Samples	Total
Phase 1	716	122	838
Phase 2A	478	35	513
Total	1194	157	1351

9.4.3 Due to bias in hand collection it is recommended that the any analysis of burning include the unidentified fragments from the samples.

9.4.4 Metric data should be recorded where possible for phase 1 and 2A to allow for these to be entered into ABMAP.

10 Bird remains (Enid Allison)

10.1 Introduction

10.1.1 A small assemblage of bird remains was recovered by hand-collection (76 fragments) and from 12 of the 30 bulk soil samples taken from the site (43 fragments).

10.2 Methods

10.2.1 Identification was by comparison with the author's modern reference collection. Vertebrae, ribs and phalanges were only identified if they formed part of an articulated group or were particularly distinctive. Unidentifiable fragments were separated into size categories where possible, e.g. large, medium and small bird. The developmental stage of bones was recorded as mature (completely ossified) or immature (incompletely ossified and porous), and all fragments were briefly examined by eye for knife marks and pathological features. All domestic fowl femora were examined for the presence of medullary bone found in hens in laying condition. Femora of other species were not systematically examined. Where possible the major leg bones (femur, tibiotarsus, tarsometatarsus) of domestic fowl were measured following Von den Driesch (1976). The data obtained is held in archive. Bones of ducks and geese were also measured when possible as an aid to identification.

10.3 Results

10.3.1 The bird remains were generally in good condition with surface features readily visible. Eighty-three per cent of the hand-collected bone and 56% of the material from samples was identifiable. No fragments showed signs of burning. A single domestic fowl bone had been crushed when fresh, perhaps by trampling. The majority of the remains were from the fills of pits. Domestic fowl was the most numerous species by bone count in each phase. Most of the fragments assigned to the medium bird category are also likely to be from domestic fowl. Remains recovered by hand-collection and from samples are discussed together below for each phase of activity, but the records are shown separately in Table 64.

Table 64. Numbers of identified fragments of bird by phase

	Anglo-Saxon		Early medieval		High medieval		Post-medieval	
	Phase 1		Phase 2A		Phase 2B		Phase 3	Undated
	Hand	Samples	Hand	Samples	Hand	Samples	Hand	Samples
Goose	2	-	2	-	-	-	-	-
Teal	1	1	-	-	-	-	-	-
cf Mallard	-	-	1	-	-	-	-	-
cf Mallard (imm)	-	-	-	-	1	-	-	-
Medium-large duck	-	-	1	-	-	-	-	-
Domestic fowl	11	18	6	2	4	2	27*	-
Domestic fowl (imm)	2	-	2	-	1	-	-	-
Crane	1	-	-	-	-	-	-	-
Pigeon	-	-	-	-	1	-	-	-
Small passerine spp.	-	2	-	-	-	1	-	-
Medium-large bird	-	-	-	1	-	-	-	-
Medium bird	-	7	-	4	-	1	13	-
Medium bird (imm)	-	-	-	1	-	-	-	-
Indeterminate	-	1	-	-	-	2	-	1
TOTAL	17	28	12	8	7	6	40*	1

10.3.2 Taxa identified were:

Goose, (*Anser* sp(p)) domestic goose/large wild grey goose
Teal (*Anas crecca* Linnaeus)
Cf Mallard (*Anas platyrhynchos* Linnaeus)
Medium to large duck (Anatidae)
Domestic fowl (*Gallus gallus* Linnaeus)
Crane (*Grus grus* (Linnaeus)
Medium-sized pigeon (*Columba* sp.)
Small passerine sp(p).

10.4 Phase 1 Anglo-Saxon (*c* AD 750–1050)

10.4.1 Most of the remains came from the square wood-lined pits. The most numerous species was domestic fowl. Two bones were from immature individuals probably under twenty-seven weeks of age (using data compiled by Serjeantson 2009, 39). The greatest variety of species came from the fills of one of the large square pits interpreted as being utilised for the disposal of cess (G5 pit **364**) where goose, teal and crane were recorded as well as domestic fowl. The two goose fragments were comparable in size with bones from small domestic geese or one of the larger species of wild grey goose (Anser spp.). Fowl remains recovered by hand-collection were from the limbs and axial skeleton, but samples from two fills of the pit, contexts (375) and (382) mainly produced bones from heads and necks, probably of two individuals. Identifiable remains from other pits were of domestic fowl and, in two fills of separate pits (**386** and **541**), single fragments of small passerine birds. A goose carpometacarpus from G7 pit **498** had been broken approximately mid-way along the bone. The break was well-healed but badly misaligned: the goose had evidently lived for some time after the fracture but its left wing-tip had healed at an angle of approximately forty-five degrees to the upper parts of the wing

10.4.2 Samples from the fills of a potential oven (**653**, G7) produced three fragments of bird bone, none of which were burnt. Two were from the same domestic fowl tibiotarsus.

10.5 Phase 2A early medieval (*c* AD 1050–1250)

10.5.1 The small group of bones representing this period included domestic fowl, goose (again comparable in size with small domestic geese or one of the larger species of wild grey goose (Anser spp.)), mallard and possibly another species of duck. Knife marks were present on two domestic fowl bones. Two bones of domestic fowl and one of goose in separate pits showed pathological features – a high proportion of the remains given the small size of the assemblage. The shaft of a tibiotarsus from G10 pit **315** showed evidence of a healed infection that had affected the outer surface of the bone. The size of both these bones and the lack of a spur in the tarsometatarsus suggests that they are from hens. Bone pathology is most frequently seen in fowls kept for breeding and egg laying (Waldron 2009) since birds reared primarily for meat would be relatively young when killed and there would usually have been insufficient time for pathology to manifest itself on the skeleton.

