



JOHN MOORE HERITAGE SERVICES

**AN ARCHAEOLOGICAL WATCHING BRIEF**

**AT**

**BLUE BOAR QUAD, CHRIST CHURCH,**

**OXFORD**

**SP 5145 0610**

*On behalf of*

*Christ Church*

**AUGUST 2009**

**REPORT FOR**

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# CONTENTS

	<b>Page</b>
<b>SUMMARY</b>	<b>1</b>
<b>1 INTRODUCTION</b>	<b>1</b>
1.1 Site Location	1
1.2 Planning Background	1
1.3 Archaeological Background	1
<b>2 AIMS OF THE INVESTIGATION</b>	<b>6</b>
<b>3 STRATEGY</b>	<b>6</b>
<b>4 RESULTS</b>	<b>7</b>
4.1 Blue Boar Brewhouse Courtyard	7
4.2 Canon's Garden	16
4.3 Blue Boar Stair 1	20
4.4 Blue Boar Stair 2	22
4.5 Blue Boar Stair 3	24
4.6 Blue Boar Stair 4	29
4.7 Brewhouse	29
4.8 Pile Caps	33
<b>5 FINDS</b>	<b>33</b>
5.1 Pottery	33
<b>6 DISCUSSION</b>	<b>40</b>
6.1 Brewhouse Courtyard	40
6.2 Canon's Garden	40
6.3 Blue Boar Stair 2	40
6.4 Blue Boar Stair 3	42
6.5 Blue Boar Stair 4	42
6.6 Brewhouse	42
6.7 General comment	42
<b>7 BIBLIOGRAPHY</b>	<b>43</b>

## FIGURES

	<b>Page</b>
Figure 1. Site location	2
Figure 2. Figure and Plan Locations	8
Figure 3. Brewhouse Courtyard Plan of Lower Level of Archaeology	9
Figure 4. Brewhouse Courtyard Plan of Upper Level of Archaeology	11
Figure 5. Brewhouse Courtyard Sections	13
Figure 6. Plan of Trench in Canon Coulter's Garden	17
Figure 7. Sections in Canon Coulter's Garden	19
Figure 8. Plan and section of trench in Canon Coulter's Garden by Brewhouse	21
Figure 9. Stair 2 Plans and sections	23
Figure 10. Outside Stair 2 Plan and section	25
Figure 11. Stair 3 Plans and sections	26
Figure 12. Stair 3 Plans and sections	28
Figure 13. West of Stair 4 Plan and Section	30
Figure 14. Brewhouse Plan and Sections	31
Figure 15. Pile Cap Pits Plans and Sections	32
Figure 16. Area Outline showing projection of walls	41

## ***Summary***

*John Moore Heritage Services carried out an archaeological watching brief during redevelopment work at Blue Boar Quad, Christ Church, Oxford.*

*The earliest activity was a pit of the mid 11<sup>th</sup> or 12<sup>th</sup> century. Deposits and pits of the 13<sup>th</sup> century were seen throughout the area. A building on the medieval plot of Eagle Hall is thought to date from the mid 13<sup>th</sup> century. A 15<sup>th</sup> or 16<sup>th</sup> century wall further west may belong to a building that is shown on Agas' map of 1578.*

*Buildings dating to after the mid 16<sup>th</sup> century were found to the north of the Brewhouse.*

## **1 INTRODUCTION**

### **1.1 Site Location**

Blue Boar Quad is located in the northeast part of Christ Church, to the north of Tom Quad and west of Peckwater Quad (NGR SP 5145 0608). To the south lie the gardens of Canon Coulton and Professor Adam. This part of the college is situated on the southern extent of the second gravel terrace (BGS 1982).

### **1.2 Planning Background**

Oxford City Council granted planning permission for work within the Blue Boar Quad building, alterations to Blue Boar Quad courtyard and a sunken level route through Canon Coulton's garden and Professor Adam's garden from Blue Boar Quad to an enlarged gateway by Killcanon. Due to the potential for archaeological remains on the site being disturbed, a programme of archaeological work was carried out in accordance with a written scheme of investigation approved by the local planning authority. The archaeological work was staged, with hand excavation and recording of significant deposits in major areas of disturbance and a watching brief in areas where the impact on archaeological remains was of low potential or within narrow trenches.

Recent extensive archaeological work had been carried out within the college that was used to inform the proposals for the mitigation.

### **1.3 Archaeological Background**

The college was founded as Cardinal College by Cardinal Wolsey in 1525 and required the clearance of numerous medieval buildings and the closing of medieval streets. By the time Wolsey had fallen from power three sides of the Gothic quadrangle had been virtually finished, but only the foundations of the proposed chapel for its north side were in place. After Wolsey's fall and death, Henry VIII took over the fabric and endowments of Wolsey's foundation and re-designated them 'King Henry VIII's College'. On the east side of quadrangle was the former Augustinian St Frideswide's priory. Following a four year period when the dissolved Oseney Abbey acted as cathedral, Henry in 1546

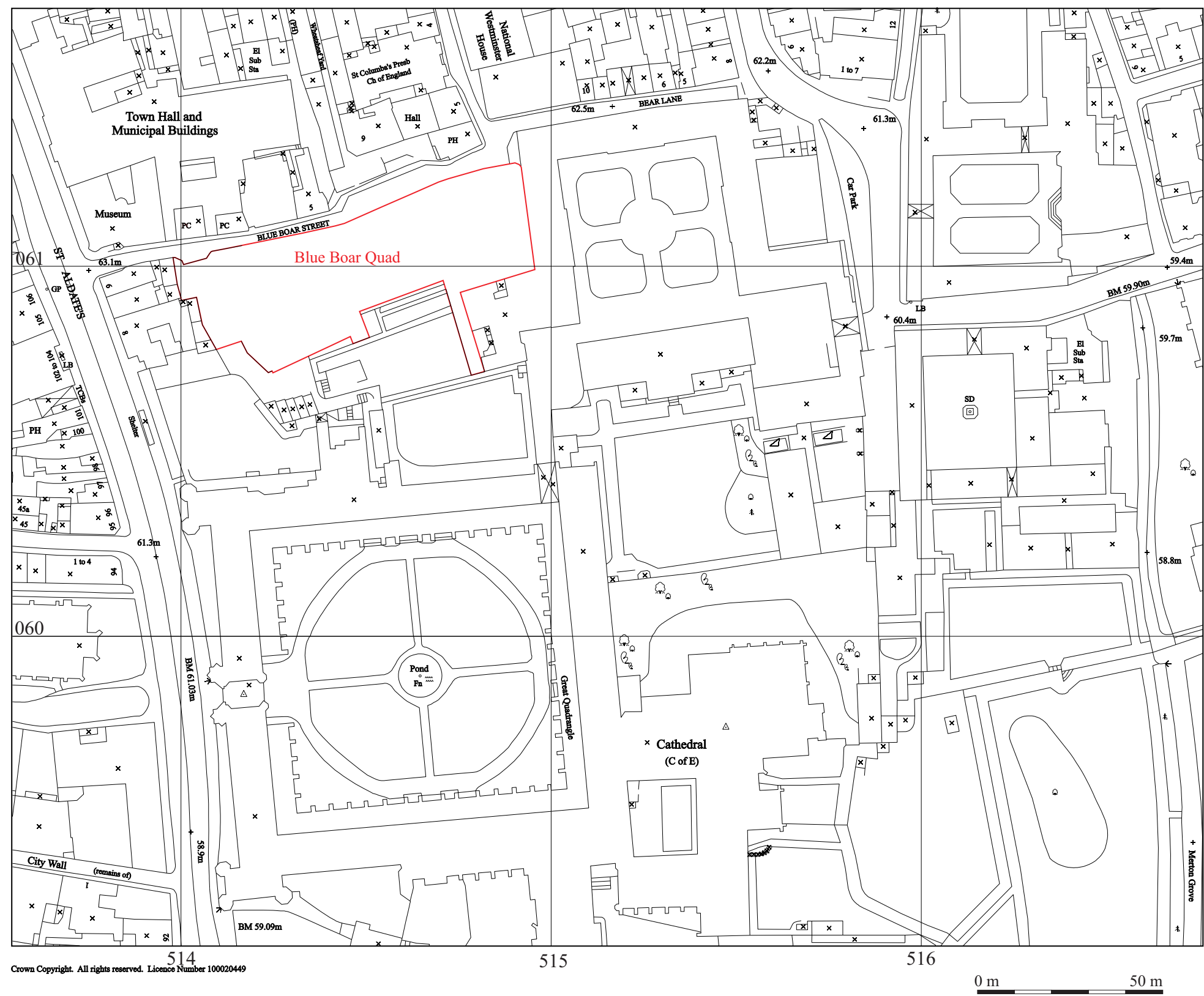


Figure 1. Site location

designated the former priory church as Christ Church cathedral of the new Henrician diocese of Oxford, and as the chapel of the new college of Christ Church. It is thought that the west end of the former priory church was demolished to accommodate the symmetrical Gothic quadrangle (Sherwood & Pevsner 1974).

Recent work in the basement of Staircases 3 and 4 on the north side of Peckwater Quad recorded a 13th century building, and pits and deposits from the 10th to 17th centuries. Residual Roman pottery was found within the medieval pits. Roman coins were said by Major Evans to have been found c. 1918 in Bear Lane just immediately west of Blue Boar Quad during the laying of Post Office cables. In addition a sherd of Samian ware was found nearby in 1965 in a medieval pit in the coal-yard at Christ Church (Sturdy & Sutermeister 1964-5). A further (or the same) sherd of Samian ware is reported from a medieval pit during excavations in Blue Boar Quad, Christ Church in 1965 (Wilcox & Hunt, 1966, 199). These suggest Roman activity in the area.

Elsewhere in the college parts of the former medieval roads of St Frideswide's Lane, St Edward Street, Shitebarne Lane and Jury Lane have been discovered. Remains of several buildings fronting these streets have been recorded.

Salter (1960) shows the area of Blue Boar Quad as being south of "New Blue Boar Lane" and to the north of "Little Jewry Street" comprising of several plots of land:

- Plot 125: Eagle Hall survived as late as 1478; it was then merged with Edward Hall in 1493.
- Plot 134: Area Predicatorum of St Frideswide's.
- Plot 250: A tenement of St Frideswide's, acquired from the Black Friars when they moved to a new site to build their priory in 1237
- Plot 251: Civil Law School, belonging to St Frideswide's.

The existing brewhouse on the south side of the quad is thought to be late 16th-early 17th century (RCHM 1939).

Recent geotechnical pits dug in Blue Boar Quad have revealed mid 11th -14th century and mid 14th century pits along with a wall dated from after the 15th century (JMHS 2006a). The wall is thought to belong to the building shown on Agas's map dated 1578.

The Cartographic evidence for Blue Boar Quad is summarised below.

Agas's map of c1578: Shows that between the unfinished building of Christ Church and Blue Boar Street (once known as Bear Lane), the area is divided by an E-W wall, which can be seen from the southeast corner of Peck Water Inn across to St Aldates Street (once known as South St & Fish St). A rectangular building with two chimneys is visible on the E-W wall. There were two N-S walls creating three parcels of land on the north side of the E-W wall. There are several buildings on the northwest corner plot, fronting onto St Aldates Street. Peck Water Inn is shown to the east. A square formal walled garden occupies the area of the east part of Blue Boar Quad with a small building just to the west of this walled garden.

Speed's map of 1605: Shows the two building roughly in the same place with further buildings built along the western part of Blue boar Street. Woods map of 1644: Shows the same arrangement of buildings.

Loggan's map of 1673: Shows the Christ Church quadrangle as having the north range complete. Killcanon building also appears for the first time on this map. The area between the north range and Blue Boar Street has been divided up into gardens and orchards. Blue Boar Street appears to be narrower and straightened with the single building previously fronting Blue Boar Street now set back from the frontage. Additional buildings have been added to the north-western plot fronting onto St Aldates and along the new Blue Boar Street frontage further west in front of the previous buildings which still stand. To the west of Killcanon there is shown a small formal garden. Just west of this garden is seen a rectangular building (Loggan's drawing of college shows this as having its entrance on the south side and a path from it along the north of side of the formal garden and Killcanon). This must be the "Old Brewhouse".

Williams map of 1733: Shows that the area to the west has been developed and has a range of buildings on St Aldates, and a range of buildings on Bear Lane, with a large formal garden in the east part of the present Blue Boar Quad. Peckwater Quad has been built.

Tailor's map of 1751: Shows that the area to the west has been developed yet again with several additional buildings added to the northwest plot (corner of St Aldates and Blue Boar St), with the area to the west of Peck Water and Killcanon shown as orchards and a small garden. Jeffrey's map of 1768: Does not show sufficient detail to determine any change. Longmate's map of 1773: Shows the area to the west of Peck Water as totally orchards. Faden's map of 1789: Shows the area to the west of Peck Water as having been divided in to two plots, the northerly staying as orchard whilst the south used as formal gardens. Davies map of 1797: Shows the area to the west of Peck Water as a large formal garden.

Hoggar's map of 1850: Shows a different arrangement to the west side of Killcanon with several small buildings to the west of Killcanon, along with an open area dotted with trees to the north in the area of Blue Boar Quad. Several buildings are seen just north of the northern range of Tom Quad.

1st Edition Ordnance survey of 1876: Shows the eastern part of Blue Boar Quad divided up and labelled as Canon's Gardens. The north western corner development can be seen clearly with two large buildings fronting onto St Aldates. A stable block fronts onto Blue Boar Street with several small buildings to the south. The "Old Brewhouse" is clearly marked with just to the northeast is a small coach house.

Ordnance survey map of 1921: An additional rectangular building can be seen up against the wall of Blue Boar Street, within the northern most Canon's garden. Ordnance survey map of 1939 shows the building in the Canon's garden have been extended along the line of Blue Boar Street. (Photographic evidence shows these building as being garages.)



Christ Church College developed the area and put up the existing buildings of Blue Boar Quad in 1966-7; in the process they demolished the coach house and the range of building that were on Blue Boar Street.

An assessment (JMHS 2006b) of the sunken level route revealed that it is across the former medieval properties fronting both sides of the medieval street of Jury Lane and the west side of St. Edward Street or Vine Hall Lane. The route crosses Salter SE 127 and 126, George Hall; SE 247, a tenement; before turning north across the line of Jury Lane and into 126 and 248, Ape Hall; and probably into the southern extent of SE 125, Eagle Hall.

