

# New Lift Pit, Patey's Quad, Merton College, Oxford Excavation Report

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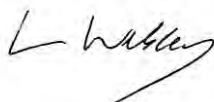
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## New Lift Pit, Patey's Quad, Merton College, Oxford

### *Archaeological Excavation Report*

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## Summary

Oxford Archaeology undertook a programme of archaeological work at Patey's Quad, Merton College, Oxford, in advance of the construction of a new lift. The earliest evidence comprised several rubbish/quarry pits dated to the 12th to early 13th century. They were probably contained within the rear of the property of Henry Herprut, who resided there by 1235–6. Two of the later pits contained roof tiles offering evidence for the refurbishment or construction of his house. Later during the 13th century, a garden soil developed over which a succession of gravel surfaces and a stone drain were constructed. They probably relate to a path leading from a gatehouse on Merton Street built during the construction of the college buildings between 1289–1311. Post-medieval evidence included a wall that formed part of a probable toilet block linking the medieval Mob Quad with the 17th century Fellows' Quad. A stone-lined well filled during the late 18th century probably served the nearby kitchen in the Fellows' Quad.

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The project was managed for Oxford Archaeology by Ben Ford. The fieldwork was undertaken by Adam Fellingham, who was supported by Robin Bashford and Thomas Bruce. Survey and digitizing was carried out by David Jamieson. Thanks are also extended to the teams of OA staff that cleaned and packaged the finds under the management of Leigh Allen, processed the environmental remains under the management of Rebecca Nicholson, and prepared the archive under the management of Nicky Scott.

## 1 INTRODUCTION

### 1.1 Scope of work

- 1.1.1 Between 18 July and 2 September 2016 Oxford Archaeology (OA) undertook a programme of archaeological work at Patey's Quad, Merton College, Oxford (NGR SP 5173 0606). BGS Architects acting on behalf of Merton College commissioned OA to undertake the archaeological work as a planning requirement (Planning Reference: 16/00655/FUL) in response to proposals to erect a side extension to provide lift access to the Hall and the Senior Common Room.
- 1.1.2 The scope of the archaeological work was set out in a brief by David Radford, Oxford City Council (OCC 2016), which outlined a three-stage approach.
- 1.1.3 **Stage 1** – an evaluation comprising an extended U-shaped trial trench (Trench 1) within the accessible area of the lift and lobby footprint, excavated to the top of significant archaeological levels if revealed within the impact depth of the new foundations (700mm BGL). In addition, a test pit measuring 1 x 1m pit located at the southern end of the proposed bin store footprint, excavated to significant archaeology or construction depth (575mm).
- 1.1.4 **Stage 2** - Subject to the results of Stage 1, the archaeological excavation of the full development footprint.
- 1.1.5 **Stage 3** - A photographic record of the existing building fabric and a watching brief during works to the listed building that have the potential to reveal historic fabric, fixtures or fittings (see separate report).
- 1.1.6 The methodology for the Stage 1 archaeological work was detailed in a written scheme of investigation (WSI: OA 2016a) and approved by OCC. The results of the first stage necessitated that Stage 2 was necessary and the Stage 1 WSI was amended and agreed with David Radford, Oxford City Council.

### 1.2 Location, topography and geology

- 1.2.1 The site is located in Patey's Quad, a passageway which lies between the Mob Quadrangle to the west and the Fellows' Quadrangle to the east (Fig. 1). The site includes an area of cobbled surface and is constrained by existing service runs. Merton College is in central Oxford, fronting on to Merton Street with Corpus Christi College to the west and Christ Church Meadow to the south.
- 1.2.2 Oxford is built on a peninsula of gravel terraces surrounded by the alluvial floodplains of the River Thames to the south and west and the River Cherwell to the east. The peninsula is mapped as mainly comprising Summertown-Radley (second) terrace, but the site lies at its southern limit, where it is fringed by a strip of floodplain (first) gravel terrace. The underlying geology is Oxford Clay.

### 1.3 Archaeological and historical background

- 1.3.1 Merton College was founded in 1264 and several of the original 13th-century buildings remain, including the chapel (formally a pre-college parish church), the hall and three pre-existing houses that were converted to form the first college building. The

southern boundary of the college is marked by the medieval city wall, a Scheduled Monument. The site lies adjacent to the Grade I listed hall to the west (built in 1277 but substantially rebuilt in the late 18th century and restored in 1872–4) and the Grade I listed west range of the Fellows' Quad encompassing the current kitchen, with pantry and SCR above, built in 1610 and extensively restored.

- 1.3.2 Oxford is believed to have its origins in the early 8th century and was developed as a fortified burh in the reign of King Alfred or his son Edward the Elder. By the 10th century a network of streets had been established and a defensive circuit constructed. Some evidence for a turf rampart has been found and wherever the early medieval rampart has been observed it has been on or close to the line of the later medieval wall (Dodd 2003, 23). It has been argued from topographical evidence that the early medieval defenses originally only enclosed an area from Oriel Street westwards, c 200m west of the site, and that the eastern part of the town was enclosed later (Munby 2003). Therefore, the site would have lain within the secondary enclosure, which was incorporated into the defended area during the 10th or early 11th century. Archaeological evidence has not been able to determine the presence (or absence) of the suggested earlier defensive line. The college is located within the walled medieval city, and the southern boundary of the college is defined by a surviving section of city wall. During 1970, an excavation was conducted on part of the city wall south-west of Merton College to establish whether it overlay an earlier, Saxon rampart, but no such predecessor was found (Hassall 1970). Recent excavations within Corpus Christi College to the west have indicated that this wall was at least partially rebuilt in the early 17th century (Bashford and Dodd 2014). In the 19th century inhumations were recorded close to the sacristy to the south-east of the college chapel in the near vicinity of the proposed extension (Hurst 1899). The extent of burials in this area remains unknown.
- 1.3.3 Excavations in the Mob Quad by Garrod in 1922 recorded an early building and medieval pottery (Garrod 1954). The building was uncovered again during drainage works in 1992. On the north side of Merton Street, excavations in 1961–2 at Logic Lane uncovered two ditches of possible Bronze Age date as well as evidence for continuous occupation from the late Saxon period onward (Radcliffe 1961–2). Excavations during 1969–70 in advance of construction of a new common room at University College recorded a stone-lined cesspit, which had apparently removed any evidence for the line of medieval Kybald Street at this location (OCC UAD EOX4635). Excavations at 4a Merton Street revealed evidence for domestic occupation during the 11th to 14th centuries and use of the site as stables during the late 14th to mid 16th centuries (Poore *et al.* 2006).
- 1.3.4 Historical evidence suggests that a late Saxon mural mansion lies beneath Mob Quad, although it has not been investigated by archaeological excavation (Jope 1952–3, fig. 39).
- 1.3.5 Historical records, collated by Salter (1961) in his map of medieval landholdings, suggest that the site lies within a property held by Henry Herprut in 1235–6 that had previously been held by Alured Herprut (Salter SE203). It lay adjacent to a tenement belonging to Jacob the Jew known as Halegod's house (Salter SE202) to the east and the churchyard of St John to the west (Salter SE204). The two tenements were

purchased by Merton College in c 1267. Herprut's house stood where the existing Gatehouse stands. The latter had been constructed by 1287, when a Merton document speaks of a *Domus Portarum* (Salter and Lobel 1954).

- 1.3.6 Early cartographic depictions by Agas (1578), Hollar (1730) and Loggan (1675) do not give a clear picture of the site. However, the maps of Taylor (1750), Faden (1789) and Davis (1793) all similarly depict a structure within the area of the site, connecting the Mob and Fellows' Quads. The Ordnance Survey map of 1876 also depicts the structure, now enlarged or rebuilt, leading out of the kitchen from the Fellows' Quad. This structure would have formed the south side of the yard referred to as Patey's Quad.

## 2 AIMS AND METHODOLOGY

### 2.1 Aims

2.1.1 The project aims and objectives were as follows:

- i. To determine or confirm the general nature of any remains present.
- ii. To establish the potential for significant archaeological remains likely to be affected by the impact of the development to inform any further Stage 2 mitigation strategy.
- iii. To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence.
- iv. To ensure that deposits are removed (where appropriate and practicable) by proper controlled archaeological methods.
- v. To determine the potential of the deposits for significant palaeo-ecological information.

### 2.2 Methodology

2.2.1 Trench 1, measuring c 0.70m in width, followed the footprint of the foundations of the new structure which measured 6.0m x 2.6m. Trench 2 was located 4.0m to the south-west measured 1.1m x 1.1m (Fig. 2).

#### *Stage 1*

2.2.2 The existing slabs and concrete binding/hardcore binding were removed by the groundwork contractor. Within Trenches 1 and 2, archaeological levels were found to be cut by many services, manholes etc. This horizon was cleaned by the archaeologist and recorded in plan. Test pits were excavated within some of the service trenches to access the archaeological deposits and features that were exposed on their sides.

#### *Stage 2*

2.2.3 After consultation with the David Radford (OCC) and the architect, it was agreed that Stage 2 (further archaeological excavation) was required to mitigate the impact of the new foundations, which were to be founded directly upon the natural gravel. This necessitated the full excavation of archaeological features and deposits within the footprint of Trench 1. These deposits and features were each hand-excavated to natural gravel and recorded as stated in the WSI. Within Trench 2, a 19th-century or earlier wall was exposed, cut by a modern manhole. After recording, no further archaeological work was required here.

## 3 RESULTS

### 3.1 Introduction and presentation of results

- 3.1.1 The results of the excavation are presented below, and include a phased stratigraphic description of the archaeological remains given in phase order. A summary of the context data is presented in Appendix A. Finds reports are presented in Appendix B and the environmental reports are presented in Appendix C.
- 3.1.2 This archive report will form the basis of a *Oxoniensia* publication in conjunction with the results from the Music Room, St Alban's Quad, Merton College (OXMMU16). As such the phasing has been combined from both sites to reflect this proposed publication.

### 3.2 Natural

- 3.2.1 Natural, soft/loose, light yellowish orange gravel/silty sand (64) was recorded at 57.24m OD in the north-east part of Trench 1 and at 57.07m OD in its south-east part.

### 3.3 Phase 1 (12th to early 13th century)

- 3.3.1 The earliest features comprised six pits, all of which were only partially exposed within Trench 1 (Figs 3 and 5). The largest (59) measured at least 3.9m (N-S) by 2.0m (E-W); only part of its eastern extent was exposed, suggesting a sub-rounded shape. It was 0.52m in depth, had a flat base and contained two fills. The earliest comprised redeposited gravel (61), possibly weathering. The main fill comprised dark brown silty clay (60), probably deliberate backfill, which contained a single sherd of medieval Oxford ware. It is probable that the pit was dug for gravel extraction since its relatively shallow depth precludes its use as a cellar.
- 3.3.2 A second large pit (54) measuring at least 2.4m across (N-S) was located to its south-east and probably served a similar function. It was flat-based and 0.65m deep, and contained two similar fills: redeposited natural (56) and a deliberate backfill of dark greyish brown silty clay (55). However, in contrast to pit 59, animal bone and ceramic building material (CBM) together with a notable quantity of pottery was present in both fills, suggesting it had later been used as a rubbish pit. The pottery largely comprised medieval Oxford ware with a small quantity of Cotswold ware.
- 3.3.3 Pit 54 cut sub-rounded pit 68 that was partially exposed in the south-east corner of Trench 1. Pit 68 contained two ash/charcoal-rich fills (69 and 70), probably sweepings from a nearby hearth or oven. The pit produced animal bone, fish bone, pottery and shell suggesting domestic refuse had been dumped into it. As with the pits above, the dominant pottery was medieval Oxford ware, though several sherds of early Brill and Brill/Boarstall ware were also present, suggesting a late 12th to mid-13th century date for this pit.
- 3.3.4 Heavily truncated, rounded pit 50 was 0.66m deep, and was located in the north-east corner of Trench 1. It seems to have had a clay lining, perhaps to prevent the seepage of ground water into it or to hold a liquid. It was backfilled with dark grey silty clay (51), from which no finds were retrieved. Circular pit 46 clipped its southern side and also appears to have had a clay lining. It measured c 1.72m in diameter and 0.52m

deep, and was 'lined' with a firm dark brown/grey silty clay (48). It was backfilled with soil (47) containing a large quantity of CBM, pottery and animal bone implying the pit had subsequently been used to dispose of rubbish and building debris. The pottery exclusively comprised medieval Oxford ware (77 sherds) except for a single sherd each of Cotswold ware and Brill/Boarstall ware. The sherd of Brill/Boarstall ware, if not intrusive, would imply an early date within the currency of this pottery, perhaps during the early part of the 13th century.

