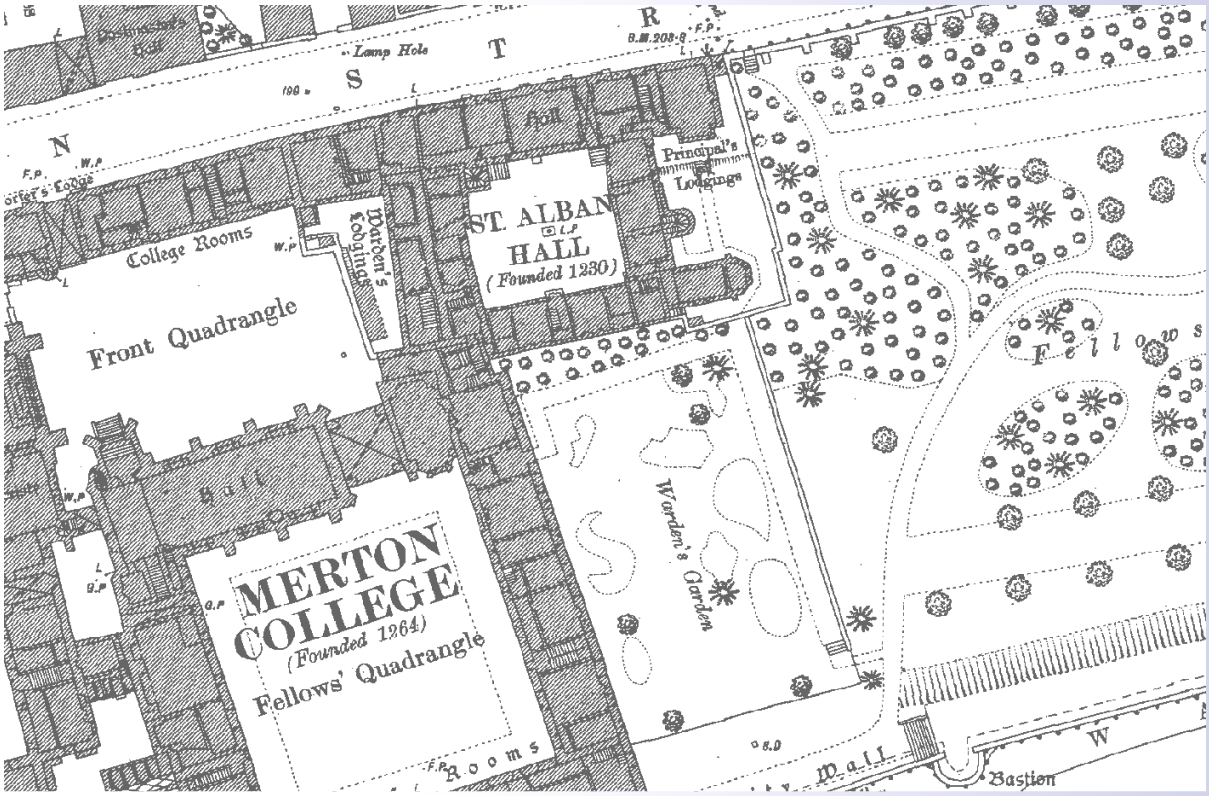

St Alban's Quad, Merton College, Oxford

Archaeological Watching Brief Report

July 2017

Client: Merton College, Oxford

Issue No: 1
OA Reference No:
NGR: SP 5179 0610

oxfordarchaeology
southsouthsouth

Client Name:	Merton College, Oxford
Document Title:	St Alban's Quad, Merton College, Oxford
Document Type:	Watching Brief Report
Grid Reference:	SP 5179 0610
Planning Reference:	16/01020/LBC
Site Code:	OXMMU16
Invoice Code:	OXMJPX
Receiving Body:	Oxfordshire County Museum Service
Accession No.:	OXCMS:2016.134
OA Document File Location:	X:\o\Oxford Merton College St Albans Quad_Postex_Archive Report\OXMMU16_ArchiveReport.docx
OA Graphics File Location:	X:\o\Oxford Merton College St Albans Quad_Postex_Archive Report\Figs
Issue No:	1
Date:	6 July 2017
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St Alban's Quad, Merton College, Oxford

Archaeological Watching Brief Report

Written by Steve Teague

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Summary

Oxford Archaeology undertook an archaeological watching brief during construction work within the east wing of St Alban's Quad at Merton College, Oxford. The archaeological work was commissioned by Ridge and Partners LLP on behalf of Merton College for the conversion of existing workshops into a new music room. A number of rubbish or quarry pits were revealed and subjected to limited excavation to formation level. These were dated to the 12th–14th centuries, after which a garden soil developed over the site which contained a late 14th or early 15th century French jeton together with late medieval pottery. Post-medieval evidence included wall fragments that probably formed part of a building within the late-17th- to mid-19th-century Principal's Garden.

Acknowledgements

Oxford Archaeology would like to thank Ridge and Partners LLP on behalf of Merton College for commissioning this project. Thanks are also extended to David Radford of Oxford City Council who monitored the work for his advice and guidance.

The project was managed for Oxford Archaeology by Ben Ford. The fieldwork was directed by Ben Attfield, who was supported by Sophie Bojadziev, Richard Kevill and Adam Fellingham. Survey and digitising 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 Nicola Scott.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Between 29th July and 30th August 2016, Oxford Archaeology (OA) undertook an archaeological watching brief during construction work within the east wing of St Alban's Quad at Merton College, Oxford (NGR SP 5179 0610). The archaeological work was commissioned by Ridge and Partners LLP on behalf of Merton College for the conversion of existing workshops into a new music room.

The watching brief was required in response to a condition of the planning permission granted by Oxford City Council (Planning Reference: 16/01020/LBC), and to fulfil stage 1 of a staged archaeological approach as requested by David Radford of Oxford City Council. The methodology of this work was set out in the written scheme of investigation (OA 2016a). The primary aim of the watching brief was to inform about the presence/absence, nature and date of any archaeological remains that may be impacted by the development and guide any stage 2 works (if required), which will seek to mitigate the impact of the development on archaeological remains. In the event, further mitigation or stage 2 works were not required.