10.6 Phase 2B high medieval (*c* AD 1250–1400)

10.6.1 The few birds represented in G21 pits **232** and **592**, G28 pit **586**, G29 pits **283** and **607**, and a linear ditch **577** (G24) were domestic fowl, an immature duck comparable with mallard or domesticated duck, a medium-sized pigeon, and a small passerine. The pigeon was of the size of domestic or feral pigeon but other closely similar medium-sized wild species (rock and stock dove) could not be ruled out. An unspurred fowl tarsometatarsus from pit **283** showed lipping of bone around the anterior margin of the outer distal trochlea. Knife marks were present on a domestic fowl femur from pit **607**. The presence of a thin layer of medullary bone within the shaft cavity indicated that this bone was from a hen. Another hen in laying condition was represented by a femur in G27 pit **369**; an immature tarsometatarsus, probably of young cockerel, had been crushed, perhaps by trampling, when the bone was fresh.

10.7 Phase 3 late post-medieval (*c* AD 1700–1900)

10.7.1 All bird remains relating to this period were from a single feature **622** (G31) identified during excavation as one of two animal burials. All the remains were of domestic fowl or ‘medium bird’ and probably from the same individual.

10.8 Discussion

10.8.1 Most of the small bird assemblage is typical of domestic refuse from elsewhere in Anglo-Saxon and medieval Canterbury with domestic fowl the dominant species (e.g. Serjeantson 2001; Allison 2010a–c; Allison 2014). Pathology recorded on bones of two domestic fowl from early medieval pits, probably both hens, is suggestive of older birds kept primarily for breeding and egg laying, perhaps on the properties for which there was limited evidence during this period. Knife marks indicated that at least one of these birds had been eaten, perhaps once its laying ability had declined.

10.8.2 The record of crane is the first occurrence from Anglo-Saxon Canterbury, adding to data indicating the presence of the species on open wetland locally up to the early fourteenth century. Remains have previously been recorded from Roman and medieval deposits at the Whitefriars site, some of the remains bearing knife marks indicating consumption. A find of a substantially complete crane skeleton

with extensive pathology in an early medieval pit (mid eleventh to thirteenth century) was highly suggestive of a bird that had been kept in captivity following an initial injury (Allison 2010a; 2010b). Crane formerly had a widespread distribution in the British Isles (Yalden and Albarella 2009, 139–145). They were often eaten, although their culinary quality was questionable, and they were also a favourite quarry of falconers. By the later part of the medieval period their bones are less frequently found and usually at very high status sites (Albarella and Thomas 2002; Sykes 2004) suggesting that by that time they were less common than formerly and the prestige of eating them had increased. They are known to have bred in some parts of Britain up to the beginning of the post-medieval period (Boisseau and Yalden 1999). They continued as visitors to this country for some time after they ceased to breed, becoming much scarcer after the mid eighteenth century.

10.9 Recommendations for further work

10.9.1 No further work is recommended

11 The fish remains (Alison Locker)

11.1 Introduction

11.1.1 Fish bones were mainly recovered by sampling pit fills of Anglo-Saxon (*c* AD 750–1050), early medieval (*c* AD 1050–1250 AD) and high medieval (*c* AD 1250–1400) date. A few fish bones were also recovered by hand collection.

11.1.2 Recovery of the smallest fish bones was ensured by using mesh sizes down to 0.5mm for the heavy residue and 0.3mm for the washover fraction, reflected in the presence of very small sprat and smelt vertebrae. The fish are tabulated in a separate Microsoft Excel spreadsheet.

11.2 Results

11.2.1 The following species were identified: indeterminate Elasmobranch, indeterminate ray (Rajidae), roker (Raja clavata), eel (Anguilla anguilla), conger eel (Conger conger), herring (Clupea harengus), Clupeidae (herring family), shad (Alosa sp.), trout (Salmo trutta), smelt (Osmerus eperlanus), cod (Gadus morhua), Gadidae, whiting (Merlangius merlangus), garfish (Belone belone), gurnard (Trigla sp.), scad (Trachurus trachurus), mackerel (Scomber scombrus), plaice (Pleuronectes platessa), plaice/flounder (Pleuronectes platessa/Platichthys flesus), sole (Solea solea) and indeterminate flatfish.

11.3 Phase 1 Anglo-Saxon (*c* AD 750–1050)

11.3.1 Table 65 summarises the fish identified from a complex of nine pits and one oven deposit representing food waste and cess from domestic settlement. Some of these were wood-lined square cut pits **364** (G5) and **639** (G6) containing cess that showed evidence of former waterlogging. Pits **541** and **688** (G5) were also thought to be cess pits, while the remainder were rubbish pits. Pit **386** (G4) may be the earliest, although most of these features are now thought to date to the mid eighth to early tenth century.

Table 65. Species identified in Phase 1 Anglo-Saxon features

	Pit 240	*Pit 364*	*Pit 386*	*Pit 388*	*Pit 570*	*Pit 541*	*Pit 639*	*Pit 688*	*Pit 535*	*Oven 653*	*Total*
Ray Indet	0	0	0	0	0	1	0	0	0	0	*1*
Roker	0	0	0	0	0	0	1	0	0	0	*1*
Eel	72	131	1	0	0	20	1	28	0	0	*253*
Conger eel	0	4	0	0	0	0	0	0	0	0	*4*
Herring	0	1	1	3	0	0	2	2	0	0	*9*
c.f. Sprat	0	30	0	0	0	0	0	0	0	0	*30*
Clupeid	1	7	0	0	0	8	0	0	0	0	*16*
Shad	0	1	0	0	0	0	0	0	0	0	*1*
Cod	0	0	1	1	0	0	0	1	0	0	*3*
Lge Gadid	0	1	0	0	1	3	0	0	1	0	*6*
Ling	0	0	0	0	0	1	0	0	0	0	*1*
Whiting	0	3	2	3	0	8	0	1	0	1	*18*
Sm Gadid	4	4	0	0	0	2	0	0	0	0	*10*
Scad	1	2	0	0	0	1	0	1	0	0	*5*
Mackerel	0	1	0	0	0	0	0	0	0	0	*1*
Flounder	0	1	0	0	0	0	0	0	0	0	*1*
Plaice/flounder	2	43*	2	0	0	8	0	9	0	0	*64*
Sole	0	0	0	0	0	1	0	0	0	0	*1*
Flatfish indet	0	5	0	0	0	0	0	1	0	0	*6*
Total	*80*	*234*	*7*	*7*	*1*	*53*	*4*	*43*	*1*	*1*	*431*
								77			
Indet	50	179	23	16	5	151	16	+	0	11	
Burnt		+	+			+		+			

