

Channel Tunnel Rail Link
Union Railways (South) Ltd.

BRIDGE HOUSE, MERSHAM, KENT
Archaeological record in advance of and during dismantling

NGR: TR 0506 3932

Environmental Statement Route Window 33



Oxford Archaeological Unit

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ARCHAEOLOGICAL RECORD IN ADVANCE OF AND DURING REMOVAL

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ARCHAEOLOGICAL RECORD IN ADVANCE OF AND DURING REMOVAL

Summary

The Oxford Archaeological Unit (OAU) was commissioned by Balfour Beatty Major Project (BBMP) to carry out an archaeological investigation of the ground beneath the Grade II Listed building at Bridge House, Mersham, Kent (NGR: TR 0506 3932). The work was undertaken on behalf of Union Railways (South) Limited, as part of the recording of listed buildings in North East Kent, due to be demolished in advance of CTRL construction.

The investigation took place during the preparations for the removal of the house to an adjacent site 80m to the north-west. Due to the listed status of the building, it was decided to move the house, using a slide technique, rather than demolish it. OAU excavated several test pits within the house to determine the existence of early floor levels, and also carried out a watching brief on the trenches dug by hand by the engineers (Abbey Pynford) along the slide route and on the ring beam trenches under wall foundations.

Overall, the results of the below-ground archaeological investigations were disappointing and have added little to the understanding gleaned from the survey of the structure itself. The seven test pits excavated within the building aimed at establishing potential historical floor levels, revealed evidence of two former floor levels. In Test Pit 70 a possible clay floor was identified, and in Test Pit 80 a brick floor was revealed although neither produced dating evidence.

The archaeological watching brief revealed archaeological evidence suggesting a possible late 14th century occupation including post holes, pits and a gully (Phase I). In particular rooms 2 and 3 contained pottery from the 14th and 12th century, however the few sherds from the latter period are likely to be redeposited and there is no substantial evidence for activity prior to the late 12th century. Archaeological evidence from the late 17th century (Phase II) suggests Bridge House was built towards the end of the 17th Century. Phase 3 was a period of major change to the building, the main one was represented by a repair to the facade of the building with squared ragstone overlain by red brick, a south-west facing chimney and fireplace were also inserted. During the early 20th Century an extension was added to the house (Phase IV), a porch added in the later half of the 20th Century (Phase V) and in the late 20th Century a lean-to out building was constructed to the rear of the house.

BRIDGE HOUSE, MERSHAM, KENT

ARCHAEOLOGICAL RECORD IN ADVANCE OF AND DURING DISMANTLING

1. INTRODUCTION

1.1 Background to the Project

- 1.1.1 Oxford Archaeological Unit (OAU) were commissioned by Balfour Beatty Major Projects on behalf of Union Railways (South) Limited to undertake a programme of archaeological investigation and record at Bridge House, Mersham (NGR TR 0506 3932). This work formed part of the work on listed buildings in North East Kent, due to be demolished in advance of the construction of the Channel Tunnel Rail Link. This Grade II listed building was a partly framed house of the 17th century or earlier with an 18th-century brick front. It was located close to the route of the Channel Tunnel Rail Link on the north side of the railway next to the village of Mersham. It had been expected that the house could be saved by a retaining wall, but it was then found preferable to relocate the building, and rather than demolition and rebuild it was decided to remove the building in its entirety and relocate it (from URL grid location 86040 19350) to an adjacent site (URL grid location 86020 19400), some 80 m to the north-west, using a lift and slide technique. All walls and structures not affixed to the house, but within its curtilage were demolished.

1.2 Reasons for Work

Planning Background

- 1.2.1 During the passage of the CTRL bill through Parliament, undertaking No. 0340 was given to Ashford Borough Council (ABC) in respect of a number of Listed Buildings. The undertaking allowed for the relocation of Bridge House and required the nominated undertaker to ensure that the house was moved for an appropriate re-use at a suitable location with the co-operation of ABC and Kent County Council (KCC).
- 1.2.2 The CTRL Act 1996 disapplies the requirement for obtaining Listed Building Consent for the demolition of these buildings, however the nominated undertaker was required to obtain agreement under the Deed of Heritage (Listed Buildings and Conservation Areas) from ABC for the necessary works to the structures.
- 1.2.3 The controlled excavation of test pits under the wall foundations and of beam trenches for the slide track, prior to the removal of the house, was undertaken by Abbey Pynford, engineering contractor, under the supervision of OAU. A rapid assessment of the building prior to its removal was carried out with the aim of identifying as far as possible the plan form of the original house and its subsequent phase of development, but no detailed investigation and record was undertaken. Archaeological monitoring was maintained throughout the relocation process.
- 1.2.4 For the archaeological evaluation of the site a two-stage approach was adopted; firstly, in advance of excavation works for the lifting of the house, a series of trial trenches were dug inside the building; secondly, during the excavation of hand-dug test pits under the house foundation to facilitate its lifting, the footprint of the building was the subject of further recording.
- 1.2.5 The recording work forms part of a wide ranging programme of archaeological recording and excavation work undertaken along the route of the proposed CTRL. The pre-removal survey was undertaken in accordance with a detailed 'Specification

for Building Investigation and Recording' prepared by OAU (December 1998) and approved by Rail Link Engineering (RLE).

1.3 Presentation of this Report

- 1.3.1 The report covers both the building archaeology and the below-ground evaluation elements of the archaeological investigation of the farm. Following a summary of the site location and topography (§2), section §3 provides a brief historical background of the farm. Section §4 presents a review of the recording methodology employed during the project. The description and interpretation of the farm buildings themselves are presented in sections §5 and 6. Section §5 presents an interpretative summary of the phased development of the farmhouse and a detailed architectural description of the farmhouse and subsidiary buildings as recorded. Section §.6 presents a more detailed interpretation of the phased development of the structure based upon the recorded evidence and other sources. Section §7 details the observations of the archaeological trial trenching undertaken before dismantling and the watching brief which took place following the removal of the standing buildings. Finally section §8 provides a summary of the conclusions drawn as a result of the investigations.

2. SITE LOCATION AND TOPOGRAPHY

- 2.1.1 Bridge House is situated adjacent to Mersham, to the south-west of the village centre, on the road to the Forstal.
- 2.1.2 The site is located on a junction between the Hythe Beds (British Geological Survey Sheet 305/6), a formation of lower cretaceous lime and sandstone, and Artherfield and Wealdon Clays. The site lies between 55m and 56m OD.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.1.1 The actual village of Mersham comprises three foci of historic interest. The northernmost of these is located some 700m north-east of Bridge House and is defined as a Conservation Area. Around 300m north-east from the site lies a second area which consists of a group of listed building; the parish church (Grade I), with its surviving medieval west window and graveyard (Grade II) and, to the west of the church, Court Lodge, an important hall house (Grade I) and its associated barn (Grade II). The earliest known reference to the church dates to 1040 and it was rebuilt in the twelfth century. Court Lodge dates to the early to mid fourteenth century, when it came under the control of Christ Church Priory, Canterbury. The third area is situated south of the site, separated from it by the London to Folkestone railway track. It consists of a widely spread group of eleven buildings of historic interest, seven of which are listed (Grade II).
- 3.1.2 Several archaeological discoveries have been made in and around Mersham village, the earliest recorded was found in 1828 during maintenance works on the road by Bower Farm. A group of at least three Anglo-Saxon burials were recovered, complete with an assortment of grave goods including brooches, buckles, a sword, a spearhead and a knife, datable to the sixth or seventh centuries. These artefacts were deposited with Canterbury Museum. Also datable to a similar period are two buckles, an oblong ornament (described as being gilt set with garnets), and a globular cinerary urn. These were all found in the area prior to 1853.
- 3.1.3 To the east of the parish church in the field to the west of Bower Lane (TR05483928), evidence for medieval settlement activity was discovered in 1967 following ragstone quarrying works. Hearths, wells and pits were found, along with some iron objects and a substantial amount of pottery, believed to date to the thirteenth and fourteenth century. In close proximity of this site is the Grade II* listed Bower Farmhouse dating to c. 1500AD.
- 3.1.4 The CTRL Environmental Statement (URL 1994) and subsequent geophysical investigation identified an area of archaeological potential, to the south of the church of St John the Baptist. The Museum of London Archaeological Service (MOLAS) carried out a programme of trial trenching in 1997, as a result of which Canterbury Archaeological Trust (CAT) undertook a detailed archaeological investigation on the site in 1998. Full details of these works can be found in reports issued by MOLAS and by CAT (contract S/400/SP/0009/P484A*). Due to the proximity of the site to Bridge House, the results of the excavations have been summarised below. The principal discovery made during the excavation was an early medieval metalworking site. Pits backfilled with iron slag, ditches cut to bring water to the site and a southern boundary ditch, all dating to the period AD 1050-1200 (most probably AD 1050-1125), were excavated. The western boundary ditch probably also dates to this time. Following the abandonment of the site the southern boundary ditch was retained, while a smaller, parallel, ditch was added in the north. A low-level renewal of activity appears to have taken place during the period 1475-1500, but this ended by AD 1775. Horticultural features excavated at the eastern end of the site are probably contemporary with this later activity.

