

The JESSOP Consultancy

GROVE GARDEN ELECTRICAL SUPPLY

Merton College, Oxford



Watching Brief Report

April 2013

Document No: TJC2013.17

SUMMARY OF PROJECT DETAILS

OASIS ID:	Thejesso1-142041
TJC Project Code:	MEC12
Project Type(s):	Archaeological Watching Brief
National Grid Reference:	SP 51676 06051 (centered)
Area:	0.1ha
County:	Oxfordshire
Parish:	Oxford
Local Authority:	Oxford City Council
Planning Reference:	12/02160/FUL
Designation Status(s):	Grade I Listed Buildings – No: 1369662 (MOB Quad); No: 1199994 (Chapel) Grade II Listed Building – No: 1046684 (Grove Building) Grade II Registered Historic Park and Garden – No: 1001099 Conservation Area – Central Oxford
HER Record:	n/a
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Reviewed by:	Karen E Walker MfA, BA, MPhil, FSA
Date:	April 2013

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NON-TECHNICAL SUMMARY

The JESSOP Consultancy (TJC) has undertaken an archaeological watching brief on the excavation of a new electricity cable supply (planning reference 12/02160/FUL) within the garden alongside Merton Grove in the western part of Merton College, Oxford, Oxfordshire, centered upon NGR SP 51676 06051. The trench lay within the curtilage of Merton College chapel and Mob Quadrangle, both Grade I Listed buildings, and the Grove Building, which is Grade II Listed. The site is within the boundary of the Central Oxford Conservation Area.

Merton was the first fully self-governing college in Oxford, founded following the purchase of a plot of land, by Walter de Merton, on the 11th January 1266. Subsequent rebuilding of the parish church of St John resulted in a new church being built in stages between 1290 and 1335. The area enclosed by the library constitutes the earliest of the Oxford quadrangles – Mob Quad.

The archaeological observations have confirmed that the area comprising Grove Garden, along the west edge of the College, has been artificially raised to create the existing ground surface. Historic illustrations from 1675 suggest that this area has been relatively undeveloped during the life of the College, having been left as open ground.

Artefactual material associated with late medieval activity on the site has been identified, including an apparent midden deposit comprising a large quantity of oyster shells, and Brill/Boarstall Ware pottery from the late 14th to 16th century. Constructional materials associated with high-status medieval buildings in the form of glazed ridge and floor tiles were also recovered. Whilst this is all unstratified, it does indicate that there is potential for undisturbed archaeological deposits to survive.

Along the west edge of Merton chapel, a stone foundation, or footing, was exposed in the northern section of the Trench 1. Whilst the purpose of this feature is unclear, it is possible that it was associated with the various stages of construction of the tower and transepts of the chapel and is within the plot of land originally intended for the nave.

Evidence for the construction and subsequent adaptation of the Grove Building during the 19th and early 20th centuries was recorded, along with land-drains and extensive cabling. These interventions have had a negative impact upon sub-surface archaeological deposits, however the watching brief can confirm that this is relatively localized in occurrence.

The results of this programme of archaeological monitoring will be submitted to South Midlands Archaeology and a summary published in an appropriate journal, such as Medieval Archaeology, or Oxoniensia. Artefactual material is to be deposited with the Oxfordshire Museum Service.

1 INTRODUCTION

BACKGROUND

The JESSOP Consultancy (TJC) has undertaken an archaeological watching brief during the excavation of a new cable trench for an upgraded electricity supply (planning reference 12/02160/FUL) between the Grove Building and Merton College chapel (**Figure 1**). The trench lay within the curtilage of the Grade I Listed Merton College chapel and Mob Quad, and the Grade II Listed Grove Building (**Figure 2**). The site is within the Central Oxford Conservation Area.

AIMS OF THE FIELDWORK

The aims of the archaeological watching brief have been to document and identify evidence relating to previous human activity within the western part of Merton College, and to place it within its surrounding archaeological context. This report has been prepared as a formal record of the archaeological monitoring and may aid the decision-making process in regards to the future management of this area of Merton College.

ARCHIVE

The site notes, drawings and record photographs produced during this programme of archaeological work have been prepared for deposition with the Oxfordshire Museum Service (including a microfiche), and a site specific record has been registered with the OASIS (Online AccesS to the Index of archaeological investigations) database; project ID: **thejesso1-142041**.

MONITORING

David Radford (Oxford City Council Development Control Archaeologist) has monitored this project.

DISSEMINATION

Digital and bound copies of this report will be distributed to the Oxford City Council Urban Archaeological database (Oxford UAD) for addition to their archives and inclusion with the Oxford Historic Environment Record. Further bound copies will be provided to Merton College and English Heritage as required. A digital copy of this report will be uploaded to OASIS.

ACKNOWLEDGEMENTS

This report has been researched and prepared by Oliver Jessop MIfA, with editing undertaken by Karen E Walker MIfA, FSA. Mike Jeffs (Merton College Surveyor) has provided background information, as has David Radford (Oxford City Council Development Control Archaeologist).

2 SITE LOCATION AND GEOLOGY

LOCATION OF SITE AND TRENCH LAYOUT

Merton College is located within the central area of Oxford University, to the south of the High Street (**Figure 1**). In the western part of Merton Street, the college buildings are located on either side of the road, with the principal buildings and quadrangles to the south.

The watching brief was undertaken in the western part of the college (**Figure 2**), within a small garden (referred to in this report as Merton Grove Garden) adjacent to the Grove Walk footpath that connects Merton Street with Merton Playing Fields and Christchurch Meadow. The excavated trench ran parallel to the west walls of the college chapel, Library and Mob Quad and around the north and west sides of the Grove Building.

This area is centered on NGR SP 51676 06051, and the ground level gently falls from north to south from a height of 59.5m OD to 58.8m OD.

The trench measured c.81m in length and was excavated parallel to the existing walls of the extant buildings (**Figure 2**). It was 0.3m in width, and 0.44m to 0.46m in depth. The trench followed the route of a previously laid electrical cable and was within an area of partially disturbed ground. The trench formed five distinct straight components, and to aid with their location of individual archaeological features, they were referenced as Trenches 1 to 5 (**Appendices 3.1 to 3.8**).