1.2 Location, topography and geology

1.2.1 The site is within the basement at the southern end of the east range of buildings on St Albans Quad, Merton College, Oxford (Fig. 1). Merton College is located in central Oxford, fronting onto Merton Street with Corpus Christi College to the west and Christ Church Meadow to the south.

Oxford was 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 The archaeological and historical background of the site is discussed fully in the desk-based assessment (OA 2016b) and will not be repeated here.

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. St Alban's Quad was built in 1904–10 on the former site of St Alban Hall, a medieval academic hall. The southern boundary of the College is marked by the medieval city wall, a Scheduled Monument.

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).

1.3.3 Excavations in the Mob Quad by Garrod (1954) in 1922 recorded an early building and medieval pottery. 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–14th centuries and use of the site as stables during the late 14th–mid 16th centuries (Poore *et al*. 2006).

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). Salter's (1960) map of medieval landholdings indicates that the area now occupied by St Alban's Quad and the Fellows' Garden comprised a series of plots fronting onto St John's Lane (now Merton Street) that were occupied by academic halls. The site possibly straddled two adjacent properties, Hertheved Hall (Salter SE198) and Lomb Hall (Salter SE196-7), which lay to the east. St Alban Hall (Salter SE198) lay to the west of the site. This was a medieval student residence that survived as an independent hall of the University until 1882, when it was incorporated into Merton College. Hertheved Hall was a tenement with houses in 1316 [Balliol Deeds 171 (253)]; once a hall and 'now a garden' in *c* 1395 [St John's Hospital rental, Cart Hosp St John iii, 253], and in 1497 a 'garden' when leased by Balliol to Merton [Balliol Deeds 171 (254)] i.e. will simply have been part of Merton's garden. It was eventually bought outright in 1804 (Garrod 1954, 98). Lomb Hall was a messuage and toft (i.e. probably with building) when given to Merton, and unrecorded thereafter. It probably became part of the College garden, though a building could have continued to be rented out by the College (Julian Munby pers. comm.).

1.3.4 Agas' map of Oxford of 1578 shows the site occupying a narrow empty plot (probably the former Hertheved Hall property) located between St Alban's Hall and the extensive Merton Gardens to the east. Loggan's map of 1675 shows a similar arrangement but it is now a walled garden or orchard. The maps of Taylor (1750) and Davis (1793) both show three small rectangular buildings within the north part of the garden. A plan of St Alban Hall by James King (1848) shows one of these structures positioned in the south-west corner of the Principal's Garden and labelled as 'parlour room'. The

Ordnance Survey map of 1876 shows that these structures had been replaced by an apsed extension that projected eastwards from the south range of St Alban Hall. All but the frontage of St Alban Hall was demolished and replaced by the current St Alban's Quad during 1904–10.

2 AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The project aims and objectives were as follows:

i. To determine the character of any remains present;
ii. To determine or estimate the date range of any remains from artefacts or otherwise;
iii. To determine the potential of the deposits for significant palaeo-ecological information;
iv. 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.

2.2 Methodology

2.2.1 Three slot trenches (Fig. 2: Trenches 1–3) were originally intended to be dug by the contractor under archaeological supervision to access archaeological survival above formation level (*c* 57.25m OD, or *c* 0.50m below the existing floor slab). However, it became clear that that archaeological deposits still survived immediately under the slab which was on average *c* 0.25m thick. Since archaeological levels were revealed within each trench, these were hand-excavated by OA to formation level.

2.2.2 After the existing slab of the basement was removed by the contractor, the underlying levels were hand-cleaned by OA to characterise and define the extents of the archaeological deposits and features. The deposits were each hand-excavated to formation level and recorded as stated in the WSI.

2.2.3 Additionally, a number of small test pits, each measuring approximately 0.30m x 0.50m, were dug against the existing walls of the basement to provide information to the contractor concerning the character and depth of their foundations. These were excavated and recorded by OA and generally achieved depths of 0.8–1.0m below the level of the existing slab.

2.2.4 During post-excavation, all contexts were phased according to their stratigraphic position and spot-dated, largely using pottery. This was achieved using the digitised matrix (on Excel 2016) in conjunction with GIS linked to the context database (on Access 2016).

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the watching brief are presented below, and include a stratigraphic description of the trenches which contained archaeological remains. Summary details of all contents are tabulated in Appendix A. Finds reports are presented in Appendix B. The animal bone report is in Appendix C.

This archive report will form the basis of a publication in conjunction with the results from Patey's Quad, Merton College (OXMEGH16). As such the phasing has been combined from both sites to reflect this proposed publication.

3.2 Natural

A sterile soft yellowish orange silty sand (25) was exposed over most of the excavated area where it had not been disturbed by later features. Its highest surviving level was consistent over much of the site at 57.29–30m OD. Towards the south-west, the natural comprised a compact mid-brownish-yellow sandy silt (105) that apparently underlay (25) to north and was revealed at 57.12m OD. It is feasible that this differentiation represents the interface of the Summertown-Radley (second) terrace to the north and the floodplain (first) gravel terrace to the south.

3.3 Phase 1 (12th–early 13th century)

3.3.1 A number of pits and two possible postholes were located within the northern part of the site and represented the earliest in a sequence of pitting that continued into Phase 2. Several of the pits (53, 57 and 69) remained unexcavated as they lay below impact level. They have been allocated to this phase on spatial grounds, though a later phase is possible. The remaining pits (20, 44, 59, 82 and 99) were investigated to a maximum depth of 0.40m and none were fully excavated to their base. Consequently, only their upper, probable secondary fills, were investigated. Though none of the pits were fully exposed in plan, they were largely circular/rounded in shape measuring between 1.1–1.6m across, the largest (sub-rectangular pit 57) measuring about 1.2m. Although it is not possible, at the depth excavated, to determine their original function the largest (20, 57 and 99) could have originated as sand/gravel extraction pits. However, pits 44 and 82 impinged upon earlier pits (20 and 99), implying that they were not dug for extraction.