** mostly one fish, flounder total length 40 cms*

11.3.2 Over half the identified fish came from five samples from charcoal rich deposits and cess material in square cut wood-lined G5 pit **364**. The fish were predominantly eel and sprat or small clupeid (herring family) vertebrae. The flatfish remains were dominated by part of a single flounder that had a total length of around 40cm. Many of the numerous fin rays and other non-specific fragments in context

(375) also probably belong to this individual as they were all very similar in colour and texture. Conger eel was only found in this pit, represented by four vertebrae.

11.3.3 The other square cut pit, **639** (G6), contained few fish remains, but more bones, largely of eel, were recovered from cess pits G5 **541** and **688**. The two refuse pits, including the earliest feature **386**, were poor in fish bone. The function of many pits for cess disposal is likely to have influenced the size of the fish bones found, i.e. they were mostly small bones from small fish. However, some pits may also have been used for refuse disposal accounting for larger pieces and burnt bone.

11.3.4 Overall, eel is the most commonly identified species in this phase both by bone number and occurrence, found in 12 of 17 samples, whereas plaice/flounder were found in eight samples and herring in six. The importance of eel seems to be a feature of some other Anglo-Saxon deposits in Canterbury, for example at the Barton Court School site (Locker 2009), although the medieval fish assemblage there was too small to confirm a later change towards marine species. At the Red Cross Centre an abundance of eel does seem to be characteristic of Anglo-Saxon features, with a range of sizes represented (total length (n = 9) from 0.26m to over 0.70m; after Thieren *et al* 2012) indicating both maturing fish and larger, probably female, individuals. There is some evidence to support a change through time favouring other species though the later assemblage from the site was smaller. Another migratory species that may have been caught in freshwater or estuarine conditions is the shad, which spawns in tidal reaches and was found in pit **364**. The more common of two possible species is the twaite shad (*Alosa fallax*) identified from a single dentary from a fish around 40cm total length.

11.3.5 Species present in Anglo-Saxon deposits and also found in later periods include scad (an opercular bone from a fish of around 0.31m total length), mackerel, herring and whiting, all found off the Kent coastline, and the flatfishes, primarily plaice and flounder, which consistently form a significant part of Canterbury fish assemblages.

11.3.6 Large offshore marine fish were few. Two caudal vertebrae of cod were identified and a basioccipital fragment from a fairly small fish of around 66cm total length. A ling precaudal vertebra from pit **541** was an uncommon find, it prefers more northerly waters to the southern part of the North Sea. However the species is known in recent times from the Channel and was identified in mid Anglo-Saxon deposits from recent excavations within the outer precinct of St Augustine's Abbey (Nicholson 2015a). A medieval fish net needle made from a ling maxillary has been identified from Rolfe Lane, New Romney (identified by the author, unpublished archive CAT). It is possible that this particular vertebra comes from a stored fish, but the precaudal vertebrae are usually removed during processing.

11.3.7 A few contexts included some burnt fin ray and indeterminate rib fragments.

11.4 Phase 2a early medieval (*c* AD 1050–1250)

11.4.1 Table 66 shows the fish remains recovered by sampling and hand collection. Numbers of contexts producing fish remains and numbers of fish bones are both fewer than in the preceding period. Pit **320** (G10) was square cut, timber-lined (as was pit **324** but it was not sampled) and used for cess but is not rich in fish remains; as is pit **498** (G7 pit now thought to be Anglo-Saxon). Refuse pit **283** (G29, now thought to be high medieval in date) produced over 70% of the identified fish, and a rise in the proportion of flatfishes (i.e. plaice/flounder) and amount of herring compared to eel are evident. The importance of herring, gadids and flatfishes with reduced numbers of eel is seen in medieval levels at other sites nearby, at Tradescant Lane (Nicholson 2015b) and at St Augustine's Abbey (Nicholson 2015a).

Table 66. Species identified in Phase 2a early medieval features

	Pit 283	*Pit 283*	*Pit 283*	*Pit 253*	*Pit 253*	*Pit 320*	*Pit 498*	*Pit 324*	
	279	*279*	*282*	*251*	*293*	*319*	*497*	*323*	
	HC	*<102>*	*<103>*	*HC*	*<112>*	*<113><114>*	*<122>*	*HC*	*Total*
Elasmobranch	0	0	0	0	1	0	0	0	*1*
Eel	0	12	2	0	0	0	17	0	*31*
Herring	0	3	16	0	0	3	0	0	*22*
Sprat	0	0	0	0	1	0	0	0	*1*
Clupeid	0	0	0	0	1	1	1	0	*3*
Trout	0	0	1	0	0	0	0	0	*1*
Smelt	0	0	0	0	5	0	0	0	*5*
Cod	0	0	1	0	0	0	0	0	*1*