GEOLOGY

The underlying bedrock geology is the Oxford Clay Formation and West Walton Formation (Undifferentiated) – Mudstone. The overlying superficial deposits comprise the Summertown-Radley Sand and Gravel Member - Sand and Gravel.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

HISTORICAL SUMMARY – THE DEVELOPMENT OF MERTON COLLEGE

(after Salter and Lobel (eds.) 1954; Beckley and Radford 2011).

The beginning of the college was a plot of land, bought by Walter de Merton, on the 11th January 1266, from the Abbot of Reading. In 1267, this holding was converted into something like a square by the purchase of two tenements on the east side, the one known as Herprut's house, belonging to the priory of St. Frideswide, the other, known as Halegod's house, belonging to Jacob the Jew, son of Moses the Jew. In the year following a third tenement was purchased: the house of Robert Flixthorpe. By 1282 the first Warden's House is believed to have been constructed. On the west side of the college, it acquired in 1317 an academic hall called Goter Hall, the name no doubt being derived from the large stone drain which runs south to the city wall and which was uncovered when the Butterfield buildings (Grove Building) were constructed.

Work upon the choir of a new church began in the summer of 1290 and was completed by 1294. The old church of St John was still standing during this building work, but was eventually incorporated within the north wing of Mob Quadrangle. Between 1330-35 work was completed on the crossing, including the two now blocked arches either side of the great west window. The window dates to the 15th century, although like the blocked arches, it was intended to be an opening leading to a nave, which was never built to the west under what is now Grove Garden. The south transept was built in c.1367, and the north transept is later, c.1419–25.

The chapel was never completed; the site originally intended for the nave (now occupied by Grove Garden) was leased in 1517 to Bishop Foxe, the founder of neighbouring Corpus Christi College (see **Figures 4, 5**). By the 17th century the chapel was in need of refurbishment; the south transept roof collapsed in 1655, and Christopher Wren was employed in 1671 to re-model the interior. The medieval bells were also recast. William Butterfield and Sir Gilbert Scott contributed to further restoration in the 19th century.

The area enclosed by the library constitutes the earliest of the Oxford quadrangles – Mob Quad – although it represents a piecemeal development and was never a conscious architectural design. It was built in three phases: the Treasury built c.1288-91, the north and east ranges and the Sacristy of c.1304-11, and the Library on the south and west sides, built in 1373-8. Since the 17th century, three new quadrangles have been added to the college, while in the south-west corner of the college, where once stood the Grove. The 'Grove Building' was erected in 1864 to a design by William Butterfield. The building was subsequently remodeled in 1930.

PREVIOUS ARCHAEOLOGICAL SURVEY, RESEARCH AND INTERVENTIONS

The earliest known archaeological excavations at Merton College took place in the north-east corner of Mob Quad in 1922, and were reported upon a few years later by Jope (1943/44, 102-106). This work identified 14th-century pottery and a small hone stone made from shist.

Further investigations in 1970, were embarked upon by the Oxford Archaeological Excavation Committee under the direction of T.G. Hassall. They undertook an excavation at the south end of the gardens, beyond the Grove Building, against the remains of the city wall. The aim was to explore the late Saxon defences of Oxford, however the excavation confirmed that the existing wall was built in the early 13th century on an alluvial deposit (Hassall 1971, 34-48) and a Saxon date could not be confirmed.

Perhaps the most significant programme of archaeological investigations within close proximity of the Grove Garden and western part of Merton College, was at No.4A Merton Street in 2000 and 2002 by Oxford Archaeology (Poore *et al.* 2006). This programme of work in advance of redevelopment, identified evidence for 11th-century activity and that the frontage building was constructed c.1200. Successive re-buildings at the rear of this property between the 13th-16th centuries are interpreted as being associated with domestic activity, demonstrated by artefactual evidence recovered from numerous refuse pits scattered throughout the site.

Recent archaeological desk-based research (Preston 2008), and a subsequent archaeological evaluation and watching brief (Lewis 2009), has been undertaken by Thames valley Archaeological Services in the South Lodge Courtyard at Merton. This site was c.0.5km away from the historic core of the College Buildings, located on Rose Lane to the north-east. Whilst this is beyond the area associated with this watching brief, the results demonstrated the potential for the discovery of unknown archaeological features, when a series of ditches were observed.

The results of these various archaeological excavations at Merton are incorporated within recent syntheses of the development of Oxford, undertaken by the Oxford Archaeological Unit (Dodd 2003), and more recently by Oxford City Council (Beckley and Radford 2011). These studies have provided a detailed framework to examine the archaeology of the city and, consider those areas where our knowledge is lacking and further investigative work would be beneficial.