Agas's map of c. 1578 shows that between the unfinished building of Christ Church and Blue Boar Street (once known as Bear Lane), the area is divided by an E-W wall, which can be seen from the southeast corner of Peck Water Inn across to St Aldates Street (once known as South St & Fish St). This wall is in the approximate position of the present wall separating Blue Boar Quad from the area to the south. The area of Blue Boar is shown as formal gardens with a building standing to the north-west fronting Blue Boar Street, while the area to the south is open. To the south partly covering the area of the present north range of Tom Quad are shown the foundations for Wolsey's chapel.

Speed's map of 1605 indicates a similar arrangement to Agas (but without Wolsey's foundations) and with further buildings fronting Blue Boar Street to the west. Gardens are not depicted on this map. Woods map of 1644 is as for Speed.

Loggan's map of 1675 shows the Christ Church quadrangle as having the north range complete. Killcanon building also appears for the first time on this map. The area between the north range and Blue Boar Street has been divided up into gardens and orchards. The present Professor Adams' garden is divided into two gardens just west of the west side of Killcanon. West of the north half of Killcanon is a formal garden with an orchard between this and the gardens to the south. Just west of the formal garden is seen a rectangular building (Loggan's drawing of College shows this as having its entrance on the south side and a path from it along the north of side of the formal garden and Killcanon). This must be the "Old Brewhouse".

On Williams' map of 1733 Peckwater Quad is seen as having been built with formal gardens in the area of Blue Boar Quad separated from two gardens to the south. These latter two gardens correspond with the present two gardens except where they have been encroached on to the west.

Tailor's map of 1751 depicts three gardens as orchards although a small area of formal garden is shown in the south-east corner of the 'Blue Boar' garden. No boundary between the southern two gardens is shown. Jeffrey's map of 1768 does not show sufficient detail to determine any new development. On Longmate's map of 1773 the area to the west of Peckwater is shown as orchard with no detail on the area to the south. Faden's map of 1789 shows the area to the west of Peckwater as formal garden and orchard similar to that depicted on Taylor's map. To the south are formal gardens. Although the layout of these gardens could represent two gardens no boundary between them is shown.

Davies map of 1797 shows the site of Blue Boar Quad as a formal garden separated from a further formal garden to the south. The later extends over both Canon Coulton's and Professor Adams' gardens.

On Hoggar's map of 1850 unfortunately the area falls on the edge of two pages. However it appears that the proposal area lies with gardens. On the west side of the present Professor Adam's garden is a building that is not one associated with the present range of buildings attached to the north side of the Tom Quad range of buildings.

The First Edition Ordnance survey of 1876 shows the Blue Boar Quad as 'Canon's Garden', Canon Coulton's garden with paths and a fountain just west of centre, and Professor Adams' garden as a 'Canon's Garden' with a fountain centrally near the north boundary. On the Ordnance survey map of 1921 no detail is shown in the present Canon Coulton's garden. The paths are shown in Professors Adam's garden but the fountain is not shown. Again no detail is shown on the Ordnance survey of 1939 in Canon Coulton's garden while the paths are the same in the garden to the south.

The Ordnance Survey maps of 1958 and 1969 show Canon Coulton's garden divided into two areas with an orchard to the east with new paths to the north and west, and a slight change of the path in the north-east corner of Professor Adams' garden.

## **2 AIMS OF THE INVESTIGATION**

The primary aim was to preserve by record the archaeological remains on this site where below groundwork disturbed them.

Particular aims included:

- Recording of remains related to the medieval plots fronting Fish Street (St Aldates), St Edward Street, and both sides of Jury Lane (details in Archaeological Background above).
- Recording remains fronting onto the later New Blue Boar Lane
- Recording later remains relating to the gardens associated with the college, and those inferring major college building campaigns.
- Recovering pottery assemblages to date the remains and compare with other assemblages in Oxford.

## **3 STRATEGY**

A programme of archaeological work was undertaken to make a record of the remains that were affected, followed by the analysis of data and artefacts collected leading to the publication of the results.

### Watching brief

The excavation for new services, both internal and external, was monitored by an archaeological supervisor who made a record of all archaeological deposits and features.

A watching brief during the excavation of the upper part of the sunken route within Canon Coulton's garden was carried out in order to record post-medieval garden features. The eastern part of the same route through Professor Adam's garden was monitored during excavation of the lower part in case Jury Lane was present.

A watching brief was maintained during the excavation for the ground beams for the base for the tower crane.

All other necessary groundwork that had an impact on archaeological remains was monitored.

#### Hand excavation

It was expected that the pad foundations for the internal lecture theatre would impact on archaeological deposits and features. However, due to large disturbance by modern or undifferentiated material it was decided to mechanically excavate down to the required depth. Archaeological remains exposed were hand cleaned and adequately recorded during the excavation with the machining being halted to allow for this.

Hand excavation was not required for the sunken route within Canon Coulton's garden due to mass disturbance from service trenches. Four sondages were hand dug by archaeologists below a depth of 61.92m AOD to confirm this down to the required formation depth.

## **4 RESULTS**

The location of figures and plans are shown on Figure 2.

### **4.1 Blue Boar Brewhouse Courtyard (Figures 3-5)**

An evaluation trench was first excavated here to establish the presence and significance of archaeological remains. The results (JMHS 2007) merited a watching brief during ground reduction in this area. The results of the evaluation are included here along with the subsequent watching brief results. Ground level was reduced over two phases in reaching the formation depth for the new outdoor theatre. Service trenches and manholes to the north had heavily disturbed the area. This left only a small section at the south relatively untouched.

Small gully [178] was aligned northwest-southeast and extended for a length of 3.5m (Fig. 5, Section 1). It was 0.34m wide and had a depth of 0.21m. The edge of the cut was 85° from the horizontal sloping to 55° with a slightly concave bottom. It was filled with (179), a friable dark brown- grey silty clay with 10% charcoal flecking and 15% ceramic building material (CBM) flecking. Small stone gravel of approximate size 10mm – 20mm made up 5-8% of the fill.

Gully [178] was cut through a 0.16m thick deposit (180) of friable mid blue-grey silt clay with mortar fragments (none bigger than 60mm). Other inclusions were mortar flecking 30% and charcoal 5%. Deposit (180) overlay deposit (186) comprising a friable dark

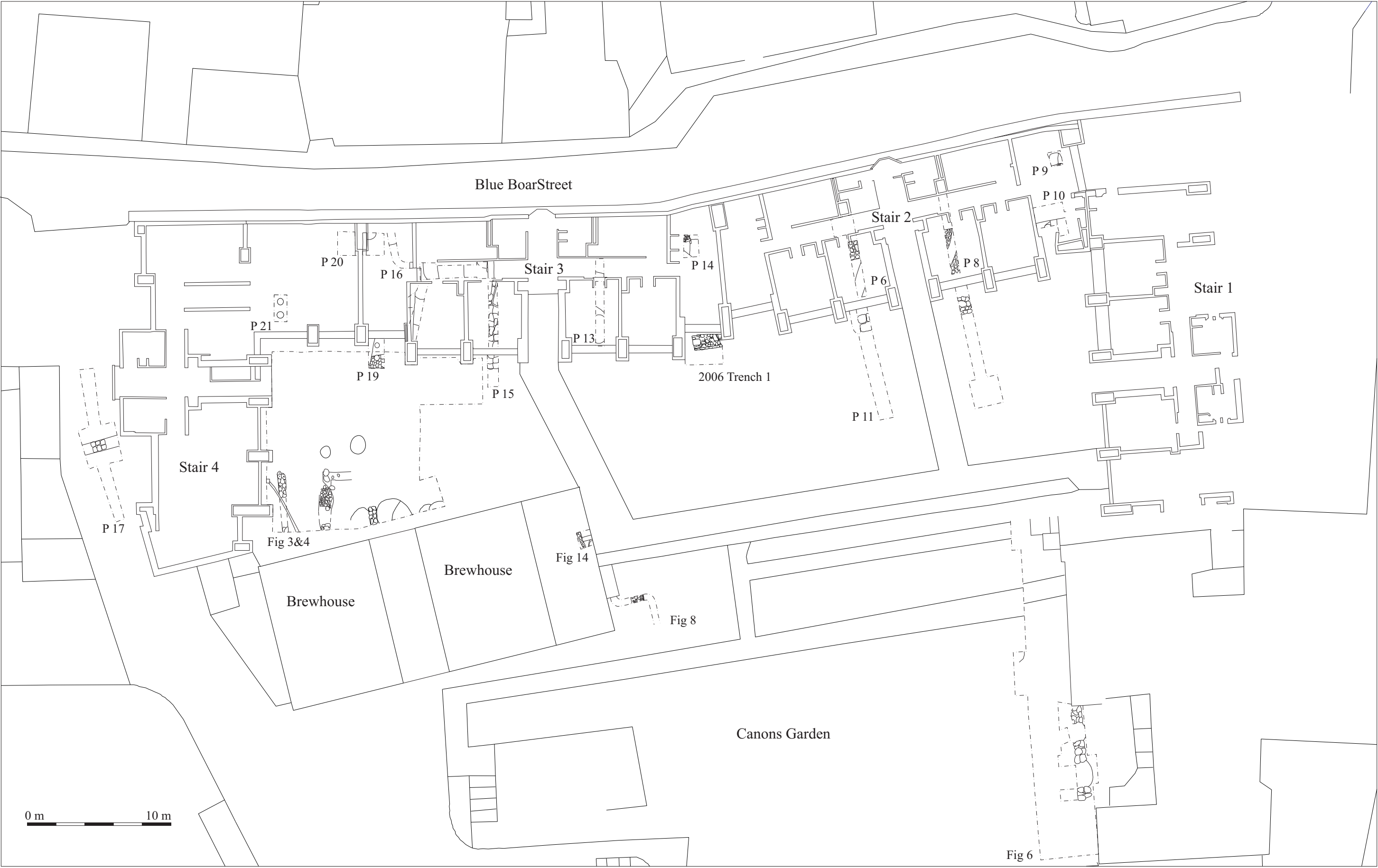


Figure 2. Figure and Plan locations

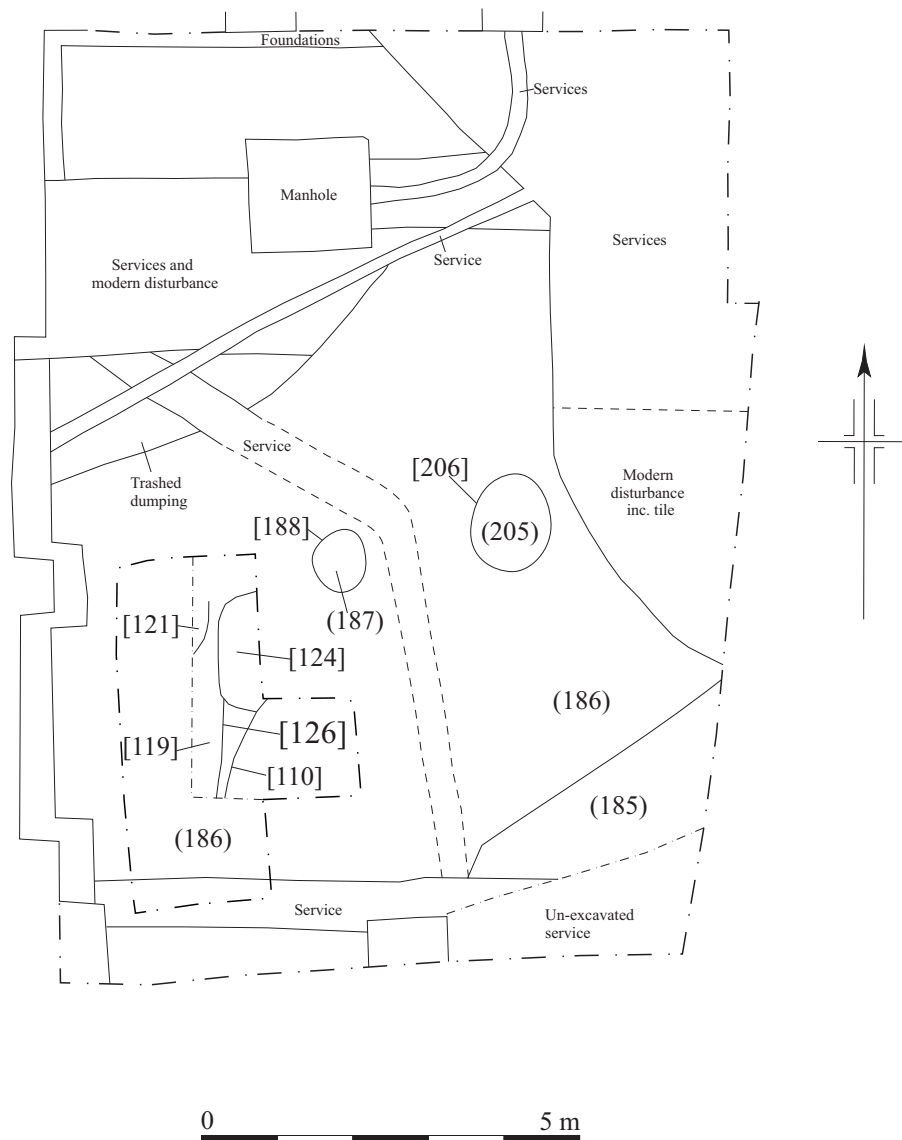


Figure 3. Brewhouse Courtyard Plan of Lower Level of Archaeology

blue-grey clay with 10% charcoal flecking and 10% CBM flecking. This layer was known to be at least 0.34m thick. The full depth of the deposit was not witnessed as it continued below the excavation depth. Apart from features and areas disturbed by services, deposit (186) was spread across the rest of the formation depth. Deposit (186) was dated to the 13<sup>th</sup> century. In the base of the evaluation trench this deposit was recorded as (119), which was at least 0.19m thick, with the base of the material not seen. This deposit was truncated to the east by the cut of a pit or ditch [126]. Only the western part of the feature was exposed and the edge was parallel to the longer sides of the evaluation trench. The upper side was at an angle of 60° from the horizontal. The feature was at least 1.5m long north/south. The feature was filled by soft mid grey-brown very clayey silt with 5% small gravel, moderate-frequent charcoal pieces and the occasional small piece of limestone (125). A relatively large assemblage of animal bone was retrieved from the upper part of the fill that was sampled. The one sherd of pottery from the upper fill of this feature was dated to after 1550 and is considered to be intrusive; the work was not conducted under the best conditions.