	Pit 283	Pit 283	Pit 283	Pit 253	Pit 253	Pit 320	Pit 498	Pit 324	
	279	279	282	251	293	319	497	323	
	HC	<102>	<103>	HC	<112>	<113><114>	<122>	HC	Total
Whiting	0	0	2	0	0	1	2	0	5
Sm Gadid	0	0	4	0	0	1	0	0	5
Garfish	0	0	0	0	0	0	1	0	1
Gurnard	0	2	0	0	0	0	0	0	2
Mackerel	0	16	0	0	0	0	0	0	16
Plaice	0	0	0	0	0	0	1	0	1
Plaice/flounder	0	66	11	0	1	0	14	0	92
c.f. Sole	0	2	1	0	0	0	0	0	3
Flatfish indet	1	0	1	1	0	0	0	0	3
Total	1	101	39	1	9	6	36	0	193
Indet	0	74	35	0	5	2	68	2	
Burnt		+	+						
Scales							+		

11.4.2 Fill (279) from pit **283** was the richest in fish remains and included both skull fragments and vertebrae of mackerel and two fragments of gurnard skull, the latter not seen in the earlier phase. In pit **498** a single, distinctive fragment of garfish dentary was identified. This offshore pelagic fish is found inshore seasonally through the summer and was also present in fourteenth- to sixteenth-century contexts at 70 Stour Street, Canterbury (Locker 2015), and twelfth- to thirteenth-century contexts at Tradescant Lane, Canterbury (Nicholson 2015a). A caudal vertebrae of cod was present in fill (282) of pit **283**.

11.4.3 A burnt caudal vertebra of a trout was the only evidence of an exclusively freshwater fish species, though freshwater fisheries would have included eel (total lengths range from 27–43cm, n=6) and smelt (found in G28 pit **253**). The latter is a coastal species that migrates into freshwater to spawn and has historically formed important local seasonal fisheries.

11.4.4 Burning and concretion was noted on some herring and plaice/flounder bones in pit **283**, specifically in fill (279). The trout vertebra and a whiting vertebra in fill (282) of the same pit were also burnt.

11.4.5 A large ctenoid scale was found in pit **498**.

11.5 Phase 2b high medieval (c AD 1250–1400)

11.5.1 The sample size was small, from two pits and a ditch reflecting species found in earlier phases (Table 67).

Table 67. Species identified in Phase 2b high medieval features

	Pit 592	Pit 586	Ditch 577	
	591	585	576	
	<120>	<121>	HC	Total
Elasmobranch	1	0	0	1
Roker	1	0	0	1
Herring	2	2	0	4
Sm Clupeid	0	1	0	1
Lge Gadid	0	0	2	2
Whiting	7	0	0	7
Gadid	0	2	0	2
Plaice/flounder	5	1	0	6
Total	16	6	2	24
Indet	21	44	0	
Burnt	+		+	

11.6 Discussion

11.6.1 The sampled cess pits and, to a lesser extent the refuse pits, of the late Anglo-Saxon period suggest that eel are the most common fish (taking into account they have double the number of vertebrae of most other fish). Clupeids (i.e. herring and sprat), small gadids, specifically whiting, and flatfishes (plaice

and/or flounder) were also common forming the 'mainstay' of fish supply. Most of these fish are small individuals and their bones could easily pass through the alimentary tract.

11.6.2 The mid Anglo-Saxon refuse pits excavated at St Augustine's Abbey, primarily on site 18 (Nicholson 2015a) produced a large fish assemblage of over 9,000 identified fragments. Eel were important (26%) but gadids totalled 36% with cod the most numerous single species (6% but significantly more by weight). Flatfish made up a further 18% of the assemblage. Nicholson commented that the number of cod bones (both skull bones and vertebrae) is uncommon in pre-Norman deposits. The later Anglo-Saxon assemblage from the British Red Cross Centre, located close by, is more typical of the period with only three cod bones recovered from three contexts. Cod apart, the contrast between the assemblages at St Augustine's Abbey and the British Red Cross Centre may reflect differences in context type, refuse pits as opposed to cess pits, or some difference in status. The fish in the refuse pits at St Augustine's Abbey is thought to probably have been waste from the early monastery, founded in AD 597. The British Red Cross site is slightly later in the Anglo-Saxon period and south of the Abbey and could also have supplied it, but the contexts generally reflect the more specialised, localised deposition of cess material and some refuse.

11.6.3 The same fish species continue to be dominant in the smaller early medieval fish assemblages but eel is proportionately lower with herring and flatfishes in particular more numerous. Most of the fish come from one refuse pit. The composition of the small assemblage from the high medieval period reflects the earlier samples.

11.6.4 Overall the fish identified here are mostly either seasonally inshore marine shoaling species, such as herring, whiting, mackerel and scad, or species of the shoreline and shallow waters such as flatfishes, gurnard, conger eel and rays including roker. Estuarine fisheries trapping and netting for flatfishes, especially immature individuals, young herring and sprats, and migrating species such as smelt and shad were a part of the fish supply along the Kent coastline. Freshwater fisheries seem, as found at many Canterbury sites, to have been unimportant except for eel.

11.1 Recommendations

11.1.1 No further work is recommended

12 Statement of potential

12.1 Archaeological significance

12.1.1 The investigation at the British Red Cross Centre, Canterbury, has produced significant archaeological data, where significance refers to the value of a heritage asset to this and future generations because of its heritage interest (NPPF 2012).

12.1.2 For the purpose of assessment, the significance of the archaeology encountered on the site has been qualitatively gauged in reference to criteria set out in Table 68.

Table 68. Levels of archaeological significance

Level	Criteria
Very high	Archaeological remains of International/National significance such as: • Evidence associated with designated World Heritage Sites, Scheduled Monuments, Protected Wrecks, Registered Battlefields or Listed Buildings • Non-designated remains of equivalent status to the above, such as those identified in national research frameworks as being significantly rare
High	Archaeological remains considered as being of particular significance according to national and regional and/or academic research frameworks, making a special contribution to knowledge of past societies
Moderate	Archaeological remains considered as being of District, Regional or academic significance, adding comparative data for developing knowledge of past societies
Low	Archaeological remains considered as being of local significance, such as: • Sites of a local or parish value or interest for education or cultural appreciation • Sites so badly damaged that too little remains to justify inclusion within a higher grade.
Negligible	Archaeological remains considered as being of little or no significance, or so badly damaged that too little remains to justify inclusion within a higher grade.