4. ARCHITECTURAL DESCRIPTION OF BRIDGE HOUSE

4.1 Introduction

4.1.1 As stated above, the building was not intended to be moved (or demolished), and accordingly no detailed investigation or record was produced, since the significance of the listed building was well established by inspection during the preparation of the Environmental Statement.

4.1.2 The list entry (see Appendix 1) states that the building is 17th century in origin, and this date was confirmed by the archaeological investigations.

4.2 General Description

4.2.1 Bridge House is a two-storey house with a central brick stack and a brick front wall with plat band, and a partly timber-framed interior. It is a lobby-entrance plan, with the front door facing the chimney stack, and an added outshot at the rear. The roof is tiled, and half-hipped at each end. The brick porch has a sloping roof with a small dormer window set into it. There are wooden casement windows, those on the ground floor having segmental heads.

4.2.2 Internally there were no special features of note, with large brick fireplaces on either side of the stack, some visible ceiling beams and a brick paved area at the rear with a water pump in it.

4.2.3 On the basis of the visible evidence, it was considered that the building was probably a timber-framed building of 17th-century date, to which a brick front had been added in the early 18th century.

5. ARCHAEOLOGICAL INVESTIGATIONS

5.1 Scope of fieldwork

5.1.1 In January 1999, a series of seven archaeological test pits were excavated within the building, in advance of the removal of the house, in order to establish the potential for historical floor layers. Specific aims and stratigraphic sequences are given in section 7.2 and 7.3.

5.1.2 Consecutively to the test pits, in February and March 1999, an archaeological watching brief was carried out during all works associated with the removal of the house. These included a series of hand-dug trenches to form a ring beam under the building foundations in order to underpin the structure and facilitate its moving and the excavation of the slide track. The excavation of the slide track and rung beam trenches was carried out by Abbey Pynford, and monitored by OAU staff.

5.2 Fieldwork Methodology

5.2.1 The test-pits within the house were excavated by hand by OAU field staff whilst the foundation trenches for the rung beam underpinning the building and the slide track were dug by hand by Abbey Pynford staff under archaeological monitoring. The main part of the slide route was stripped by mechanical excavator under archaeological supervision using a toothless ditching bucket.

5.2.2 All trenches were cleaned by hand and exposed features were investigated to determine their extent and nature, and to retrieve finds and environmental samples. All trenches were planned at an appropriate scale (1:50) and individual excavated sections were drawn at a scale of 1:20. All features were photographed using colour slide and black and white negative film. Recording was in accordance with standard OAU procedures as set out in the OAU Field Manual (ed. Wilkinson D, 1992).

5.2.3 Fieldwork was undertaken in accordance with requirements set out in the CTRL *Archaeology Programme Written Scheme of Investigation* and the agreed methodology in the existing Project Method Statement (ref. S/400/SP/0008 p.481 & 483, part 5).

5.3 Test pits

Test Pit 10

5.3.1 A small exploratory test pit was dug through the concrete floor within room 5, to a total depth of 0.4m. The concrete was removed from an area measuring approximately 0.6m x 0.6m before a secondary pit, measuring approximately 0.3m x 0.3m, was dug through the subsidiary levels. Six layers were recorded.

5.3.2 No significant archaeological deposit was recorded.

Test Pit 10: Table of Contexts	
16	Natural clay.
15	Overlying 16 - a make up layer of dark greenish yellow silty clay with some stone fragments.
14	Overlying 15 - a make up layer of grey brown silty clay with occasional fragments of C.B.M. and stone.
13	Overlying 14 - a make up layer of greenish yellow sandy clay, containing fragments of C.B.M and lime mortar. Approximately 0.1m deep.

Test Pit 10: Table of Contexts	
12	Overlying 13 - a mixed layer of crushed stone and C.B.M. forming a base for the modern floor. Approximately 0.05m deep.
11	Overlying 12 - a layer of strong cement concrete for the modern floor. Approximately 0.05m deep.

Test Pit 20

- 5.3.3 An exploratory test pit was dug through the floor of room 6. A hole approximately 0.6m x 0.5m was broken out of the floor and a vertically sided pit approximately 0.3m x 0.3m sunk through the subsidiary levels. Six contexts were recorded.
- 5.3.4 No significant archaeological deposit was recorded.

Test Pit 20: Table of Contexts	
26	Natural clay.
25	Overlying 26 - a make up layer of dark greenish yellow silty clay with some stone fragments. Approximately 0.08m deep
24	Overlying 25 - a make up layer of grey brown silty clay with occasional fragments of C.B.M. Approximately 0.08m deep.
23	Overlying 24 - a dull greenish yellow tenacious silty clay with inclusions of C.B.M. and lime mortar. Approximately 0.04m deep
22	Overlying 23 - a layer of mixed crush stone and C.B.M. forming the foundation for the modern floor. Approximately 0.08m deep.
21	Overlying 22 - a 0.03 m thick skim of a cement concrete forming the modern floor.

Test Pit 30

- 5.3.5 A small test pit was dug partially under the interior wall separating room 7 and a small store room. The pit was dug to an approximate depth of 0.35m and had dimensions of 0.5m x 0.3m. Six contexts were exposed.
- 5.3.6 No significant archaeological deposit was exposed.

Test Pit 30: Table of Contexts	
36	Course of ragstone blocks, suggested to be an earlier foundation plinth although there was no evidence of a foundation cut.
35	Sealing 36 - a layer of pale greenish yellow clay, probably part of the house platform. Full depth was not exposed.
34	Overlying 35 - a make up layer of grey brown silty clay with occasional inclusions of stone fragments. Approximately 0.06m deep.
33	Overlying 34 - a make up layer of dark greenish yellow silty clay, with some fragments of stone and C.B.M. Approximately 0.08m deep.
32	Overlying 33 - a compacted layer comprising grey brown silty clay, crushed C.B.M and fragments of lime mortar. Approximately 0.06m deep.
31	Overlying 32 - a lime mortared foundation plinth supporting a wooden sill beam (approximately 0.1m x 0.05m). The foundation plinth consisted of a course of ragstone blocks with a thin levelling course of tile between the ragstone and the sill beam.

Test Pit 40

- 5.3.7 An exploratory test pit was dug in the interior of room 7, abutting the eastern external wall. The pit was dug to a depth of 0.35m and exposed four contexts.

- 5.3.8 This test-pit exposed the base of the exterior wall, the foundation plinth, foundation cut and the building platform.

Test Pit 40: Table of Contexts	
44	A light greenish yellow clay, perhaps the original building platform
43	Cut into 44 - a vertically sided foundation trench for the external wall. Approximately 0.15m deep.
42	Fill of 43 - the original foundation plinth for the timber framing of the house, consisting of ragstone blocks approximately 0.2m x 0.1m x 0.05m laid in an apparently random fashion. No mortar was visible
41	Overlying 42 - the later exterior wall, brick faced with stone backing, built directly on top of 42.

Test Pit 60

- 5.3.9 An exploratory test pit dug to a depth of 0.5m in room 1, exposing three contexts. Approximate dimensions of the trench were 0.4m x 0.6m.
- 5.3.10 No significant archaeological deposit was recorded.

Test Pit 60: Table of Contexts	
63	Natural clay.
62	Overlying 63 - a make up layer of grey brown silty clay containing ragstone and C.B.M fragments. The pipe stems recovered suggest a date of late 17 th or early 18 th century.
61	Overlying 62 - a modern floor layer of weak cement concrete containing many crushed fragments of C.B.M, ragstone and broken concrete. Approximately 0.2m deep.

Test Pit 70

- 5.3.11 An exploratory test pit was excavated in room 2, exposing eight contexts. The pit measured 0.46m x 0.36m and was dug to an approximate depth of 0.41m.
- 5.3.12 One possible clay floor was recorded (74) but did not produce any dating evidence.

Test Pit 70: Table of Contexts	
78	Natural clay.
77	Overlying 78 - make-up layer of yellow silty clay.
76	Overlying 77 - make-up layer of redeposited natural.
75	Overlying 76 - a thin layer of lime mortar and plaster.
74	Overlying 75 - yellow silty clay lens with charcoal flecking. Possible clay floor?
73	Overlying 74 - a charcoal rich lens with frequent mortar flecks.
72	Overlying 73 - a make up layer of crushed C.B.M. ragstone and broken concrete.
71	Overlying 72 - modern concrete floor layer, some flint inclusions.