Cut into deposit (186), and left unexcavated as there occurred at formation level, were two pits (Fig. 4). Pit [188] was observed with a diameter of 0.75m. It was filled with (187), a friable mid brown-grey silt clay with 2% small gravel and high concentration of CBM flecking. Pit [206] had a diameter of 1.3m. It was filled with (207) a friable mid-dark yellow-brown silty clay loam with charcoal flecking and 10% small gravel.

In the east of the area and also cut into deposit (186) were several pits. Pit [243] was circular in plan with a known diameter of 1.5m and depth of 0.42m. The upper side of the pit was 70° from the horizontal; the lower edge and bottom of the cut were unobserved. The pit was filled with deposit (244) comprising loose light yellow-brown clay silt with 15% small water worn pebbles and 5% angular stone. Pit [344] was circular in plan with a diameter of 1.2m and depth of 0.62m. The upper edge of the cut was 35° from the horizontal; the bottom and lower sides were not exposed. The lowest fill seen was (345), a friable dark brown-black silty clay (Fig. 5, Section 3). This appeared to be a burnt layer with a heavy presence of charcoal flecking. It was 0.11m thick. The secondary fill (346), as seen, was a friable mid brown-yellow mixed silty grit clay with creamy white mortar mottle 0.09m thick with CBM and charcoal flecking along with 15% gravel. The uppermost fill (347) was composed a friable mid brown-red, tinted yellow, silty clay 0.58m thick. Gravel made up 20% of deposit along with charcoal, CBM flecks and animal bone.

Above gully [178] was deposit (181), friable-hard dark black-grey clay with CBM fragments and charcoal and mortar flecking 0.38m thick (Fig. 5, Section 1). Against, and partly overlying, deposits (180, 181 and 186) on the south side was a series of deposits interpreted as possible dumping/levelling material. The earliest of these was (185) comprising up to 0.20m thick deposit of dumped mortar and roof tile which was overlaid by 0.08m of dark black-grey clay containing 60% charcoal and 5% gravel (184). Overlying the last to the north was dark blue-grey gravelly clay with 20-25% mortar flecking, and 15% charcoal flecking (182). This in turn was sealed by 0.34m of dark blue-grey gravelly clay with 20% tile fragments, 15-20% mortar flecking, and 15% of angular limestone (183).

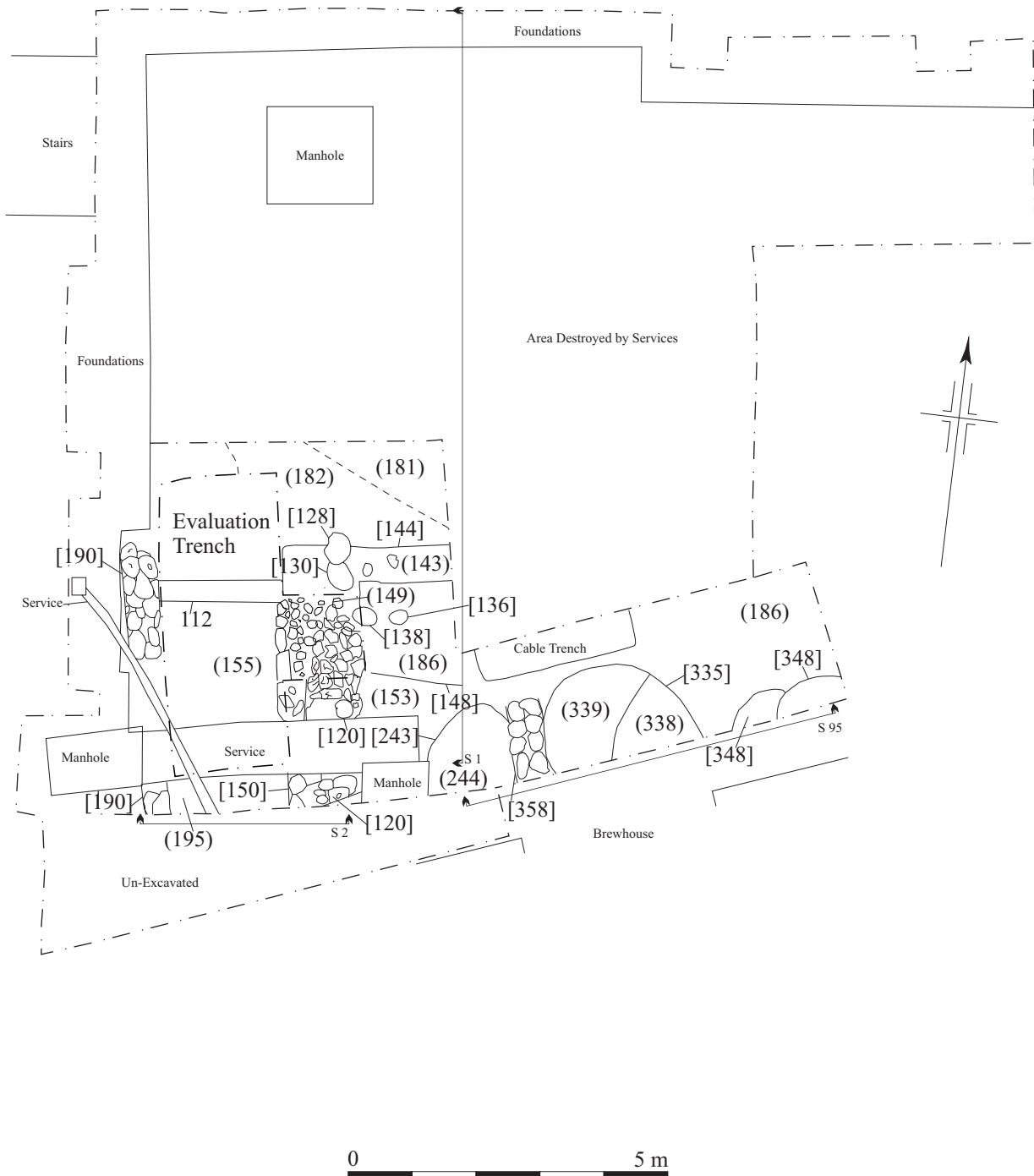


Figure 4. Brewhouse Courtyard Plan of Upper Level of Archaeology



Along the south part of the area the earliest deposit was sealed by a lens of dark brown grey clay with 20% CBM fragments and charcoal flecking (198) and pale yellow-orange sandy clay (197) (Fig. 5, Section 2).

Within the evaluation trench and sealing the pit or ditch [126] was a deposit of mid-dark grey-brown sandy silt with a slight clay fraction and 5% small gravel, moderate charcoal flecks and small lenses of mortar (117) that was probably the same as deposit (195) seen during the watching brief to the south. This was 0.27-0.30m thick and contained pottery dated from the 13<sup>th</sup> -15<sup>th</sup> century. Above the last was a 0.06-0.07m thick deposit of off-white mortar (116) possibly the same as dump material (185) described above. This was continuous in the south part of the trench but traceable as lenses 10-25mm thick to the north. Above this and between the lenses of mortar was a deposit (same number 116) of pale grey brown sandy silt with lenses of mid yellow gravel and sand. The overall deposit increased in thickness from 0.05m at the south end of the trench to 0.19m where seen to the north.

Further dump deposits were seen in the east part of the area. Overlying pit [243], in turn, was a 0.2m thick deposit comprising loose blue-grey clayey silt (241) that was overlaid by dark black silty clay (240) and yellow-brown silty clay (239). Overlying pits [358] and [348] was deposit (343), a loose friable mid red yellow-brown silty grit loam 0.62m thick. Inclusions were 10% gravel, charcoal flecks and one large limestone piece 250mm x 180mm x 110mm.

Cut into deposit (116), within the evaluation trench, where two pits. A sub-rectangular pit [124] with slightly bowed sides and rounded corners was filled by soft pale-mid grey-brown sandy, clayey silt with 5% small gravel and small limestone fragments (123). No pottery was retrieved from a quick sample of this upper fill which contained occasional fragments of roof tile. The pit measured 1.5m north/south and at least 0.64m east/west. It was at least 0.40m deep. The other pit [121] was sub-circular in plan and at least 0.88m in diameter. It continued under the west baulk and was truncated to the north by pit [104]. The upper fill (122) of soft mid-dark grey-brown clayey silt with 5% small gravel and occasional small limestone fragments again failed to produce any dating material from that part sampled.

Pit [110] cut fill (123) of pit [124]. This pit [110] was at least 1.38m long north/south (continuing into the south baulk of the evaluation trench) and at least 0.67m wide; truncated by the much later pit [107] to the east. The west side of the pit was at an angle of 70° and the base was irregular. The pit was dug to a depth of 0.77m. The primary fill was silty fine sand reminiscent of water laid deposits some 0.12m thick (109c). This was overlaid by mid grey-brown clayey silt with moderate to frequent charcoal flecks noticeably concentrated in the upper part of the deposit on the west side of the pit (109b). Overlying the last was a 0.47m thick deposit of limestone rubble, roof tile fragments and mid grey-brown slightly clayey silt. The final pit fill was a 0.12m thick deposit of clayey silt. Finds from the upper two deposits were mixed with finds from pit fill (106) and numbered (108).

In the east of the area pit [353] cut into the top of earlier pit [344] but from what height is unclear due to later disturbance. Pit [353] was circular in plan 0.56m in diameter and



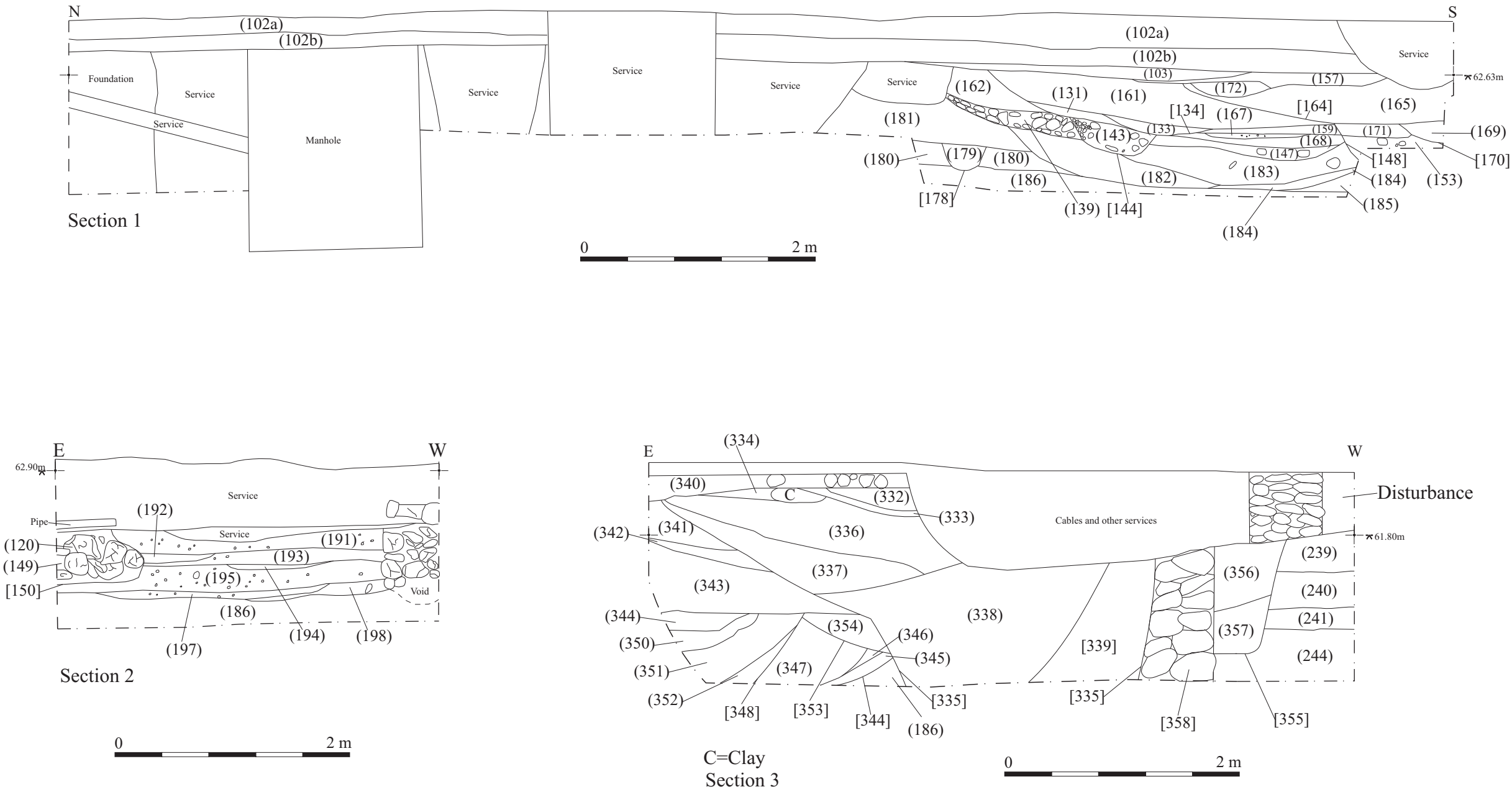


Figure 5. Brewhouse Courtyard Sections

0.31m deep. The upper edge of the cut was 35° from the horizontal sloping to 25° down the sides to a slightly concaved bottom. The single fill (354) was a friable mid brown-yellow with red tint silty gritty loam with CBM pieces and charcoal flecking (Fig. 5, Section 3). The last pit was cut by a circular pit [348] that was at least 1.3m in diameter and 0.6m deep. The upper edges of the pit were 45° from the horizontal; the lower edge and bottom was unobserved. The earliest fill seen (352) was a friable mid black-brown silty loam 0.16m thick. A high level of charcoal flecking suggests a burnt layer. The secondary fill (351) as seen was friable mid blue-grey silty sand loam 0.58m thick with 10% gravel, charcoal flecks and small sub angular stones 10mm-30mm. Above the last was fill (350), a friable mid brown-yellow silty sand loam 0.19m thick with charcoal flecking and small sub angular stones 10mm-30mm. The uppermost fill (349) was friable darkish brown-blue-grey silty clay 0.16m thick with inclusions of oyster shell, charcoal flecks and 10% gravel.