12.1.3 The archaeological data have been allocated into five phases of activity. The archaeological data encountered was variable between phases. As such, the significance of the archaeological data has been assessed for each phase (Table 69).

Table 69. Archaeological significance by phase

Phase	Period	Summary	Significance
1	Mid to late Anglo-Saxon	Use of the site for cess and refuse disposal, including evidence of both industrial (metalworking) and domestic activity.	Moderate
2a	Early medieval	After a hiatus in activity, use of the site is re-established possibly as early as the late eleventh century. Features mainly comprise cess and refuse pits. Limited evidence for the establishment of buildings are possibly associated with an expansion of suburbs along Lower Chantry Lane.	Moderate
2b	High medieval	Continuous use of the site through to the end of the fourteenth or start of the fifteenth centuries is apparent, with intensification in the mid thirteenth century.	Moderate
3	Post-medieval	From the fifteenth century the site was used as agricultural or horticultural land. Sporadic activity during the eighteenth and nineteenth centuries is possibly associated with dwellings along Lower Chantry Lane.	Low
4	Modern	Service trenches, building wall foundations, made ground and hardstanding associated with the former British Red Cross Centre.	Negligible

12.1.4 Recovered artefactual material was processed, categorised and quantified, and an assessment made in accordance with MAP2, section 6.16 (English Heritage 1991). A summary of the potential significance of each material class and requirement for further analysis is shown in Table 70.

Table 70. Artefactual significance by material class

Material class	Principal specialist	Significance	Analysis
Post-Roman pottery	L. Barber	Moderate	Yes
Ceramic building material	L. Barber	Low	Yes (Identify/Catalogue only)
Metallurgical remains	L. Keys	Moderate	Yes
Registered finds	A. Richardson	Low	Yes
Glass	R. Broadley	Low	No
Plant macrofossils	W. Carruthers	Moderate	Yes
Animal bone	T. Kausmally	Moderate	Yes
Bird and fish remains	E. Allison	Moderate	No (Analysis complete)

12.1.5 In assessing the archaeological data and artefactual material from the British Red Cross Centre, Lower Chantry Lane, Canterbury, it is evident that the middle to late Anglo-Saxon (phase 1), early medieval (phase 2a) and high medieval (phase 2b) periods offers the greatest potential in contributing to local and regional heritage interests.

12.1.6 Emphasis should be placed on further understanding of the development of Canterbury's historic parish of St Paul and the medieval borough of Longport during these periods.

12.2 Revised research aims

12.2.1 Revised research aims (RRAs) that might be investigated include;

RRA1: Can the Anglo-Saxon activity be associated with similarly dated sites within this area of Canterbury?

RRA2: Is the apparent decline in activity from the first half of the tenth century localised to the British Red Cross Centre site or is this a pattern seen elsewhere across the wider Canterbury environs? If so, can any contributing factors be identified?

RRA3: Is there any documentary evidence for the expansion of the medieval suburb from the mid twelfth century when activity on the British Red Cross Centre site is re-established after an apparent hiatus?

RRA4: Can an apparent intensification of activity in the mid thirteenth century be confirmed? In contrast, activity on the 1–7 New Dover Road and 41 St George's sites appeared to decline at this time. Can any overriding factors for this apparent contradiction be identified, for example, is this directly associated with the establishment of Doge's Chantry in AD 1264?

RRA5: Activity at the British Red Cross Centre site appears to cease at some stage around the end of the fourteenth or beginning of the fifteenth century. This contrasts with evidence for the re-establishment of activity on the 1–7 New Dover Road and 41 St Georges sites. What factors can be determined to explain this? Are comparable trends evident from contemporary sites across Canterbury?

12.3 Publication proposal

12.3.1 Summary project results have been published in *Canterbury's Archaeology* 2011–2012 (Gollop 2013).

12.3.2 Final publication is recommended in *Archaeologia Cantiana*, the journal of the Kent Archaeological Society. While the principal focus of the publication will be on the archaeological data recovered from the British Red Cross Centre, the discussion will integrate a broad range of comparative archaeological data, of both local, regional and national significance. The paper will be approximately 5,000 words in length, and will be fully illustrated with plans, photographs and drawn artefacts.

12.4 Online resources

12.4.1 All digital project data will be available online through the Integrated Archaeological Database (IADB). This password protected resource can be accessed online by prior arrangement. The database is primarily intended for enabling interested finds specialist and other academic to access the primary site data for the purpose of research.

12.4.2 Digital copies of archived reports on the stratigraphy, finds and environmental evidence will be available without restriction from CAT's website (http://www.canterburytrust.co.uk).

12.4.3 An OASIS (Online AccesS to the Index of archaeological investigationS) record for this project was entered on 28/03/2017 (OASIS ID: canterbu3-289592).

12.5 Recommended tasks

12.5.1 A proposed list of tasks to complete a report suitable for publication is provided in Table 71.

Table 71. Task list

Task	Type	Description	Personnel	Days
Stratigraphic	Stratigraphic narrative	Analysis and report	A. Gollop	10
Artefactual	Post-roman pottery	Analysis and report	L. Barber	3
		Illustration (up to 20 vessels)	B. McNee	3
	CBM	Identify and report	L Barber	2
	Metallurgical residues	Analysis and report	L. Keys	10
	Registered Finds	Analysis and report	A. Richardson	2
		Illustration (8–10 objects)	B. McNee	3
Environmental	Plant macrofossils	Analysis and report	W. Carruthers	6
	Animal bone	Analysis and report	T. Kausmally	12
Historical	Documentary search	Review of historical sources for inclusion in publication	S. Sweetinburgh	2
Archive	Finds	Archive curation	M. Johnson	0.5
	Site records	Archive curation	A. Gollop	0.5
Publication	Publication report	Compilation of text for publication	A. Gollop	10
		Publication figures	P. Atkinson	6
		Academic edit	P. Clark	0.5
		Copy edit, mark to house-style, check references	J. Elder	0.5
Management		Project management	R. Helm	1
Total				

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Plate 1. General view of the excavation area after initial machine reduction and hand cleaning, as viewed from the north-west. No scale.