3.3.2 Pit 44 contained the largest quantity of pottery, including large sherds of north-east Wiltshire ware and medieval Oxford ware. The latter type was also present in pit 82. The lack of the ubiquitous Brill/Boarstall ware suggests both these pits date to no later than the early 13th century. Both cut earlier pits (20 and 99) which therefore must date to this phase, or feasibly earlier. However, several small sherds of late medieval Brill/Boarstall Ware were present in pit 20 which on consideration of its stratigraphic position are considered intrusive, perhaps from an unidentified later deposit or a feature not recognised during the difficult site conditions.

Although unexcavated postholes 51 and 55 are not dated, one was cut by pit 53, considered to be early in date. They may have formed part of a fence delimiting the pits to the west, feasibly a property boundary.

3.4 Phase 2 (early 13th–14th century)

The site continued to be utilised for pitting, the degree of which intensified and spread to the western and southern part of the site. A total of up to 18 pits were revealed though none were excavated below a depth of 0.25–0.30m, and those to the south only to 0.08–0.18m. In contrast to those of Phase 1, the pits were somewhat larger or tended to be more rectangular, five of which (18, 27, 109, 115 and 6=32) exceeded 1.8m in size. It is likely that these larger pits served as quarries before being later utilised for the disposal of rubbish. However rectangular pit 18 may have served a different purpose, the regularity of its sides suggesting that it they may have once been lined with timber, though the lack of excavation (below a depth of 0.25m) precludes further interpretation. Most of the pits contained a single homogeneous fill of dark greyish brown clay silt, likely to either represent deliberate backfill or in some cases accumulation of overlying deposits that may have slumped into them. It is therefore possible that some of the pits, especially the larger examples, originated during Phase 1. Twelve of the pits contained Brill/Boarstall ware pottery suggesting a date range of *c* 1200–1600, with the lack of discernible late medieval wares implying that the pits were finally filled during the 13th or 14th centuries. Rectangular pit 18 was notable for containing the bulk of the Brill/Boarstall ware pottery obtained from this phase.

3.5 Phase 3 (15th–mid 16th century)

Sealing the pits within the southern part of the site was an accumulation of garden soils which were probably otherwise truncated to the north by the existing cellar. This may be supported by the lack of late medieval features within this area. Within the south-west room (Room 6) it comprised two deposits of dark grey-brown silt (96 and 108), both 0.10–0.14m thick, separated by a thin dump of pea grit/gravel (104) suggesting an accumulation over a sustained period and/or that the soil had been deliberately imported onto the site. A French jeton dating to the late 14th or early 15th century was recovered from the lower garden soil (108) and a significant quantity of Brill/Boarstall ware pottery and animal bone was recovered from the upper soil (96), suggesting the deposal of rubbish or middening. Within the south-east room (Room 5) these garden soils remained largely unexcavated, though several small sondages (121, 125=126) were excavated through it, two of which produced sherds of late medieval Brill/Boarstall and reduced ware, suggesting that the soil was accumulating into the 15th century and beyond.

3.6 Phase 4 (mid 16th–19th century)

On the north-west corner of the site were the remains of wall footings that clearly predated the construction of the existing building in 1904–10. East-west wall 30 was set at a slight angle to the existing building and was cut by the footings of the west wall of the modern building. It projected eastwards for a length of 3.0m before turning southwards for a length of 2.4m (wall 31), after which point the wall did not survive. It is possible that the southern arm of the building was denoted by unexcavated rubble-filled feature 71, possibly a robber trench. Its northern arm measured 0.80m in width and at least 0.35m deep and was constructed with medium to large rough-hewn limestone blocks bonded by an off-white lime mortar containing coarse sand. A second wall foundation (39) measuring 0.64m in width ran approximately parallel to wall 30

about 0.35m to the south. It was of similar construction to walls 30/31, suggesting it was contemporary, though only its basal level survived. An unexcavated possible linear (28) aligned at right angles to possible robber trench 71 may have robbed an internal wall or installation. No direct dating evidence was recovered from the structure to which the walls belong, though the type of mortar used is of post-medieval character. If linear 28 belonged to the structure, it is notable that it cut the upper fill of pit 27 (possibly a fill of a later feature) which produced a clay tobacco pipe bowl dated to 1610–40.

3.6.1 The only other features assigned to this phase were several circular pits (26, 84, 86 and 88) that were exposed after the removed of the existing basement slab. Each pit was of a similar diameter of between 0.60–0.70m and were 0.22–0.45m in depth. Three of the pits contained similar fills of brick rubble and mortar. The brick (not retained) was of 19th to 20th century type. It is possible that these pits were originally dug for trees and subsequently filled with building rubble, perhaps during the construction of the existing 1906 building. They appeared to have been arranged in a regular manner, and one cut the possible robber trench pertaining the demolished remains of the structure described above. If so they may pertain to the Principal's Garden depicted on King's Plan of St Alban Hall (1848). Alternatively, the pits may have held supported columns for a pre-existing ground floor belonging to the 1906 building.

3.7 Phase 5 (modern)

3.7.1 This phase pertains to the footings, slab and associated deposits relating to the existing building constructed 1905–10.

3.8 Finds summary

3.8.1 The pottery assemblage comprised 220 sherds with a total weight of 2663g and was largely of 13th to 14th century date. A single sherd of residual late Saxon St Neots ware was present together with a small assemblage of late 11th–12th century fabrics. The assemblage included just two post-medieval sherds.

3.8.2 The ceramic building material consisted entirely of roof tile, comprising 22 fragments weighing 1027g. It is predominantly of 13th–14th century date with a few pieces of the 15th–16th century.

3.8.3 The metal objects comprise a late medieval French jeton, a copper alloy strap-end and the shank from an iron nail.

3.8.4 The stonework comprises nine sandstone roofing tile fragments and three architectural pieces including a post-medieval limestone door jamb fragment and a squared block with twisted roll moulding, probably also of post-medieval date.

3.8.5 The animal bone assemblage was small (160 fragments), comprising a typical assemblage of cattle, pig, sheep/goat and domestic fowl.

4 DISCUSSION

4.1.1 No features or deposits that on the available evidence can be assigned to the late Saxon period were identified. A single sherd of St Neots ware occurred residually within a medieval pit and some of the Cotswolds ware may have feasibly originated from earlier pre-Conquest deposits. It is also possible that some of the unexcavated pits may have been of late Saxon origin. 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 burh defence within this area. Indeed the apparent lack of evidence from the site complies with the paucity of archaeological evidence along Merton Street.