Wall [120] was seen in the evaluation trench and during the subsequent ground reduction. This was cut into the dump deposits and pit [124]. The wall was constructed from roughly hewn limestone blocks with the largest 540mm x 230mm x 200mm and average being 250mm x 190mm x 100mm. A red brick of 210mm x 120mm x 100mm dimensions was also present. Pale creamy white limestone mortar was used for bonding for the core. The west face of the wall was constructed of large roughly shaped blocks of limestone set in a matrix of gravelly silty clay. The surviving extent of the wall was 3.4m before it had been robbed out at the north end. The wall was 0.95m wide and survived to a height of 0.61m. The wall was set in a foundation trench [150] that had a maximum width of 0.98m. The robber trench for the north extent of the wall and the section running east was defined by cut [144]. The fill (143) was friable dark black-grey silty clay containing charcoal, gravel, CBM flecking (15-20%), and limestone fragments between 50mm-150mm. The upper part of wall [120] had also been robbed (118).

Within the angle of the robber trench and the wall [120] was an associated floor (147) composed of 0.11m thick orange-yellow sand, mortar and small gravel. This had subsided into the underlying dumped material (Fig. 5, Section 1). A 0.05m thick deposit (168) of loose dark blue-black clay silt with 2% charcoal had accumulated on top. Above this was a small pocket of mid yellow-brown sandy silty clay with 50% gravel content (167). This may have been a repair to the floor infilling where the worse subsidence had occurred. Overlying this was a further surface (159), up to 0.11m thick, of dark brown-grey silty clay with 45% gravel content and 5% charcoal flecking. The last was dated to after the mid 16<sup>th</sup> century and was cut to the south by a rectangular pit [148] filled by dark grey gravelly silty clay with small limestone fragments and charcoal flecking (153) and mid-dark red-brown silty clay (171). The pit extended as far west as wall [120]. This in turn was cut by a further pit [170] in the south-east corner of the area. This 0.22m deep feature was filled loose yellow-brown gravelly silty clay (169).

To the west of wall [120] within the evaluation trench was a deposit of soft, sticky pale-mid brown-grey silty clay with 10% small gravel and moderate amounts of CBM (111). This was 0.27m thick. South of the evaluation trench deposits (192-194) were the equivalents to the deposit west of the wall (Fig. 5, Section 2). Deposit (194) was a 10mm thick lens of mid dark orange-red sandy clay. Above it deposit (193) was a mid light blue-grey silt clay with 10% gravel, CBM and charcoal flecking. At the eastern top of

(193) was (192), a hard light grey-white mortar layer with 30-40% gravel and 20% sand. It was 0.16m at its thickest and abutted [120]. Deposit (111) was dated to after the mid 16<sup>th</sup> century. Lying above deposit (193) and the surviving top of wall [120] was deposit (191) composed of loose-friable light yellowy grey sandy gravel with 50% gravel content. It was 0.2m thick and abutted wall [190].

Cut into the robber trench [144] and deposit (147) to the south and east were four small pits. Pit [128] was a circular pit 0.4m in diameter. It was filled with a friable dark black-grey sandy clay with charcoal and CBM flecking and mortar fragments (127). Pit [130] was an oval shaped feature with a width of 0.3m and length of 0.5m. It was filled with gravel and 10-15% friable-hard dark red-orange sand (129). Pit [138] was a small circular pit 0.35m in diameter filled with a friable dark black-grey clay with charcoal and CBM flecking (137). Pit [136] was a circular feature that had a diameter of 0.3m. It was filled with a friable dark grey-black silt clay with mortar fragments and charcoal flecks (135). Pit fill (129) was dated to after 1550.

West of wall [120] was wall [190] (Fig. 4, Fig. 5, Section 2). This wall was on a NNW/SSE alignment. Wall [190] was 0.55m wide and survived 4.1m long and 0.69m high. The middle section of the wall had been removed by modern services. The lower 0.29m of the wall had been constructed from roughly hewn limestone pieces of different shapes and sizes. On top of this a 0.03m thick layer of creamy white limestone mortar. On top of the mortar, courses of roughly hewn limestone blocks with the average size 290mm x 210mm x 140mm were recorded. The middle of the wall appeared to be filled with limestone rubble. The wall was bonded heavily with creamy white limestone mortar with small pieces of CBM and charcoal inclusions. No foundation trench was seen and as such the level from which this was built was not discernible.

The backfill (118) of the robbing of wall [120] and deposit (111) to the west of wall [120] was cut by what has been interpreted as a beam slot (112), which also slightly cut into or was lying on deposit (116). This was represented by a deposit of red-brown and brown-grey soft slightly sticky, slightly clayey silt (112). In profile this was virtually rectangular although the south side was slightly tapering to the base. This ran east/west and was 260-0.30m wide and 0.23m high. It is probably associated with wall [190] although this was not proven in the watching brief.

To the north of beam slot (112) and overlying the two pits [121] and [124] was a deposit of mid grey-brown clayey silt with 2% fine gravel and very small limestone pieces (114). This was 0.25m thick. Overlying deposit (114) within the evaluation trench was a layer of white lime mortar (113), 0.13m thick at its south extent thinning to 0.04m at its northern extent. This partly overlay the north side of the beam slot (112) and is considered to be a floor associated with the beam slot. Along the south extent of the mortar floor was a single row of limestone (115) set in a clay silt matrix. This was *c.* 0.17m high and *c.* 0.18m wide. It would appear that this was laid along the inner face of the wall represented by the beam slot (112).

In the eastern part of the area pit [355] was cut from at least deposit (239) (Fig. 5, Section 3). This pit was cut from directly below modern disturbance with the upper sides at 75° while sloping off at the bottom to 45° and a flat bottom. The pit was 0.61m in diameter

and 0.92m deep. The primary fill was (357), a friable vivid brown-red silty sand clay with charcoal flecking 0.51m thick. Secondary fill was (356), a friable mid grey-brown silty sandy loam with 15% grit/gravel and white mortar flecking, charcoal and CBM. The latter was dated to the 17<sup>th</sup> century.

Cutting the last pit was wall [358] that was constructed from roughly hewn limestone blocks approximate size 310mm x 400mm x 180mm. The blocks were bonded with a creamy white limestone mortar. The wall was aligned NNW/SSE and was 1.08m in height and 0.69m wide. It had a length of 1.3m before being destroyed by a cable trench. The west face had been damaged by pit cut [339] and no foundation trench was witnessed. The wall is probably related to wall [190] further west (see above).

Cutting against the eastern face of wall [358] was large pit [335] (Fig. 5, Section 3). The diameter of the pit was 4.1m and it was at least 1.5m deep. The cut was circular in plan and the sides were 65° from the horizontal although the upper part of the east side was at 45°. The bottom was not observed. The lowest fill seen (339) was a friable mid creamy white limestone mortar with 65% broken red roof tile (all approximately 20mm thick) 1.01m thick. The 0.95m thick secondary fill (338) as seen was a brown creamy white sandy grit with mortar pieces, charcoal flecks and 60% broken roof tile pieces 20mm thick. Above (338) was (337), a friable mid yellow-brown sandy gritty loam with creamy white mortar mottling 0.38m thick. Red roof tile 20mm thick made up 40% of deposit, with other inclusions of charcoal flecking and clay tobacco pipe. The uppermost fill of the pit was (336), a friable mid yellow-brown gritty sandy loam 0.42m thick with 40% broken red roof tile 20mm thick and charcoal flecking.

Sealing pit [355] was a 0.2m thick cobbled layer [340] formed from smooth cobble stones 90mm x 80mm x 50mm in a mid dark brown-black silty clay loam.

## **4.2 Canon's Garden (Figures 6-8)**

A submerged pathway was opened north-south in the Canons garden. Due to the massive disturbance of previously unknown service pipes it was decided to machine down to formation depth after four sondages were hand dug to establish depths of singular deposits clarifying that no destruction of important archaeological remains would occur.

The surviving archaeological deposits extended to a maximum width of 1.45 from the west facing section and 0.8m from the east facing section. At the south end of pathway archaeological 'islands' were recorded between services.

Towards the south end and on the west facing section, walls [399] and [406] were observed. Both were constructed from roughly dressed limestone blocks 430mm x 250mm x 160mm with orange-brown clay for bonding. Wall [406] ran on a north-south alignment for at least 4m, had a width of 1.0m and survived to a height of 0.6m. 1.6m to the south was wall [399] on an east-west alignment. Between the two and in a doorway was deposit (402) comprising firm orange-brown sandy clay up to 0.10m thick which may have been a base for a floor surface. This was cut into slightly by pit [401] (Fig. 7, Section 7). Pit [401] was a sub circular feature 3.8m in diameter and 0.6m deep filled with single context (400), a friable light – dark brown and orange banding sandy silt.

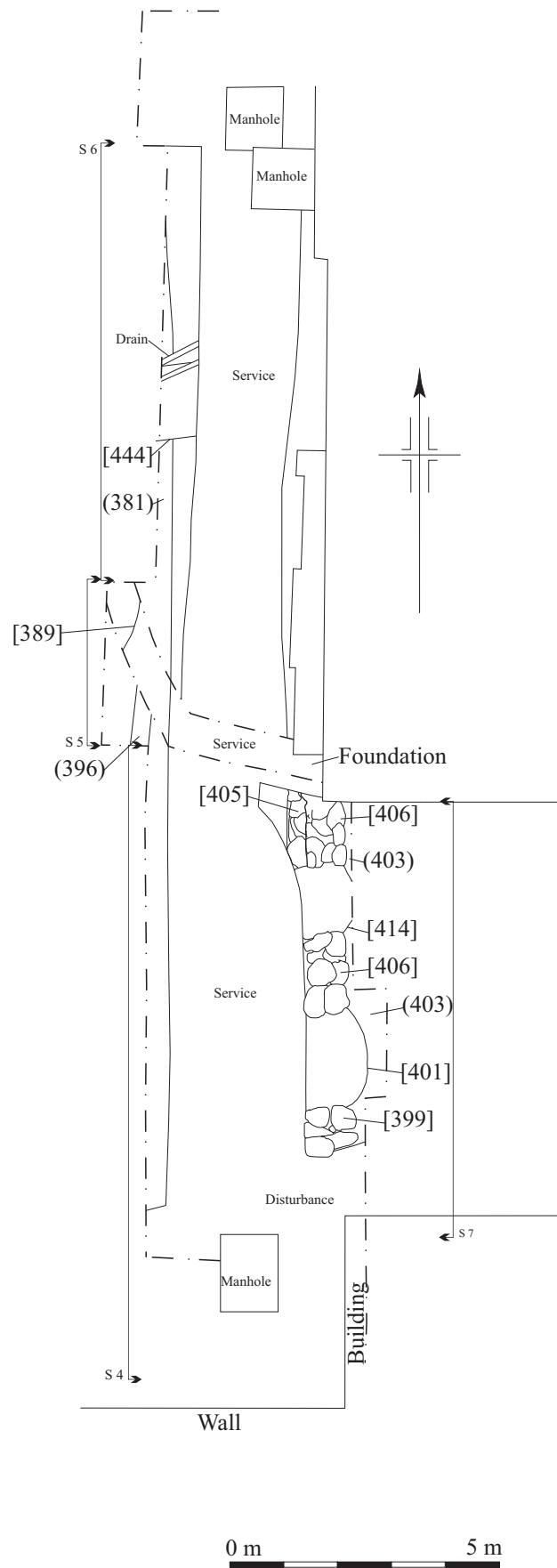


Figure 6. Plan of Trench in Canon Coulter's Garden

Inclusions such as sub-angular limestone fragment, roots, and mortar flecks were all present. Wall [406] had been cut into by service trench [414] filled by (413 & 415). Wall [406] had its western face damaged by a modern machine cut service trench. There was no sign of facing on the eastern side.

The northern part of wall [406] was directly on top of feature [405] composed of roughly dressed limestone cobble sized stones 100mm x 100mm approx, in an irregular pattern. North – south it was 1.5m long, 0.6m wide and 0.5m deep. The feature had been destroyed to the south by modern services and damaged on the western face by another service trench. It is possible that this is a deeper part of the foundation for the building over a ‘soft spot’ or an earlier feature.

The lowest deposit (404) seen in the west-facing section was a light orange-brown sandy silt with cbm and limestone fragments. This contained a sherd of late 11<sup>th</sup> to mid 14<sup>th</sup> century pottery. The 19<sup>th</sup> century sherd recorded from this deposit is contamination from one of the service trenches. Above this deposit was dark brown sandy silt with moderate fragments of limestone, and gravel (403). The last deposit was seen on the western side of the area reduced for the pathway. Here it was 0.98m thick and it had the consistency of garden soil. From this layer a small silver halfpenny minted 1399-1413 was recovered.

Beneath deposit (403) on the west side of the area and towards the middle was a mound of material (425 and 395) (Fig. 7, Sections 4 & 5). This comprised mid brown-orange sand and gravelly silt that was up to 0.60m thick. Deposit (394) was probably the same as (403). Beneath deposit (425) was deposit (426) comprising green-brown silt.

Lying above (403) on the western side of the area was a layer [396] of creamy white limestone mortar mixed with brownish yellow sand 0.08m thick (Fig. 7, Section 4). This may have been a north-south path, seen for a length of 10.4m. The path rose upwards from the south before levelling out to the north. Above the path was deposit (420) composed of grey-brown silty clay, which was 0.12m thick above the level part of the path but up to 0.4m thick to the south where it had been used to level up the fall in ground level. Above and cut into the last was deposit (419/428) a mid orange-grey sandy gravel that may have been a later east-west path. This had been replaced by a path of hard creamy yellow-white limestone mortar (427) on the south side.

Cut into deposit (420) were two small pits [422] and [424]. [422] was circular in plan 0.7m wide and 0.38m deep. The sides of cut were steep with the upper edge of cut being 85° from the horizontal sloping to 45° and a concaved bottom. The singular fill was (421) a friable mid grey brown sandy silt 0.38m thick.

North of [422] was [424], a circular feature 1.3m in diameter and 0.6m deep. The sides were steep with the top of the cut being 75-80° from the horizontal sloping to 45° at a flat bottom. The only fill (423) was friable dark brownish grey sandy silt with occasional small stones making up 5% of context. Both of these pits were under context (418), a hard light whitish yellow gravel hardcore 0.2m thick.