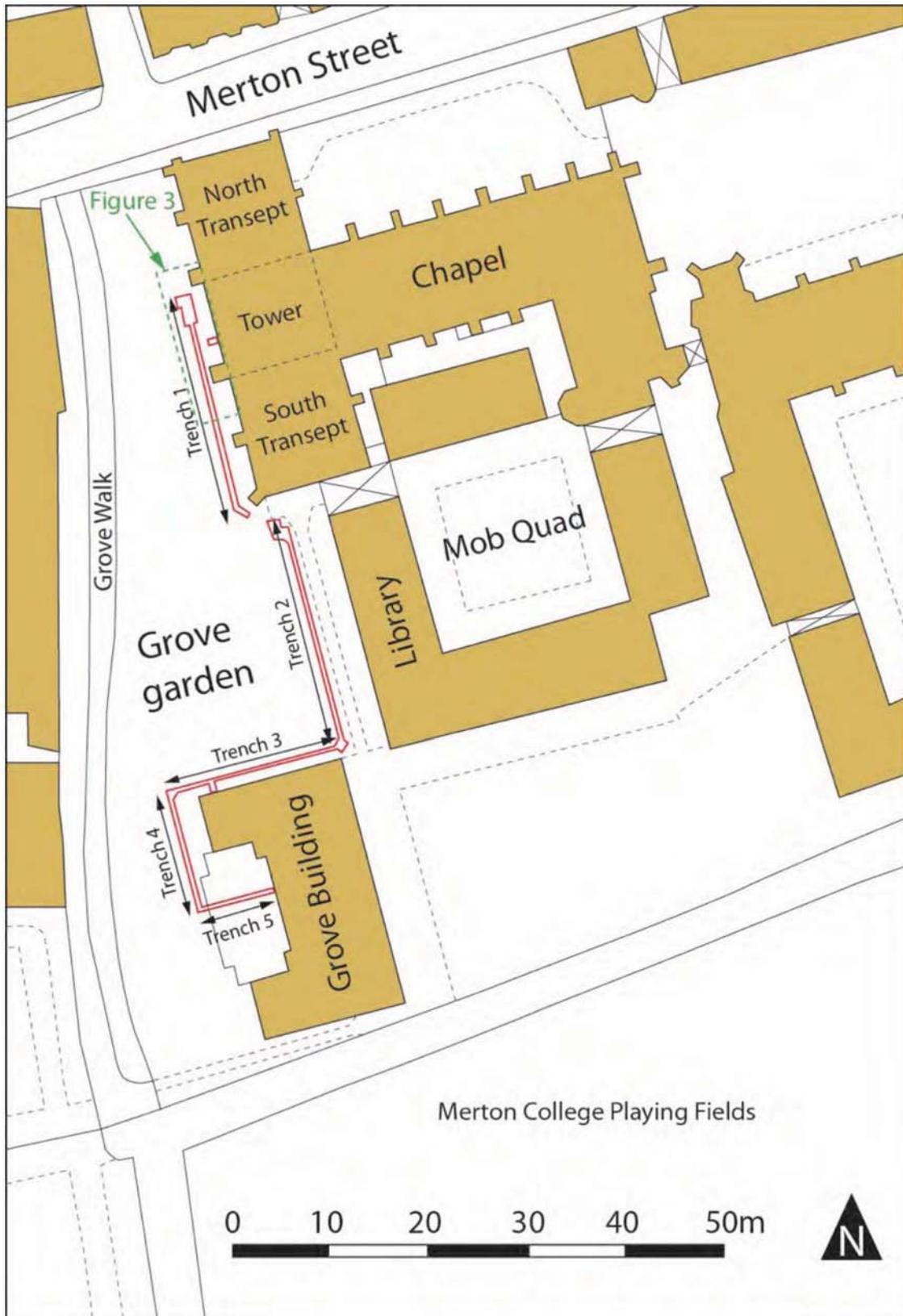


Figure 2: Location plan of Merton Grove Garden with route of electricity cable trench.

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4 METHODOLOGY

METHODOLOGY

This archaeological watching brief has been undertaken in accordance with the guidelines issued by the Institute for Archaeologists (IfA 2008) and industry best practice. Following discussions with David Radford (Oxford City Council archaeologist), it was confirmed that no formal Written Scheme of Investigation was required.

The programme of work has comprised:

- *Consultation with the Merton College in regards to the details of the ground-works;*
- *A review of relevant archive and documentary material;*
- *Archaeological monitoring following excavation of cable trench;*
- *The preparation of site records, plans and photographs;*
- *The preparation of this report and fieldwork archive.*

OUTLINE OF RECORDING STRATEGY

In accordance with the IfA guidelines (2008) a suitably qualified archaeologist undertook archaeological monitoring of the excavated trench and its up-cast spoil. The trench was excavated by hand.

All archaeological deposits were recorded using a pro forma recording system. This written record is hierarchically based and identifies individual archaeological contexts and their relationship to one another. The context description, the location, extent, composition and their stratigraphic relationships are cross-referenced to any associated records. Context numbers used in recording the excavated features will not be repeated.

A measured plan of the route of the trench was prepared at a scale of 1:500, and a detailed plan at 1:50 of the north part of trench was drawn by hand measurement.

Record photography comprised both a b/w 35mm and digital record, using metric ranging poles as appropriate to provide a scale measurement. All shots were catalogued on a pro-forma register sheet.

Artefactual remains were recovered from the up-cast spoil and catalogued in accordance with each of the five trench components.

The fieldwork was undertaken in accordance with current Health and Safety Legislation (HSE 1992).

5 RESULTS

GENERAL SITE CONDITIONS

This section of the report details the archaeological recording and observations that were made during the watching brief on the 14th December 2012. Each individual observation is described, making reference to relevant plans and photographs (see **Figures 2, 3**, and **Appendices 1** and **3**).

The weather conditions during the archaeological fieldwork were heavy rain, which had an adverse impact upon the legibility of the archaeological deposits.

DESCRIPTION OF RESULTS

WATCHING BRIEF OBSERVATIONS - TRENCH 1

Trench 1 was 20.5m in length (**Figure 2**) and parallel to the west wall of the tower and transepts of Merton College chapel (**Appendices 3.1, 3.2**). Beneath the turf and topsoil (**001**) was a layer of sandy clay (**002**), which was c.0.3m thick, and continued the full length of the trench. It contained fragments of stone, pottery, bone, brick, tile shell and slate and is similar in composition to (**023**), (**028**), and (**043**).

The trench follows the route of two earlier electric cables (**003**) and (**004**), and was orientated north-south (**Figure 3**). Beneath the west window in the tower of the chapel, cable (**004**) is diverted beneath the flowerbed (**005**), within a layer of sand (**006**) to enter the building at a depth of c.0.6m. Further cables at the south end of the trench (**020**) and associated manhole covers in the grass are associated with telecommunication service routes.

Three ceramic land-drains (**009**), (**015**), (**018**), within layers of pea gravel (**010**), (**016**), (**019**), were recorded along the length of the trench, all within (**002**). No obvious cuts could be identified for these drains, and they may be contemporary with the formation of (**002**).