Plate 2. General view of the excavation area after initial machine reduction and hand cleaning, as viewed from the south-east. No scale.

Plate 3. Working shot of the excavation area during excavation. No scale.

Plate 4. Half-section through part of the Anglo-Saxon refuse pit complex, detailing features (386, and 387), as viewed from the west. Scale 1m.

Plate 5. Slot excavated through Anglo-Saxon cess pit complex, detailing feature (364), as viewed from the north-east. Scales 1m and 0.5m.

Plate 6. Detail of the unexcavated basal deposits in cess pit (364), as viewed from the south. Scale 1m.

Plate 7. Detail of section through early medieval cess pit complex comprising features (317, 320, 324 and 328), as viewed from the south. Scales 2m and 1m

Plate 8. Detail of early medieval cess pit (253), hand excavated to a depth of 1.20, as viewed from the south. Scales 1m and 0.50m.

Plate 9. Detail of section through high medieval refuse or cess pit (586), as viewed from the east. Scale 1m.

Plate 10. High medieval midden layer (257), sealing an early medieval pit complex, as viewed from the south-west. Scales 2m and 1m.

Figure 1. Site location (1:1000)

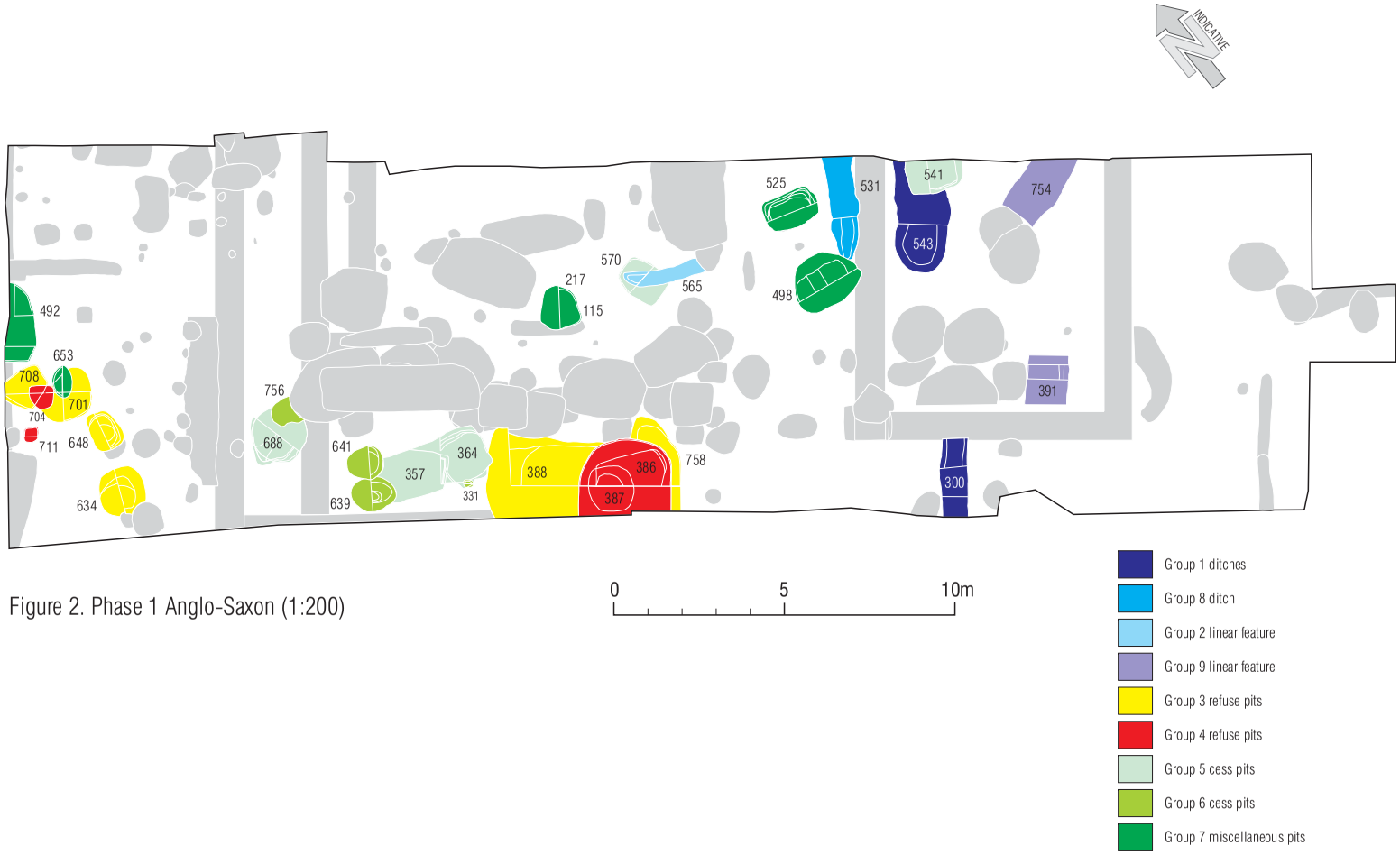

Figure 2. Phase 1 Anglo-Saxon (1:200)