Pit [389] was sub circular 1.54m north–south, 0.75m east–west and 0.72m deep and was cut into deposit (394) which is probably the same as deposit (403). The upper edge of the



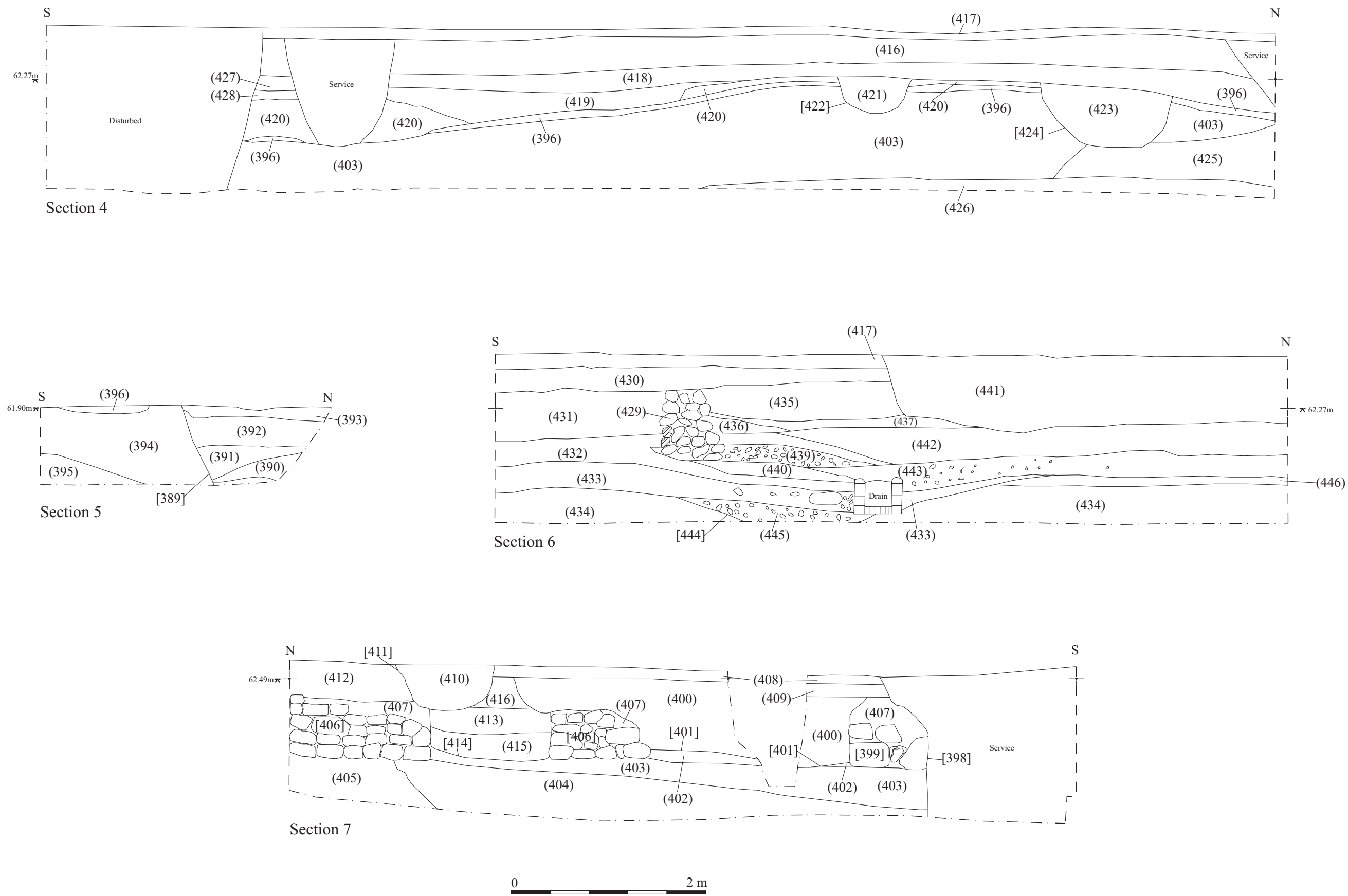


Figure 7. Sections in Canon Coulter's Garden

cut was 55° from the horizontal. The bottom was not observed. The lowest fill recorded was (390); a hard coppery brown-yellow sandy gravel (gravel making 60% of deposit) with charcoal flecking 0.19m thick. Above (390) was (391) a hard mid grey-brown sandy silt gravel (60% gravel) 0.26m thick with charcoal flecking. Above (391) was a hard mid grey-white sandy silt gravel (50% gravel) with creamy white mortar and charcoal flecking 0.38m thick. The upper fill of [389] was (393) a friable-hard mid yellow-brown silty clay gravel (40% gravel) 0.39m thick with charcoal inclusions. A modern service trench has truncated the top of the feature.

Further northwards were a series of deposits that cannot be related to those to the south. The earliest (434) was brown-red, mottled bright yellow, sandy gravel. (Fig. 7, Section 7) This was cut by a 2m wide east-west orientated ditch [444] that was filled by blue-grey clay with angular limestone fragments (445). This contained 12 sherds of pottery dated to the 14<sup>th</sup> or 15<sup>th</sup> century. Overlying this was dark black-brown-grey sandy clay with charcoal flecking (446) in turn overlaid by pale brown-grey silty clay (433), grey-brown sandy clay containing 30-40% small limestone (4332, mid orange-yellow sand and gravel (440) and dark brown-grey sandy clay with 40% small stone (443).

A drystone wall [429] was constructed from irregular sized angular limestone fragments, the largest being 180mm x 100mm. Fragmentary red brick pieces approximately 80mm x 100mm were also used. It was constructed in courses with no bonding material being present. The wall was 0.58m wide at the bottom and 0.44m at the top. The height of wall was 0.64m. The wall appears to be cut into layers and lenses of build up such as (432), a friable mid greyish brown sandy clay 0.51m thick on the southern side and (439), a loose dark blue-grey sandy clay with angular limestone pieces approximately 80mm wide and 60mm wide making up 60-70% of the deposit on the northern side.

Post-dating the building of the wall was a series of deposits including brown-grey sandy clay (442), orange-yellow sand with 50-60% small gravel (436), dark brown-grey gravelly sandy clay (437), and dark grey-brown sandy clay with 40% small gravel (435). These were all to the north of the wall. To the south of the wall was a 0.50m thick deposit of dark grey-brown sandy clay (431). Overlying these was a deposit of orange-yellow very gravelly sandy clay (430) and modern topsoil (417).

At the western end of Canons Garden a service trench was excavated from a manhole along side the eastern wall of the Brewhouse. Within this trench wall [460] was observed. It was constructed from rough, unfinished limestone blocks (largest 260mm wide x 160mm long, smallest 130mm wide x 80mm long). 3 courses of stone were visible without bonding material. The alignment of the wall was north – south and it was 0.83m wide and survived at least 0.36m high. It was set within a foundation cut [462] which was cut through (463); loose dark grey-brown sandy clay with 5% stone. The wall was sealed by the present garden soil (459).

### **4.3 Blue Boar Stair 1**

Trenches for new drainage were opened up in the floor of Blue Boar building. No archaeological features were exposed. Undated made ground deposits such as (282); a mid brown silty sand clay were observed with a large inclusion of sub angular limestone



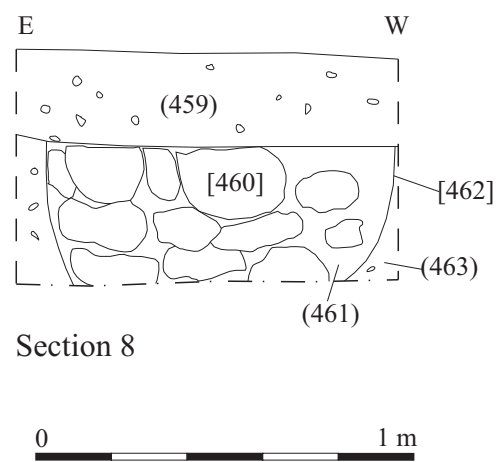
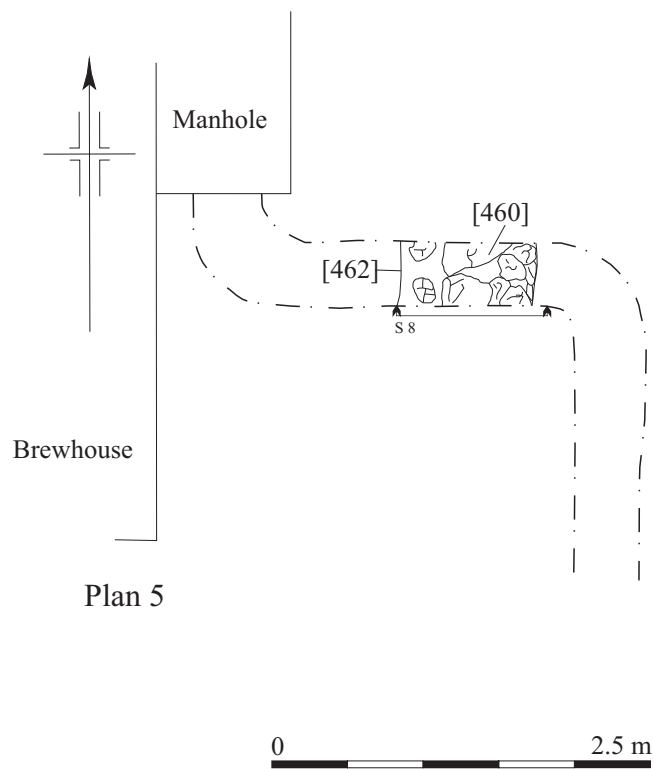


Figure 8. Plan and section of trench in Canon Coulter's Garden by Brewhouse

pieces along with 15% gravel and charcoal. This layer was known to be at least 0.72m thick. Overlying this was 0.11m thick mid brown clayey silty loam (281).

#### **4.4 Blue Boar Stair 2 (Figures 2, 9 & 10)**

New drainage trenches were hand dug through the floor to a maximum depth of 1.1m. In the southern room directly west of the entrance for stair 2 a wall [213] on an east-west alignment was observed (Fig. 9, Plan 6). It was constructed from roughly hewn limestone blocks (approximate size 240mm x 160mm x 140mm) and was bonded with a creamy white sandy mortar. The width of the wall was 1.42m with a known height of 0.58m (Fig. 9, Section 9).

Directly north of [213] was a small pit [230] cut into 0.36m thick deposit (229) composed of friable mid orange-brown silty clay with inclusions of gravel 10%, CBM flecks and charcoal. Pit [230] was appeared circular in plan although the full feature was not witnessed. The upper sides of the cut were 85° from the horizontal and the pit had a flat bottom (Fig. 9, Section 10). It was filled with (228), which was friable mid yellow-brown silty clay with 3% oyster shell and 4% charcoal. It also contained animal bone, tile and a sherd of 13<sup>th</sup> century pottery.

Deposits 218, 219 and 229 appeared slightly different from each other with (2190 having a slightly more gravel content than (218). Both deposits (218) and (229) were dated to the mid 13<sup>th</sup> century and therefore the single sherd within pit fill (228) of pit [230] is unlikely to be residual. South of wall [213] deposit (214) was composed of mid-dark yellow-brown sandy silty clay with a sherd of late 11<sup>th</sup> to mid 14<sup>th</sup> century pottery and therefore could be of mid 13<sup>th</sup> century. Overlying wall [213] was 0.04m thick deposit of mid brown black silty sandy clay with 10% content of small gravel. Above this was a deposit of mid brown sandy silty clay with 10% gravel content (216) and (mid black-brown clay silt (215). A sherd of pottery from deposit (216) is dated to the late 11<sup>th</sup> to mid 14<sup>th</sup> century and is either residual or could indicate that the building had gone out of use by the mid 14<sup>th</sup> century.

In the southern room directly east of the entrance for stair 2 were walls [211] and [212]. The relationship between the walls, if there was one, was destroyed by a service (Fig. 9, Plan 8 & Section 11). [211] was constructed from roughly hewn limestone blocks (approximate size 150mm x 100mm x 90mm) with a creamy white limestone mortar. [211] had a width of 1.28m and was observed in both sections of the narrow trench and is likely to be a continuation of wall [213] seen further west. [212] was similarly constructed with limestone blocks, these however had been shaped to a higher standard (approximate size 120mm x 210mm x 90mm), also the quality of the construction was improved with standardised courses. [212] was bonded with a creamy white sandy limestone mortar. Also present between stones was a dark red silty sandy clay. The wall had a width of 0.9m and known height of 0.66m. The faces of [212] were not witnessed meaning that the alignment is unknown. The wall was directly under the modern hardcore.

Observed in the north-easternmost room, a trial hole was opened to reveal a small wall [204] on an east-west alignment (Fig. 10, Plan 9) with only the north face being visible.

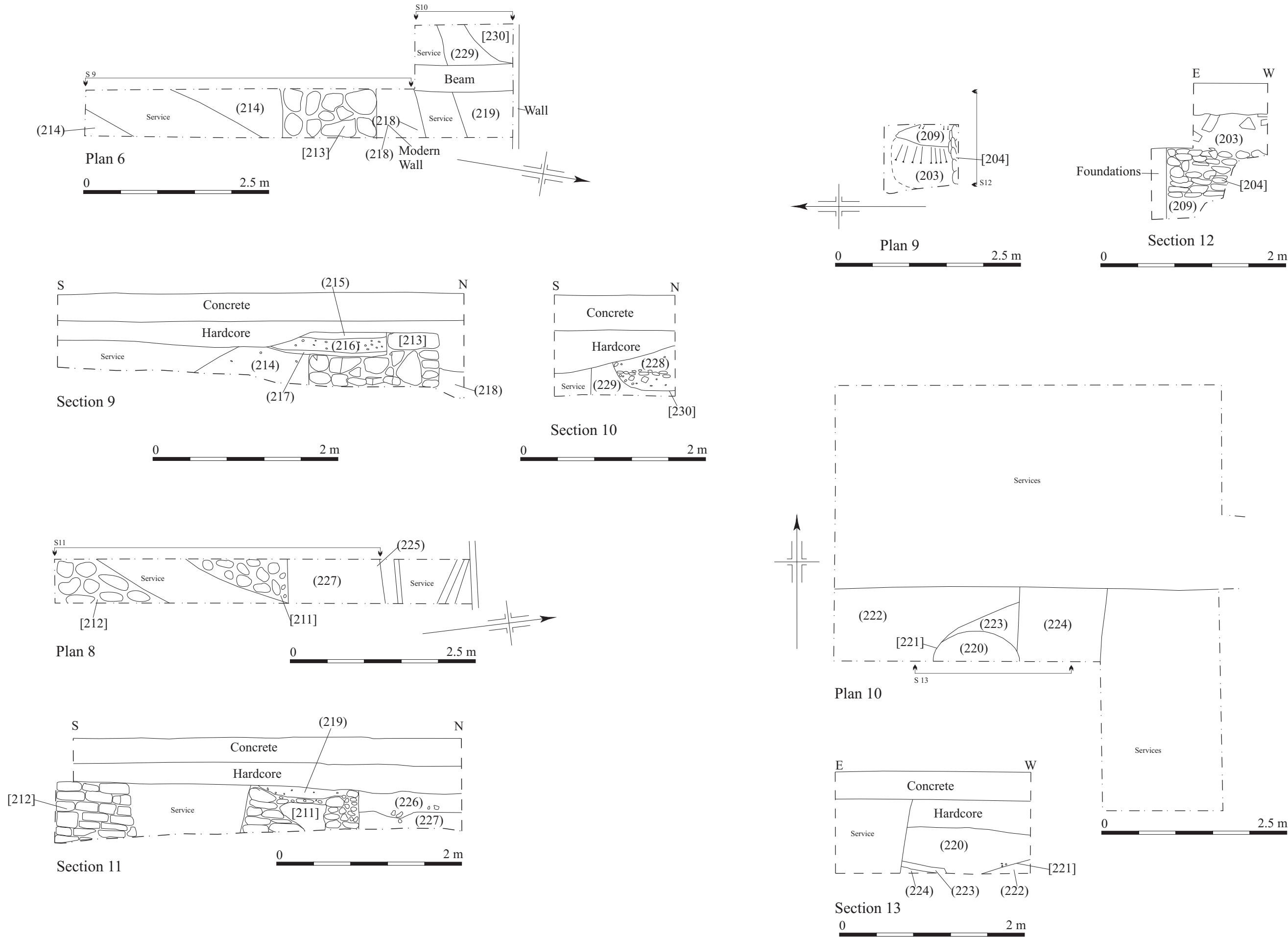


Figure 9. Stair 2 Plans and Sections

[204] was constructed from roughly hewn limestone blocks with the largest being 250mm x 80mm x width unknown. It had been bonded with a pale white limestone mortar and was 0.52m high. The wall had been cut into (209); hard, dark red-brown silty clay loam with 30% gravel and 10% grit with charcoal flecking throughout. It was at least 0.24m thick.