Test Pit 80

- 5.3.13 An exploratory test pit was located in room 3, exposing seven contexts. The pit measured 0.76m x 0.53m and was dug to an approximate depth of 0.30m.
- 5.3.14 One brick floor was recorded (83) but did not produce any dating evidence.

Test Pit 80: Table of Contexts	
87	Natural clay
86	Overlying 87 - make up layer
85	Overlying 86 - grey silty clay make up layer with charcoal flecks.
84	Overlying 85 - a deliberately deposited fine sand bedding layer for 83.
83	Overlying 84 - tightly packed brick floor level of hard fired, red/purple, unfroged bricks.
82	Overlying 83 - lime mortar flooring.
81	Overlying 82 - pink mortar flooring.

5.4 Watching brief

Phase I: late 14th century occupation?

- 5.4.1 The natural geology is clay (3).
- 5.4.2 Cutting through the natural geology is a series of features pre dating the construction of Bridge House. A 1.36m wide ditch (180), aligned NE-SW, was exposed through the width of room 8. Other features stratigraphically pre-dating the building have been exposed in the same room, including one gully (167), 2 post-holes (189, 212) and one pit (165). However they did not produce any dating evidence.
- 5.4.3 Further evidence of activity prior the construction of Bridge house were exposed in rooms 2 and 3. 2 undated post-holes and 2 pits were recorded at the base of the sequence. A 0.96m deep pit (224), interpreted as a possible cess pit, contained some pottery dated from the late 14th century. Ditch 148, aligned NE-SW, was exposed on a length of 3.70m in room 3, with a terminus appearing in room 5; it also contained dating evidence from the late 14th century. Other deposits, such as a midden layer (129) and a burning deposit *in situ* (112) contained late 14th century pottery. A pit (210), in the same area, produced early 12th century pottery. However this could be redeposited.
- 5.4.4 The evidence uncovered in room 2 and 3 suggest an early occupation in the late 14th century. The nature of this late medieval ‘settlement’ is difficult to precise as the function of these features have not been determinate, but it is likely to be associated with agricultural or domestic activity. The features in room 8 could not be dated but it is possible they belong to the same period. It must be noted that ditches 180 and 148 are in the same alignment and could represent boundary ditches. There was no substantial evidence for activity prior to the late 12th century. The few sherds of 12th century pottery are likely to be redeposited.

Phase II: Construction of the building - late 17th century

- 5.4.5 In order to prepare the site for the building of Bridge House, previous features were deliberately infilled (164, 168). A series of levelling deposits were laid on top of them across the site (99, 118, 119, 128, 144, 163). A few of them produced dating evidence. Most of the pottery have been dated from the mid 16th century onwards. However the presence of one late 17th century sherd and of 17th century clay pipes within the same deposits suggest this levelling event only took place in the 17th century, which induce Bridge house was probably built towards the end of the 17th century.
- 5.4.6 Following the levelling of the site, foundation cuts were dug (183, 198, 216, 217, 228). The earliest walls appeared to have ragstone foundations, 0.40m wide, (160, 114, 115, 185, 199, 229) and upstanding timber and plaster walls which only one survived (186, 204). Two internal walls (197, 205) have also been included in phase

2 as they are stylistically similar to 186 (timber and plaster structure). 205 appears to have originally been an external wall yet there is no indication of an early wall abutting 205 to the north (in area where later wall 156 is located). It is possible that the construction of 156 at a later phase have obliterated any remaining traces.

Phase III: Brick re-fronting and insertion of a chimney - 18th century

5.4.7 This phase appeared as a period of major alterations to the building. The main one was represented by the repair of the façade of the house. The front wall (102) and the two side walls (132 and 100) were all constructed with lower courses of roughly squared ragstone which was overlain by red bricks coursed in Flemish bond. At the junction between walls 102 and 100, the foundations (103 and 101) have been rebuilt and widened before being sealed by 5mm of bitumen and tar and built upon. Perhaps as part of these works, a cut was dug in room 1 for the insertion of a brick plinth (105). As this was positioned underneath the main structural beam, it might have represented a post pad used to support the roof, whilst the stone footings were being removed from the original timber structure before the rebuild of the foundations.

5.4.8 At some stage of phase 2 (before or after the repairs to the facade?), a south-west facing fireplace and chimney were inserted into room 8. A cut was dug for the insertion of 203, a fire surround comprising ragstone footings supporting a brick wall of headers and stretchers bonded with a gritty mortar. In the centre of the hearth, an irregular rectangular cut (166), 0.71m x 0.80m, was found. It was either an earlier truncated feature associated with the early phase of construction, either a hole for the foundation of the hearth. This was later infilled (195) and another feature inserted. A rectangular structure (193), with dimensions of 0.52m x 0.35m, was created by six bricks laid on their edges with mortar in the gap between them. This feature, presumably the base of a previous hearth or oven, was packed with broken bricks, mortar and ash (200), either associated with the construction of 193, either backfilling of the structure at a later date. Sealing this deposit was a layer of mortar (192), presumed to be the base of a hearth because of the overlying fire deposit (188). At the top of the sequence was a layer of mortar (187) supporting a levelling surface for the final fireplace before the modern tile floor was laid across room 8. The few finds recovered from this sequence (195, 192, 188, 179), including a few sherds of pottery, one brick and a few clay pipe fragments, suggest a 18th century date.

Phase IV: Extension to rear of house

5.4.9 During the early 20th century, an extension was built to the rear of the house. The foundation cut (124, 149, 153) was filled with a rough mix of mortar plus broken brick and ragstone (125, 150, 151, 154, 155) and a wall (126, 152, 156) of coursed ragstone built on top.

5.4.10 Around this time, a partition wall (196) was built to divide rooms 6 and 7.

Phase V: Addition of a porch

5.4.11 During the later half of the 20th century, a porch was built abutting the south east facing wall (102). A shallow cut (159) was filled with concrete foundations (158) for a porch constructed from wire cut bricks and ragstone blocks (157).

Phase VI: Extension to rear of building

5.4.12 A lean-to out-building was constructed to the rear of the house during the late 20th century. A shallow foundation trench (96) was filled with a single course of rough ragstone bonded with lime mortar (95). On top of this, a brick base for a wall was

built (94) standing to a height of approximately 0.5m. This consisted of reused bricks, many of which were half bricks or smaller, roughly coursed and bonded with lime mortar. The remainder of the wall above this height was a rough ragstone construction.

6. DISCUSSION AND CONCLUSIONS

6.1.1 The results of the underground archaeological investigation have been disappointing and have added little to the understanding gleaned from the survey of the structure itself. The test-pits did not identify any historical floor layers associated with the early occupation of the house. The watching brief did allow an observation of the building of the foundations but its main interest probably lay with the identification of remains pre-dating the house, probably from the late 14th century. Bridge House was located just south west of one of the main historic nucleus of the medieval village of Mersham. The house was situated about 60m west of the early medieval iron working site, excavated during the CTRL works (URS 2001), 200m west of the 12th century parish church and 150m of Court Lodge, an early to mid fourteenth century hall house (Grade I) and its associated barn (Grade II). It is therefore not really surprising to identify some late medieval activity at Bridge House and would need to be taken into account in any study of the medieval occupation at Mersham and of its extent. However the archaeology identified was very fragmentary due to its disruption by the construction of the 17th century house.

6.1.2 Although the nature of the archaeological investigation was constrained by the unusual working conditions, the dating obtained for various features was useful, even if archaeological evidence for habitation was limited.

7. BIBLIOGRAPHY

URS, 2001, Mersham, Kent, ARC MSH 98: detailed archaeological works assessment report, prepared by Canterbury Archaeological Trust for URS.

APPENDIX 1 COPY OF DCMS LIST ENTRY

TR 03 NE

MERSHAM

CHURCH ROAD
(west side)

7/102

Bridge House

II

House. C17. Painted brick with plain tiled roof. Lobby entry plan. Two storeys on plinth with plat band. Half-hipped roof with moulded stacks to centre left. Three wooden casements on first floor, and two tripartite wooden casements with segmental heads on ground floor.

Plank and stud door to centre with raking dormer, with hipped dormer in upper section. Reported timber framed interior.

APPENDIX 2 FINDS AND ENVIRONMENTAL

2.1 Pottery assessment

by Paul Blinkhorn

Introduction

- 2.1.1 The pottery assemblage comprised 309 sherds with a total weight of 5,254 g. The minimum number of vessels (MNV), by measurement of rimsherd length, was 2.19. The range of pottery types, which are all wares well-known in the region, indicates that there was little significant activity at the site before the later 14th century, although a few sherds of 12th – 13th century pottery were noted, along with three heavily abraded and redeposited sherds of Iron age material. The rest of the assemblage was post-medieval in date, and indicates that occupation at the site continued throughout the period.