4.1.2 The earliest evidence comprises several pits that where dated contained medieval Oxford ware dating no earlier than the late 11th or early 12th century. The pits were initially clustered within the north-eastern part of the site before expanding westwards and southwards during the early 13th to 14th centuries. As such this follows a pattern of pits radiating outwards from buildings that presumably fronted St John's Lane located about 20m to the north. No such evidence for these frontage structures were found, presumably as they were situated much closer to the street. Two early postholes may hint of a structure or fence possibly separating two properties. Hypothetically, this boundary could correspond with that between Hertheved Hall (Salter SE198) and Lomb Hall (Salter SE196-7). The apparent clustering of the pits either side of this boundary may also support this. The lack of excavation renders suggestions for the use of the pits problematic, though probably they served for gravel extraction (for floors, yards and foundations), rubbish disposal, latrines and possibly wells. The content of the pits was unremarkable. The animal bone assemblage was too small to draw conclusions about the medieval inhabitants, both spatially or chronologically, across the medieval phases. Nonetheless, the relative abundance of domestic fowl compared to the three principal domesticates (pig, sheep/goat and cattle) in the two later medieval phases is similar to other contemporary sites such as the nearby 4a Merton Street (Poore *et al*. 2006).

4.1.3 There is no firm evidence that pit digging continued much beyond the 14th century, after which a garden soil developed over at least the southern part of the site that contained late medieval pottery and a jeton dated to the late 14th or early 15th century. This presumably marked a change in the use of the site, and it is tempting to correlate this with this with the documentary evidence that suggests that the western property (Hertheved Hall) was a garden in *c* 1395 and remained so until at least 1497 when it was leased to Merton College by Balliol. Loggan's map confirms that it remained a garden until the late 17th century.

4.1.4 The two undated walls and possible robber trench formed part of a small structure later occupying this garden. This appears to have been an eastwards extension to St Alban Hall, shown on Taylor's map of 1750. A possible robber trench pertaining to this structure cut a deposit that contained a clay tobacco pipe dated to 1610–40. On King's 1848 plan of St Alban Hall/Merton College, the structure is labelled as a 'parlour room'. This structure had been demolished by the time of the OS 1st edition map of 1876.

APPENDIX A CONTEXT INVENTORY

Cxt	Cxt_Type	Fill_Of	Description	Group_No	Pot_date	CP_date	Phase
1	Structure		Concrete floor slab	65			Phase 5
2	Layer		Modern levelling				Phase 5
3	Structure	5	Stone latrine				Phase 5
4	Fill	5	Latrine fill				Phase 5
5	Cut		Latrine cut				Phase 5
6	Cut		Quarry				Phase 2
7	Fill	6	Quarry fill				Phase 2
8	Cut		Foundation cut for current wall				Phase 5
9	Fill	8	Foundation fill				Phase 5
10	Cut		Pit				Phase 4
11	Fill	10	Pit fill		M4		Phase 4
12	Cut		Pit				Phase 2
13	Fill	12	Pit fill		M2		Phase 2
14	Layer		Garden soil?				Phase 2
15	Layer		Garden soil or pit fill				Phase 2
16	Cut		Pit				Phase 2
17	Fill	16	Pit fill		M2		Phase 2
18	Cut		Pit				Phase 2
19	Fill	18	Pit fill		M2		Phase 2
20	Cut		Pit				Phase 1
21	Fill	20	Pit fill		M3		Phase 1
22	Layer		Garden soil				Phase 1
23	Cut		Quarry pit				Phase 2
24	Fill	23	Quarry fill				Phase 2
25	Layer		Natural sands				Phase 0
26	Cut		Posthole				Phase 4
27	Cut		Void (apparently)				Phase 2
28	Cut		Pit				Phase 4
29	Fill	28	Pit fill				Phase 4
30	Structure	61	Limestone wall (19C?)				Phase 4
31	Structure	61	Limestone wall (same as 30)				Phase 4
32	Cut		Quarry pit				Phase 2
33	Fill	32	Quarry pit fill				Phase 2
34	Cut		Quarry pit				Phase 2
35	Fill	34	Quarry pit fill				Phase 2
36	Cut		Quarry pit				Phase 2
37	Fill	36	Quarry pit fill				Phase 2
38	Structure	46	Limestone footings (current as 48)	65			Phase 5
39	Structure		Limestone footings				Phase 4

40	Fill	27	Pit fill		PM1	1610–1640	Phase 4
41	Fill	27	Pit fill		M2		Phase 2
42	Cut		Pit (unexcavated)				Phase 2
43	Fill	42	Pit fill (unexcavated)				Phase 2
44	Cut		Pit				Phase 1
45	Fill	44	Pit fill		M1		Phase 1
46	Cut		Construction cut for wall 65	65			Phase 5
47	Structure	46	Ashlar foundation for wall 66	65			Phase 5
48	Structure	46	Brick footing supporting concrete floor 1 (as 38)	65			Phase 5
49	Cut		Pit				Phase 1
50	Fill	49	Pit fill				Phase 1
51	Cut		Posthole				Phase 1
52	Fill	51	Posthole fill				Phase 1
53	Cut		Pit (unexcavated)				Phase 1
54	Fill	53	Pit fill (unexcavated)				Phase 1
55	Cut		Posthole (unexcavated)				Phase 1
56	Fill	55	Posthole fill (unexcavated)				Phase 1
57	Cut		Pit (unexcavated)				Phase 1
58	Fill	57	Pit fill (unexcavated)				Phase 1
59	Cut		Pit (unexcavated)				Phase 1
60	Fill	59	Pit fill (unexcavated)				Phase 1
61	Cut		Construction cut for wall 80				Phase 4
62	Structure	63	Limestone wall foundation				Phase 4
63	Cut		Construction cut for wall 62				Phase 4
64	Fill	46	Construction cut backfill	65			Phase 5
65	Group		1906 building				Phase 5
66	Structure		Brick wall	65			Phase 5
67	Cut		Construction cut for wall 66				Phase 5
68	Fill	67	Construction cut backfill				Phase 5
69	Cut		Pit (unexcavated)				Phase 1
70	Fill	69	Pit fill (unexcavated)				Phase 1
71	Cut		Pit? (unexcavated)				Phase 4
72	Fill	71	Pit fill? (unexcavated)				Phase 4
73	Cut		Modern pit				Phase 5
74	Fill	73	Modern pit fill				Phase 5
75	Cut		Pit				Phase 2
76	Fill	75	Pit fill		M2		Phase 2
77	Cut		Pit				Phase 2
78	Fill	77	Pit fill		M2		Phase 2
79	Layer		Modern levelling				Phase 5
80	Cut		Construction cut for wall 39				Phase 4
81	Structure	46	Cemented wall foundations	65			Phase 5
82	Cut	83	Pit				Phase 1