- 3.3.5 A third circular/rounded pit (57) cut the southern side of quarry pit 59. It measured at least 1.12m across and 0.54m deep, and contained a single fill of soft dark grey silty clay from which no finds were recovered.

### 3.4 Phase 2 (mid 13th to 14th century)

#### *Phase 2A*

- 3.4.1 Sealing the pits described above was a homogeneous soft dark brown-grey silty clay (45=44), probably an accumulated garden soil. It was up to 0.55m thick, suggesting a prolonged period of accumulation, and contained a large amount of pottery, animal bone with some CBM, the quantities suggesting middening. The pottery was predominately medieval Oxford ware with small quantities of Brill/Boarstall ware, the latter largely from deposit 44, the upper part of this soil (not distinguished in the site sections).

#### *Phase 2B*

- 3.4.2 Sealing the garden soils on the eastern arm of Trench 1 were a succession of gravel surfaces separated by occupation and makeup deposits (Fig. 4). The earliest (16) consisted of a compact metalling of tightly packed small pebbles within a matrix of mid yellowish brown silty clay. It was supported upon two dumps of gravelly silty clay (42 and 43) that presumably represented a firm base for the metalled surface. It is possible that the lower dump (43) supported an earlier surface of stone limestone slabs (41), remnants of which were briefly recorded. A brown-grey silt (17) that contained a few sherds of Brill/Boarstall ware developed over surface 16. Over this silt were patches of ash (40) that may have been dumped from elsewhere, and contained hammerscale from iron smithing.
- 3.4.3 A second surface of gravel/pebbles was laid (15=32) at time of the construction of a stone-lined drain (13), both of which were constructed over gravel makeup layer 39 that contained frequent fragments of CBM and Brill/Boarstall ware pottery. The drain ran at an oblique angle and predated the west wall of the Fellows' Quad (constructed 1610). Only a length of 0.92m survived. The sides of the drain were constructed of roughly hewn rectangular limestone blocks, and it was capped with limestone slabs. The channel was c 0.18m wide and 0.14m deep, with no evidence that its base had been lined. Its primary fill comprised mid-bluish grey silty clay (35) that was probably deposited by water (Sample 6) during its use. This contained sherds of Brill/Boarstall ware. Two further silting episodes (33 and 34) followed; the latest (33), a soft brownish silty clay, was probably deposited after it went out of use. After a clayey silt containing hammerscale had developed over the surface (18=31), the surface was replaced twice with gravel (28 and 30). The earliest of these gravel layers (30) supported an



occupation layer of dark brownish grey clayey silt (29), both only surviving towards the northeast corner of Area 1. Further hammerscale was recovered from surface 28.

### 3.5 Phase 3 (15th to mid 16th century)

3.5.1 No deposits or features are associated with this phase.

### 3.6 Phase 4 (mid 16th to 19th century)

3.6.1 This phase comprises features and deposits considered contemporary with the Fellows' Quad, constructed in 1610 (Fig. 4).

3.6.2 The off-set footings (12) for the west wall of the quad were exposed and comprised roughly hewn limestone blocks with evidence for mortar bonding. This supported the existing ashlar-faced wall.

3.6.3 A stone-lined well (67) was located immediately adjacent to the west wall of the quad on the south side of Trench 1. It was constructed with roughly hewn, randomly coursed limestone blocks that formed a circular shaft that had an external diameter of c 1.1m. It survived to a depth of 0.94m, a depth that penetrated the existing water-table. Its primary or earliest fill (74) comprised soft dark brown silty clay, possibly accumulation formed whilst the well was in use or still open (Sample 15). This contained 18th-century pottery and clay tobacco pipe stems dated to 1740–1820. The fill above (73), a light brownish silty clay, had evidence for green staining suggesting the disposal of cess-like material (Sample 14). The remaining fills of the well (66, 71-2) represented deliberate backfill and contained a similar assemblage of pottery and clay tobacco pipe stems. The clay pipes from its latest fill (66) included examples that are tentatively dated slightly later to 1780–1820, which could suggest the well was finally filled during the late 18th century.

3.6.4 Within Area 2 a short length of wall foundation (25) was exposed that ran at right-angles to the west wall of the Fellows' Quad. It was constructed with roughly squared limestone blocks bonded by a pale off-white 'cement'. The wall was at least 0.45m wide and supported a column measuring c 0.40m in diameter, the base of which was bonded into the wall.

### 3.7 Phase 5 (modern)

Phase 5 is allocated to modern contexts including brick manholes, grease trap, services and the pre-existing cobbled surface between Mob Quad and the Fellows' Quad.

### 3.8 Finds and environmental summary

3.8.1 The pottery assemblage comprised 239 sherds with a total weight of 2892g. It was mostly of 13th to 14th century date. The glass assemblage comprises 166 mainly small to very small sherds recovered from sieving soil samples. All bar one piece was recovered from fills of well 65 and is probably of late 18th century date. There are 44 fragments of clay tobacco pipe, comprising one piece of bowl, 42 pieces of stem and one mouthpiece. All bar one piece was also recovered from well 65 and is dated to 1760–1800. There is a modest assemblage of CBM consisting entirely of 119 fragments of roofing tile of 13th or 14th century date. A total of 61 metal finds (16 copper alloy, 43 iron and two lead) and one worked bone object were recovered. Those finds that

are identifiable include fragments from slender copper alloy pins with wire wound heads, a copper alloy buckle frame, fragments from an iron knife, numerous nail fragments and two pieces of lead waste. The great majority was recovered from the fills of Phase 4 well 67.

- 3.8.2 Identifiable charred plant remains were present in 10 of the 12 samples; this included mainly cereal grains though the only significant sized assemblage was from Phase 1 pit 68. Waterlogged plant remains were found in well 65. Charcoal was only present in any quantity pit 68 and well 67. Seven flots contained occasional insect remains although some of this material may be intrusive.
- 3.8.3 A very small assemblage of 21 hand-recovered animal bones was recovered from Phases 1 and 2A. A small assemblage of 76 identified fish bones and scales was recovered exclusively from the residues and flots of sieved soil samples. The great majority of bones (56) came from pit 68. The remains include bones and scales from small and tiny fish, particularly herring, but also including eel, pike, cyprinid, perch and probable whiting.

## 4 DISCUSSION

- 4.1.1 No features or deposits that on the available evidence can be assigned to the late Saxon period were identified, although it possible that undated pits 50 and 62 are of this period. A single sherd of St Neots ware occurred residually and some of the Cotswolds ware may feasibly have originated from earlier pre-Conquest deposits. It is presumed that the site lies within and close to the south-east corner of the burh, though to date no firm evidence has been found for the burh defences within this area. Indeed the apparent lack of evidence from the site complies with the paucity of archaeological evidence along Merton Street. No evidence was found for the putative late Saxon mural mansion thought to lie beneath the adjacent Mob Quad.
- 4.1.2 The earliest evidence comprises six pits, that where dated contained medieval Oxford ware dating no earlier than the late 11th or early 12th to the early 13th century. These were distributed throughout Trench 1 indicating that this area remained external during this time. Given their large size, some of the pits were probably originally utilised for the extraction of gravel for use in floors, yards and foundations before their eventual use for the disposal of refuse. The pits were presumably located to the rear of Henry Herprut's property fronting St John's Lane (Merton Street) that presently lies about 40m to the north of the site.
- 4.1.3 Evidence from these pits, which predates the acquisition of Henry Herprut's property by Merton College in 1267, gives some insights in its inhabitants. The CBM indicates that a building (possibly Herprut's house) occupying the property during the 12th to early 13th centuries was roofed with ceramic peg tiles with the ridges probably covered with plain, probably glazed, ridge tiles. All the tiles were retrieved from the two latest pits (46 and 64) and are in an early fabric that can probably be dated to the first part of the 13th century. The lack of recognizable late 12th century fabrics contrasts with nearby 4a Merton Street where the earlier phases were dominated by such fabrics (Cotter 2006). This would suggest that the house on Herprut's property was constructed, or at least re-roofed, at the around the time of his tenure by 1235–6 or by his predecessor Alured Herprut, perhaps his father. The animal bone assemblage is inconclusive given its small size but includes a horncore and zygomaticus that tentatively suggests horn working. Late 12th century horn working was identified at nearby 4a Merton Street (Poore *et al.* 2006) suggesting such industries were present in the immediate area. Pit 68 was reasonable rich in charred free-threshing wheat suggesting that bread making for the better off took place nearby.
- 4.1.4 Later during the 13th century, pit digging ceased and a garden soil developed across the site. The low percentage of Brill/Boarstall Ware compared with medieval Oxford ware suggests a date during the early to mid-13th century. Much of the pottery was in a good condition suggesting the soil had not been subject to any significant cultivation prior to the construction of gravel surfaces over it. Though it not possible to say whether the garden soil post-dated the acquisition of Herprut's property by Merton College around 1267 it did produce a sherd from a ceramic lamp, objects commonly associated with college sites in Oxford (Cotter pers. comm.).
- 4.1.5 The exterior yard surfaces and drain certainly predate the construction of the Fellow's Quadrangle in 1610 though their relationship with the Mob Quad to the west is not

known. The eastern and northern arm of the Mob Quad was constructed under the supervision of Walter of Cuddington between 1289–1311 (Garrod 1954), when a gatehouse was constructed on the site of Herprut's house. It is possible that the gravel surfaces formed part of an access route leading from the new gatehouse and alongside the chapel and the Mob Quad. Its resurfacing on at least two occasions suggests a busy thoroughfare and a drain transecting it suggests the presence of a nearby building to the east. The presence of hammerscale on the surfaces suggests smithing was occurring close by, perhaps associated with a workshop on the site of the present Fellows' Quad.

- 4.1.6 Little post-medieval activity survived between the two quadrangles, though it likely to have remained largely open after the construction of the Fellows' Quad in 1610. The undated stone wall footing (25) in Trench 2 appears to have been colonnaded and perhaps originally formed part of a passage linking the kitchen of Fellows Quad to the medieval Mob Quad to the west. An apparent passage in the approximate position of the wall is depicted on Taylor's map of 1750 and on the later maps of Faden (1789) and Davis (1793). The north side of this passage corresponds with the wall. However, on King's plan of Merton College (1848) the structure is formed of two elements; the western part is divided into two rooms and is labelled as a 'water closet' (45) and its eastern part, to which wall 25 belongs, is labelled as a 'yard' (46). The Ordnance Survey map of 1876 depict a self-contained structure that may have been rebuilt or remodelled with several small rooms/cubicles on its south side, probably latrines. Wall 25 could have formed an internal division separating the cubicles with a small room or passage to the north.
- 4.1.7 Well 67 was positioned immediately north of this structure and presumably served the adjacent kitchen in Fellows' Quad until its final filling perhaps at the end of the 18th century. It appears to have been later used as a latrine and for general rubbish disposal given the mineralized fruit remains and the large amount of iron and copper alloy debris deposited in it. Surprisingly little animal bone was recovered given its proximity to the kitchen.