Methodology

- 2.1.2 All sherds were processed within the guidelines of the CTRL Section 1 Archaeology Post-Excavation Assessment Instruction: Rev AB, and the Medieval Pottery Research Group Guidelines for the Analysis and Publication of Medieval Pottery were adhered to. Where necessary, sherds were examined under a 20x binocular microscope to aid fabric identification.

Quantification and Provenance

- 2.1.3 The pottery was recorded using the codes and chronologies of the Canterbury Archaeological Trust Fabric series for the county of Kent (Cotter forthcoming a) and b)), with the following types noted:

EM.M5, Ashford Potters Corner shell-filled sandy ware, 1125/50-1225/50. 6 sherds, 65 g, MNV = 0.06.

M5, London-type ware, 1140-1375. 27 sherds, 476 g, MNV = 0.

M38A, N or W Kent Sandy ware, Maidstone kiln? 1175/1200-1400. 29 sherds, 380 g, MNV = 0.34.

LM1, Tyler Hill sandy ware, 1375-1525. 106 sherds, 1416 g, MNV = 0.70.

LM1A Tyler Hill sandy ware with sparse chalk, 1375-1525. 67 sherds, 1,021 g, MNV = 1.09.

PM1: Red earthenwares, 1550-1800. 46 sherds, 1296 g.

PM5: Frechen Stoneware, 1525-1750. 1 sherd, 9 g.

PM9B: English Tin-Glazed Earthenware, 1575-1775. 2 sherds, 35 g.

PM10.1: Border ware 1550-1700. 4 sherds, 189 g.

PM14: Staffs-type iron glaze earthenware, 1675-1800/25. 1 sherd, 46 g.

PM57: Cistercian ware, 1475-1600. 3 sherds, 142 g.

LPM5: Yellow ware, 1825-1900. 1 sherd, 2g.

LPM7B: Bone china, 1770-1925. 8 sherds, 55 g.

LPM10: Late English Stoneware, 1800-1940. 2 sherds, 87g.

Cross-fits

Two cross-fits were noted:

140 = 225, LM1, L14thC

129 = 141, LM1, L14thC

- 2.1.4 This suggests that these deposits are likely to be contemporary.

Discussion

- 2.1.5 Generally, the medieval assemblage was highly fragmented, with the range of pottery types present indicating that there was little activity at the site before the later 14th century. Certainly, the commoner medieval pottery types which formed the bulk of the medieval assemblages at other, earlier sites from the CTRL project, such as fabrics EM38A, EM38B, EM38C and EM3A are relatively scarce or completely absent here. The last-named of these fell from use during the early 13th century, the rest *c* 1400. There are however a few sherds of EM.M5 at this site, suggesting low-level activity during the 12th and 13th centuries. London ware is relatively plentiful here, despite being given an end-date of the later 14th century in the local type-series. Certainly, it was rare in London by 1380, and had completely fallen from use by 1400 (Pearce *et al.* 1985, figs 87 and 88), suggesting that either such vessels had a longer life in rural Kent, or that the late Tyler Hill-type wares, which date the late-14th century contexts, may have been first made a decade or two earlier than is presently accepted.
- 2.1.6 The later wares show that there was occupation at the site throughout the post-medieval period. The range of kitchen and table wares present, eg. skillets, plates, chafing dishes, cups and cauldrons, are typical of the earlier post-medieval period.

Illustrations

- 2.1.7 Fig. BR1: Context 164, fabric PM57. Full profile of Cistercian ware cup. Brick red fabric, black glaze on both surfaces.
- 2.1.8 Fig. BR2: Context 164, fabric PM1. Red earthenware side-handled tripod skillet. Orange-red fabric, black-speckled orange internal glaze. The base and feet on the opposite site to the handle are sooted.
- 2.1.9 Fig. BR3: Context 168, fabric PM1. Red earthenware dish/plate. Brick red fabric with thin grey core. Greenish-orange glaze on inner surface.
- 2.1.10 Fig. BR4: Context 168, fabric PM10.1. Border ware chafing dish. White fabric with buff outer surface, bright copper-green glaze on the inner surface. The 'double triangle' cut-outs on this vessel are very unusual, with only one published example from the city of London (Pearce 1992, 22 and fig. 31.191B). The London example is very similar to this one, with the only apparent difference being that it has horizontal rather than longitudinal loop handles.

Bibliography

- Cotter, J, forthcoming a) The Pottery in K Parfitt, B Corke and J Cotter
Excavations at Townall Street, Dover, 1996 Canterbury Archaeological Trust

Cotter, J, forthcoming b) The Post-Roman Pottery in A Hicks and M Hicks (eds) *Excavations at St. Gregory's Priory, Canterbury* Canterbury Archaeological Trust

Pearce, J, 1992 *Border Wares* HMSO

Pearce, JE, Vince, AG and Jenner, MA, 1985 *A Dated Type-Series of London Medieval Pottery Part 2: London-type Ware* LAMAS Special Paper 6

Table 1.1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Cntx	IA		EM.M5		M5		M38A		M40B		LM1		LM1A		PM1		PM5		PM9B		PM10.1		PM14		PM57		LPM5		LPM7B		LPM10		Date				
	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt					
1																																			U/S		
91											1	1															1	2							19thC?		
93																	1	9																	16thC+		
99															1	21																			M16thC+		
112											2	194																							L14thC		
113											5	140																							L14thC		
129					16	214	25	271			47	454	29	482																					L14thC		
140											1	9																							L14thC		
141			2	16	10	225	3	92	2	17	43	502	38	539																					L14thC		
163															1	13									1	46									L17thC+		
164															21	453			1	26					1	87									M16thC+		
168															12	679					3	180			2	55											M16thC+
188															1	14																					M16thC+
192																					1	9															M16thC+
209			3	41																																	E12thC
225							1	17			4	95																									L14thC
227					1	37																															L12thC
501											2	9			8	46									1	2	1	8									U/S
503	3	16	1	8							1	12																									L14thC
	3	16	6	65	27	476	29	380	2	17	106	1416	67	1021	44	1226	1	9	1	26	4	189	1	46	3	142	2	4	8	55	2	87					

2.2 Assessment of the Ceramic Building Materials and Fired Clay

By Susan Pringle

Introduction

- 2.2.1 All the ceramic building material, fired clay and stone recovered during the recent excavation works, amounting to 21.656 kilogrammes, was examined for the assessment. The brick and tile weighs 18.265 kilogrammes, the stone 3.370 kilogrammes, and the fired clay, 0.021 kilogrammes.

Methodology

- 2.2.2 All of the material has been scanned for the assessment using a binocular microscope. Ceramic building material has been divided by form, and fragments counted and weighed. The presence of distinctive fabric types has been noted, but no analytical work has been carried out on the fabrics from the site, as this task is more appropriately carried out at the next stage. Other information recorded includes the presence or absence of glaze, burning or vitrification, and any complete dimensions. The data were entered on an Excel database. The fired clay assemblage has been counted and weighed, and the presence of features such as original surfaces, impressions or tempering noted.

Quantification

- 2.2.3 The total weight of ceramic building material scanned for the assessment is 18.286 kilogrammes, of which 0.021 kilogrammes is fired clay.

Ceramic building materials

- 2.2.4 The tile assemblage contains brick, roof tile (peg, ridge and hip tiles), and floor tile.

Peg or plain tile

- 2.2.5 With 86 fragments present, this is the most abundant tile type from the site. Most of the peg tile is in fine orange or reddish–orange fabrics, highly fired, with a calcareous speckle; some tiles have coarser calcareous inclusions, sometimes with streaks of pale cream or white silty clay. A distinctive variant which is present has frequent cream and red blocky siltstone inclusions in a light orange matrix. All the nail–holes noted are square in shape, set diagonally. Some of the tile resembles the production of the Naccolt kilns, with a creamy white surface, and some resembles Museum of London type 3201, which has a very similar fabric with more even moulding sand. It is not clear whether these tiles come from different sources on similar claybeds, or if they represent different phases of the same production. The peg tiles cannot be dated closely, as the type has changed very little since the 13th century. Two examples were noted with a complete breadth measurement of 160mm, both probably in the Naccolt fabric, and with diagonally–set square nail holes.

Ridge and hip tiles

- 2.2.6 Three fragments of curved tile were noted which are either ridge or hip tiles. These tend to be under–represented as the smaller fragments resemble peg tiles.

Floor tile

Two fragmentary floor tiles are present, in a red fabric similar to Museum of London fabric 2323 (context 101). Both are very worn and appear to be unglazed; dimensions are 204 x 203 x 26mm, and 200mm square x 21mm (but worn to 11mm thick in places). These cannot be dated closely, but were probably made between the 17th and 19th centuries.