Overlying wall [204] was deposit (203) comprising friable dark black-brown sandy clay, 0.78m thick with inclusions of large pieces of red brick, 10% creamy white limestone mortar pieces and 20% small stones. Deposit (203) was recorded above [204] as well as covering the northern face.

To the south of wall [204] in the same room, a 2.08m x 2.31m trench was opened to accommodate a new manhole. Most of below ground had been heavily disturbed by services. However, a small area remained in the south-west corner that showed pit [221] (Fig. 10, Plan 10). The top and bottom of [221] were not witnessed due to destruction from services and the extent and depth of trench. The cut of the pit at the sides was 35° from the horizontal with a depth of 0.51m and width of 1.35m. The single fill (220) was friable, mid dark brown sandy silty clay with charcoal, CBM, animal bone, small limestone pieces and pottery dating from at least the mid 16<sup>th</sup> century.

Other service trenches were dug that showed no sign of archaeological features and indicated that large single layers were modern disturbance/deposits.

Outside the entrance for stair 2 and to the east and west, 0.8m wide drainage trenches were excavated on north/south alignments. In the trench to the east, wall [455] was recorded (Fig. 10). Constructed from roughly finished limestone blocks (largest 550mm x 330mm x 210mm, smallest 130mm x 180mm x 70mm) over four visible courses, the wall was aligned east – west. Sandy mortar with small shell was used for bonding. The wall was 1.14m wide and was at least 0.72m high. Overlying the wall was 0.84m thick deposit (453); a mid, dark black-grey sand clay with stone. Wall [455] had deposit (454) abutting. This deposit was soft mid black-brown sand clay was also under (453). Deposit (454) was dated from at least the 13<sup>th</sup> century until the mid 14<sup>th</sup> century.

West of the entrance of stair 2 the wall continued and was numbered [451]. The matrix (452) of the stones contained a sherd of Medieval Oxford Ware that dates from the late 11<sup>th</sup> century until the mid 14<sup>th</sup> century.

#### **4.5 Blue Boar Stair 3 (Figures 11 & 12)**

Pit [247] was recorded in the southern room directly east of the entrance to stair 3 (Fig. 11, Plan 13 & Section 15). The pit was circular with a diameter of 2.05m and depth of 0.54, sides at 45° and a U-shaped base. The single fill (246) was a friable mid orange-yellow-brown gritty clay loam with large roughly hewn limestone pieces (c. 180mm x 120mm x 70mm) and charcoal inclusions. Finds included pottery dating from after 1550 and animal bone. A clay tobacco pipe bowl dates this pit to 1640-60 or later. The pit was directly under the hardcore and concrete flooring and cut into 0.61m thick deposit (248) a friable mid yellow-brown silty sandy clay with charcoal and 10% grit inclusions.

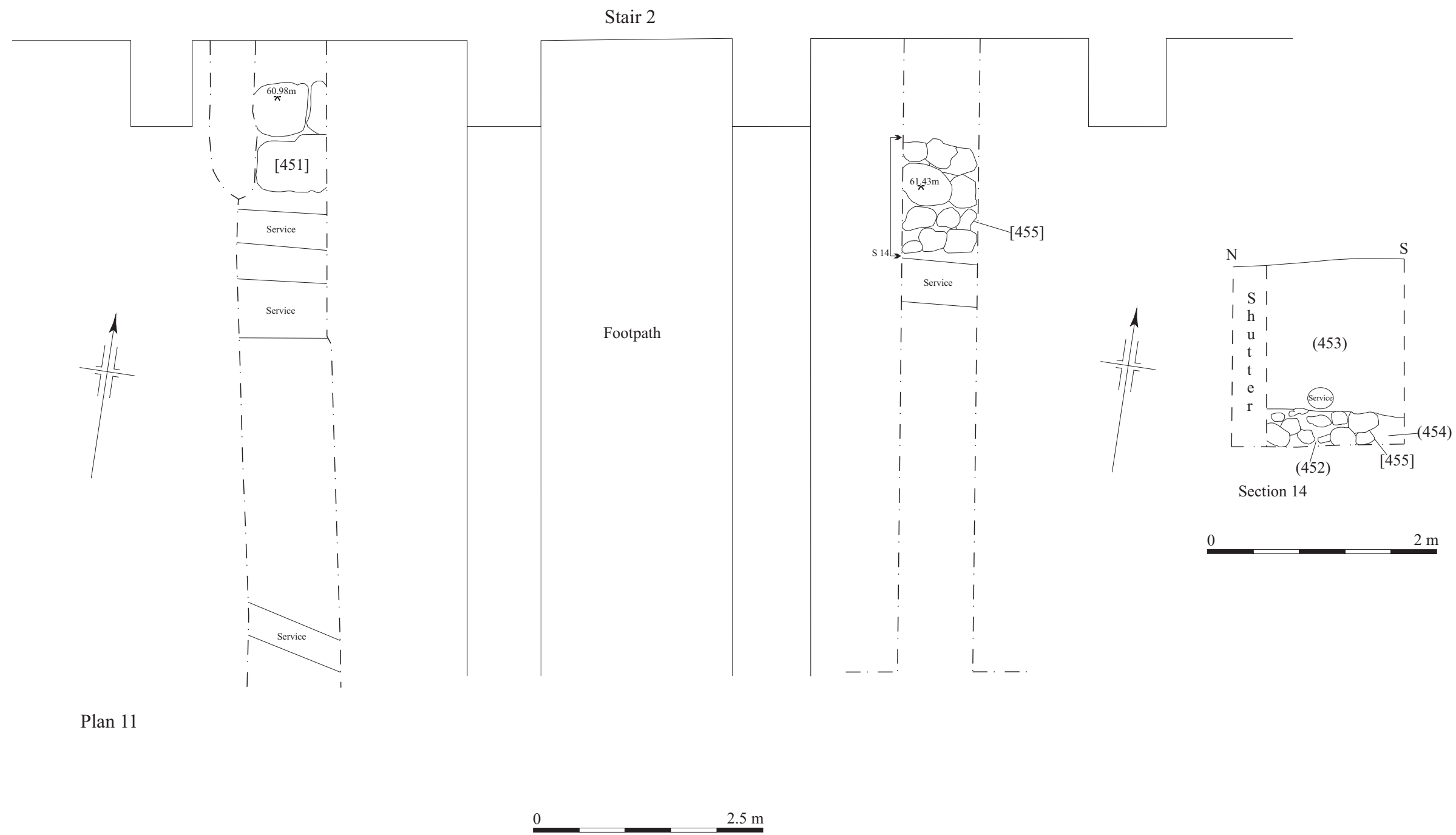


Figure 10. Outside Stair 2 Plan and Section

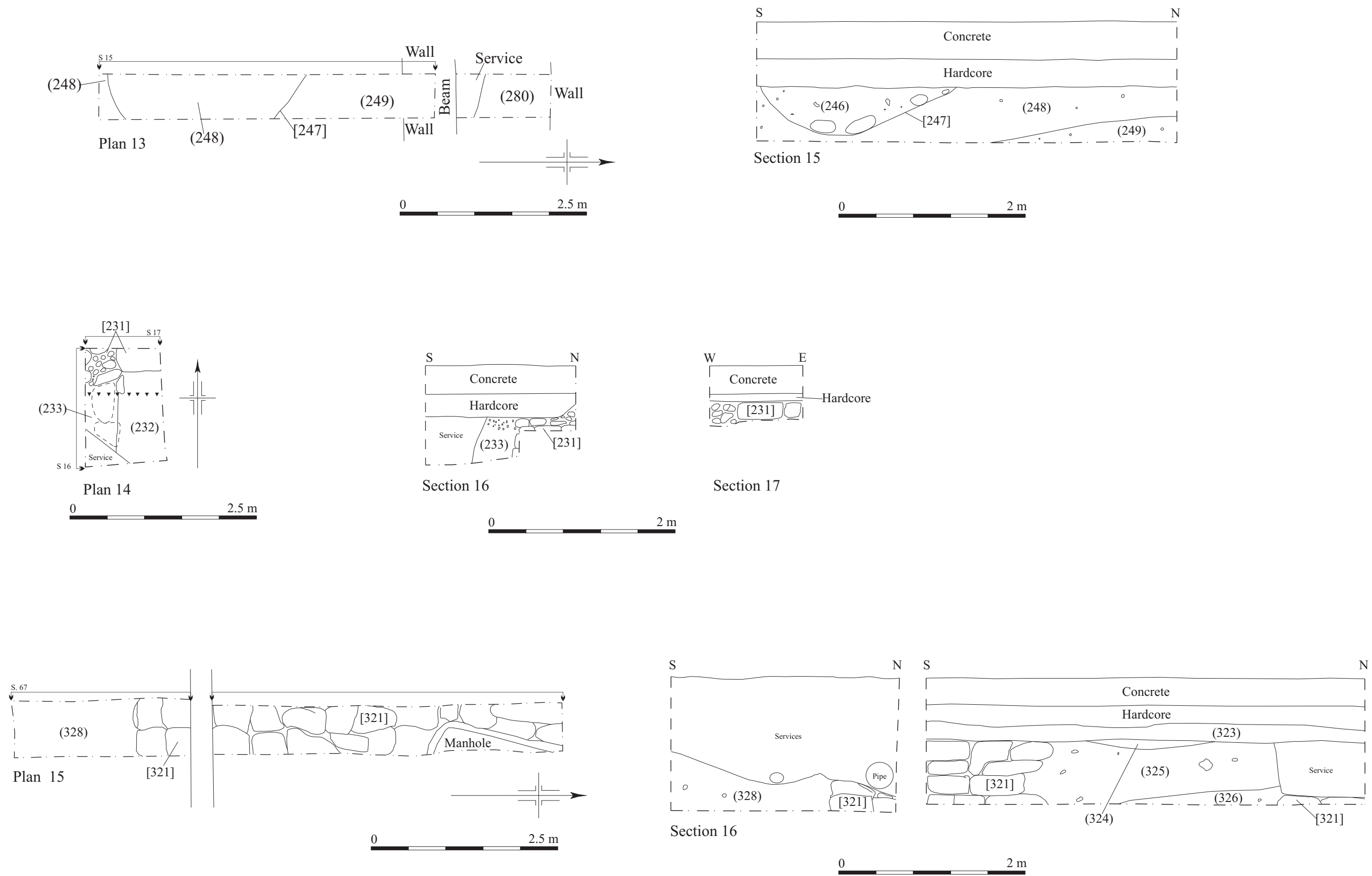


Figure 11. Stair 3 Plans and Sections

A stone structure [231] was observed in the north-easternmost room when a small 1.6m x 1m hole was opened (Fig. 11, Plan 14). It had a face to the south and was constructed of roughly hewn limestone blocks with the largest 500mm x 310mm x 180mm and the average size around 200mm x 180mm x 80mm. The blocks were bonded with creamy white sandy limestone mortar. Possibly associated with structure [231] was deposit (233); a friable-hard mid yellow-brown sandy silty clay with creamy white limestone mortar patches and limestone pieces 100mm x 80mm x 20mm. Deposit (233) was observed in the east section and south section where it had been cut by a service trench. It was dated to after the mid 16<sup>th</sup> century. In the western section only deposit (232); a friable mid-dark brown-black silty clay with charcoal flecking and 2% gravel was recorded.

In the southern room directly west of the entrance, a large north-south wall was discovered [321] (Fig. 11, Plan 15). With large roughly hewn limestone blocks approximately 800mm x 500mm x 600mm the wall was 0.9m wide, at least 6.5m long and 0.68m high. Neither face showed signs of plaster while bonding material was almost absent; creamy white-red clay was used in places. The wall [321] was cut into deposit (325) which was on both sides and dated from at least the mid 16<sup>th</sup> century. This was friable mid-dark yellow-brown silty clay with 10% gravel, and small angular stones, CBM and charcoal inclusions. It was 0.66m thick. The wall was under deposit (323); a friable mid black-brown silty sandy clay 0.21m thick. This modern layer also covered a service cut.

In the westernmost room on the south side of the corridor was pit [268] (Fig. 12, Plan 16). The pit had been partially destroyed by modern floor beams. What remained had at least a diameter of 1.25m with a depth of 0.48m. The bottom of the pit was not witnessed due to depth of trench. The upper fill (266) was friable mid-dark grey-brown clay silty loam 0.14m thick with 5% gravel, charcoal and animal bone inclusions and dated to after 1550. The lower of the fills (267) was friable mid brown-green clay silt loam 0.39m thick with a heavy charcoal presence of 20%, 5% grit, and animal bone. Pit [268] was cut through 0.42m thick deposit (269) comprising friable mid yellow-brown loamy silty clay with charcoal and 10% gravel inclusions. Above pit [268] was 0.31m thick deposit (265) of friable mid chalky yellow-brown gritty clay silt with modern red brick inclusions.