## APPENDIX A CONTEXT INVENTORY

Cxt	Type	Fill_Of	Sample	Description	Pot_date	CP_date	Phase
1	Structure			Stone slabs and binding			Phase 5
2	Cut			Gas trench			Phase 5
3	Fill	2		Gas trench fill			Phase 5
4	Cut			Service trench			Phase 5
5	Fill	4		Service trench fill			Phase 5
6	Cut			Electric duct			Phase 5
7	Fill	6		Electric duct fill			Phase 5
8	Structure	4		Brick/concrete manhole			Phase 5
9	Structure			Brick grease trap			Phase 5
10	Structure			Brick drain			Phase 5
11	Cut			Construction trench for 12			Phase 4
12	Structure	11		1610 limestone wall footing			Phase 4
13	Cut			Construction trench for 14			Phase 2B
14	Structure	13		Limestone drain			Phase 2B
15	Layer			Gravel surface (as 32)			Phase 2B
16	Layer			Gravel surface	M1		Phase 2B
17	Layer		9	Occupation deposit?	LSAX		Phase 2B
18	Layer		3	Occupation deposit (as 31)	SN		Phase 2B
19	Structure			Cobbled surface			Phase 5
20	Cut			Drain pipe cut			Phase 5
21	Fill	20		Drain pipe fill			Phase 5
22	Cut			Manhole cut			Phase 5
23	Fill	22		Modern levelling			Phase 5
24	Structure			Brick manhole			Phase 5
25	Structure			19C limestone wall			Phase 4
26	Layer			Construction debris predating 1610 wall			Phase 4
27	Layer			Gravel levelling			Phase 2B
28	Layer		1	Gravel surface	M2		Phase 2B
29	Layer		2	Occupation deposit	SN		Phase 2B
30	Layer			mortar/gravel surface			Phase 2B

Cxt	Type	Fill_Of	Sample	Description	Pot_date	CP_date	Phase
31	Layer		7	Occupation deposit (as 18)			Phase 2B
32	Layer			Gravel surface (as 15)			Phase 2B
33	Fill	14	4	Drain Fill			Phase 2B
34	Fill	14	5	Drain Fill			Phase 2B
35	Fill	14		Drain Fill	M2		Phase 2B
36	Structure	14		Limestone drain base	M1		Phase 2B
37	Structure			19C wall			Phase 4
38	Layer			Modern levelling			Phase 5
39	Layer			Gravel levelling for surfaces 15 and 32	M2		Phase 2B
40	Layer		8	Heat affected gravel/silt			Phase 2B
41	Structure			Limestone surface			Phase 2B
42	Layer			Gravel levelling for surface 16			Phase 2B
43	Layer			Gravel/clay levelling	M1		Phase 2B
44	Layer			Garden soil	M2		Phase 2A
45	Layer			Garden soil	M2		Phase 2A
46	Cut			Pit			Phase 1
47	Fill	46		Pit fill	M2		Phase 1
48	Fill	46		Pit fill			Phase 1
49	Fill	46		Pit fill			Phase 1
50	Cut			Quarry pit?			Phase 1
51	Fill	50		Pit fill			Phase 1
52	Fill	50		Pit fill			Phase 1
53	Fill	50		Pit fill			Phase 1
54	Cut			Quarry pit?			Phase 1
55	Fill	54		Pit fill	M1		Phase 1
56	Fill	54		Pit fill	SN		Phase 1
57	Cut			Pit			Phase 1
58	Fill	57		Pit fill			Phase 1
59	Cut			Pit or cellar			Phase 1
60	Fill	59		Pit or cellar fill	M1		Phase 1
61	Fill	59		Pit or cellar fill			Phase 1
62	Cut			Pit			Phase 1
63	Fill	62		Pit fill			Phase 1

Cxt	Type	Fill_Of	Sample	Description	Pot_date	CP_date	Phase
64	Layer			Natural gravel			Phase 0
65	Cut			Construction cut for 67			Phase 4
66	Fill	65	11	Well fill	PM4	1780-1820	Phase 4
67	Structure			Limestone well			Phase 4
68	Cut			Pit			Phase 1
69	Fill	68		Pit fill	M2	1710-1780	Phase 1
70	Fill	68	10	Pit fill	M2		Phase 1
71	Fill	65	12	Well fill	MOD	1740-1880	Phase 4
72	Fill	65	13	Well fill	PM4	1740-1820	Phase 4
73	Fill	65	14	Well fill	PM1	1740-1820	Phase 4
74	Fill	65	15	Well fill	PM4	1740-1820	Phase 4
75	structure			Brick and concrete footings			Phase 5
76	Structure			Existing walls of building			Phase 4
77	Cut			Construction cut for 78			Phase 5
78	Structure			Grease trap wall base			Phase 5

## APPENDIX B FINDS REPORTS

### B.1 Pottery

*By Paul Blinkhorn*

B.1.1 The post-Roman pottery was recorded using the conventions of the Oxfordshire County type-series (Mellor 1994). The late medieval and early post-medieval wares were recorded using the conventions of the Museum of London Type-Series (eg Vince 1985).

#### *Chronology*

B.1.2 Each stratified, context-specific pottery assemblage was given a ceramic phase date ('CP') based on the range of ware and vessel types present. The veracity of each date was then checked against the stratigraphic record, and adjusted where necessary. The chronology and defining wares is shown in Table 1.

Table 1: Ceramic phase chronology, occurrence and defining wares

Phase	Defining wares	Date
LSAX	OXR	10 <sup>th</sup> C
SN	OXAC, OXBF	E/M - L 11 <sup>th</sup> C
M1	OXY	L 11 <sup>th</sup> – 12 <sup>th</sup> C
M2	OXAM	13 <sup>th</sup> – 14 <sup>th</sup> C
M3	OXBX, OXBN	E-L 15 <sup>th</sup> C
M4	OXCL, RAER	L 15 <sup>th</sup> C – M 16 <sup>th</sup> C
PM1	PMR, FREC	M-L 16 <sup>th</sup> C
PM2	TGW	E-M 17 <sup>th</sup> C
PM3	CHPO	M-L 17 <sup>th</sup> C
PM4	CREA, SWSG, LONS	18 <sup>th</sup> C
MOD	REFW	19 <sup>th</sup> C

B.1.3 The pottery assemblage comprised 239 sherds with a total weight of 2892g. The estimated vessel equivalent (EVE), by summation of surviving rim sherd circumference was 1.90. It was mostly medieval (13th to 14th century). The following fabrics were noted:

#### *Late Saxon and medieval*

Fabric code	Fabric Name	Date	No. sherds	Weight (g)
OXAC	Cotswolds-type ware	975–1350	15	219
OXAM	Brill/Boarstall ware	1200–1600	21	190
OXAW	Early Brill coarseware	1180–1250	4	46
OXBF	North-East Wiltshire ware	1050–1400	9	190
OXR	St Neots ware	850–1200	1	1
OXY	Medieval Oxford ware	1075–1350	174	2179



*Post-medieval*

<b>Fabric code</b>	<b>Fabric Name</b>	<b>Date</b>	<b>No. sherds</b>	<b>Weight (g)</b>
CHPO	Chinese porcelain	1650+	2	3
CREA	Creamware	1740–1830	5	15
LONS	London stoneware	1680+	2	18
PMR	Post-medieval redware	1550+	2	17
REFW	Refined whiteware	1800–1900	1	1
SWSG	Staffordshire white salt-glazed stoneware	1720–1800	1	11
TGW	English tin-glazed ware	1613–1800	1	1

B.1.4 In addition, a single sherd of residual Romano-British pottery weighing 1g was also noted. The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. The range of fabric types is typical of sites in the region.

*Pottery occurrence*

B.1.5 The pottery occurrence by number and weight of sherds per ceramic phase is shown in Table 2.

Table 2: Pottery occurrence by ceramic phase

<b>Ceramic Phase</b>	<b>No. Sherds</b>	<b>Weight Sherds (g)</b>	<b>Mean Sherd Weight (g)</b>
LSAX	0	0	0
SN	1	5	5.0
M1	14	222	15.9
M2	210	2599	12.4
M3	0	0	0
M4	0	0	0
PM1	1	16	16.0
PM2	0	0	0
PM3	0	0	0
PM4	7	44	6.3
MOD	6	6	1.0
Total	239	2892	

B.1.6 This shows that the pottery assemblage is dominated by wares of 13th to 14th century date, ie Ceramic Phase M2. The earliest possible stratified material is a single sherd of OXAC from context 56, the lower fill of pit 54. Nearly all the pottery of M1 date came from context 55, the upper fill of 54. It is thus entirely possible that the sherd from context 56 is of the same date. The group comprises mostly fairly large and fresh fragments of OXY jars, including a rim sherd, along with two sherds (46g) of OXAC and one sherd (4g) of OXBF. This is entirely typical

of sites of the period in Oxford. The only other pottery which may be of this date is a single sherd from context 60. It is the only pottery from the feature, and is fairly large and fresh, and so seems likely to be reliably stratified.

B.1.7 The vast majority of the pottery (87.8% by count, 89.8% by weight) dates to CP M2. OXY is by far the major ware (163 sherds, 2007g), with most of the rest of the assemblage made up of OXAM (21 sherds, 190g), OXAC (12 sherds, 168g), and OXBF (8 sherds, 186g), along with a few sherds of OXAW (4 sherds, 46g), and single residual sherds of OXR (1g) and Romano-British material (1g). The rim assemblage is dominated by jars (13 examples; EVE = 1.03), along with a few jugs (3 examples; EVE = 0.38), bowl (2 examples, EVE = 0.09) and lamps (2 examples, EVE = 0.27). The assemblage appears to be of an entirely domestic nature, with the domination of OXY and jars suggesting that most of it dates to the first half of the 13th century, as OXAM vessels, particularly jugs, are usually much commoner than OXY and jars from the mid 13th to 14th centuries (Mellor 1994, 138).

B.1.8 Most of the CP2 assemblage consists of groups of relatively small sherds which appear to be the product of secondary deposition. This is partly due to the fact that a fairly large proportion of the material is from garden soils such as contexts 44 and 45, although these deposits did also produce some of the best-represented vessels from the site, such as large fragments of a glazed jug and a lamp, both in OXY, along with a large rim sherd of an OXBF jar, from context 44. This suggests that this material was dumped immediately prior to the construction of the gravel courtyard, as they could not have survived so well in a regularly turned garden soil.

B.1.9 The post-medieval material consists of a single sherd of PMR which is likely to be of mid-16th to 17th century date, and a few small groups of highly fragmented 18th to 19th century wares.

Table 3: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Context	RB		OXR		OXAC		OXBF		OXY		OXAW		OXAM		PMR		TGW		CHPO		LONS		SWSG		CREA		REFW		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	
16									1	2																			M1
17	1	1	1	1																									LSAX
18					2	29																							SN
28													1	1															M2
29					3	31																							SN
35													4	12															M2
36									1	3																			M1
39					2	8			1	10			4	12															M2
43									2	9																			M1
44					1	6	4	128	35	306	1	8	8	90															M2
45					2	39	1	28	31	408			1	6															M2
47					1	25			77	1118			1	25															M2
55					2	46	1	4	10	154																			M1
56					1	5																							SN
60									1	18																			M1
66															1	1	1	1	1	1					2	2			PM4
69					1	30	2	16	8	48	3	38	1	5															M2
70							1	14	7	103			1	39															M2
71																										1	1		MOD
72																					1	1			2	12			PM4
73															1	16													PM1
74																			1	2	1	17	1	11	1	1			PM4
Total	1	1	1	1	15	219	9	190	174	2179	4	46	21	190	2	17	1	1	2	3	2	18	1	11	5	15	1	1	



## B.2 Glass

*By Ian Scott*

B.2.1 The glass assemblage comprises 166 mainly small to very small sherds recovered from sieving soil samples. All the glass, bar one piece, was recovered from fills of Well 67 (Table 1). The glass has been fully recorded onto an Excel spreadsheet for the archive.