83	Fill	82	Pit fill		M1		Phase 1
84	Cut		Modern (?) pit or posthole				Phase 4
85	Fill	84	Modern pit fill				Phase 4
86	Cut		Modern (?) pit or posthole				Phase 4
87	Fill	86	Modern pit fill				Phase 4
88	Cut		Modern (?) pit or posthole				Phase 4
89	Fill	88	Modern pit fill				Phase 4
90	Cut		Pit				Phase 2
91	Fill	90	Pit fill				Phase 2
92	Cut		Pit				Phase 2
93	Fill	92	Pit fill		M2		Phase 2
94	Cut		Pit				Phase 4
95	Fill	94	Pit fill		M3		Phase 4
96	Layer		Garden soil		M2		Phase 3
97	Cut		Pit				Phase 2
98	Fill	97	Pit fill		M2		Phase 2
99	Cut		Pit				Phase 1
100	Fill	99	Pit fill				Phase 1
101	Fill	99	Pit fill				Phase 1
102	Cut		Robber cut? (as 46 and 117)				Phase 5
103	Fill	102	Robber cut fill (as 118)				Phase 5
104	Layer		Gravel dump				Phase 3
105	Layer		Natural?				Phase 0
106	Cut		Pit				Phase 2
107	Fill	106	Pit fill		M2		Phase 2
108	Layer		Garden soil?				Phase 3
109	Cut		Pit				Phase 2
110	Fill	109	Pit fill		M2		Phase 2
111	Cut		Pit				Phase 1
112	Fill	111	Pit fill				Phase 1
113	Cut		Pit				Phase 2
114	Fill	113	Pit fill		M2		Phase 2
115	Cut		Pit				Phase 2
116	Fill	115	Pit fill		M2		Phase 2
117	Cut		Modern pit (as 102)				Phase 5
118	Fill	117	Modern pit fill (as 103)				Phase 5
119	Cut		Pit				Phase 2
120	Fill	119	Pit fill				Phase 2
121	Layer		Garden soil?		M4		Phase 3
122	Layer		Rubble dump (modern)				Phase 5
123	Fill	124	Modern fill				Phase 5
124	Cut		Modern cut				Phase 5
125	Layer		Garden soil? (same as 121?)		M2		Phase 3
126	Layer		Garden soil? (same as 121?)		M3		Phase 3

APPENDIX B FINDS REPORTS

B.1 Pottery

By Paul Blinkhorn

The pottery assemblage comprised 220 sherds with a total weight of 2663g (Table 4). The estimated vessel equivalent (EVE), by summation of surviving rim sherd circumference was 1.03. It was mostly of 13th–14th century date. The following fabrics were noted:

Table 1: Late Saxon and medieval pottery

Fabric	Fabric Name	Date Range (AD)	Sherds	Weight (g)
OXAC	Cotswold-type Ware	975–1350	14	204
OXAM	Brill/Boarstall Ware	1200–1600	130	1660
OXAW	Early Brill Coarseware	1180–1250	2	6
OXBF	North-East Wiltshire Ware	1050–1400	9	119
OXBX	Late Medieval Brill/Boarstall Ware	15th–early 17thC	8	85
OXR	St Neots Ware	850–1200	1	1
OXY	Medieval Oxford Ware	1075–1350	51	450
F365 LMR	Late Medieval Reduced Ware*	1380–1500 (Blinkhorn 2007)	1	75

* not included in the Oxfordshire or London type-series

Table 2: Post-medieval pottery

Fabric	Fabric Name	Date Range (AD)	Sherds	Weight (g)
FREC	Frechen Stoneware	1550–1750	1	10
PMR	Post-medieval Redware	1550+	1	34
RAER	Raeren Stoneware	1480–1600	2	19

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Tables 1 and 2. The range of fabric types is typical of sites in the city.

Pottery occurrence

The pottery occurrence by number and weight of sherds per ceramic phase is shown in Table 3. This shows that the earliest activity at the site is represented by just two sherds (22g) dated to CP M1, although a very small (1g) sherd of residual St Neots ware (fabric OXR) was noted in a CP M2 context. The possible CP M1 sherds occurred in a pit fill (83), and it is entirely possible that they are later than the bare ceramic date suggests, given that most pits were not fully excavated.

The bulk of the pottery from the site (85.9% by both number and weight) comes from features dated to CP M2. Most of the pottery (119 sherds, 1560g) is OXAM, along with smaller quantities of OXY (46 sherds, 412g), OXAC (13 sherds, 201g), OXBF (8 sherds, 107g), OXAW (2 sherds, 6g), and the residual sherd of OXR. This is very typical of 13th–14th century

assemblages in Oxford. Just nine rim sherds were noted, six of which were from jars (EVE = 0.46) and the rest from jugs (EVE = 0.37). A base of an OXAM bottle was also present. This again fairly typical of the period in the city.

Given the high proportion of OXAM in the CP M2 groups, there seems no reason to suppose that there was any sort of significant break in activity during that time, although pottery deposition did drop off quite significantly in CP M3 and CP M4. All the pottery from those phases came from garden soils or tree-holes, and most of the sherds are relatively small and appear to be the product of secondary deposition, other than a fairly large rim sherd from an LMR bowl from context (95). The only other rim sherd present was that of a jar in OXBX from CP M3 context (126), although a fragment of a handle of an OXAM skillet or dripping dish, both typical late medieval vessel forms, was noted in CP M4 context (11).