Brick

- 2.2.7 Nine bricks or brick fragments were recovered. All are unfrosted, but none appears to be earlier than the late 17th or 18th century. They include a ?wire-cut, unfrosted brick with sharp arrises which probably dates to the 19th century (context 101). Three brick samples have been recorded; details are in Table 1.2.

Table 1.2: Details of brick samples

Context	Phase	Feature	Count	Weight (gm)	Early date	Late date	Comments
101	II	foundation	2	5180	1670?	1900?	<1> 3032 type, unfrosted - burnt and reused? Late 17th-18th c? With off-white fine sandy mortar.
105	II	brick plinth	2	1960	1700?	1800?	<3> iron-rich fabric, nr 3047; unfrosted - 18th century?
147	?	?	1	20?	?	?	<6> could be Roman or post-med.

Table 1.3: Counts and weights for each tile type (securely identified material only)

Tile type	Count	Weight (grams)
Brick	9	10110
Floor tile	5	3920
Hip tile	1	205
Peg tile	86	3935
Ridge tile	1	50
Ridge or hip tile	1	40
Total	103	18260

Fired clay

- 2.2.8 Five fragments of fired clay come from two deposits, one of which, context 129, is a midden from the pre-house phase. The other context, 177, contains a small fragment of fine fired clay with organics which could have been part of a fired clay object, although it is too fragmentary to be sure.

Stone

- 2.2.9 The only stone present is a sample of Kentish ragstone rubble with off-white sandy mortar adhering to it (sample <2>).

Table 1.4: Quantification of ceramic building materials by count and weight

Context	Count	Weight (gm)	Type	Period	Early date	Late date	Comments
91	14	240	peg	M; PM	1200	1900?	Fine red to orange, calcareous fabrics; some Naccolt type.
91	1	5	brick?	PM	?	?	Orange, sandy, iron-rich fabric.
99	2	140	peg	M; PM	1200	1900?	Nr 3201 and 2271

Context	Count	Weight (gm)	Type	Period	Early date	Late date	Comments
101	2	5180	brick	PM	1800?	1900?	<1> 3032 type, unfrogged - burnt and reused? Late 17th-18th c? Also complete unfrogged brick with sharp arrises, may be wire-cut, prob 19th c. Both have off-white fine sandy mortar.
101	1	3370	stone	?	?	?	<2> Sample of Kentish ragstone with off-white sandy mortar.
105	2	1960	brick	PM	1700?	1800?	<3> iron-rich 'Wealden' type fabric, nr 3047; unfrogged - 18th century?
129	4	20	f/c	?	?	?	clay with abundant fine sand; some mortar attached; 2 burnt. All abraded but 1 frag has a flat surface.
140	1	30	peg	M; PM	1200	1900?	Nr 3201
147	1	20	brick	?	?	?	<6> could be Roman or post-med.
163	1	20	peg	M; PM	1200	1900?	Streaky, with coarse calcareous inclusions
164	16	140	peg	M; PM	1200	1900?	3201 with diagonal square n/holes; some conjoin.
164	1	40	ridge/hip	M; PM	1200	1900?	3201
164	3	220	brick	PM	?	?	Overfired and heat-cracked; reduced top surface; 2 conjoin.
168	23	2240	peg	M; PM	1200	1900?	3201, with diagonal square nail holes; ?Naccolt; breadth = 160mm x 2.
168	1	205	hip	M; PM	1200	1900?	3201 type
168	1	50	ridge	M; PM	1200	1900?	?Naccolt type
176	8	265	peg	M; PM	1200	1900?	<7> fine orange fabric, calcareous, diagonally set square n/holes.
177	2	30	peg	M; PM	1200	1900?	Fine orange fabric, calcareous, nr 3201 and Naccolt.
177	1	1	f/c	?	?	?	crumb of reduced fine clay with organics - no surfaces.
179	5	3920	floor tile	PM	1600	1900?	Red fabric nr 2323; worn floor tiles, prob unglazed 203 x 204 x 26mm & 200 x 21mm (worn to 11mm in places).
179	1	2730	brick	PM	1700?1800?		unfrogged - 18th century?
190	2	100	peg	M; PM	1200	1900?	3201 type
211	11	520	peg	M; PM	1200	1900?	3201 type with small square n/hole; 1 is lumpy silty fabric nr 3205
225	4	120	peg	M; PM	1200	1900?	nr 3201, and version with coarser calc incls, overfired.
501	2	90	peg	M; PM	1200	1900?	nr 3201, but mauve core nr?Naccolt type.

Provenance

- 2.2.10 The material examined for this assessment comes from the excavation of the house site, although the provenance of all the material is not clear at this stage. There is a small quantity of fired clay from the pre-house phase and Phase II, but nothing that can be identified from Phases I, III, IV and V. There are no good groups, and the main value of the assemblage is to confirm the presence of late 17th and 18th century bricks in the structure, and to provide evidence for the types of material used in a house of this period.
- 2.2.11 The condition of the material is fairly abraded, but there is no risk to its preservation.

Conservation

- 2.2.12 It is unlikely that further analysis of this material will be needed, so there is nothing to prevent it being placed in long term storage. There are no special requirements for long term storage, other than the use of robust packaging materials and a dry environment.
- 2.2.13 Retention/discard policy: at this stage, all the material should be retained, but there is little in the assemblage that could not be discarded in the future. The following should be retained: samples of all the brick and tile fabrics, and the floor tiles; the quantity retained will probably be equivalent to approximately 10% of the assemblage.

Comparative material

- 2.2.14 The tile fabrics found on the site should be compared with the Canterbury Archaeological Trust's tile fabric type series, which could provide information on their sources and date ranges, and comparisons could be carried out with material from other sites in north Kent.

Potential for further work

- 2.2.15 There is little real potential for further work on this material, as its main interest is in the dating of the bricks and tiles from Bridge House. It is recommended however, for the fabrics to be compared with those in the Canterbury Archaeological Trust and Museum of London type series.

2.3 Assessment of metalwork

by Valerie Diez

Introduction and methodology

- 2.3.1 A total of 127 metal objects were recovered from the excavations at Bridge House. The assemblage comprised the following material categories, copper alloy and iron. All objects have been X-rayed. This assessment was based upon the X-rays.
- 2.3.2 Iron was in general in fairly poor condition.
- 2.3.3 Each object has been identified and assigned to a functional group, these groups are as follows, personal, domestic, horse-gear and structural.

Quantification

- 2.3.4 Personal: 2 fairly utilitarian buckle forms were found. One was a plain and rectangular buckle frame and the other was a double looped buckle with an iron pin. 3 pins were also recovered, 2 of which were drawn pin with wire wound spherical heads, the remaining one was a dome headed plated pin. Pins with wire wound spherical heads were employed for a number of uses, from the 14th century onwards.
- 2.3.5 Domestic: 5 objects belong to this category, 1 possible Iron base, 2 iron back fire and 2 possible blades.
- 2.3.6 Horse-gear: 1 spur was identified. It is not complete, but the neck, split at the end, indicates that this is a rowel spur. The rowel spur was introduced in England in the 13th century and they have remained in use until the modern day. In this case it is not possible to give a precise dating as the rowel itself is missing.

2.3.7 Structural: This is from far the main category with 115 items, mostly fragments of unidentified objects. They comprise 88 nails and nail shank fragments, 1 split pin, 4 strips, 1 rod, 10 sheet fragments, 2 perforated sheet fragments, 1 disc and 8 undetermined fragments.

Conservation and potential for further work

2.3.8 No further conservation is required. the actual packaging is suitable with long term storage.

2.3.9 The artefacts are probably all of post-medieval date. No further work is recommended.

Table 1.5: Metal artefacts

Context	SF number	Material	No of fragments	Object type	Comment
1		Cu alloy	1	Buckle frame	Plain and rectangular with rectangular section
1		Fe	1	Nail	
1		Fe	1	Spur	Probably rowel spur
1		Fe	1	Object	Triangular shaped
91		Fe	1	Object	
91		Fe	1	Strip	
91		Fe	3	Nails	
91		Fe	6	Miscellaneous	Undetermined
99		Fe	1	Sheet	
99		Fe	1	Slag	
141		Fe	1	Nail	
147		Fe	72	Nails and shanks	including 31 nails minimum (with head)
147		Fe	1	Strip	Fragment with visible rivets
147		Cu alloy	1	Strip	
164	2	Cu alloy	1	Buckle	Double looped buckle with iron pin
164	4	Cu ally	1	Pin	Wire wound head; incomplete
164	7	Cu alloy	1	Perforated sheet	Fragment. Holes are punched through from upper surface
164		Fe	3	Nails	
168	3	Cu alloy	1	Pin	Wire wound head
168	5	Cu alloy	1	Disc	Thin disc with small irregular shaped perforation in centre
168	6	Cu alloy	1	Pin	Dome headed plated pin
168		Fe	6	Nails	
168		Fe	1	Sheet	Fragment with circular holes
168		Fe	1	Strip	
168		Fe	1	Blade	
168		Fe	1	Rod	
176		Fe	9	Sheet fragments	
179	9	Fe	1	Iron fire back	
179	10	Fe	1	Iron fire back	
188		Fe	1	Strip	Possible blade, very worn and broken off
195		Fe	1	Nail	
195		Fe	1	Split pin	
225		Fe	1	Nail	
512		Fe	1	Object	Iron base?