Table 1: Summary quantification of vessel and window glass by context and glass type (sherd count)

Feature	Context	Vessel	Window	Other	Uncertain	Totals
Drain 14	33			1		1
Well 67	66	20	28		2	50
	71	11	17			28
	72	24	36			60
	73	3	16		5	24
	74	3				3
	Totals	61	97	1	7	166

B.2.2 The only glass not from well 67 was from drain 14, context 33 (Phase 2B) and is a single tiny cylindrical pellet of opaque pale turquoise glass. The object is clearly intrusive in a medieval context.

B.2.3 The glass from the fills of Phase 4 well 67 comprises 97 small sherds of window glass and 61 sherds of vessel glass together with seven sherds that were of indeterminate origin (see Table 1). The window glass cannot be closely dated but most appears to post-medieval or later in date.

B.2.4 The vessel glass includes small sherds of wine bottles and small sherds of other vessel glass. Context 66 (sample <11>) produced two tiny rim sherds probably from drinking vessels, one in colourless glass, and one in very pale green glass, neither closely datable. There is a thick-walled colourless sherd possibly from the neck of decanter with etched floral decoration. The decoration is probably acid etched. The decanter is probably of late 18th- or very early 19th-century date.

B.2.5 There is a body sherd in olive green glass from a small globular vessel, probably a flask or pharmaceutical phial, from context 71 (sample <12>). A larger body sherd probably from a similar vessel in olive green glass comes from context 74 (sample <15>). These sherds could date as early as the 17th century, but are probably later in date.

B.2.6 Context 72 (Sample <13>) produced a small sherd from the applied and hand-tooled rim or finish of a wine bottle of late 18th-century date, and a small sherd from a colourless vessel with etched decoration. The extant decoration is a chain with two elongated loops. The decoration of the vessel or decanter may have included an etched label indicating its contents. An etched label attached to a chain was a device found on 18th-century decanters. There are also five thin-walled colourless sherds probably from stemmed wine glass bowls, although the form of the bowls cannot be determined.

B.2.7 Context 73 produced small sherd of colourless glass from a fluted or faceted vessel and this probably indicates a later 18th-century or later date. The precise form of the vessel – whether a glass or a bottle – cannot be determined.

B.2.8 In addition to the sherd from a possible globular flask noted above, context 74 (Sample <15>) produced two small sherds apparently from two vessels of square or rectangular section. The sherds are both too small to be certain of the form the vessels. One sherd is thin-walled, the other is thicker. The two sherds look suspiciously modern.

### ***Conclusions***

B.2.9 Most of the sherds of glass are too small to be diagnostic to form or date. Most of the sherds would fit happily in a late 18th-century context. The etched colourless sherds from contexts 66 and 72 and the wine bottle rim from context 72 all fit into this date range. The two colourless sherds apparently from square or rectangular section vessels from context 74 might be later in date but the small size of the sherds means that they cannot be dated with certainty.

## **B.3 Clay tobacco pipes**

*By David A Higgins*

B.3.1 The excavations produced a total of 44 fragments of pipe, comprising one piece of bowl, 42 pieces of stem and one mouthpiece. With the exception of one intrusive stem fragment from a medieval pit, these were all recovered from various deposits within well 67. There was no discernible difference in the pipe fragments from the various fills of the well (66 and 71–74), which suggests that the abandonment of the well took place within a relatively short space of time. Although 42 pipe stem fragments and a mouthpiece were recovered, there was only one small bowl chip, which was not diagnostic enough to date accurately other to note that it was made of a fine sandy fabric type that probably dates from before c 1800. A number of different pipes were represented by the stems, all of which were very slender with a cylindrical cross section and typically with bores of 6/64" or 5/64". Fragments of up to 18cm in length with barely any discernible taper survived, showing that they came from very long-stemmed pipes with essentially straight stems and simple cut tips. A couple of pieces have surviving traces of a red tip coating. The best example extends across a broken stem end, showing that even slightly damaged pipes were finished in this way for use. The red coating has not been analysed but is a rare survival, probably of paint or wax. It is unfortunate that no bowls were recovered, but the stems suggest these were delicate, elegant pipes that were probably of a better than average quality. They are most likely to date to around 1760–1800, thus providing a date for the use and abandonment of the well.

## B.4 Ceramic building material

*By Cynthia Poole*

### *Introduction and methodology*

B.4.1 A modest assemblage of ceramic building material (CBM) consisting entirely of roof tile comprised 119 fragments weighing 5224g recovered through hand excavation and a further 19 scraps (33g) from sieved samples. Roughly two thirds of the assemblage was found in occupation, surface and garden soil layers of Phase 2 and the remainder in pit fills of Phase 1. The tile consists entirely of roof tile apart from a few scraps of mortar from a sieved sample and all dates to the 13th to 14th centuries. Though the tile is generally fairly fresh and unabraded, it is fragmented with a mean fragment weight of 44g (excluding sieved material) and the only complete dimension surviving is thickness.

B.4.2 The assemblage has been fully recorded on an Excel spreadsheet, which forms part of the site archive, in accordance with guidelines set out by the Archaeological Ceramic Building Materials Group (ACBMG 2007). The record includes quantification, fabric type, form, surface finish, markings and evidence of use/reuse (mortar, burning etc). Fabrics were characterised with the aid of x20 hand lens and assigned to the Oxford tile fabric series based on comparison with examples held by Oxford Archaeology.

### *Fabrics*

B.4.3 Fabrics VIIA and B formed a significant proportion of the assemblage especially in phase 1, though only a single small fragment of the contemporary early Oolitic limestone tempered fabric IB was found. Fabric VIIBB was the dominant type through all phases with a notable increase in phase 2B. Taken together the group VII fabrics formed 88% of the assemblage, whilst the later red sandy fabric IIIB and IIIB/VIIBB accounted for only 11% of the assemblage and IIIA 1%. The late fabrics IIIC, IIIB St Giles and IVA/B were entirely absent. The quantities of fabrics are quantified by phase in table 1.

Table 1: CBM fabrics (including samples) quantified by phase

Fabric date	Fabrics		Phase 1 (12th-early 13th C)	Phase 2A (early 13th-1266)	Phase 2B (1267-14th C)	Total
LC12-EC13?	IB	Nos	1			1
		Wt (g)	15			15
Early-mid C13 (-C14)	VIIA	Nos	7	1	1	9
		Wt (g)	176	60	71	307
Early-mid C13 (-C14)	VIIA/B	Nos	10			10
		Wt (g)	547			547
Early-mid C13 (-C14)	VIIB	Nos	6	5	9	20
		Wt (g)	155	374	193	722
C13-C14	VIIBB	Nos	10	10	53	73
		Wt (g)	831	475	1739	3045

c.1175-1400	VIIBB/IIIB	Nos	1		8	9
		Wt (g)	79		256	335
c.1175-1400	IIIB	Nos		2	2	4
		Wt (g)		184	51	235
C14th	IIIA	Nos		1	1	2
		Wt (g)		28	18	46
-	Mortar M1	Nos			10	10
		Wt (g)			5	5
	Total	Nos	35	19	84	138
	Total	Wt (g)	1803	1121	2333	5257

**B.4.4 Fabric IB:** reddish brown high density of shell/limestone grits and subrounded medium quartz sand. Date: late 12th-early 13th century.

**B.4.5 Fabric IIIA:** pink or light brownish orange with buff core; high density of well-sorted rose quartz sand <0.5mm. Date: 14th century.

**B.4.6 Fabric IIIB:** Coarse sandy brownish red or reddish-brown fabric, some with grey core. High density of medium-coarse clear, white and rose quartz sand. Sparse iron compounds. Very similar to the fabric of Ashampstead ware (Fabric OXAG, formerly Abingdon-type ware), made from the London Clay, and therefore thought to come from the Newbury-Reading area of Berkshire. However, a more local source is probable for the roof tile. Date c 1175–1400.

**B.4.7 Fabric VIIA:** Cream, pale pink or buff fabric (sometimes with a pale grey core) with a fairly smooth texture with moderate to low densities of clear and rose quartz sand <0.3mm. Moderate fine chalk or limestone inclusions or leached voids and fine black speckling with sparse coarser brown iron oxide grits, possibly weathered glauconite. Patchy clear or green or amber glaze. VIIA is similar to a Roman fabric (source unknown) found at sites in the Thames valley from the Cirencester area to Didcot (pers. obs. author). If the iron oxide inclusions are weathered glauconite the fabric may derive from the Gault clay outcropping along the southern margins of the Thames Valley. Generally, early in date, perhaps c 1200–1325?

**B.4.8 Fabric VIIB:** As VIIA above but pink, pale orange or light red with a pale to mid grey core. Moderate density of medium quartz sand <0.3mm. Some examples with the same fine dark speckling as noted in VIIA. Rounded chalk inclusions 1-2mm can be common. Chalk often dissolved from surfaces leaving a finely pock-marked texture. Glaze green with brown speckling or leached and opaque. Possibly made from outcrops of the Gault Clay (as noted in VIIA), as they resemble other medieval tiles made from this (eg Naccolt, near Wye, Kent). Source unknown (see also VIIA above) but presumed to be fairly local to Oxford, where this fabric is common on monastic sites. Generally, early in date, perhaps c 1200–1325?

**B.4.9 Fabric VIIBB:** First described from the Tidmarsh Lane site as Fabric 'B' (Booth 2003, 408) but modified here to VIIBB. This is similar to VIIB above but was generally more orange or light red in colour with a sharply defined mid-dark grey core and the chalk/limestone inclusions are sparse or rare, though one tile had a large shell grit 23mm in size. Quartz sand



moderate-abundant. Glaze amber, green with brown speckling, brown and olive green or leached and opaque. Source and date as for VIIA and VIIB.

### Roof tile

B.4.10 Previous excavations at Merton College at No. 4a Merton Street (Cotter 2006) have dealt extensively with the roof tile demonstrating a range of ridge forms were in use as well as glazed and unglazed peg tile. Fabrics were not catalogued in detail in that analysis and it is difficult to judge whether the group VII fabrics were well represented though fabric 1B and IIIB appear to have dominated the assemblage. Thus, the present assemblage appears to differ in emphasis partly owing to the lack of later comparable phases. However, the previous excavations were located on the north side of Merton Street, whereas the site under consideration here lies to the south in the main college grounds. The tile derives from deposits largely predating the college and the tile reflects the character of the property on this individual tenement, whilst the contemporary material from the earlier excavations relates to a separate property on the opposite side of the road prior to its acquisition by the college.

B.4.11 The tile consisted entirely of flat roof tile fragments, of which only a small proportion could be assigned to the distinct category of peg tile, when peg holes survived. Generally flat roof tile fragments would be interpreted as peg tile, but this assumption cannot be made where much of the ridge tile had a fairly angular profile and flat sides resulting in flat fragments that cannot be readily distinguished from the peg tile. The presence of glaze cannot be taken as an indicator of ridge tile alone, as Cotter (ibid.) noted that much of the peg tile was also glazed, though normally only the exposed lower half of the tile. The plain flat tile has been divided into glazed and unglazed for the purpose of analysis. The types are quantified by phase in Table 2 and in relation to fabric in Table 3.