In the center of the trench a narrow metal pipe (**007**), set on a series of flat stones (**008**), was exposed on a west-east orientation at a depth of 0.3m; it is most likely a water pipe. One of these stones represents the use of recycled material, as it contains a square sectioned bar fixed within a lead caulked hole. To the north of this was a mortared limestone structure (**014**) of indeterminate size, at a depth of 0.35m. It was overlain by (**002**) and appeared to be within a layer of compacted gravel (**012**) (**013**) exposed at the base of either end of the trench.

Alongside the west window of the tower of the chapel a solid stone footing (**011**), 6.6m in length, was exposed along the base of the trench at a depth of 0.44m (**Appendices 3.9, 3.10**). This feature extended beyond the trench and appeared to have straight edges at either end, set at

right angles to the chapel, one possibly aligning with a blocking in the west wall of the south transept. The upper surface of (011) was relatively level and it is suggested that it represents a possible foundation for a former surface, or floor, or alternatively represents a lower course of a former wall that has been reduced in height to this level. The date of (011) is unclear, but its proximity to the chapel (only 2.6m away), may indicate that it was associated with one of the various stages of construction of the building.

Against the north edge of (011) was a row of stones (017), one containing a cut off section of metal bar set in lead (**Appendix 3.9**). It is unclear, however, whether they represent the secondary re-use of earlier material to form a wall foundation, or an earlier ground level, with a wall that incorporated a metal fence.

WATCHING BRIEF OBSERVATIONS - TRENCH 2

Trench 2 was 22.8m in length (**Figure 2**) and parallel to a footpath that runs alongside the west wall of the Library (**Appendices 3.3, 3.4**) of Mob Quad. The turf and topsoil (001) overlay a re-deposited layer of sandy clay (023), which was c.0.3m thick, and continued the full length of the trench. It contained fragments of stone, pottery, bone, brick, decorated floor tile, glazed roof tile, oyster shell and slate, and is similar in composition to (002), (028), and (043).

At the north end of the trench a large salt-glazed pipe (021) 0.5m in diameter and at a depth of 0.45m was exposed. Associated with this pipe, which had been re-used as a conduit for a cable, were two electric cables (022) orientated west-east. To the south of this area of 20th-century disturbance a deposit of degraded lumps of limestone (024) was recorded at the base of the trench, below (023).

A single ceramic land-drain (025), within a deposit of pea gravel (026) was identified within the north part of the trench. Similar to those in Trench 1, (009), (015), (018), no obvious cut for the insertion of the drain could be identified, which may be contemporary with the formation of (023).

The only feature of archaeological significance was a large dump of oyster shells (027) that appears to be a discrete feature within (023). It contained the base of an internally glazed bowl of late 14th- to 16th-century Brill/Boarstall Ware pottery and is tentatively interpreted as a midden deposit.

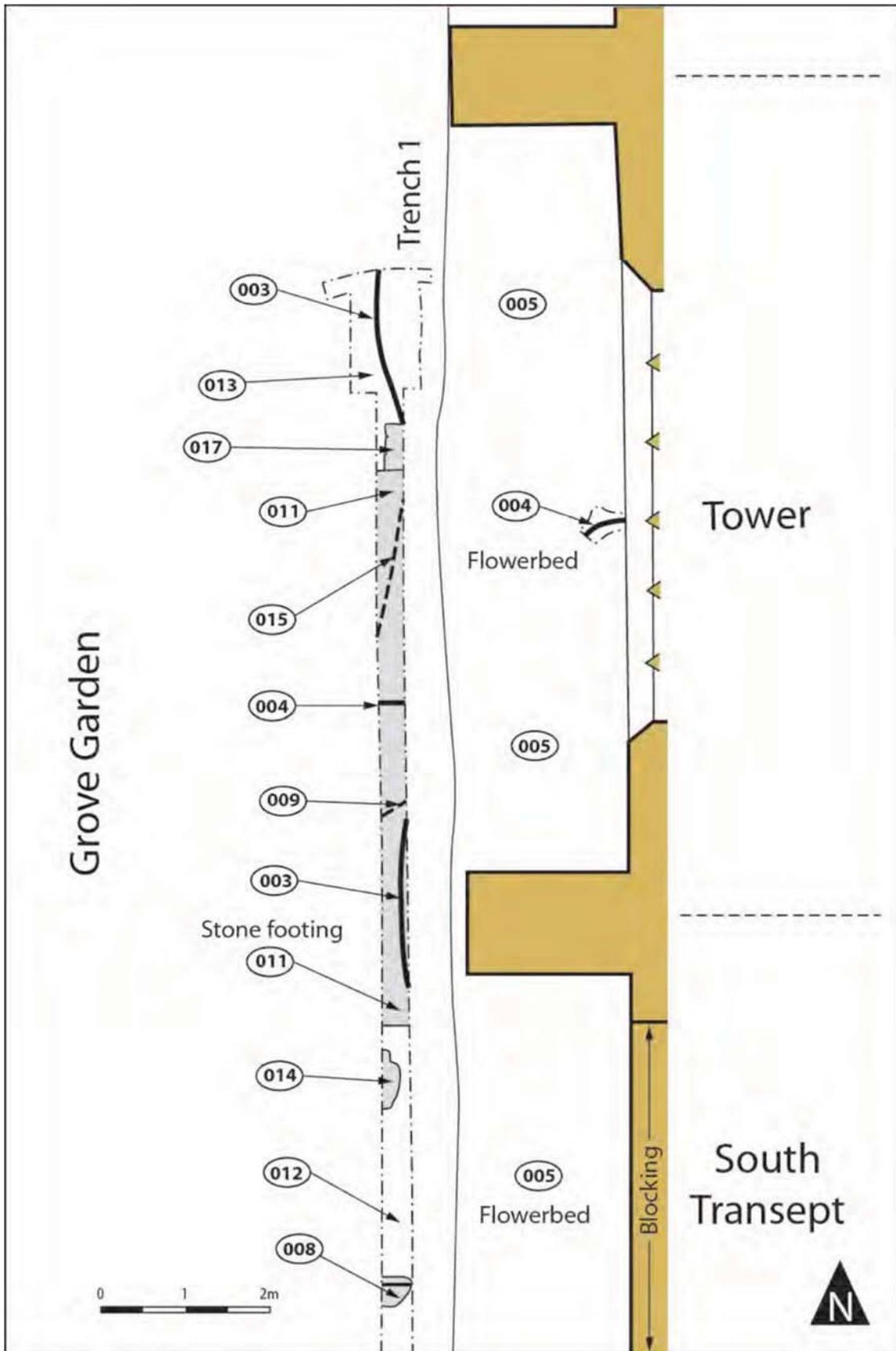


Figure 3: Plan of excavated features at north end of Trench 1.