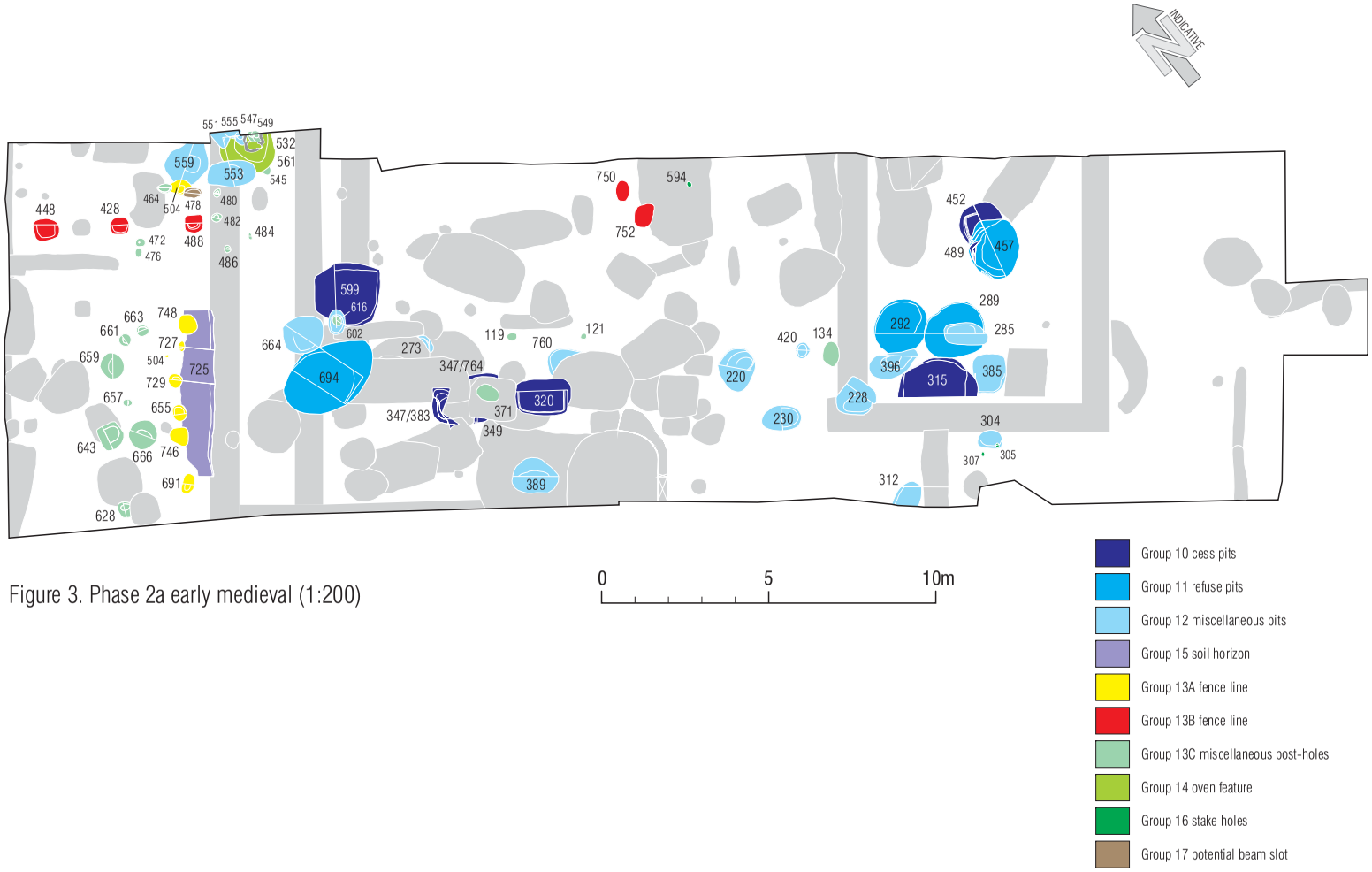

Figure 3. Phase 2a early medieval (1:200)