Table 2: CBM types (including samples) quantified by phase

Form		Phase 1	Phase 2A	Phase 2B	Total	% CBM
Roof: peg	Nos	6	3	9	18	14%
	Wt (g)	444	278	292	1014	19%
Roof: flat glazed	Nos	9	4	31	44	34%
	Wt (g)	594	426	1071	2091	40%
Roof: flat	Nos	20	12	34	66	52%
	Wt (g)	765	417	965	2147	41%
Mortar	Nos			10	10	-
	Wt (g)			5	5	-
Total	Nos	35	19	84	138	
Total	Wt (g)	1803	1121	2333	5257	

Table 3: CBM types (including samples) quantified by fabric

Roof tile type	Peg	Flat glazed	Flat	Total
Fabric				
IB	Nos		1	1

	Wt (g)			15	15
IIIA	Nos		1	1	2
	Wt (g)		18	28	46
IIIB	Nos	2		2	4
	Wt (g)	51		184	235
VIIA	Nos		6	3	9
	Wt (g)		186	121	307
VIIA/B	Nos	1		9	10
	Wt (g)	105		442	547
VIIB	Nos	3	4	13	20
	Wt (g)	278	187	257	722
VIIIBB	Nos	9	30	34	73
	Wt (g)	507	1608	930	3045
VIIIBB/IIIB	Nos	3	3	3	9
	Wt (g)	73	92	170	335
Total	Nos	17	44	67	128
	Wt (g)	909	2091	2252	5252

### *Peg tile*

B.4.12 The peg tile could be positively identified on the basis of peg holes. These were circular usually tapering to the base and often punched at an angle rather than perpendicular to the surface. They measured 15–22mm in diameter tapering to 8–13mm, apart from one rather smaller example of 11mm diameter. The distance from the top edge varied from 20–35mm and 25–75mm from the side edge. The peg tile ranged in thickness from 11–16mm sometimes thickening to the edge and in general has a fairly rough crude finish. One piece (pit 46, fill 47) had the imprint of a small hoof, probably ovicaprid or deer, and another (pit 54, fill 56) had a large thumb print from handling. The peg tile was made mostly in fabric VIIBB with smaller quantities in VIIB, IIIB and VIIIBB/IIIB.

### *Glazed and plain flat tile*

B.4.13 The glazed and plain flat tile had a finish, which ranged from neat and regular to quite rough and crude. Edges were generally rough though several tiles had distinctive smoothed concave edges or with lips of clay projecting at the arrises folded in over the edge. Similar edge characteristics have been noted by the author on Roman imbrices and it is possible that such features on medieval tile could denote ridge tile, which is likely to have been manufactured in a similar manner to imbrices. Thickness measured 10–21mm, though that of glazed tile was more restricted at 13–19mm, the tiles often thickening noticeably to the edges and corners.

B.4.14 Sporadic grass or straw impressions were noted on the underside of three tiles and eight had imprints on the surfaces or edges of thumb or finger tips as a result of handling during manufacture. In one case (context 47) the three contiguous oval depressions on the underside were unusually small and would have to result from a young child handling the tile if they have been correctly identified as finger marks.

B.4.15 Glaze was pale green, olive green, amber or brown, sometimes with brown mottles or speckles on the lighter colours. The glaze was often thin and nearly always patchy or discontinuous rarely extending as far as the tile edge. Some piece just had splashes of glaze surviving.

B.4.16 The largest surviving tile was a glazed piece (context 45) in fabric VIIBB, which had one edge surviving and measured 16mm thick, over 180mm wide and over 150mm long. Across one half was a green brown mottled glaze ending in a fairly straight line perpendicular to the edge, whilst over the unglazed area was the remnants of a coarse gritty mortar (M7); mortar residue also occurred on the underside, but underlying the glazed section. The whole pattern and relationship of glaze to mortar is suggestive of overlapping tiles mortared together. Such an arrangement could be envisaged for both peg tiles and ridge tiles, though if a ridge tile it would imply that the apex was without a crest. It is perhaps more likely that the ridge was secured in place with mortar, though peg tiles may have been mortared at gable ends.

### *Mortar*

B.4.17 A few small fragments of lime mortar were recovered from a sieved sample. In addition mortar was noted on the surfaces, usually the upper surface, of several tiles. Four out of ten records of mortar present occurred on ridge tile. Most were thin patchy remnants of cream-buff sandy lime mortar (M1). One was a whitish cream lime mortar containing a high density of rounded quartz sand and speckled with frequent fine black sand (M2). Four tiles had a very coarse gritty mortar (M7) attached: this was cream-buff in colour, and contained a high density of quartz sand and coarse rounded and angular grits up to 5mm size. Similar coarse gritty mortar has been noted at Littlemore Priory (Poole forthcoming), where it was associated with 13th-14th century roof tile and 'stabbed Wessex' floor tiles, and from the Westgate Centre excavations during recent analysis of a decorated tile pavement from the cloisters of the Greyfriars dated to c 1240–50 (OA forthcoming).

### *Discussion*

B.4.18 The ceramic building material suggests that the building occupying the tenement during the 12th to 13th centuries was roofed with ceramic peg tiles with the ridges probably covered with plain, probably glazed, ridge tiles. No ridge tiles were positively identified, although one very slightly curved tile hints at their presence as do some of the edge characteristics. It is perhaps surprising that not a single ridge apex was found if ridge tile were represented in the assemblage. The glazed tile cannot be regarded as exclusively ridge tile as Cotter (2006) records a quantity of glazed peg tile at 4a Merton Street. All the fragments of peg tile identified in this assemblage were exclusively upper sections which would not have been glazed and so it has not been possible to establish whether the lower sections were glazed, though this is likely.

B.4.19 The presence of roofing tile in Phase 1 pits of 12th- to early-13th century date provides significant evidence for the early use of tile in the group VII fabrics. Flat roof tiles of plain rectangular form are known from documentary evidence and later 12th century contexts in several English towns and cities including London (Smith 1998–9) and Eynsham Abbey, Oxfordshire (Mitchell 2003). This assemblage provides evidence for the use of roof tile in a domestic setting and contrasts with the assemblage from 4a Merton Street, where the early phases were dominated by the early type A ridge tiles in fabric IB, virtually absent from the

present excavation. The sandier fabrics of group III, which formed a significant part of the later assemblage at No.4a, make their appearance in Phase 2.

## B.5 Metalwork and worked bone

*By Leigh Allen*

### *Introduction*

B.5.1 A total of 61 metal finds and one worked bone object were recovered. The metal assemblage comprises 16 copper alloy, 43 iron and two lead finds. The metalwork is in a very poor condition, corroded and fragmentary, and many of the finds are small undiagnostic fragments. Those finds that are identifiable include fragments from slender copper alloy pins with wire wound heads, a copper alloy buckle frame, fragments from an iron knife, numerous nail fragments and two pieces of lead waste. The majority of the assemblage was recovered from the fills of Phase 4 stone-lined well 67.

### *Phase 1*

B.5.2 The fragmentary remains of two iron nails were recovered from the fills of pits 54 and 68. In addition the head and part of the shank of a pin with a wire wound head also came from pit 68. Small, slender pins with wire wound heads are common finds on medieval and post-medieval sites; analysis of a large assemblage recovered from Winchester established that this type of pin was first produced in the 13th century in this country (Biddle and Barclay 1990, 560–71). They do however become more common from the 14th century onwards.

### *Phase 2B*

B.5.3 Three nails and three undiagnostic fragments were recovered from occupation deposits 17 and 18 and gravel surface 30.

### *Phase 4*

B.5.4 The remaining finds all came from the fills (66, 71, 72, 73 and 74) of well 67. The only notable finds are the fragmentary remains of an iron knife blade with a slender triangular section and a small copper alloy fragment from an oval or D-shaped buckle frame with part of the iron pin still attached to the off-set bar. The other finds comprise 33 undiagnostic fragments, a very corroded nail, 12 fragments from copper alloy pins with wire wound heads (see above) and two fragments of lead waste.

B.5.5 A single worked bone button was recovered from the well (context 72). The small, thin, flat disc (D: 12mm) has a central perforation and a rounded edge. Simple buttons of this type or the bone debris from which they were cut have been found on a number of Oxford sites including St Aldates (Henig 1977, 160–3, fig. 38, nos 23–5) and St Ebbe's (Egan and Henig 1984, 229, fig. 39, nos 22–3). They were probably used to secure light garments, possibly undergarments, and were often covered by cloth or wound thread. They could also have formed the backing for composite buttons which would have had a decorated sheet metal cover over the bone disc and a copper wire attachment loop through the central perforation (Margeson 1993, 20–2, fig. 11, nos 111–12).

## B.6 Worked stone

*By Ruth Shaffrey*

B.6.1 Three pieces of stone were retained but none are obviously worked. One is a piece of slate with no obvious worked edges; it could be from roofing or a writing slate, but was found in a modern context. None of the stone needs to be retained.

## APPENDIX C ENVIRONMENTAL REPORTS

### C.1 Plant remains

*By John A Giorgi*

#### **Methods**

C.1.1 Fifteen samples were collected and processed for the potential recovery of botanical remains. No assessment was carried out although the presence of any other biological remains in the samples will be noted in the following report. The samples were collected from the following deposits and phases of the site: one sample from pit 68 (Phase 1); six from a succession of gravel/occupation surfaces and three from the fills of stone-lined drain 13 (Phase 2B); and five from mid-18th-century fills of well 67 (Phase 4).

C.1.2 The volume of the individual samples ranged from 2.5 to 24l and were processed using a modified 'Siraf'-style type flotation tank, with mesh sizes of 0.25mm and 0.5mm for the recovery of the flots and residues respectively. Flot size was generally very small (10ml or less) with the exception of those from the well samples that produced very large flots well in excess of 100ml. Information on individual sample and flot size is shown in Table 1.

C.1.3 The flots were dried and sorted for plant remains, which were identified using a binocular microscope (with a magnification of up to x40) together with modern and charred reference material and reference manuals (Cappers *et al.* 2006; Jacomet 2006). Nomenclature follows Stace (2005) which was also used for habitat/ecological information. Three of the samples from backfills (66, 71, 72) of the well, however, were not included in the analysis because of their late date and uncertain provenance.

#### **Results**

C.1.4 The results are shown by phase in Table 1. Identifiable plant remains were present in 10 of the 12 samples; this included charred plant remains, mainly cereal grains, in eight samples although the only significant sized assemblage was from pit fill 70 (Phase 1), the other seven samples containing only traces of identifiable charred remains. 'Waterlogged' plant remains were found in the two fills of well 67 but with a good amount of identifiable remains only in fill 74.

C.1.5 Charcoal (including identifiable fragments greater than 2mm) was present in all the samples but largely consisting of only very small amounts of material except in the samples from pit fill 70 and well fills 73 and 74. The charcoal probably represents sweepings from nearby hearths and ovens but cannot be directly related to any specific activities. Other biological remains in the flots consisted of occasional snails in seven samples and variable but mainly small amounts of fragmented (small, mammal, fish, possibly bird) bone in 12 samples, the best assemblages being in well fills 73 and 74 and pit fill 70. Seven flots contained occasional insect (beetle, pupae, eggs) remains although some of this material may be intrusive.

C.1.6 The botanical results will be discussed by phase.

*Phase 1 (12th to early 13th century)*

C.1.7 The one sample from this phase, from the fill (70) of pit 68, produced the only significant charred plant assemblage from the site, consisting largely of cereal grains (91% of the quantified remains), a few cereal chaff fragments (5%) and other wild plant/weed seeds (4%). The grains, however, were very poorly preserved and fragmentary and just over 80% could not be identified further. The poor condition of the grains suggests burning at high temperatures; such accidents may have occurred while the grains were being dried before milling and/or storage or as a result of cooking accidents.