2.4 Miscellaneous finds

by Valerie Diez

Introduction and methodology

2.4.1 A total of 125 items have been recorded as miscellaneous finds, including the following categories: bone objects, clay pipes, glass fragments and worked stone.

2.4.2 All objects were identified and dated when possible.

Quantification

2.4.3 Two combs were found. They are double-sided, with fine teeth c. 1mm apart on one side and coarser teeth, whose spacing can vary between c. 2 and 3mm, on the other. This appear to be the most common early post-medieval type (Grew, F. 1984, 111). They are generally dated between 1670 and 1770.

2.4.4 79 fragments of clay pipes were recovered from the excavation and the majority of finds consisted of unmarked stem-sherds. Evidence in the form of internal blackening confirms that the pipe have been used. The positively identifiable material dates from two main period. The earliest types (contexts 93 and 168) comprises 2 simple bowls with no marks or decoration and 1 bowl (context 192) with a rouletted decoration under the rim. These three examples have a button top, and can be dated roughly between 1600 and 1700. Around 1700 the practice of finishing the top of the pipe changes. The “button” rotated by hand round the top of the bowl was gradually replaced with a top cut while in the mould by using a knife through a slot. These knife-cut tops have sharp edges (Goode E. 1984, 220). Five bowls have cut tops (contexts 1, 192, 195). They are also polished and “spurred”. 3 of them are marked on both sides of the spur, with the initials of the makers (whom have not been identified). They are dated probably towards the first half of the 18th century.

2.4.5 41 fragments of glass were recovered. All the types identified are either window glass or common vessels. 11 fragments were probably window glass. The are all in fairly poor condition with very flaky surfaces. Other fragments of vessels include a large dark green bottle and 2 small light green bottles. One of the small bottle is probably a phial (or ‘apothecary bottle’); phials have been an unchanging design over many centuries and offer little for dating purposes (Ashurst, D. 1987, 192). The fragments of vessels are mostly in fairly good condition. Their dating is problematic and can only be attributed to the post-medieval period.

2.4.6 Three stone fragments were found. Two of them were whetstone made out of schist. This material was generally imported from Norway. The last fragment was a type of lava and was possibly a quern fragment.

Conservation and potential for further work

2.4.7 The storage in boxes is satisfactory. No conservation is required.

2.4.8 This assemblage is rather small and fragmented. There is little information to be gained by further study and therefore no potential for further work.

Table 1.6 : Miscellaneous finds

Context	SF number	Material	No of fragments	Object type	Comment
1		Ceramic	13	Clay pipes	Stem fragments + 2 fragments of unmarked cut top bowls + one fragment with the sides of the foot marked "I.K" crowned. 1700-1800?
1	1	Bone	1	Comb	Double-sided comb. Width: 62mm. Surviving length: 25mm. Teeth spaced at 1mm and 2mm. 1670-1770.
91		Ceramic	2	Clay pipes	2 fragments of the same pipe. Bowl and stem polished and unmarked.
93		Ceramic	3	Clay pipes	Stem fragments + bowl with probable button top. Heel and bowl unmarked and polished. 1600-1700
99		Glass	3	Fragments	2 possible window glass fragments and one thin base of light green glass.
107		Plaster	3	Fragments	
110		Plaster	4	Fragments	
113		Stone	1	Whetstone	Schist whetstone fragment.
133		Glass	10	Small bottle?	Base of a small size bottle with inscriptions including "ASHFORD/KENT". Clear glass with a green tinge.
133		Glass	1	Small phial?	Clear glass with a green tinge. Round small bottle intact up to the base of the neck.
140		Stone	1	Fragment	Lava? possibly quern fragment.
163		Ceramic	1	Clay pipe	Stem fragment
164	8	Stone	1	Whetstone	Schist whetstone fragment.
164		Glass	4	Window glass?	Poor condition.
168		Ceramic	19	Clay pipes	Stem fragments + bowl with probable button top. Heel and bowl unmarked and polished. 1600-1700
168	11	Bone	1	Comb	Double-sided comb. Width: 57mm. Surviving length: 43mm. Teeth spaced at 1mm and 3mm. 1670-1770.
168		Glass	4	Window glass?	Poor condition.
188		Ceramic	10	Clay pipes	Stem fragments
188		Flint	1	Retouched flake	Possible piercing tool. Burnt with post-depositional damage.
188		Glass	16	Large bottle?	Fragments of base of dark green glass, very thick.
192		Ceramic	6	Clay pipes	4 stem fragments + 1 polished bowl with button top and rouletted decoration under rim 1640-1680 + 1 spurred bowl with cut-top, polished. Initials on both side of the spur "I.S". 1720-1760.
192		Glass	2	Fragment	Body sherd of green glass.
195		Ceramic	12	Clay pipes	Stem fragments + complete spurred bowl with cut-top, polished. Initials on both side of the spur "I.S". 1720-1760.
202		Ceramic	7	Clay pipes	Stem fragments
211		Ceramic	1	Clay pipe	Stem fragment
501		Ceramic	5	Clay pipes	Stem fragments
501		Glass	1	Window glass?	Small fragment of clear glass.

Bibliography

Ashurst, D. 1987. Excavations at the 17th-18th century Glasshouse at Bolsterstone and the 18th century Boltsterstone Pothouse, Stocksbridge, Yorkshire. In: *Post-Medieval Archaeology* 21, 147-227.

Davey, P. (ed.). 1981. The Archaeology of the Clay Tobacco Pipe: VI. Pipes and kilns in the London region. In: *BAR British Series* 9J.

Gooder, E. 1984. The finds from the cellar of the Old Hall, Temple Balsall, Warwickshire. In: *Post-Medieval Archeology* 18, 149-249.

Russell Fox, Barton, K.J. 1986. Excavations at Oyster Street, Portsmouth, Hampshire, 1968-71. In: *Post-Medieval Archeology* 20, 31-257.

Thompson, A., Grew, F., Schofield, J. 1984. Excavations at Aldgate, 1974. In: *Post-Medieval Archeology* 18, 1-148.

2.5 Animal bones assessment

by Julie Hamilton

Introduction

- 2.5.1 A total of 338 fragments of bone (239 after joining pieces were matched) were recovered by hand from 12 contexts, of which 228 (1067 g) fragments of bone from 11 contexts were examined in detail.

Methodology

- 2.5.2 Bones and teeth were identified using a comparative collection and standard references such as Schmidt (1972) and Hillson (1992). The assemblage was recorded on a computer spreadsheet (Excel) allowing details of context, species, element, side, completeness, age/sex data, pathology, measurements, alteration and condition to be recorded for each fragment; numbers of unidentified fragments and weights per context were also recorded. Total fragment numbers and, where useful, minimum numbers of individuals (based on the commonest element, with side taken into account, and fusion state for long bones) were calculated from these records. Ageing of domestic animals followed Silver (1969), Payne (1973, 1987), Grant (1982), and Levine (1982), sheep and goat bones were distinguished according to Boessneck (1969), and cattle horn cores were classified following Armitage and Clutton-Brock (1976) and Armitage (1982). Where no goat was positively identified, sheep/goat is referred to as sheep. Measurements followed von den Driesch (1976). Small mammal and bird bones were noted but not identified to species.
- 2.5.3 Contexts for detailed examination were selected based on their archaeological value (i.e. secure contexts that could be placed within the site phasing), potential information to be gained from the bone assemblage, and to obtain as much information as possible about phases of interest.

Quantification

- 2.5.4 A total of 228 fragments (1067 g) of bone hand-recovered from 11 contexts were examined in detail. Of these, 185 (697 g) from 7 contexts were identified to species

(Table 1). A modern burial of a dog in the sewer pipe trench accounted for 159 of these, so only 26 identified fragments came from the pre-house phase and earlier phases of occupation.