WATCHING BRIEF OBSERVATIONS - TRENCH 3

Trench 3 was 18m in length (**Figure 2**) and parallel to the north wall of the Grove Building (**Appendices 3.5, 3.6**). The turf and topsoil (**001**) overlay a layer of sandy clay (**028**), which was over c.0.3m thick, and continued the full length of the trench. It contained fragments of stone, brick, slate and occasional sherds of pottery, similar in composition to (**002**), (**023**), and (**043**).

At the east end of the trench the deposits had been disturbed by the insertion of an electric cable (**031**) and modern plastic pipe (**030**). A second plastic pipe (**038**) within a layer of sand (**039**) was recorded in a short additional section of trench in the west of the trench leading to the Grove Building.

Three cast-iron (foul) drainage pipes (**033**), (**035**), (**037**) were recorded within (**028**). They all appeared to be associated with service runs emanating from the Grove Building and two were laid on a deposit of white limestone and brick rubble (**034**), (**036**). The ground was disturbed above each pipe, with no obvious cut, presumably having been located within a former flowerbed.

Two ceramic land-drains were identified, although only one (**041**) was still *in-situ* within the side of the trench in a deposit of pea gravel (**040**) was identified within the north part of the trench.

In the east part of the trench, c.4m from the north-east corner of the Grove Building, a stone-lined chamber, or drain (**032**), was observed in the north side of the trench (**Appendix 3.5**). This was beneath (**001**) and cut into (**028**) and a mottled clay layer (**029**) to the east. The east wall of this feature was damaged and appeared to be of a dry-stone construction. There was a substantial stone slab on the top that covered a shallow void, 0.4m wide and over 0.6m in length. The base of this feature extended beneath the depth of the trench and its full extent, or function could not be established, however it was notably different from all of the other drainage features identified during the archaeological watching brief.

WATCHING BRIEF OBSERVATIONS - TRENCH 4

Trench 4 was 12.2m in length (**Figure 2**) and parallel to the west wall of the Grove Building (**Appendix 3.7**). The turf and topsoil (**001**) overlay a thin patchy layer of crushed limestone (**042**), which overlay a thick layer of mid brown sandy clay, with small fragments of stone. This layer was similar to (**028**), although it contained notably less artefactual material.

Only one feature was noted within the trench, a ceramic land-drain (**044**) at a depth of 0.25m and within a deposit of pea gravel (**045**). As was the case with the field-drains recorded in the other trenches, no evidence was observed for a cut for this feature. However, unlike the others, it was

laid above a dump of white stone chips and mortar (046), similar to the foundation deposits beneath the cast-iron drains (033), (035) along the north side of the Grove Building.

WATCHING BRIEF OBSERVATIONS - TRENCH 5

Trench 5 was 7.7m in length (Figure 2) and connected the south end of Trench 4 with the west wall (053) of the Grove Building (Appendix 3.8). The west elevation of the building has a central section that steps in from the corner to form a C-shaped plan. Within this recess is an area of sandstone paving (048), laid over a thin layer of sand (049), with a concrete foundation along its west edge (056). At the west edge of the paving that aligns with the projecting sections of the building, a vertical cut (047) was recorded, denoting the edge of the foundation deposit for the Grove Building, 7.5m from the façade. The edge of this foundation trench (047), cut into (043), which clearly predated it.

Backfilled within (047) was a deposit of mid-brown clay (052), which contained a horizontal lens of yellow sand and mortar (050). A single metal pipe (051), orientated north-south and c.1.5m west of (053), was recorded within (052). Constructed against the plinth (053) at the foot of the west elevation, was a concrete drainage channel (054) with a brick rubble foundation (055). These layers are interpreted as being associated with the construction of the Grove Building in 1864, and subsequent re-modeling in the 1930s.

6 MATERIAL CULTURE

INTRODUCTION

The archaeological watching brief provided a small assemblage of artefactual material, and apart from the oyster shell and one fragment of pottery, was all recovered from the up-cast spoil following excavation from the trench. Each type of material is described below with a summary interpretation.

POTTERY AND TILE BY PAUL BLINKHORN

POTTERY

The pottery assemblage comprised 11 sherds with a total weight of 329g. It was recorded utilizing the coding system and chronology of the Oxfordshire County type-series (Mellor 1984; 1994), as follows:

- **OXAM: Brill/Boarstall ware, AD1200 – 1600.** 7 sherds, 298g.
- **BBTG: Brill/Boarstall ‘Tudor Green’ wares, 1475-1600.** 1 sherd, 4g.
- **CRM: Creamware, mid-18th to early 19th century.** 1 sherd, 5g.
- **WHEW: Mass-produced white earthenwares, 19th to 20th century.** 2 sherds, 22g.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in **Table 1**. Each date should be regarded as a *terminus post quem*. The range of fabric types is typical of sites in the city. All the sherds of OXAM are in the later medieval (late 14th to 16th century) fabric, and include a full profile of an internally-glazed bowl with a slightly rounded profile, along with sherds from other, similar vessels, and a fragment of a ‘Tudor Green’ drinking jug or cup. Such pottery was a common find during previous excavations at the college, and made up around 75% of the late 14th- to 16th-century pottery assemblage (Blinkhorn 2006, Table 10). That assemblage, which is thought to have originated from the college kitchens, included relatively large quantities of lamps and pottery associated with cookery, vessel types which are absent here.