C.1.8 The small number of well-preserved grains in the sample mainly belonged to *Triticum aestivum/turgidum* (free-threshing wheat) with the general morphology of many of the unidentifiable grains also tentatively suggestive of this cereal. Several wheat rachis fragments showed the presence of *Triticum aestivum* (bread wheat) although there were also a few other poorly preserved fragments of free-threshing wheat rachides that could not be identified to species. Other cereals in the sample were represented by a few grains of possibly *Secale cereale* (rye), the definite presence of which, however, was confirmed by a single rachis fragment, while there was a tentative identification of *Avena* (oat); several large grass seeds may also belong to this cereal and/or other wild grasses.

C.1.9 The only other charred plant remains in the pit (besides charcoal) were potential food remains represented by a single *Corylus avellana* (hazel) nut shell fragment and a *Prunus domestica* (plum/bullace) fruit stone.

#### *Phase 2B (early 13th to 14th century)*

C.1.10 Six of eight samples from this phase, from four gravel/occupation surfaces (17, 28, 29, 31) and from the two fills (33, 35) of stone-lined drain 13, produced only traces of charred plant remains consisting of a few poorly preserved and fragmentary cereal grains including tentative identifications of free-threshing wheat, possibly *Hordeum vulgare* (barley) and oat, and a single *Medicago/Trifolium* (medick/trefoil) seed in occupation deposit (31), together with very small amounts of fragmented charcoal. Little comment may be made on the basis of these few remains, the grains representing debris from activities possibly taking place at some distance from these sampled features.

C.1.11 Two of the drain fills (33, 35) also contained a few non-charred plant items, a few *Rubus* (blackberry/raspberry) fruit seeds and a *Prunus avium* (cherry) fruit stone; these are robust woody items and may have survived as uncharred remains from this time rather than being intrusive.

#### *Discussion of medieval charred plant assemblages*

C.1.12 The four cereals represented in the medieval samples, free-threshing wheat and rye and possibly barley and oats, are the four main grains found as archaeobotanical remains at medieval sites in southern England (Greig 1991, 321) including numerous sites in Oxford. For example, 11th to 14th century pits from earlier excavations at 4a Merton Street produced evidence for free-threshing (including bread) wheat, rye, oats and hulled barley (Pelling 2006, 323, 335). Free-threshing wheat was the dominant cereal together with very large amounts of rye and low levels of barley and oat in late 11th-12th century pits on the site of Corpus Christi College, immediately west of Merton College (Smith 2014, 206), and was also the main cereal (along with smaller amounts of the other grains) in late 11th to mid-13th century pit fills in excavations at Queens College to the north of Merton College (Giorgi 2015, 183) as well



as in similarly dated contexts from Jesus College (along with hulled barley) to the north-west of the site (Smith 2014a).

C.1.13 Wheaten bread was the preferred, most sought after and commercially valuable crop in the medieval period (Hammond 1995, 2) being mainly consumed by the better off (Campbell *et al.* 1993, 26), bread wheat producing better quality flour than rivet wheat for bread making (Moffett 2006, 48). All the cereals in the samples, however, may have been used for bread (sometimes as mixes) and in pottage. There were no sprouted grains in the samples to suggest on-site brewing although malting activities were suggested on the basis of large numbers of germinated oat and barley grains in other early medieval deposits from previous excavations in the area (Pelling 2006, 323).

#### *Phase 4 (mid 16th to 19th century)*

C.1.14 Two mid-18th century fill samples from well 67 produced uncharred plant remains of mainly fruits, from a primary silty fill (74) and a mid-18th cessy filling/backfill (74).

C.1.15 The primary fill (74) contained a modest range of fruits although individual species representation was poor with only occasional or small amounts of remains from *Prunus avium* (cherry), *Vitis vinifera* (grape), *Ficus carica* (fig), *Rubus idaeus* (raspberry), *Rubus sect Glandulosus* (blackberry), *Sambucus nigra* (elderberry) and *Fragaria* (strawberry). There was a fairly good number of *Corylus avellana* (hazel) nut shell fragments in the sample with fragment size ranging from 3mm to 9mm. There were also a small number of other non-charred seeds including *Stellaria media* (common chickweed) and *Chenopodium/Atriplex* (goosefoots/oraches) which may be indicative of nutrient-rich disturbed ground in the vicinity of the well while a few records for *Ranunculus acris/repens/bulbosus* (buttercups) and *Carex* (sedges) may point to areas of damp grassland close-by. A single *Brassica/Sinapis* seed could represent food remains (cabbages/mustard). The botanical remains in the overlying well fill (73) consisted of just a few fruit seeds of fig, blackberry/raspberry and possibly strawberry and a hazel nut shell fragment.

C.1.16 Similar fruit remains have been recovered from other post-medieval deposits in Oxford; late 17th to 18th-century deposits from two excavated latrines at Corpus Christi were dominated by fruit stones and pips including all the species found in the Merton College well (Smith 2014, 207) while earlier medieval deposits from 4a Merton Street (including from a garderobe) have also produced a similar range of fruits including cherry, grape and fig (Pelling 2006, 336). The fruits represented in the well sample may have been garden cultivated, possibly close-by, although blackberries, raspberries and hazel nuts may have also been collected from the wild and the figs probably imported as dried fruit.

C.1.17 The fruit remains provide a partial insight into the diet of the inhabitants of the college during the 18th century with the larger fruit remains maybe representing refuse from food preparation taking place in the kitchen nearby and the smaller fruit seeds possibly being from human excrement dumped into the well as part of the backfilling of the feature. The sedges represented in fill 74 may be the residues of these plants dumped into the well to dampen down any smells. The presence of very small undiagnostic mineralized concretions in both fills and a few fly puparia in fill 74 may also tentatively point to the presence of cess and/or foul conditions within the well. Some of the small bone fragments (including fish remains) in both fills may also be food waste. Both flots, however, consisted mainly of charcoal and coal/clinker,



the residues of fuel possibly from the nearby kitchen and/or other activities close-by, which would have also helped suppress any smells emanating from the well.

	phase	1	2B									4	
	date range	12th- E 13th C	Early 13th - 14th Century									Mid-16th - 19th Century	
	feature	PIT	GRAVEL	OCC	OCC	OCC	GRAVEL	OCC	DRAIN			WELL	
	cut number	68							14			67	
	feature type	FILL	LAYER	LAYER	LAYER	LAYER	LAYER	LAYER	FILL	FILL	FILL	FILL	FILL
	context number	70	28	29	18	31	40	17	33	34	35	73	74
	sample number	10	1	2	3	7	8	9	4	5	6	14	15
	vol sample (l)	20	6	6	2.5	3	4	15	3	2.5	12	24	18
	vol flot (ml)	66	4	5	1	2	1	11	2	<1	5	320	480
LATIN_NAME	ENGLISH												
<b>CHARRED PLANT REMAINS</b>													
<b>Cereal grains</b>													
<i>Triticum aestivum/turgidum</i> type	free-threshing wheat	2											
<i>T. cf. aestivum/turgidum</i> type	?free-threshing wheat	6						1					
<i>Triticum</i> spp.	wheat	4											
cf. <i>Triticum</i> sp(p).	?wheat	6				1					1		
cf <i>Secale cereale</i>	?rye	3											
cf <i>Hordeum vulgare</i>	?barley			1									
cf. <i>Avena</i> sp.	?oat	1							1				
Cerealia	indet. grain (estimate)	103	2			3		2					
Cerealia	indet cereal fragments <1mm	++						+	+				
<b>Cereal chaff</b>													
<i>Triticum aestivum</i> type	hexaploid wheat rachis fragments	3											
<i>T. aestivum/turgidum</i> type	free-threshing wheat rachis fragments	3											
<i>Secale cereale</i> L.	rye rachis fragments	1											
<b>Other plant/weed seeds</b>													

<i>Corylus avellana</i> L.	hazel nut shell fragments	1												
<i>Prunus domestica</i> type	plum/bullace	1												
<i>Medicago/Trifolium</i> spp.	medicks/clovers (small)					1								
<i>Avena/Poaceae</i> indet.	oat/large wild grass seed	4								1				
indeterminate	wood charcoal (>/<2mm)	+++++/+++++	+++//++++	+++//++++	+//++++	++//++++	+++//++++	+++//++++	++//++++	++//++++	+++//++++	++++//++++	++++//++++	
indeterminate														
<b>WATERLOGGED PLANT REMAINS</b>														
<i>Ranunculus acris/repens/bulbosus</i>	buttercups													2
<i>Ficus carica</i> L.	fig											2		5
<i>Corylus avellana</i> L.	hazel nut shell fragments											1		54
<i>Chenopodium</i> spp.	goosefoot etc													5
<i>Atriplex</i> sp.	orache													1
<i>Stellaria media</i> (L.) Vill.	common chickweed													1
<i>Brassica/Sinapis</i> sp.	cabbages, mustards													1
<i>Rubus idaeus</i> L.	raspberry													6
<i>R. sect. Glandulosus</i> Wimm. & Grab.	blackberry													1
<i>R. fruticosus/idaeus</i>	blackberry/raspberry											1		2
<i>Potentilla/Fragaria</i> sp(p).	cinquefoils/strawberry											1		2
<i>Fragaria</i> sp.	strawberry													1
<i>Prunus avium</i> type	cherry													1
<i>Vitis vinifera</i> L.	grape													2
<i>Sambucus nigra</i> L.	elder													1
<i>Carex</i> spp.	sedge													3
Bryophyta indet.	moss													12
indeterminate	leaf abscission pads													8
indeterminate	bud fragments													2
indeterminate	stem fragments													2

indeterminate	wood												++++
indeterminate													+
<b>Total number of quantified charred plant items</b>		<b>138</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>112</b>
<b>item density of quantified plant remains (per litre of processed soil)</b>		<b>6.9</b>	<b>0.3</b>	<b>0.2</b>		<b>1.7</b>		<b>0.2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.1</b>	<b>0.2</b>	<b>6.2</b>

**key:**

**feature type:** GRAVEL=gravel surface; OCC

=occupation deposit

**item frequency:** + =1-5; ++=6-25; +++=26-100; ++++=101-300;

+++++=>300 items.

## C.2 Animal bone

*By Lee G Broderick*

### **Methods**

C.2.1 Recovery of material on site was principally through hand-collection. Environmental samples were also taken and these were sieved at 10mm, 4mm, 2mm and 0.5mm fractions. This material was recorded in the same way and is considered together below. Taxonomy follows Wilson and Reeder (2005) for mammals and Gill and Donsker (2013) for birds. The word 'caprine' is used when referring to an animal that may be a sheep or a goat.

C.2.2 All specimens were identified with the aid of the Oxford Archaeology reference collection. Bones were recorded using the diagnostic zones described by Serjeantson (1996) for mammals, Strid (2012) for mammal mandibles and Cohen and Serjeantson (1996) for birds.

C.2.3 The separation between *Ovis aries* (sheep) and *Capra hircus* (goat) was attempted on the following elements: mandible; dP3; dP4; M1; M2; M3; distal humerus; distal metapodials (both fused and unfused); distal tibia; astragalus and calcaneum, using the criteria described in Boessneck (1969), Payne (1985), Kratochvil (1969) and Halstead *et al.* (2002).

C.2.4 Wear stages were recorded for P4, dP4, M1, M2, and M3 of *Bos* sp. (cattle), caprines and *Sus* sp. (pig), both isolated and within mandibles following Grant (1982). *Equus caballus* (horse) incisor wear stages follow Levine (1982) and separation between the various equid species was attempted on the molars, premolars, metapodials and astragali according to criteria laid out by Davis (1980).

C.2.5 A mammal bone epiphysis is described as 'fusing' once spicules of bone have formed across the epiphyseal plate, joining epiphysis to metaphysis, but while some gaps are still visible between the epiphysis and diaphysis. An epiphysis is described as fused once these gaps along the line of fusion have disappeared. Fusion stages follow Silver (1969). Only fused bones were measured, with measurements taken following the criteria laid out by von den Driesch (1976).