Table 1.7: Percentage of identified fragments by context, feature interpretation and period

Context	Interpretation	Period	% of identified fragments					Count	Weight (g)
			Sheep	Cattle	Pig	Dog	Bird		
99	levelling layer	P	0	100	0		0	1	7
141	gully fill layer	P	0	0	100		0	1	1
164	pit fill	P	67	22	11		0	9	118
168	gully fill	P	50	40	10		0	10	204
129	midden (hearth)	I+II	0	50	0		50	2	8
188	fireplace layer	F	0	0	100		0	3	5
92	sewage pipe trench	M	0	0	0	159	0	159	354
TOTAL	(count)		11	8	6	159	1	185	697

- 2.5.5 Species present, apart from the modern dog, were sheep/goat (no positive goat), cattle and pig, and an unidentified bird; there are too few bones to estimate species proportions meaningfully or compare them between periods.
- 2.5.6 There were 2 stageable sheep mandibles from the pre-house period (164,168), from sheep aged 2-3 and 3-4 years, respectively. Butchery marks (cuts) were seen on a sheep tibia (from 168). One medium-sized rib, probably sheep, showed extensive bone remodelling, possibly a reaction to trauma/fracture.
- 2.5.7 From the pre-house period (164, 168) 6 large ribs and 3 large lumbar vertebrae, probably all from cattle, showed cut and chop marks, probably related to secondary butchery/food preparation.
- 2.5.8 The pig fragments from context 188 were from a foetal/neonate animal; all were burnt, and butchery marks (cuts) were seen on the innominate, reinforcing the interpretation of these as food refuse.

Provenance

- 2.5.9 The bone was in fairly good condition: little surface erosion was recorded, and other surface alterations such as butchery and gnawing were clearly visible. 25/69 (36%) mammalian fragments (not including the modern dog skeleton) were identified to species, and there was one bird bone.
- 2.5.10 The majority of bone came from the pre-house pit and gully fills, probably representing domestic rubbish. The small amount from the 17th-18th century occupation periods was from a midden, possibly hearth rakings (context 129), and layers associated with a fireplace (188, 195), representing food remains. Not surprisingly, 12/15 (80%) of these latter fragments showed signs of burning, compared with 1/43 (2%) of the others.
- 2.5.11 8/20 fragments from context 164 had been gnawed, probably by dogs, suggesting that they had been available for some time before burial: taken together with the butchery marks, an interpretation as kitchen refuse seems reasonable. No other gnawing was observed.
- 2.5.12 12/69 (17%) of fragments showed butchery marks: in addition to those detailed in the previous section there was one unidentified fragment with a cut mark. These cut

and chop marks were related to secondary butchery/food preparation, and reinforce the interpretation of the animal bone as kitchen/food refuse.

Conservation

- 2.5.13 Storage in boxes is satisfactory.

Potential for further work

- 2.5.14 The small amount of bone recovered does not justify any further work, though it might be of interest to identify the bird bone.

Bibliography

ARMITAGE, P.L. 1982: A system for ageing and sexing the horn cores of cattle from British post-medieval sites. In WILSON, B., GRIGSON, C., and PAYNE, S., *Ageing and Sexing Animal Bones from Archaeological Sites*_(Oxford, British Archaeological Reports 109), 37-54.

ARMITAGE, P.L. and CLUTTON-BROCK, J. 1976: A system for classification and description of the horn cores of cattle from archaeological sites. *Journal of Archaeological Science* 3, 329-348.

BOESSNECK, J. 1969: Osteological differences between sheep and goat. In BROTHWELL, D.R. and HIGGS, E.S. (1969) (eds.) *Science in Archaeology* (London, Thames and Hudson)

DRIESCH, A. VON DEN 1976: *A Guide to the Measurement of Animal Bones from Archaeological Sites*_(Harvard University, Peabody Museum Bulletin 1).

GRANT, A. 1982: The use of tooth wear as a guide to the age of domestic animals. In WILSON, B., GRIGSON, C., and PAYNE, S., *Ageing and Sexing Animal Bones from Archaeological Sites* (Oxford, British Archaeological Reports 109), 91-108.

HILLSON, S. 1992: *Mammal Bones and Teeth*_(London, Institute of Archaeology)

LEVINE, M.A. 1982: The use of crown height measurements and eruption-wear sequences to age horse teeth. In WILSON, B., GRIGSON, C., and PAYNE, S., *Ageing and Sexing Animal Bones from Archaeological Sites*_(Oxford, British Archaeological Reports 109), 223-250.

PAYNE, S. 1973: Kill-off patterns in sheep and goats: the mandibles from Asvan Kale. *Anatolian Studies* 23,281-303.

PAYNE, S. 1987: Reference codes for wear states in the mandibular cheek teeth of sheep and goats. *Journal of Archaeological Science* 14, 609-614.

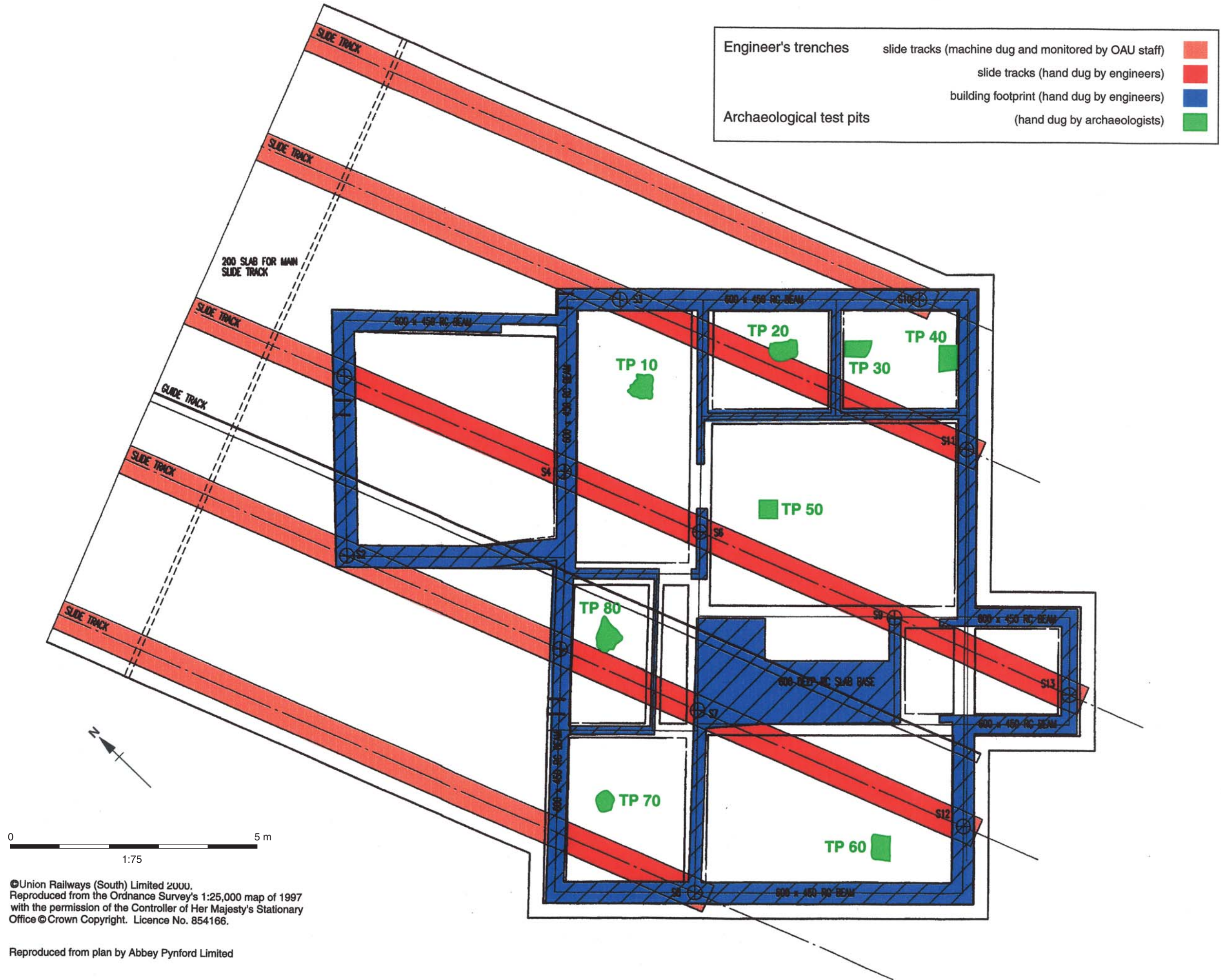
SCHMID, E. 1972: *Tierknochenatlas*_(Amsterdam, Elsevier).

SILVER, I.A. 1969: The ageing of domestic animals. In BROTHWELL, D.R. and HIGGS, E.S. (eds.) *Science in Archaeology*_(London, Thames and Hudson), 283-302.