The CP M3 material comprised a single sherd each of OXAM (27g), OXBX (11g) and LMR (75g), along with a residual sherd of OXAC (3g) and three of OXY (16g). The CP M4 material was made up of seven sherds (74g) of OXBX and two sherds of Raeren Stoneware (19g), with the rest being residual fragments of OXAM (73g) and another (12g) of OXBF.

The only post-medieval material present came from a single context (40), and consisted of single sherds of FREC and PMR, which is again very typical of the period in the city.

Table 3: Pottery occurrence by Ceramic Phase (CP)

CP	No. Sherds	Weight (g)	Mean Sherd Weight (g)
LSAX	0	0	0
SN	0	0	0
M1	2	22	11.0
M2	189	2287	12.1
M3	7	132	18.9
M4	20	178	8.9
PM1	2	44	22.0
PM2	0	0	0
PM3	0	0	0
PM4	0	0	0
MOD	0	0	0
Total	220	2663	

Table 4: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

	OXR		OXAC		OXBF		OXY		OXAW		OXAM		OXBX		LMR		RAER		PMR		FREC		
Ctxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
11											2	18	4	46			1	11					M4
13											4	23											M2
17											1	14											M2
19					1	23					34	764											M2
21											5	45											M2
40																			1	34	1	10	PM1
41							1	13			4	71											M2
45					3	151	2	13															M2
76							2	11			1	5											M2
78											1	10											M2
83							2	22															M1
93											7	124											M2
95			1	3			3	16			1	27			1	75							M3
96			1	13	1	7	11	62	1	2	28	235											M2
98											3	49											M2
107	1	1	4	15	5	63	19	181			19	95											M2
110			5	22	1	14	7	79			9	76											M2
114							3	37	1	4	3	19											M2
116							1	16			1	10											M2
121					1	12					8	55	3	28			1	8					M4
125											2	20											M2
126													1	11									M3
Total	1	1	11	53	12	270	51	450	2	6	133	1660	8	85	1	75	2	19	1	34	1	10	

B.2 Clay tobacco pipe

By David A Higgins

The excavations produced just two fragments of pipe, comprising one piece of bowl and one joining piece of stem, which were found together in context 40, a pit fill. These come from a high-quality pipe, which not only reflects the elevated social status of the college occupants but also sheds light on early 17th century trading connections across the country. The pipe has a rather squat, dumpy form but is very well made and has been neatly finished, the rim having been fully milled just below the lip and a good quality burnish applied all over its surface (Fig. 3.1). The heel has been stamped with a star mark made up of a central dot with eight radiating arms, which are alternately straight and curved. This distinctive mark has previously been recorded from Jesus College, Oxford (Bashford and Ford 2014, 228), where it occurs on another good quality burnished pipe, but one that is clearly from a different mould, since it is much larger overall and with a different bowl profile (Fig. 3.2).

The earliest pipemakers often used symbol marks, which makes them hard to identify or pin down to an exact manufactory. In this instance, however, a number of other examples are known from London, which suggests that this was their production place. Atkinson (1965, fig. 48) illustrates an example from the Thames foreshore with a similar bowl form to the Merton College find and with what is probably the same mark. Another example from the foreshore, formerly in the Le Cheminant Collection, has been recorded by the author and others have been excavated at 8–10 Crosswall (XWL 79 5169 <317>) and 118 Minories (MIO 86 1002 <121>), both of which are located just to the north of the Tower of London. There are also two examples from Queenhithe in the City of London (Elkins Collection in the National Pipe Archive, University of Liverpool) and there is also an unprovenanced example in the Grosvenor Museum, Chester (but probably found there; Rutter and Davey 1980, fig. 30.6), which also has a finely burnished surface. Finally, there is an example from the old fort excavations at Jamestown, Virginia (JR 1734 B). This latter example is particularly important for two reasons. First, the Jamestown settlement was largely financed by London investors and stocked with goods from the capital and, second, the pipe was found on the site of the early fort where many of the deposits date from *c* 1607-10. The first ships set out from London in 1606 and so the pipe could date from as early as that. The Jamestown evidence for the date of the mark together with the bowl form of the Merton College example suggest a range of *c* 1605-25 for the new Oxford find.

Although the name of the 'star' maker is not known, it is worth noting that this maker clearly operated on a considerable scale, as evidenced by the number of recorded examples and the fact that several different bowl forms are represented, some of which could date from as late as the middle of the seventeenth century. Given that several different moulds were being used and it appears that the workshop operated over a period of time, it is likely that there would have been several stamps for marking the pipes too. The Elkins collection includes a number of different versions of star marks from London and excavations at Tong Castle in Shropshire have produced a good quality early bowl with a similar star mark on the heel that could possibly have come from the same workshop (Fig. 3.3). Quite apart from the Tong example, the distribution of the other identically marked pipes across England and to the New World shows that this workshop was able to market its goods over very considerable distances at an early date. They also appear to have specialised in making high–quality products, as evidenced by the finish of the pipes and the higher than average social status of the sites on which they

have been found. The Merton College example therefore provides an important piece of evidence with regard to the understanding the broader patterns of trade and social status within early 17th century society in general and, in particular, in relation to the emergent pipemaking industry.

B.3 Ceramic building material

By Cynthia Poole

Introduction and methodology

A modest assemblage of ceramic building material consisting entirely of roof tile comprised 22 fragments weighing 1027g recovered through hand excavation from Phase 2 pit fills and a garden soil layer of Phase 3. The roof tile dates predominantly to the 13th–14th centuries together with a few pieces of slightly later 15th–16th century date. Though the tile is generally fairly fresh and unabraded, it is fragmented with a mean fragment weight of 47g and the only complete dimension surviving is thickness. The forms and fabrics are quantified in Table 5.

The assemblage has been fully recorded on an Excel spreadsheet 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.