Trench	Context	OXAM		BBTG		CRM		WHEW	
		No	Wt	No	Wt	No	Wt	No	Wt
Tr1	Central section					1	5	1	12
Tr1	South section	1	8						
Tr2	Central section	3	194						
Tr2	South End	2	62						
Tr3		1	34					1	10
Tr4				1	4				
	Total	7	298	1	4	1	5	2	22

Table 1: Pottery occurrence by number and weight (g) sherds per context by fabric type.

FLOOR TILE

Two fragments of medieval floor tile weighing 260g were noted. The first, from the south end of Trench 2, is in a sandy orange fabric, and has an entirely unglazed upper surface, although spots of glaze are present on the side, suggesting that any decoration had been entirely worn away. The second fragment, from the central section of Trench 2, has white slip decoration in the form of small triangles, under a reddish-brown glaze (**Appendix 2.1**). The thickness (22mm), design and fabric are identical to that of an example from previous excavations at Merton College, tile T14, a Penn/Chiltern 'printed' tile dated 1330-1380 (Cotter 2006, 298).

ROOF TILE

Three fragments of medieval ridge tile with a total weight of 409g occurred in the central section of trench 2, and they are very similar to examples from the 2006 excavations. Two of the fragments (348g) are in a grey sandy fabric with orange surfaces and have patchy, orange green variegated glaze. These probably date to the late 13th to 14th century onwards (*ibid.* 301). One of the fragments has a triangular, knife-cut 'cockscorn' ridge. The third fragment also has a knife-cut 'cockscorn' ridge (**Appendix 2.2**), and is in a pale orange and grey Brill/Boarstall fabric with a copper-speckled green glaze. It is also of late 13th- to 14th-century or later date (*ibid.* 300).

BONE

A total of 18 fragments of bone was recovered from the up-cast spoil following the excavation of the cable trench. All of the material was un-stratified and was recovered from all parts of the trench. The small assemblage weighed 179g, some fragments displayed cut marks from butchery. Although Trench 1 was parallel to Merton chapel, none of the bone was human and it can be suggested that burials were not interred in this part of the College grounds, only on the small plot of land to the north of the nave fronting onto Merton Street where headstones are still extant (**Figure 5**).

SHELL

A large scatter of oyster shells was observed in the up-cast spoil of the central section of Trench 2 (**027**). Associated with the shell was the base fragment of a late 14th- to 16th-century Brill/Boarstall Ware internally-glazed bowl with a slightly rounded profile. A sample comprising of 55 shells of both upper and lower valves was collected. The shells varied in size, although on average measured between 5-7cm in size, and had a combined weight of 626g.

This deposit, whilst disturbed, provides some insight in to the late 14th- to 16th-century consumption patterns within this part of the College, and for the potential for such material to survive in close proximity to the standing buildings. This is especially likely since the excavations at No.4A Merton Street (Poore *et al.* 2006), on the opposite side of the road to the chapel, identified numerous late 14th- to 16th-century rubbish pits containing evidence for a high-status diet including oyster shell, game animals, swan and heron (Poore *et al.* 2006, 321).

CLAY PIPE

Three fragments of clay pipe stem were recovered from the excavation. All were stem fragments of indeterminate date.

1. Tr1 (central section). Stem fragment, white fabric. Dimensions: 3.5cm in length; 9mm diameter; 3mm bore; weight 4g.
2. Tr1 (north end). Stem fragment, white fabric. Dimensions: 3cm in length; 1cm in diameter; 5mm bore; weight 1g.
3. Tr4. Stem fragment from junction with bowl, white fabric. Dimensions: 4.5cm in length; 1cm in diameter; 3mm bore; weight 6g.

DISCUSSION

The range of artefactual material can perhaps be regarded as typical for a late medieval site within an urban centre such as Oxford, however as it is largely derived from surface collection in the up-cast spoil, it is an important indicator that the likelihood of undisturbed archaeological deposits within this area of Merton College is high.

The glazed roofing tiles and decorated floor tile (**Appendices 2.1, 2.2**) are all associated with high-status construction, and, whilst they may have been imported onto the site, they confirm the existence of substantial buildings within the vicinity as detailed in the documentary accounts. The fragments of glazed tile were recovered from Trench 3, which runs parallel to the Library forming the west range of Mob Quad dating to 1373-8 (**Appendix 3.6**) and the use of a decorative roofing material, such as has been identified here, would not be unexpected within the original phase of construction of this building.

The bone, shell and pottery are associated with a thick layer of re-deposited material (**002**), (**023**), (**028**), and (**043**) that extends across substantial parts of the Grove Garden and are all potentially late 14th to 16th century in date. The range of pottery was similar to that recovered during previous excavations at the college (Blinkhorn 2006, Table 10), however the comparatively small size of this assemblage is such that only general observations can be made.

The pottery will be offered to the Oxfordshire Museum Service for inclusion within their archives, however the remaining material has negligible archaeological significance and will be discarded.



Figure 4: Extract from 1675 Logan's Ichnography; approx. route of cable trenches in green.



Figure 5: 1675 engraving of Merton College; note approx. route of cable trenches.

7 DISCUSSION AND INTERPRETATION

SUMMARY OF RESULTS AND CONCLUSIONS

It should be noted that the archaeological observations are derived from a very narrow trench, however this programme of monitoring has been able to provide new evidence for the development of the College. It can be suggested that the Grove Garden, comprising the grassed lawn and flowerbeds of the west part of Merton College, has been artificially raised to create the existing ground surface. Historic illustrations (see **Figures 4** and **5**) suggest that this area has been relatively undeveloped during the life of the College, left as open ground.

Artefactual material associated with late medieval activity on the site has been identified, which adds to previous knowledge derived from the excavations at No.4A Merton Street in 2000 and 2002. Of particular relevance in this respect is an apparent midden deposit comprising a large quantity of oyster shells, incorporating late 14th- to 16th-century pottery.

A series of constructional materials associated with high-status medieval buildings in the form of glazed ridge and floor tiles were recovered. Whilst this is all unstratified, it does indicate that there is potential for undisturbed archaeological deposits to survive.

The purpose of the stone foundation, or footing, that was exposed in the northern section of Trench 1 is still unclear. It is possible that it is associated with the various stages of construction of the tower and transepts of the chapel and is within the plot of land originally intended for the nave, but was never realized.