A trench was dug the length of corridor west of the entrance. A large deposit (271) of friable mid yellow-brown silty clay loam 0.39m thick extended the length of the corridor. At the eastern end of the corridor trench a small pit [274] was recorded cut into deposit (271) and had been half removed by a floor beam. Pit [274] was circular in plan, 0.71m wide and 0.41m deep. The break of slope at top of cut was 55° from the horizontal sloping off to 25° at a flat bottom. The 0.27m thick primary fill (273) was a friable heavily mixed dump of mid brown-yellow with dark red and creamy white mottled silty clay loam. Charcoal flecking, 5% grit/gravel and animal bone were all inclusions. The upper fill (271) was friable mid yellow-brown silty clay loam with charcoal and small sub angular stones (c. 10mm – 20mm) inclusions. The pit dates from after 1550 due to Border Wares in the primary fill (273).

In the westernmost room (Transformer Room) pit/linear feature [261] was observed; 0.9m wide, 0.5m long with a depth of 0.52m. The upper edge of the cut was 45° from the

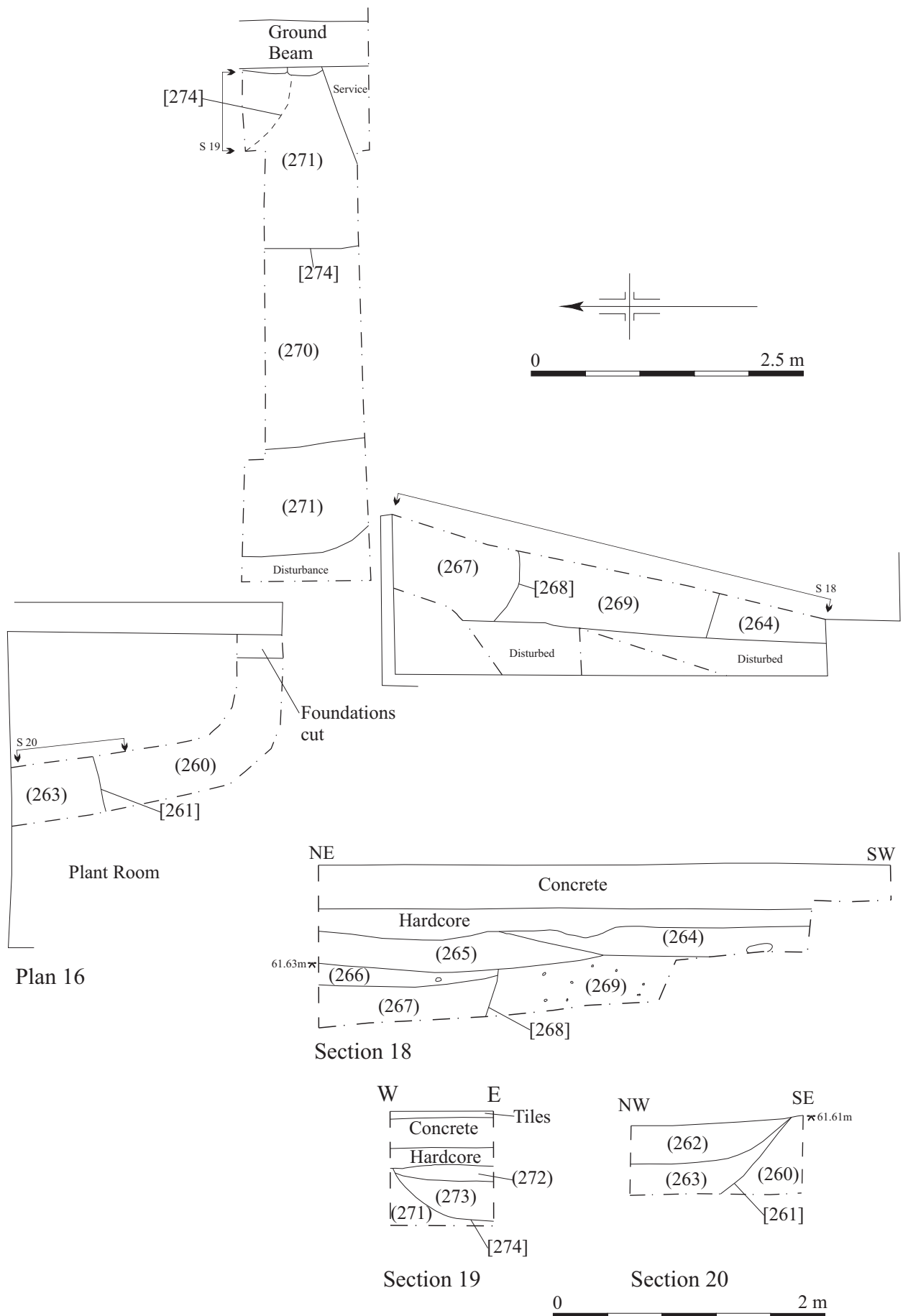


Figure 12. Stair 3 Plan and Sections



horizontal sloping to 35°. The bottom of feature was not witnessed due to lack of depth of the trench. The upper fill (262) was friable mid yellow-brown silty clay loam 0.34 m thick with charcoal flecking, oyster shells, 5% grit and small angular stone inclusions. The lowest fill (263) seen was a friable-hard mid yellow-brown mixed with creamy white mortar patches. A modern wall had cut the northern half of pit [261].

Wall [451/455] was seen during trial geotechnical works (JMHS 2006a). Here a mid 11<sup>th</sup> century or 12<sup>th</sup> century pit was cut by a 13<sup>th</sup> century pit. Pottery from the wall dated it to the 15<sup>th</sup> century or later.

#### **4.6 Blue Boar Stair 4 (Figure 13)**

West of Stair 4, a trench 2.52m deep was opened through the access road to the Brewhouse. Wall [367] was observed made from roughly hewn limestone pieces 220mm x 160mm x 120mm bonded with creamy white gritty clay (Fig. 13, Plan 17). The alignment of the wall was east-west and stood 1.1m tall and 0.8m wide. The eastern and western ends had been destroyed by services. The wall had a foundation trench [368] that was 0.9m wide and had the upper edge of the cut 55° from the horizontal before sloping for 35° at a flat bottom. The foundation cut was 0.28m deep and filled with (369), a friable mid yellow-brown silty gritty clay with charcoal flecks and 10% gravel. It had been cut into deposit (360) that was a friable mid brown-black silty clay 0.45m thick with 5% gravel, charcoal flecking and CBM pieces. Abutting [367] and overlying the foundation cut [368] was 0.38m thick deposit (359) comprising friable relatively dark yellow-brown sandy gritty (20%) clay.

Physically above wall [367] and deposit (359) was deposit (450), a friable mid yellow-grey silty clay 0.12m thick with 10% gravel and charcoal flecking. This was dated to after the mid 16<sup>th</sup> century.

#### **4.7 Brewhouse (Figure 14)**

A 1.1m north-south, 0.9m east-west service trench was excavated in the most easterly room to a depth of 1.1m. Along the west side of the trench a red brick (210mm x 60mm x unknown width) and limestone wall [306] was partially exposed. The wall was bonded with a creamy white limestone mortar and was at least 0.15m wide and was aligned NNW/SSE. Along the east side of the wall was (305); a hard creamy white limestone mortar with large sub angular limestone pieces (approximate size 220mm x 180mm x 110mm). Deposit (305) was 0.26m thick and 0.34m wide.

In the centre aligned east-west and joining with (305) was a single large rectangular shaped limestone block [316], size 590mm x 320mm x 310mm. On one side was a pentagram mason's mark. To the north of support [316] was surface (304) comprising hard dark yellow black-brown silty clay which contained charcoal, tile flecks and a small amount of grit (5%). Above (304) was (303), a mid golden brown silty clay loam 0.26m thick. South of support [316] the lowest deposit seen was a surface (302) of mid brown-yellow silty loam and mortar. Overlying this was a 0.02m thick layer of charcoal (301) covered by 0.09m of mid yellow gravelly clayey silt with charcoal flecking (300) and

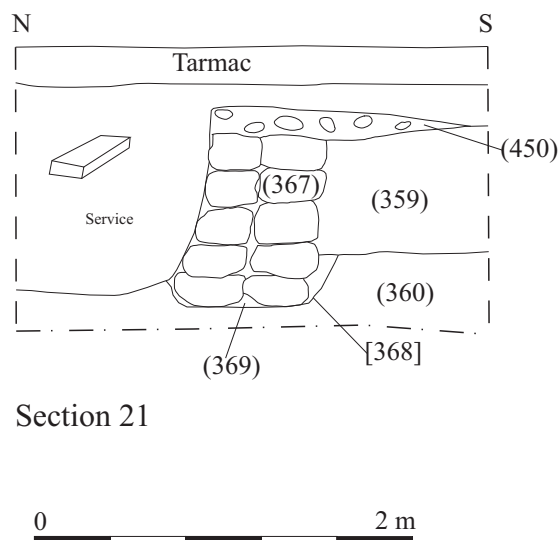
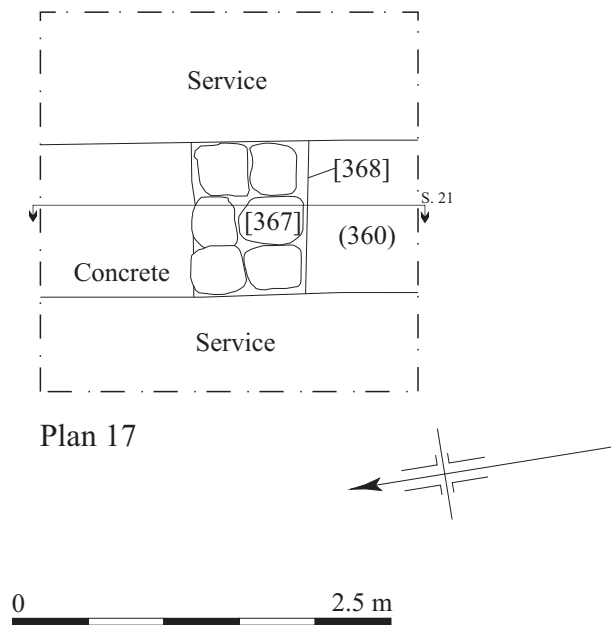
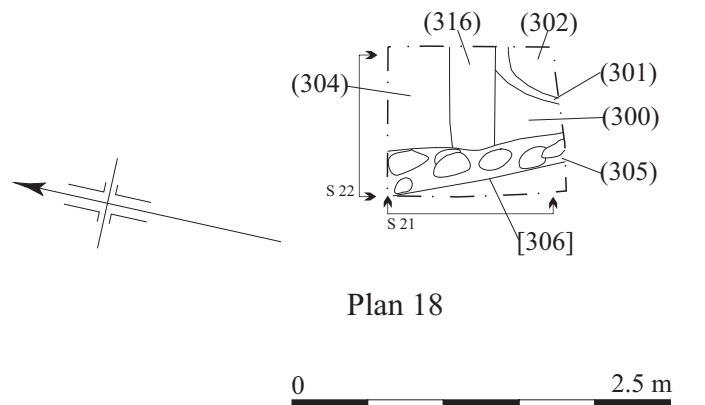
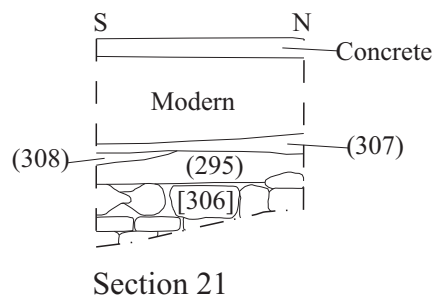


Figure 13. West of Stair 4 Plans and Section



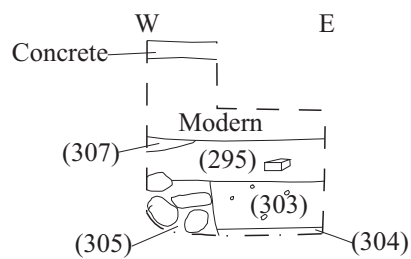
Plan 18

0 2.5 m



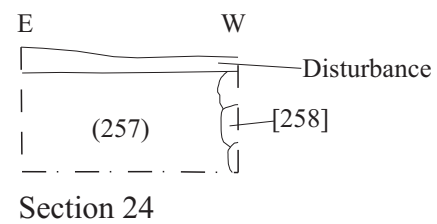
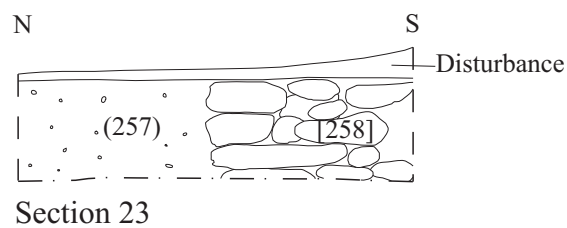
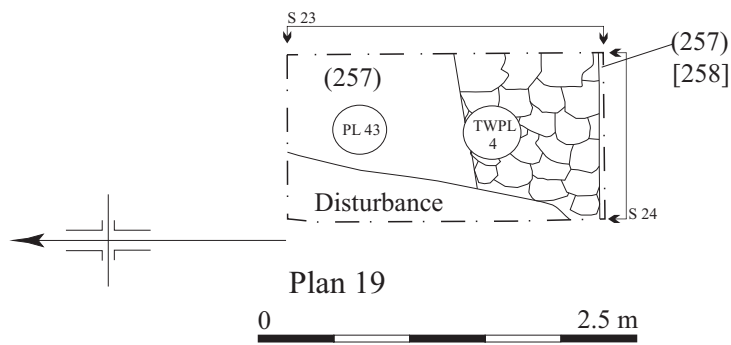
Section 21

0 2 m

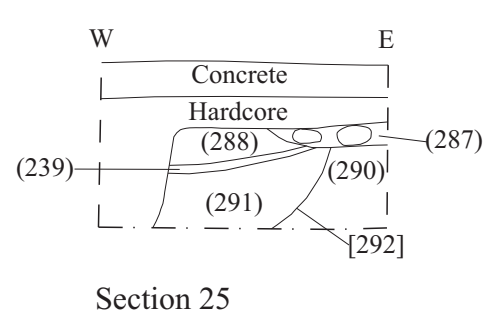
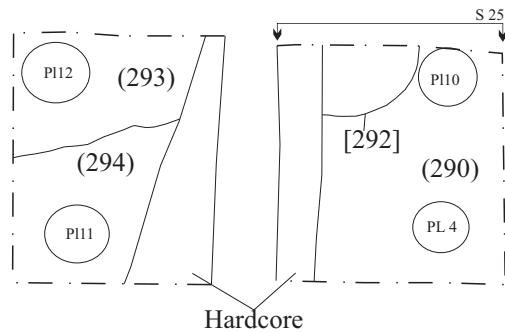


Section 22

Figure 14. Brewhouse Plan and Sections



0 2 m



0 2 m

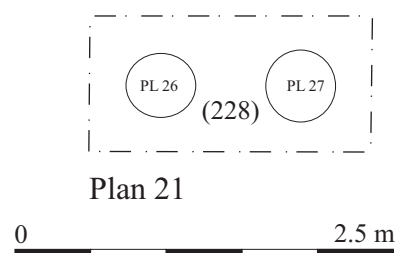


Figure 15. Pile Cap Pits, Plans and Sections

0.22m of grey-yellow clayey silt (299).