### **The assemblage**

C.2.6 A total of 21 animal bones were recovered from the site: 8 from Phase 1 and 13 from Phase 2A (Table 1). All of the specimens were recovered by hand. The bones were generally in moderate condition (Lyman 1996, stage 3) although this was very variable.

#### *Phase 1*

C.2.7 Evidence from the 12th to early 13th century was scarce, although domestic cattle (*Bos taurus taurus*), caprine (sheep – *Ovis aries* and goats – *Capra hircus*) and pig (*Sus scrofa domestica*) specimens were all identified from a pit (68). The cattle specimens included a horncore and zygomaticus which may be relevant as previous excavations at 4a Merton Street, around 50m to the north, identified evidence for a horner's workshop (Worley and Evans, 2006). Animal bones were also recovered from excavations around 100m to the south-west in the 1960s; these were comparable to the material recovered here in terms of both number and species, including another horncore, this time of a sheep (Hassall 1971).

### Phase 2A

C.2.8 The 13th to 14th century assemblage came from a garden soil. The 13 specimens recovered were in poor condition but included unfused caprine femurs and tibiae as well as pig and cattle specimens. A large mammal vertebra recovered from this context (45) had been chopped through the centre axially. It was observed from the much larger assemblage recovered from 4a Merton Street that cattle carcasses were split in half lengthways from the 11th century onwards (Worley and Evans 2006) and this would fit that observation.

Table 1: Total NISP (Number of Identified SPecimens) and NSP (Number of SPecimens) figures per period from the site. Three most common species for each phase highlighted.

	Phase 1	Phase 2A
domestic cattle	3	2
caprine	1	3
pig	1	1
medium mammal		3
large mammal		1
<b>Total NISP</b>	5	10
<b>Total NSP</b>	8	13

Table 2: Number of specimens recorded with taphonomic, ageing or biometric data.

	Butchery marks	Pathologies	Ageing data	Biometric data
domestic cattle			2	
caprine		1	2	1
large mammal	1			
<b>Total Mammal</b>	1	1	4	1
<b>Total</b>	1	1	4	1

## C.3 Fish remains

*By Rebecca Nicholson*

C.3.1 A small assemblage of 76 identified fish bones and scales was recovered exclusively from the residues and flots of sieved soil samples. The great majority of bones (56) came from sample <10> taken from fill 70 within 12th-early 13th century pit 68. The remains include bones and scales from small and tiny fish, particularly herring, but also including eel, pike, cyprinid, perch and small gadid (probably whiting). It is likely that the herring, which is exclusively marine and spoils quickly, had been preserved by pickling or smoking; the gadid may have been a dried fish, although fresh seafish were sold in Oxford at that time. The remaining fish are all likely to have been caught fairly locally in the surrounding rivers and

ponds. Perch scales were also recovered from 18th century well fill 73 demonstrating continuity in the eating of fairly small freshwater fish. Bones from small and tiny freshwater fish have now been recovered from a number of sites in Oxford, for example from pit fills of similar date at 4a Merton Street (Nicholson 2006). The consumption of these small and bony freshwater fish seems to have been fairly commonplace. Certainly, in the 15th century, and perhaps before, the fishing in the river Cherwell as far as Magdalen Bridge belonged to Merton College as lords of Holywell (Chance *et al.* 1979, 327–31). The lack of bones from larger, potentially more expensive fish is probably a consequence of the small size of the excavations here rather than an indication of the status of the landowner.

## C.4 Marine shell

*By Rebecca Nicholson*

C.4.1 A single left valve of European oyster (*Ostrea edulis*) weighing 13g was recovered from gravel surface 2,8 which has been dated to the 13th-14th century (Phase 2B). Oyster shells are fairly common in Oxford college assemblages and it is likely the oyster shell was discarded from the college kitchen or that of a previous landholder.

## C.5 Eggshell

*By Rebecca Nicholson*

C.5.1 A very small quantity of avian eggshell weighing 1g and probably from domestic chicken, was recovered from the sorted residue of sample <10>, from 12th-early 13th century pit fill 69.

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## APPENDIX E SITE SUMMARY DETAILS

<b>Site name:</b>	New Lift Pit, Patey's Quad, Merton College, Oxford
<b>Site code:</b>	OXMEGH16
<b>Grid Reference</b>	SP 5173 0606
<b>Type:</b>	Excavation
<b>Date and duration:</b>	18 July to 2 September 2016
<b>Summary of Results:</b>	Oxford Archaeology undertook a programme of archaeological work at Patey's Quad, Merton College, Oxford, in advance of the construction of a new lift. The earliest evidence comprised several rubbish/quarry pits dated to the 12th to early 13th century. They were probably contained within the rear of the property of Henry Herprut, who resided there by 1235–6. Two of the later pits contained roof tiles offering evidence for the refurbishment or construction of his house. Later during the 13th century, a garden soil developed over which a succession of gravel surfaces and a stone drain were constructed. They probably relate to a path leading from a gatehouse on Merton Street built during the construction of the college buildings between 1289–1311. Post-medieval evidence included a wall that formed part of a probable toilet block linking the medieval Mob Quad with the 17th century Fellows' Quad. A stone-lined well filled during the late 18th century probably served the nearby kitchen in the Fellows' Quad.
<b>Area of Site</b>	24 sq m
<b>Location of archive:</b>	The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Oxfordshire County Museum Service in due course, under the following accession code: OXCMS:2016.121.