Evidence for the construction and subsequent adaptation of the Grove Building during the 19th and early 20th centuries by the provision of new services and foundation has also been noted.

Land drains and extensive cabling have had a negative impact upon sub-surface archaeological deposits, however the watching brief can confirm that this appears to be relatively localized in occurrence.

RECOMMENDATIONS

Following an initial consultation with David Radford, it is recommended that the small ceramic assemblage is submitted to the Oxfordshire Museums Service along with the fieldwork archive, and that the remaining unstratified artefactual material is discarded. In addition, the results of this watching brief should be reported upon in *South Midlands Archaeology* and a summary submitted to an appropriate archaeological journal such as *Medieval Archaeology*, or *Oxonensia*.

8 REFERENCES CONSULTED AND BIBLIOGRAPHY

PUBLISHED WORKS AND GREY LITERATURE

- Beckley, R. and Radford, D. 2011. *Oxford Archaeological Plan: Resource Assessment 2011 – The medieval period (1205-1540) (Draft)*. Oxford City Council
- Blinkhorn, P. 2006. Pottery. In D. Poore, D. Score, and A. Dodd, Excavations at No. 4A Merton St., Merton College, Oxford: The Evolution of a Medieval stone house and tenement and an early college property. *Oxoniensia* **71**, 258-78
- Cotter, J. 2006. Ceramic Building Materials. In D. Poore, D. Score, and A. Dodd, Excavations at No. 4A Merton St., Merton College, Oxford: The Evolution of a Medieval stone house and tenement and an early college property. *Oxoniensia* **71**, 292-305
- Dodd, A. 2003. *Oxford before the University: the Late Saxon and Norman Archaeology of the Thames Crossing, the Defences and Town*. Thames Valley Monograph, OAU: Oxford
- Hassall, T.G. 1971. Excavations in Merton College, Oxford, 1970. *Oxoniensia* **36**, 34-48
- Institute for Archaeologists (IfA). 2008. *Standard and Guidance for Archaeological Watching Brief*. IfA: Reading
- Jope, E.M. 1943-44. Medieval Pottery from Merton College, Oxford. *Oxoniensia* **8/9**, 102-6
- Martin, G.H. and Highfield, J.R.L. 1997. *A History of Merton College, Oxford*. Oxford University Press: Oxford
- Lewis, J. 2009. South Lodge Courtyard, Merton College, Oxford – an Archaeological Watching Brief. Unpublished report by Thames valley Archaeological Services Ltd
- Mellor, M. 1984. A summary of the key assemblages. A study of pottery, clay pipes, glass and other finds from fourteen pits, dating from the 16th to the 19th century,. In T.G. Hassall *et al.*, Excavations at St Ebbe's. *Oxoniensia* **49**, 181-219
- Mellor, M. 1994. Oxford Pottery: A Synthesis of middle and late Saxon, medieval and early post-medieval pottery in the Oxford Region. *Oxoniensia* **59**, 17-217
- Poore, D., Score, D. and Dodd, A. 2006. Excavations at No. 4A Merton St., Merton College, Oxford: The Evolution of a Medieval stone house and tenement and an early college property. *Oxoniensia* **71**, 211-341
- Preston, S. 2008. *South Lodge Courtyard, Merton College, Oxford – an Archaeological Desk-Based Assessment for Merton College*. Unpublished report by Thames Valley Archaeological Services Ltd
- Salter, H.E. and Lobel, M.D (eds). 1954. *A History of the County of Oxford: The University of Oxford, Vol.3, Victoria County History*. Oxford University Press: Oxford

MAPPING AND TOPOGRAPHIC DATA CONSULTED

- *1578 Agas's map of Oxford*
- *1675 Loggan's 'Ichnography' bird's eye view of Oxford*
- *1675 Merton College, view from the North*
- *Ordnance Survey Map, 1876, 1:500*
- *Ordnance Survey Map, 1898, 1:2,500,*
- *British Geological Map of Britain (digital data), 2013*
- *Ordnance Survey Mastermap, 2013, 1:1,250*

INTERNET RESOURCES

- ADS: www.archaeologydataservice.ac.uk
- British Geological Survey: www.bgs.ac.uk
- Heritage Gateway: www.heritagegateway.org.uk
- National Heritage List: <http://www.english-heritage.org.uk/professional/protection/process/national-heritage-list-for-england/>

9 APPENDICES

Appendix 1 – Context List Summary

<i>Context</i>	<i>Type</i>	<i>Depth (m)</i>	<i>Description</i>	<i>Artefact(s)</i>	<i>Trench</i>
001	Layer	0.0-0.18	Grass and topsoil	n/a	1,2,3,4,5
002	Layer	0.18-0.44+	Mid brown sandy clay (re-deposited); small frag stone; = 023, 028, 043?	P B Sl C Br, T, Sh	1,2
003	Feature	0.3	Electric cable (north-south)	n/a	1
004	Feature	0.6	Electric cable (west-east) into chapel	n/a	1
005	Layer	0.0-0.35	Garden soil (flowerbed)	n/a	1
006	Fill	0.35-0.65	Sand surrounding 004 ; no clear cut	n/a	1
007	Feature	0.3	Cast-iron pipe; Dia.3cm; within 002	n/a	1
008	Layer	0.35	Flat stone foundation to 007	n/a	1
009	Feature	0.28	Ceramic land-drain; within 010	n/a	1
010	Fill	0.02-0.4	Pea gravel surrounding 009 ; no clear cut	n/a	1
011	Feature	0.44+	Pale yellow limestone foundation, 6.6m long; below 002	n/a	1
012	Layer	0.44+	Compacted orange gravel in south of trench, below 002, 014 ; = 013?	n/a	1
013	Layer	0.44+	Compacted orange gravel at north end of trench, below 002 ; = 012?	n/a	1
014	Layer	0.35-0.44+	Mortared limestone structure, possible footing; cuts 012	n/a	1
015	Feature	0.28	Ceramic land-drain; within 016	n/a	1
016	Fill	0.24-0.4	Pea gravel surrounding 015 ; no clear cut	n/a	1
017	Feature	0.4	Row of mortared limestones at north end of 011 , below 002 ; one contains cut off bar set in lead	n/a	1
018	Feature	0.25	Ceramic land-drain; within 019	n/a	1
019	Fill	0.2-0.4	Pea gravel surrounding 018 ; no clear cut	n/a	1
020	Feature	0.5	Plastic pipe associated with telecommunication cables at south end of trench	n/a	1
021	Feature	0.45	Large salt-glazed pipe at north end of trench; Dia.18cm; reused to house electric cable	n/a	2
022	Feature	0.4	Electric cables (x2) (west-east); disturbed ground no clear cut	n/a	2