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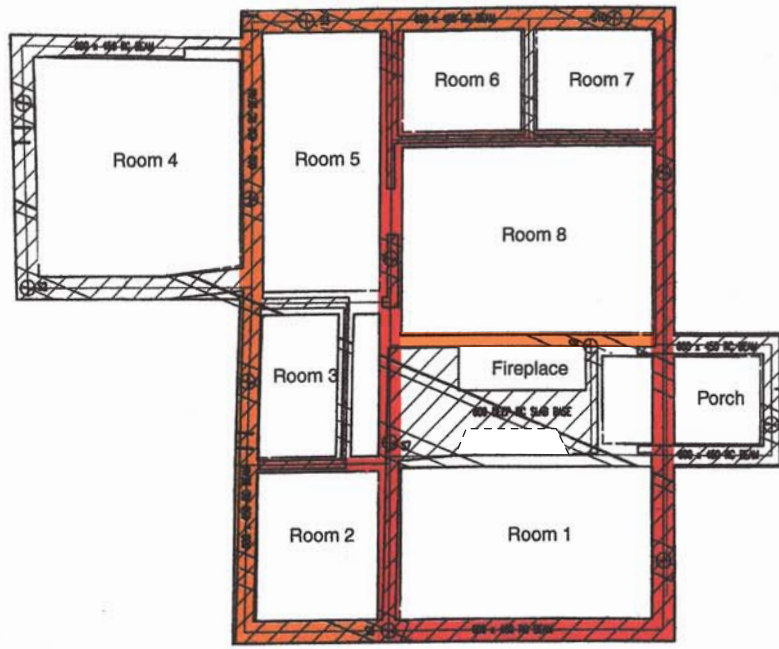
Figure 1: Site location



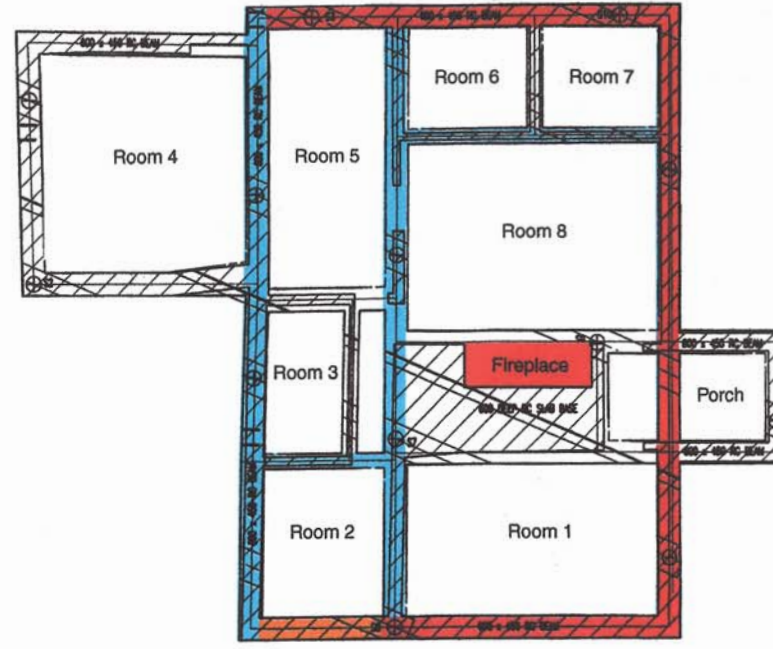
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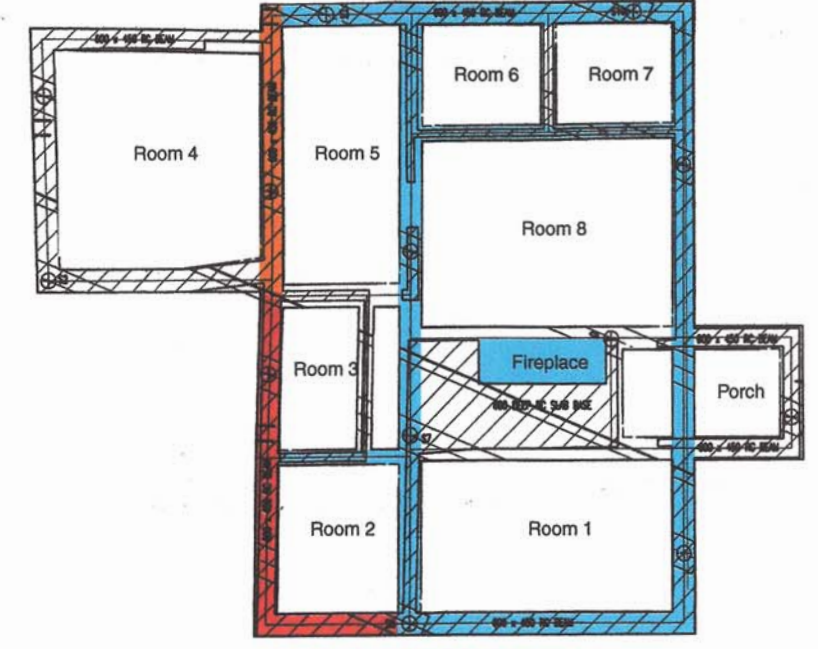
Figure 2: Ground plan showing excavated areas



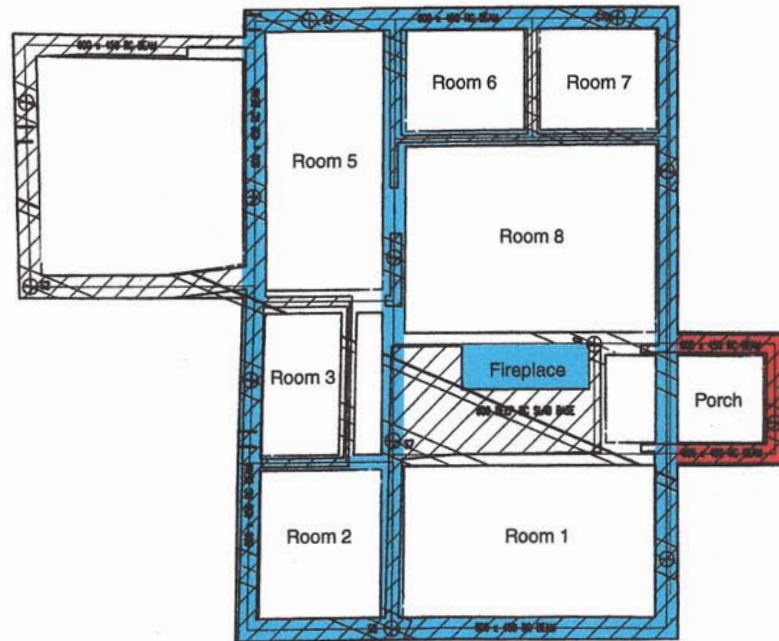
Phase I: Original structure



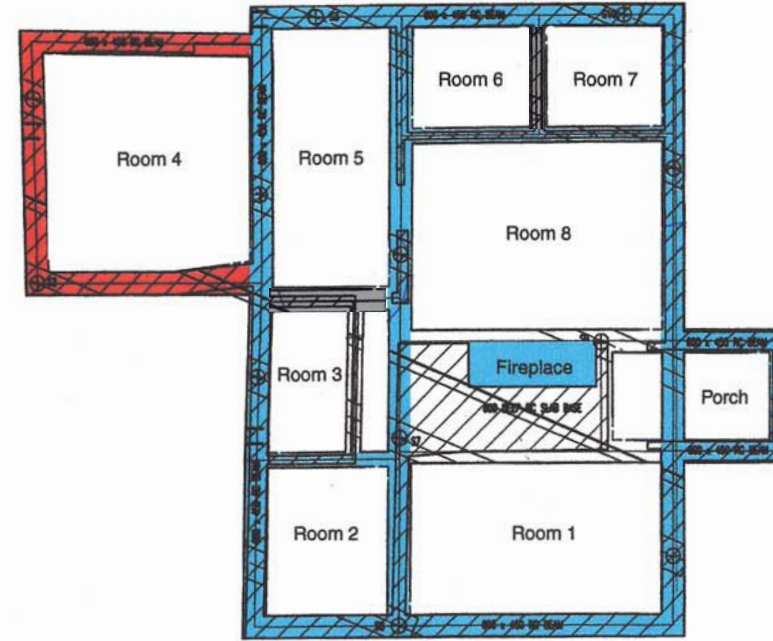
Phase II: Major alterations to house and insertion of fireplace



Phase III: Extension to rear of house



Phase IV: Addition of porch to front of house



Phase V: Construction of lean-to to rear of building

- New in each phase
- Inferred phasing
- Existing from previous phase
- Uncertain

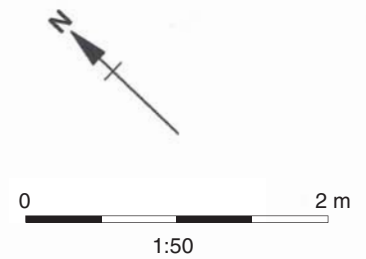


Figure 3: Ground plans showing phases of the developmnt of the house