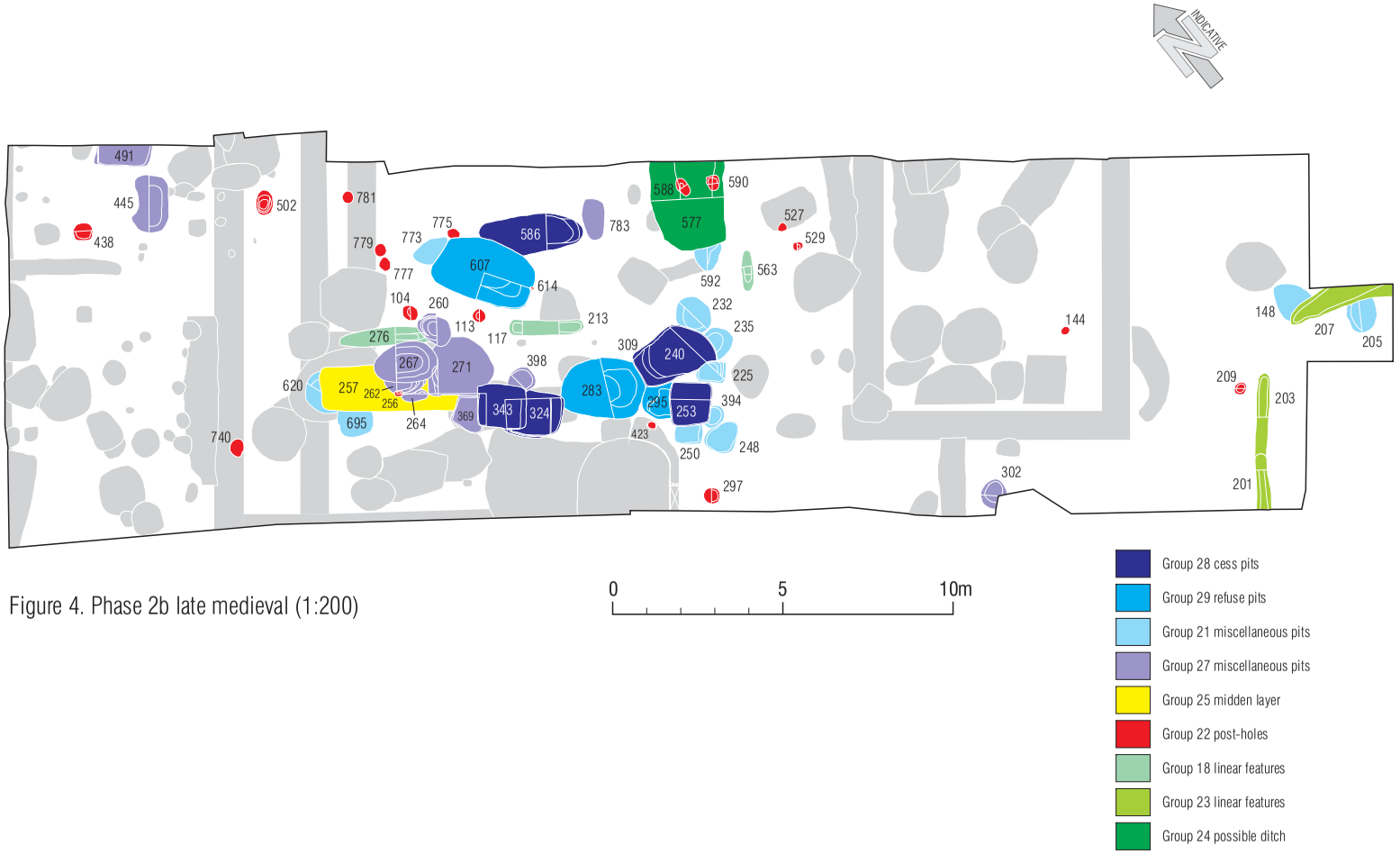

Figure 4. Phase 2b late medieval (1:200)

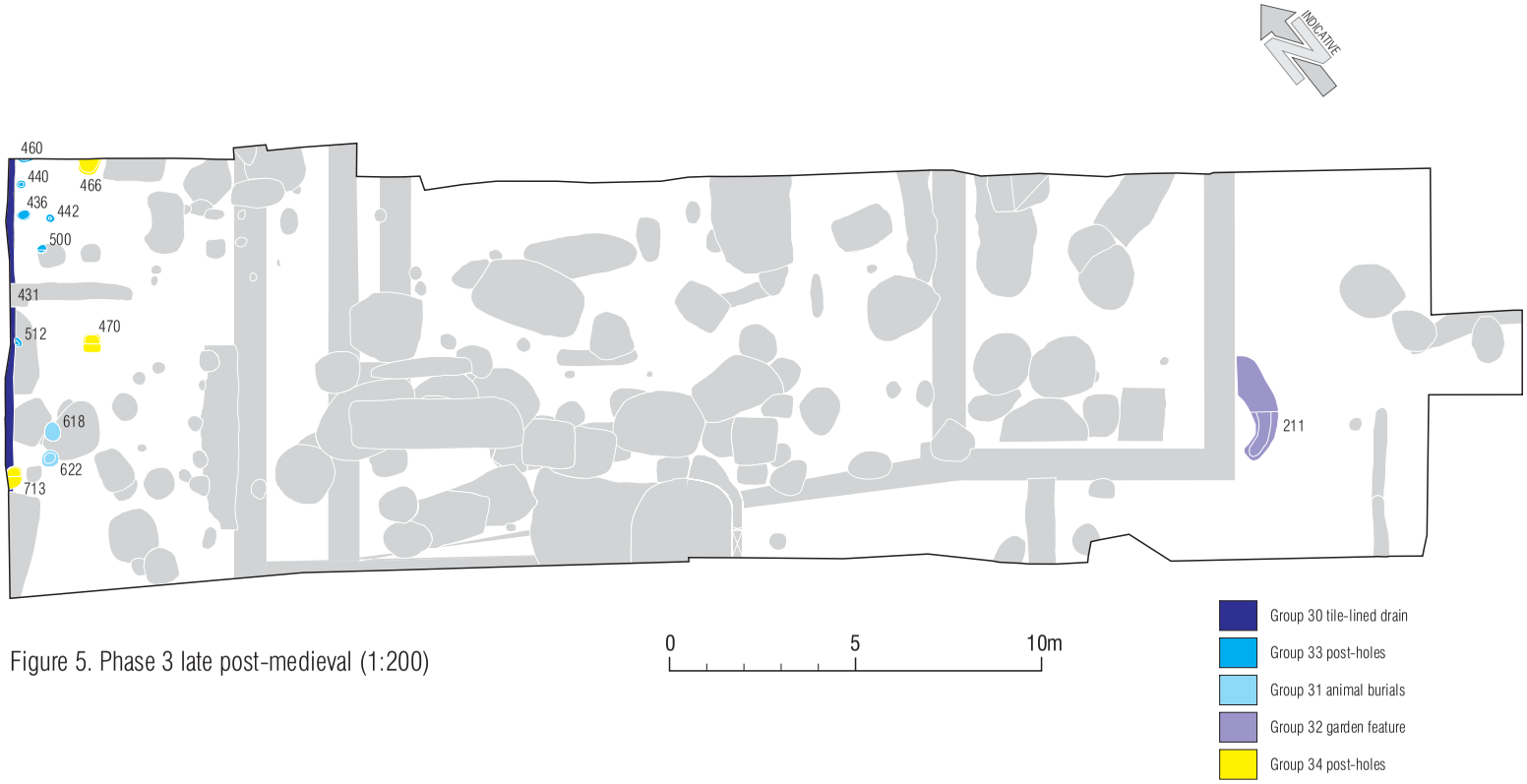

Figure 5. Phase 3 late post-medieval (1:200)

Figure 6. Phase 4 modern (1:200)