Roof tile

Flat roof tile dominated the assemblage, but few pieces could be assigned to a distinct type. Only one fragment could be designated as a peg tile: this was made in red sandy fabric IIIB, measured 14–17mm thick and had a circular peg hole 17mm diameter tapering to 12mm at the base, which was encircled by a thickened halo of clay *c* 30mm in diameter. A quantity was identified as ridge or possible ridge tile based on the presence of glaze, profile or form or treatment of the edges or underside, but none had evidence of the ridge apex and no crests were found. Glaze was green, dark green or olive green and generally patchy discontinuous or splashes. A couple had knife trimming along the underside of the edge, which is frequently a feature of ridge tile. Most occurred in fabric VIIBB, and one each in VIIBB/IIIB, IIIA and IVA/B. The two latter fabrics are of 15th–16th century date, whilst the former were broadly of 13th–14th century date. None of the early ridge tile in Oolitic limestone tempered fabric IB was present. It is possible some of the glazed pieces derived from the lower half of peg tiles.

Brick

A small quantity of late 19th–20th century brick was found, mostly in modern fill layer 123, but a piece in pit 18 must be intrusive or contamination. These were machine made in hard sandy fabrics. The most distinctive was a fine pale yellow brick, probably intended to imitate stone and with a shallow frog on both bedding faces.

Table 5: Quantification of ceramic building material forms and fabrics

Form	Fabric	C	D	IIIA	IIIB	IVA/B	VIIB	VIIBB	VIIBB/IIIB	Y	Total
Brick	Nos	1	1							2	4
	Wt (g)	8	27							144	179
Roof: flat/peg	Nos				2		3	2			7
	Wt (g)				113		71	48			232
Roof: ridge/glazed	Nos			2		1		7	1		11
	Wt (g)			83		63		438	32		616
Total	Nos	**1**	**1**	**2**	**2**	**1**	**3**	**9**	**1**	**2**	**22**
	Wt (g)	**8**	**27**	**83**	**113**	**63**	**71**	**486**	**32**	**144**	**1027**

B.4 Metalwork

By Leigh Allen and Ian Scott

Three metal objects were recovered. They comprise a French jeton reported on by Ian Scott (see below), a copper alloy strap-end and the shank from an iron nail. The jeton and the nail shank were recovered from Phase 3 garden soils, contexts 108 and 96 respectively, and the strap-end came from context 64, construction cut backfill for wall 65. The composite strap-end (SF 2) is tongue-shaped with a pointed end and a single rivet at the top to secure it to the strap. It has a sheet spacer sandwiched between the front and back plates that occupies the whole width of the strap end but not the whole length. This form of strap-end dates to the 14th century and is relatively short lived (Egan and Pritchard 1991, 146–8, fig. 96).

French jeton

Late 14th or early 15th century. *Obverse*: Shield of three lis with cross at top; shield with crown above, and flanked by annulets between pellets. Legend: + AVE MARIA o GRACIA PL . *Reverse*: Triple stranded straight cross feuilly within four-arched tressure with + A V S in spandrels. D: 24.5mm. OXMMU 16, Context 108, SF 1.

B.5 Worked stone

By Ruth Shaffrey

Nine pieces of stone are likely or certain to be fragments of stone roofing. Two of these retain drilled circular perforations for the nails (fill 69 of pit 68; gravel surface 28) and one of these (69) appears to be from a small stone only 104mm wide. The remainder are non-diagnostic flat pieces of typical roofing material. All the roofing fragments are made of beige sandstone, (a Cotswold stone type such as Stonesfield Slate) and fine-grained oolitic limestone.

B.6 Architectural stone

By Julian Munby

Context	Lithology	Description	Dimensions
122	Limestone	Post-medieval door jamb with ogee and ovolo mouldings	22 x 25 x 21cm tall
122	Oolitic limestone	Whitewashed. ?Post-medieval (or Romanesque) squared block with twisted roll moulding on outer corner	14 x 16 x 26cm tall
122	Limestone	Ridge stone with roll along top	(7 cm diam); 14 deep, 25 cm long

APPENDIX C ENVIRONMENTAL REPORTS

C.1 Animal bone

By Lee G Broderick

Methods

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.

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.

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).

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).

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

A total of 160 animal bones were recovered from the site, mostly from medieval contexts (Table 6). All of the specimens were recovered by hand. The bones were generally in moderate condition (Lyman 1996, stage 3) although this was very variable. Given the small sample size in each phase, NISP figures are used throughout as providing the most likely reflection of living animal proportions on the site.

Phase 1

Pig (*Sus scrofa domestica*) and cf. caprine (sheep – *Ovis aries* and goat – *Capra hircus*) specimens were identified from pits on the site in this phase.

Phase 2

The assemblage from this phase also came from pits. The pits contained specimens of the three principal domesticates (pig, caprine and cattle – *Bos taurus taurus*), including cranial, forelimb and hindlimb elements, and also specimens of domestic fowl (*Gallus gallus*) and

greylag and/or domestic goose (*Anser* sp.). Three of the nine domestic fowl specimens came from juvenile individuals, suggesting summer to autumn use, and at least two adult birds were present. Despite being the phase which produced the most specimens the assemblage is still small and it would be unwise to read too much into it. Broadly speaking, the relative abundance of species is consistent with observations made elsewhere in the city at this time, including those nearby at 4a Merton Street (Worley and Evans 2006). A medium mammal vertebra has been chopped axially through the centre; 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 and this would fit that observation. A cattle metatarsal had been gnawed by rodents, perhaps rats, suggesting both that they were present on the site at this time and that that specimen, at least, had lain exposed for some time before being buried in the pit.

Phase 3

The material recovered from Phase 3 came from a garden soil and contained the same range of species as Phase 2, with the addition of a domestic duck or mallard (*Anas platyrhynchos*) coracoid. The material was generally in poorer condition than the rest of the assemblage; two of the specimens (a cattle calcaneum and a caprine humerus) also showed signs of having been gnawed by canids. A medium mammal vertebra recovered showed the same pattern of butchery described in the previous phases suggesting consistency in butchery practice. Other butchery marks recorded in this phase suggested additional processing – a chop through the medial side of the distal end of a caprine radius suggests heavy processing by a butcher and a domestic fowl ulna with multiple cutmarks may be evidence of meat being sold off the bone – cooked meat falling away far more easily.

Phase 4

The specimens from Phase 4 were from a series of small pits and consisted of cattle, pigs and caprines as well as medium and large mammals.

Phase 5

The total material recovered from Phase 5 consisted of one large mammal fragment.