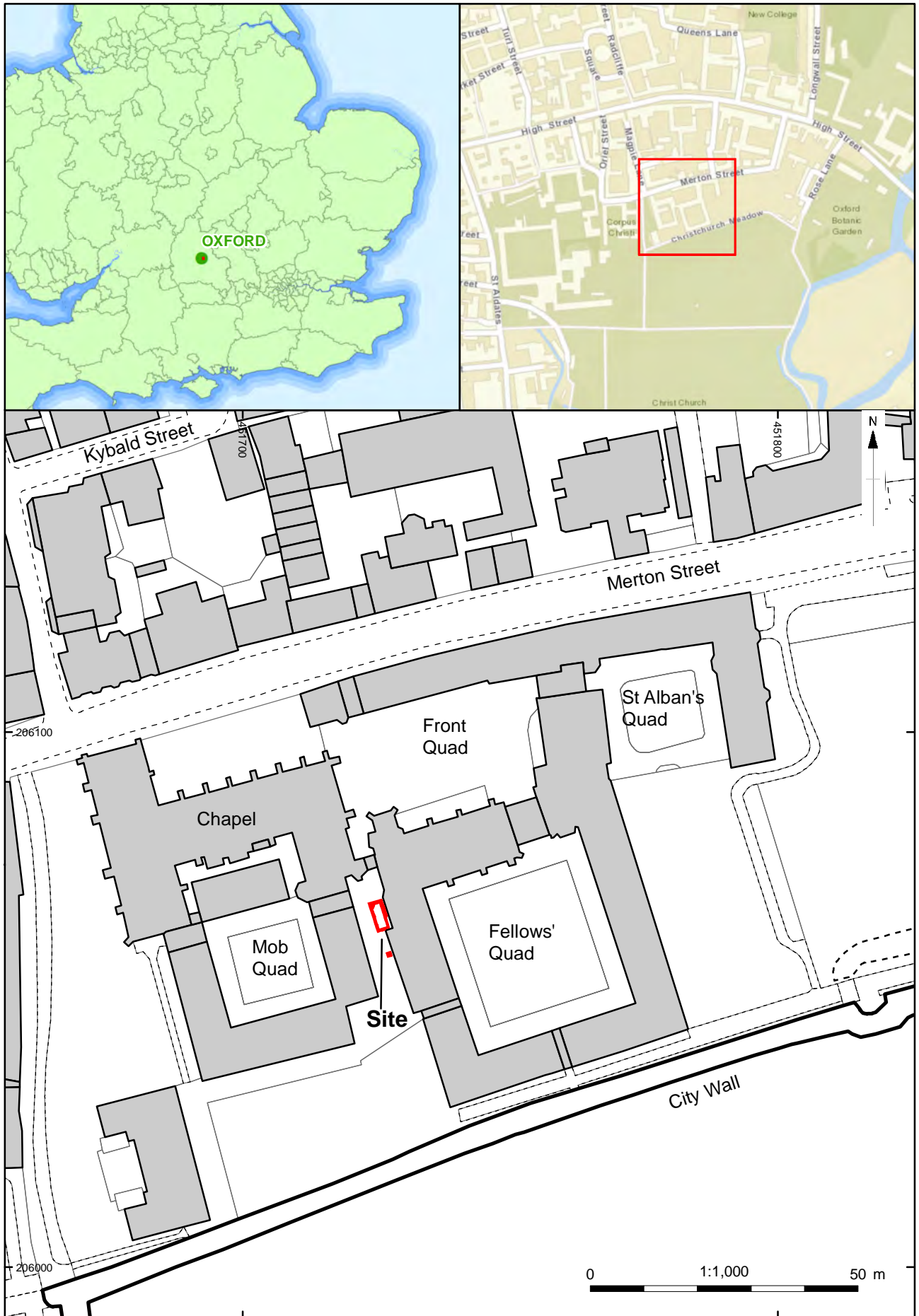


Figure 1: Site location

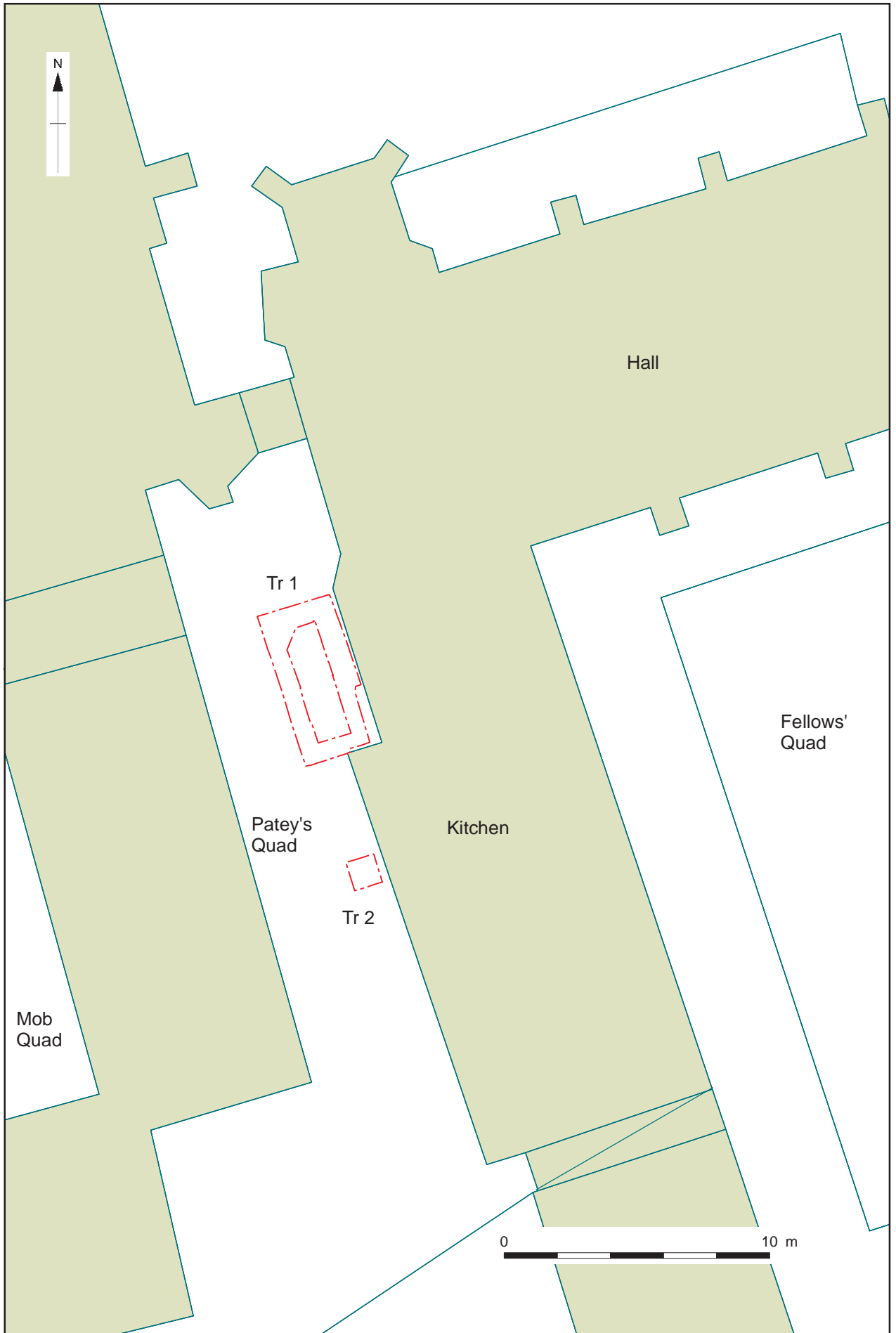


Figure 2. Trench location

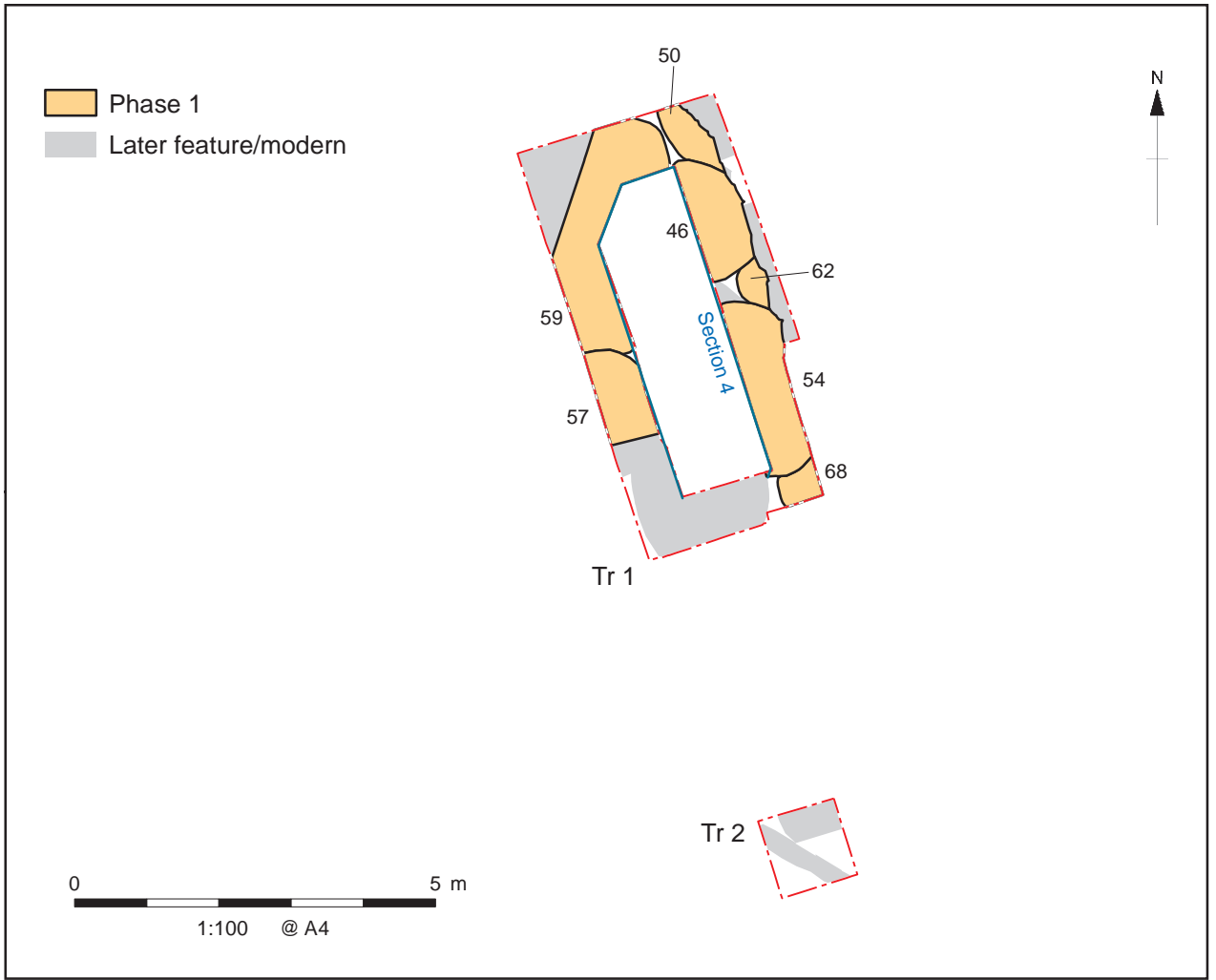


Figure 3. Phase 1

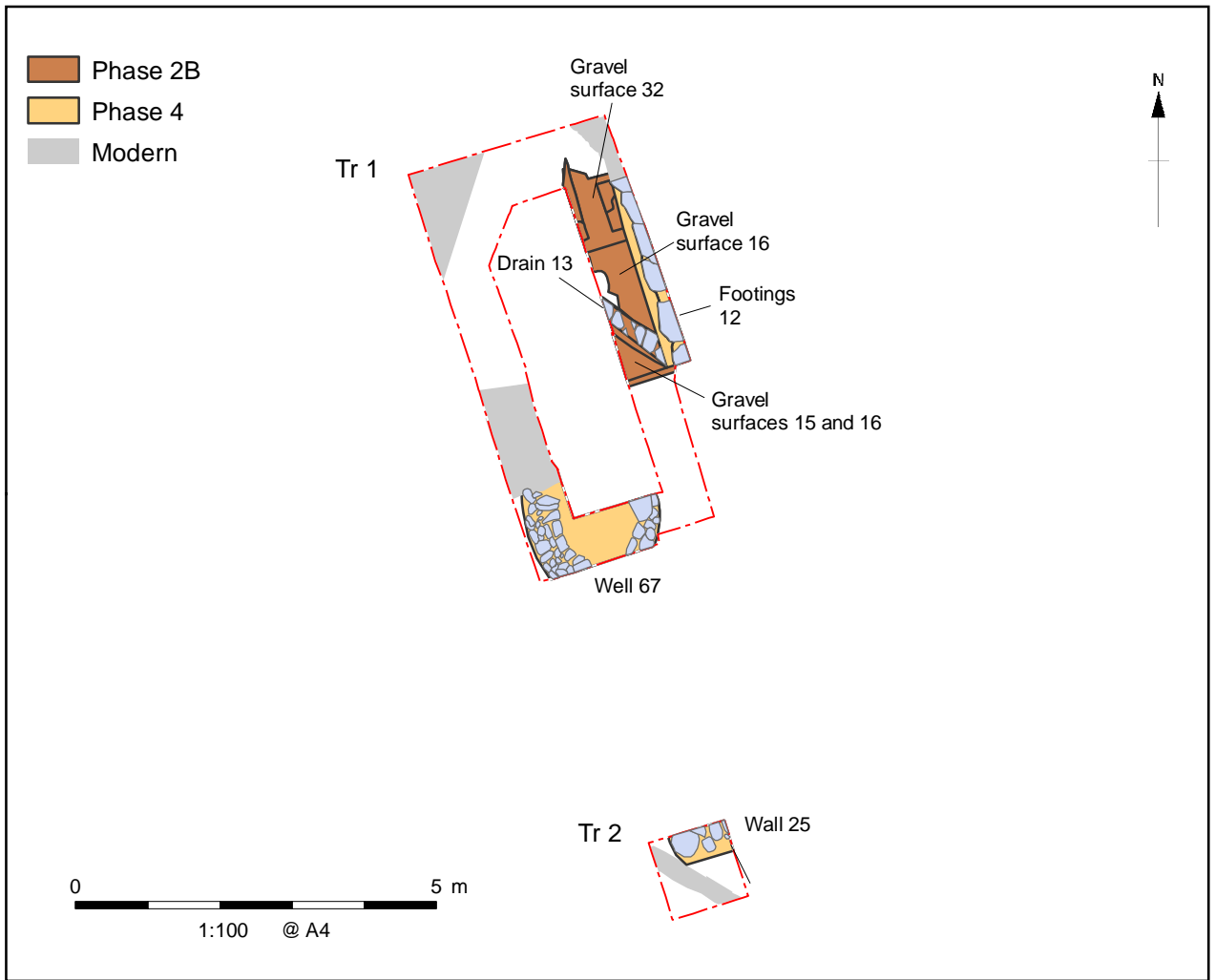


Figure 4. Phases 2b and 4



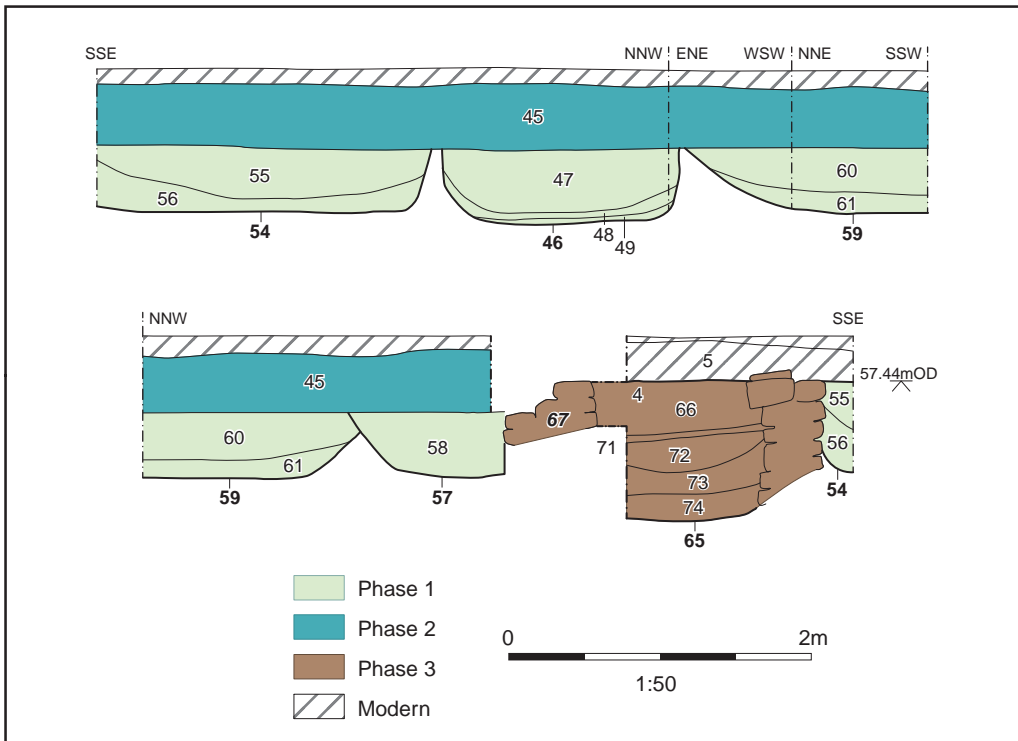


Figure 5: Section 4 (Patey's Quad)



Plate 1: Phase 4 walls 30 and 39 with phase 2 pit 36 at formation level, view north



Plate 2: Phase 2 pit 18 at formation level, view east





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