<i>Context</i>	<i>Type</i>	<i>Depth (m)</i>	<i>Description</i>	<i>Artefact(s)</i>	<i>Trench</i>
023	Layer	0.16-0.44+	Mid brown sandy clay (re-deposited); small frag stone; = 002, 028, 043?	P B Sl Br, T, Sh, Ch	2
024	Deposit	0.4+	Degraded lumps of limestone, below 023	n/a	2
025	Feature	0.26	Ceramic land-drain; within 026	n/a	2
026	Fill	0.2-0.39	Pea gravel surrounding 025 ; no clear cut	n/a	2
027	Deposit	0.16-0.46+	Dump of oyster shell, c.1.8m across, below 001	P	2
028	Layer	0.16-0.46+	Mid brown sandy clay (re-deposited); small frag stone; = 002, 023, 043?	P B Sl Br, T, Sh, Ch	3
029	Layer	0.23-0.46+	Mid brown mottled clay, with small white stones (disturbed); = 028?	n/a	3
030	Feature	0.24	Plastic pipe (north-south); within 029	n/a	3
031	Feature	0.43	Electric cable (north-south); within 029	n/a	3
032	Feature	0.12-0.44+	Stone lined chamber with stone capping; below 001 ; and cut into 028, 029 ; 0.4m wide and 0.6m+ in length	n/a	3
033	Feature	0.24	Cast-iron pipe; Dia.12cm; within 028 ; over 034 ; no clear cut	n/a	3
034	Deposit	0.3-0.4	Dump of fragments of white limestone and brick rubble; below 033	n/a	3
035	Feature	0.3	Cast-iron pipe; Dia.12cm; within 028 ; over 036 ; no clear cut	n/a	3
036	Deposit	0.3-0.42	Dump of fragments of white limestone and brick rubble; below 035	n/a	3
037	Feature	0.4	Cast-iron pipe; Dia.12cm; within 028 ; over 036 ; no clear cut	n/a	3
038	Feature	0.3	Plastic drain pipe (west-east); within 039	n/a	3
039	Fill	0.25-0.4	Yellow sand and limestone chips surrounding 038 ; no clear cut	n/a	3
040	Fill	0.2-0.35	Pea gravel surrounding 045 ; no clear cut	n/a	3
041	Feature	0.25	Ceramic land-drain; observed in section at west end of trench; within 040	n/a	3
042	Feature	0.16-0.22	Patch of crushed limestone, below 001 , over 043	n/a	4
043	Layer	0.16-0.46+	Mid brown sandy clay (re-deposited); small frag stone; = 002, 028, 023?	P Br, T, B	4
044	Feature	0.25	Ceramic field-drain; within 045	n/a	4

<i>Context</i>	<i>Type</i>	<i>Depth (m)</i>	<i>Description</i>	<i>Artefact(s)</i>	<i>Trench</i>
045	Fill	0.2-0.4	Pea gravel surrounding 044 ; no clear cut	n/a	4
046	Deposit	0.4-0.46+	Dump of white stone chips and mortar below 045	n/a	4
047	Cut	0.0-0.46+	Vertical cut at west edge of paving 048	n/a	5
048	Feature	0.0-0.05	Sandstone paving to west of Grove Building; over 049	n/a	5
049	Layer	0.05-0.11	Bedding sand below 048	n/a	5
050	Layer	0.23-0.28	Lens of yellow sand, with mortar and crushed brick; within 052	Br	5
051	Feature	0.25	Metal pipe within 052 ; Dia.3cm	n/a	5
052	Layer	0.11-0.45	Mid brown clay (re-deposited); below 049	Br, T	5
053	Feature	n/a	Ashlar plinth at base of Grove Building	n/a	5
054	Feature	0.16-0.46	Yellow concrete trough along west wall of Grove Building; over 055	n/a	5
055	Layer	0.46-0.61+	Dump of loose brick bats forming hardcore foundation below 054	n/a	5
056	Layer	0.11-0.23	Concrete foundation along west edge of paving 048	n/a	5

Notes:

1. Artefacts: P (pottery); B (bone); Sh (shell); M (metal); G (glass); S (stone); C (clay pipe); Br (brick); T (tile); Sl (slate); Ch (charcoal).

Appendix 2 – Artefacts



Appendix 2.1: Fragment of decorated floor tile - Penn/Chiltern fabric; dated 1330-1380 (5cm scale).



Appendix 2.2: Fragment of knife-cut 'cockscomb' ridge tile - Brill/Boarstall fabric (5cm scale).

Appendix 3 – Record Photographs



Appendix 3.1: General view of Trench 1, looking south; note Merton chapel at the left of image.



Appendix 3.2: General view of Trench 1, looking north (2m scale).



Appendix 3.3: General view of Trench 2, looking south (2m scale).



Appendix 3.4: General view of Trench 2, looking north; note Merton Library at the right of image.



Appendix 3.5: General view of Trench 3, looking west; note stone chamber (032) in foreground.



Appendix 3.6: General view of Trench 3, looking north-east towards the Library.



Appendix 3.7: General view of Trench 4, looking south-east.



Appendix 3.8: General view of Trench 5, looking east towards the Grove Building (1m/2m scale).



Appendix 3.9: Detail of exposed stone foundation (011) in Trench 1, looking south (1m scale).



Appendix 3.10: Detail of exposed stone foundation (011) in Trench 1, looking north (1m/2m scale).