Table 6: 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 2	Phase 3	Phase 4	Phase 5
domestic cattle		**7**	**3**	**2**	
caprine		**10**	**6**	**6**	
caprine?	**2**				
pig	**1**	3	**3**	**1**	
small mammal		4	1		
medium mammal		16	8	6	
large mammal	5	26	14	3	1
Total Mammal	**8**	**66**	**35**	**18**	**1**
greylag/domestic goose		**2**	**1**		
domestic duck/mallard			**1**		
domestic fowl		**9**	1		
domestic fowl?			**1**		
Total Bird	0	11	4	0	0
Total NISP	8	77	39	18	1
Total NSP	8	87	46	18	1

Table 7: Number of specimens recorded with taphonomic, ageing or biometric data

	Butchery marks	Pathologies	Gnawed	Ageing data	Biometric data
domestic cattle			2	5	1
caprine	7	1	1	12	5
caprine?	2	2			
pig				7	
medium mammal	2	2			
large mammal				1	
Total Mammal	11	5	3	25	6
greylag/domestic goose				1	1
domestic duck/mallard				1	1
domestic fowl	1			8	5
Total Bird	1	0	0	10	7
Total	12	5	3	35	13

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APPENDIX E SITE SUMMARY DETAILS

Site name:	St Alban's Quad, Merton College, Oxford
Site code:	OXMMU16
Grid Reference	NGR SP 5179 0610
Type:	Watching brief
Date and duration:	29th July to 30th August 2016
Summary of Results:	Between the 29th July and 30th August 2016, Oxford Archaeology undertook an archaeological watching brief during construction work within the east wing of St Alban's Quad at Merton College, Oxford. The archaeological work was commissioned by Ridge and Partners LLP on behalf of Merton College for the conversion of existing workshops into a new music room. A number of rubbish or quarry pits were revealed and subjected to limited excavation to formation level. These were dated to between the 12th-14th centuries, after which a garden spoil developed over the site which contained a late 14th or early 15th century French jetton together with late medieval pottery. Post-medieval evidence included wall fragments that probably formed part of a building within the late 17th–mid-19th century Principal's Garden.
Area of Site	80 sq m
Location of archive:	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 number: OXCMS:2016.134.

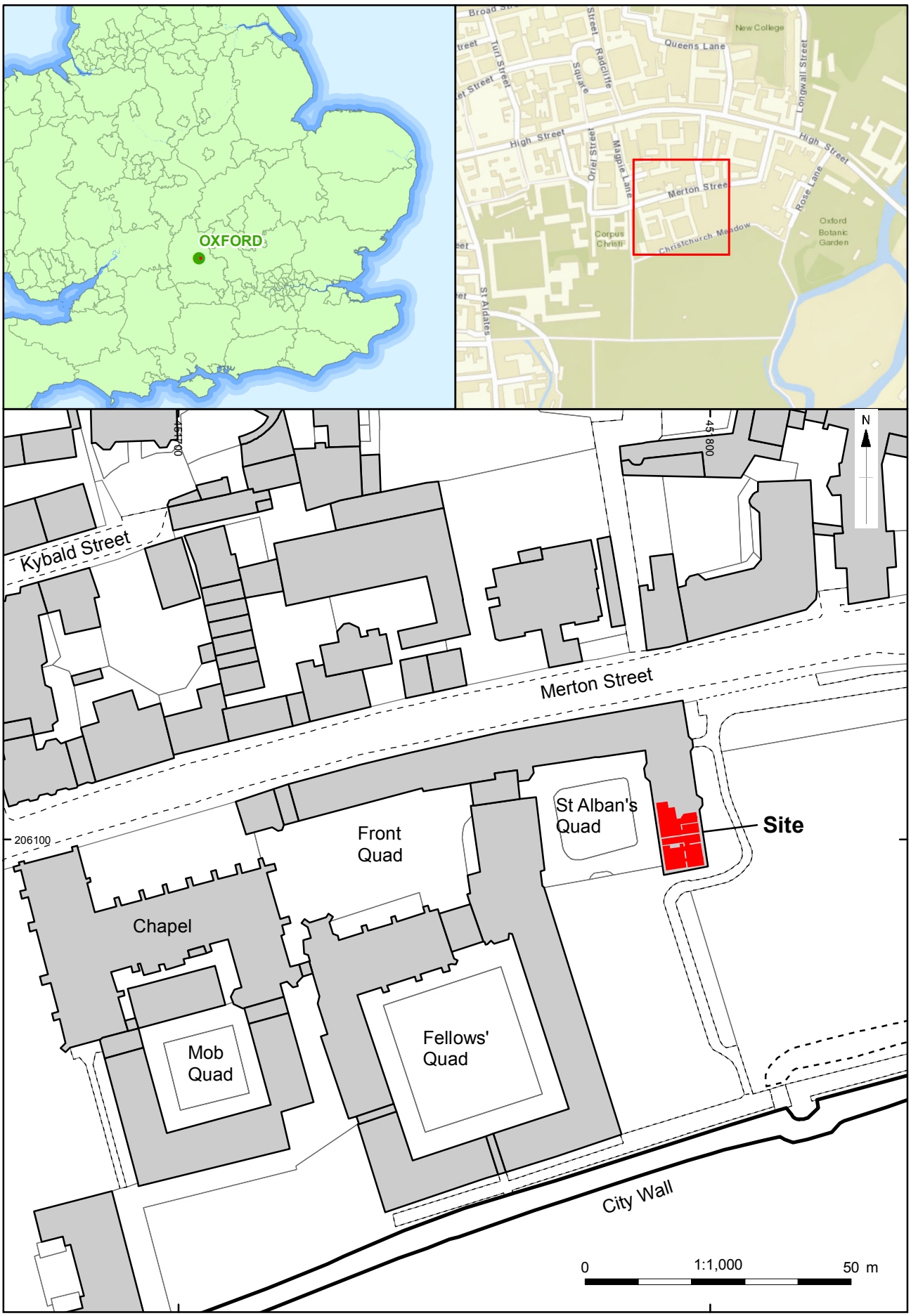

Figure 1: Site location

X:\o\Oxford Merton College St Albans Quad_Postex_Archive Report\Figs\GIS\Fig 2_trench location.mxd*steve.teague*01/05/2018

Figure 2. Trench location

Figure 3. Trench location

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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