The structure must be associated with brewing with the wall [306] defining one side of a flue and the mortar lining and limestone block [316] being supports for large vessels. The layer of charcoal south of the limestone suggests the presence of a fire here.

The structure was covered by deposits of silty loam (309) and (295).

#### **4.8 Pile Caps (Figure 15)**

Fifty-one piles were sunk within the new theatre room with a further eight piles to the south outside. The majority of pile cap pits showed only modern disturbance down to formation depths of 0.8m. Pile caps such as for pile 29 dug to a depth of 0.66m showed potentially undisturbed deposits such as (252), a hard mid yellow-brown silty clay with 2% small stones. This deposit was only 0.04m thick at the bottom of this pit and was witnessed in many other pile caps pits that had not been disturbed to formation depth.

Along the north wall the pile cap for piles PL9 and PL12 (Fig. 15, Plan 20) showed unusually little signs of disturbance and pit [292] was recorded directly under the modern hardcore. A ground beam on the western side of feature had destroyed half of the pit. Upper fill (288) of the pit was friable mid-dark yellow-brown silty sand clay with charcoal, small sub angular stones and CBM inclusions. A thin lens of creamy white limestone mortar 0.06m thick (289) was below with possible primary fill (291) at the bottom which was friable mid red-brown gritty silty clay 0.38m thick with 20% gravel, charcoal and CBM inclusions. Pit [292] was cut into deposit (290) of friable mid grey-brown silty clay 0.39m thick. This deposit had a lens of creamy white limestone mortar 0.04m thick within it.

A sherd of pottery dating to 13-14<sup>th</sup> century was recovered from deposit 228 (Fig. 15, Plan 21) along with animal bone and tile. It is possible that this was fill material of a pit.

In pile cap TWPL4 wall [258] (Fig. 15, plan 19) was observed on an east-west alignment. Made of roughly hewn limestone blocks average size 210mm x 160mm x 80mm and bonded with creamy white limestone mortar it had a width of at least 1m. A cut for this wall was not witnessed and appeared to have deposit (257), a friable mid yellow-brown silty sandy clay 0.51m thick with charcoal flecking and 10% gravel inclusions spread over the top and abutting either side.

## **5 FINDS**

### **Pottery by Paul Blinkhorn**

The pottery assemblage comprised 157 sherds with a total weight of 5,534g. It consisted of a range of medieval and later wares which show that the main period of activity at the site was between the 13<sup>th</sup> and late 16<sup>th</sup> centuries, after which very little pottery was deposited. A small number of features may date to around the time of the Norman

Conquest, but those that are given that date each produced only a single sherd of pottery, and could easily be later than the ceramic date suggests. The early post-medieval assemblage has unusually large quantity of drinking pottery, specifically German Stonewares, a pattern of vessel use which has been noted from assemblages from other excavations at colleges in the city.

### **Analytical Methodology**

The pottery was initially bulk-sorted and recorded on a computer using DBase IV software. The material from each context was recorded by number and weight of sherds per fabric type, with featureless body sherds of the same fabric counted, weighed and recorded as one database entry. Feature sherds such as rims, bases and lugs were individually recorded, with individual codes used for the various types. Decorated sherds were similarly treated. In the case of the rimsherds, the form, diameter in mm and the percentage remaining of the original complete circumference was all recorded. This figure was summed for each fabric type to obtain the estimated vessel equivalent (EVE).

The terminology used is that defined by the Medieval Pottery Research Group's Guide to the Classification of Medieval Ceramic Forms (MPRG 1998) and to the minimum standards laid out in the Minimum Standards for the Processing, Recording, Analysis and Publication of post-roman Ceramics (MPRG2001). All the statistical analyses were carried out using a Dbase package written by the author, which interrogated the original or subsidiary databases, with some of the final calculations made with an electronic calculator. All statistical analyses were carried out to the minimum standards suggested by Orton (1998-9, 135-7).

### **Fabric**

The assemblage was recorded utilizing the coding system and chronology of the Oxfordshire County type-series (Mellor 1984; 1994), as follows:

*OXAC: Cotswold-type ware, AD975-1350. 13 sherds, 209g.*  
*OXBF: North-East Wiltshire Ware, AD1050 – 1400. 1 sherd, 26g.*  
*OXY: Medieval Oxford ware, AD1075 – 1350. 14 sherds, 204g.*  
*OXAM: Brill/Boarstall ware, AD1200 – 1600. 71 sherds, 1985g.*  
*OXBG: Surrey Whiteware. Mid 13<sup>th</sup> – mid 15<sup>th</sup> C. 2 sherds, 20g.*  
*OXBN: Tudor Green Ware, late 14th century - c. 1500. 1 sherd, 6g.*  
*OXCL: Cistercian ware, 1475-1700. 3 sherds, 8g.*  
*OXAMTG: Brill/Boarstall 'Tudor Green' wares, 1475-1600. 3 sherds, 22g.*  
*OXFH: Border wares, 1550 - 1700. 2 sherds, 37g.*  
*OXST: Rhenish Stoneware, AD1480 – 1700. 14 sherds, 858g.*  
*OXDR: Red Earthenwares, 1550+. 21 sherds, 1427g.*  
*OXCE: Tin-glazed Earthenware, 1613 – 1800. 1 sherd, 2g.*  
*OXFI: Chinese Porcelain, c1650+. 1 sherd, 20g.*  
*OXRESWL: Polychrome Slipware, 17<sup>th</sup>C. 2 sherds, 188g.*  
*OXBEW: Staffordshire manganese wares. c. 1700-1800. 1 sherd, 41g.*  
*OXEST: London stoneware. c. 1680 plus. 1 sherd, 37g.*  
*WHEW: Mass-produced white earthenwares, 19th - 20th C. 3 sherds, 175g.*

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 3. Each date should be regarded as a *terminus post quem*. The range of fabrics is typical of the period in Oxford, and can be paralleled at numerous sites in the city.

### Chronology

The range of relatively well-dated wares at the site allows the following phases, based on the known start-dates of the wares in the city of Oxford (Mellor 1994). The phasing, and pottery occurrence by number and weight of sherds and EVE, is shown in Table 1.

*Table 1: Ceramic phasing: pottery occurrence per phase by number and weight of sherds and EVE*

Phase	Defining wares	Date	No Sherds	Wt. Sherds	Mean Wt
CP1	OXAC	11 <sup>th</sup> C	1	11g	11.0g
CP2	OXBF, OXY	L11 <sup>th</sup> -12 <sup>th</sup> C	3	24g	8.0g
CP3	OXAM	13 <sup>th</sup> C	47	928g	19.7g
CP3a	OXBG	M 13 <sup>th</sup> – 14 <sup>th</sup> C	4	46g	11.5g
CP4	OXAM*	14 <sup>th</sup> C	12	139g	11.6g
CP5	OXBN	15 <sup>th</sup> C	0	0g	0
CP6	OXCL, OXAM*	L15 <sup>th</sup> – M16 <sup>th</sup> C	9	31g	3.4g
CP7	OXST, OXDR	M16 <sup>th</sup> – 17 <sup>th</sup> C	55	3145	57.2g
CP8	OXCE	17 <sup>th</sup> C	4	49g	12.3g
Totals			117	3926g	

\*Based on fabric and form

The data in Table 1 show that there was activity at the site from the 11<sup>th</sup> – earlier 17<sup>th</sup> centuries. The earliest groups, from CP1 and CP2, all comprise single sherd context assemblages, and could easily be later than the ceramic date suggests. The main periods of pottery deposition were CP3, the 13<sup>th</sup> century, and CP7, the mid-16<sup>th</sup> to 17<sup>th</sup> century. In between, pottery was somewhat sparse. The main assemblages, CP3 and CP7 generally comprise fairly large sherds, with high mean sherd weights, indicating that they are in good condition, and almost certainly the products of primary deposition.

### The Assemblage

The occurrence of the major fabrics per ceramic phase is shown in Table 2. It shows that there is a degree of residuality in some phases. In CP6, nearly 13% of the pottery is residual early medieval wares. There seems little doubt therefore that there has been considerable disturbance of the early medieval deposits at the site during the mid-late 16<sup>th</sup> century. Otherwise the pottery occurrence is mostly as would be expected, with any fluctuations due to the small assemblage sizes in some phases.

The CP3 assemblage is generally typical of sites in the city, being dominated by fragments of OXAM glazed jugs, along with quantities of unglazed jars and bowls, vessel types which become less common through the medieval period. A single example of an



OXAM skillet handle is the only exception, and such vessels are not uncommon in Oxford, and usually occur in small quantities at most sites (e.g. Mellor 1994).

*Table 2: Pottery occurrence per ceramic phase by fabric type, expressed as a percentage of the total wt per phase, major fabrics only*

Phase	OXAC	OXBF	OXY	OXAM	OXBG	OXCL	OXST	OXDR	OXFH	OXCE	Total Wt
CP1	100%	-	-	-	-	-	-	-	-	-	11g
CP2	0	0	100%	-	-	-	-	-	-	-	24g
CP3	19.4%	2.7%	4.8%	72.4%	-	-	-	-	-	-	928g
CP3a	0	0	45.7%	10.9%	43.5%	-	-	-	-	-	46g
CP4	0	0	0	100%	0	-	-	-	-	-	139g
CP6	12.9%	0	0	41.9%	0	25.8%	-	-	-	-	31g
CP7	0.4%	0	3.3%	23.7%	0	0	26.5%	42.5%	0.4%	-	3145g

One factor which is worthy of comment is the large proportion of German Stonewares present in contexts dating to CP7. Such pottery is a relatively common occurrence in the city of Oxford, and in towns in the south and east of England generally, as they were imported in huge quantities in the early post-medieval period (Gaimster 1997). The fact that it represents over 26% of a fairly large CP7 assemblage is unusually high, however. The figure is comparable with the pottery assemblage from Tom Quad at Christ Church, where it represented 24% of the pottery from the same ceramic phase (Blinkhorn in print a), but very different to other sites, such as Oxford Castle, where it comprised just 6.5% of the contemporary ceramic phase assemblage (Blinkhorn in print b).

The overwhelming majority of late- and early post-medieval German Stoneware pottery in England, as at this site, was vessel types associated with drink, in the form of mugs or bottles, with most of the material from this excavation taking the form of mugs, although a single bottle-neck with a fragment of a *Bartmann* mask was also present. A high proportion of pottery related to drink does seem to be a feature of late medieval and early post-medieval deposits at Oxford College sites, more so than in assemblages found at domestic sites elsewhere in the city. As already noted, German Stonewares were very common at Tom Quad at Christ Church, and 23% of the pottery from the early post-medieval phases at Merton College was types associated with drink, mainly in the form of 'Tudor Green' and Cistercian wares, but German Stonewares were also present (Blinkhorn in print c). Cistercian and 'Tudor Green' type wares are present here, but in lesser quantities than the German Stonewares, and include a Cistercian ware cup with applied slip decoration, which is generally quite rare in Oxford. The preponderance of German Stoneware at this site may simple be a matter of preference of the inhabitants, or may reflect the relative wealth of the various mentioned institutions at that time. The basic cost of a German Stoneware mug was quite low, although the fashion in the mid-16<sup>th</sup> century amongst the middle classes was to have silver lids added, which could take their price up to several pounds, with the lower classes opting for cheaper pewter lids, which were often supplied with the pots (Gaimster 1997, 134). Vessels with pewter covers were only valued at around 1 1/2d each in English Port Books (ibid., 79-80). This does not appear to be significantly more than the prices paid in England for more local pottery in the later medieval period (Moorhouse 1978, 7-8).



This assemblage is a small but useful insight into pottery consumption in Oxford in the medieval period, and, particularly the early post-medieval wares, throws further light on life in the city, and especially Christ Church, at that time.

	OXAM		OXST		OXDR		OXFI		OXRESWL		
Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
108			1	3			1	20	1	24	17thC
109B	2	6	2	164							M16thC
111					2	38					M16thC
117	4	24									13thC
119	4	34									13thC
125					1	24					M16thC
Total	10	64	3	167	3	62	1	20	1	24	

Table 3: Pottery occurrence by number and weight (in g) of sherds per context by fabric type, unstratified and post-medieval contexts only

	OXAC		OXBF		OXY		OXAM		OXBG		OXBN		OXAMTG		OXCL		OXST		OXDR		OXFH		OXCE		OXREWSL		OXFI		OXBEW		OXEST		WHEW			
Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date	
0					1	2	3	311					1	18			1	23	3	359					1	164			1	41	1	37			U/S	
108																	1	3							1	24	1	20							17thC	
109B							2	6									2	164																	M16thC	
111																			2	38															M16thC	
117							4	24																											13thC	
119							4	34																											13thC	
120							1	56											2	359															M16thC	
125																			1	24															M16th	
129																			1	21															M16thC	
159																																				M16thC
165							1	4																											13thC	
173																	1	141																	M16thC	
186							3	34																											13thC	
208																			1	18															M16thC	
214					1	6																													L11thC	
216					1	5																													L11thC	
218					1	21	1	5	1	2																									M13thC	
220							2	26									1	49																M16thC		
222							1	144																											13thC	
225							1	7																												13thC
228							1	32																											13thC	
229							2	86																											13thC	
233					1	16													1	8														M16thC		
246																			1	156															M16thC	
249	1	10			2	42	1	35											1	78															M16thC	

	OXAC		OXBF		OXY		OXAM		OXBG		OXBN		OXAMTG		OXCL		OXST		OXDR		OXFH		OXCE		OXREWSL		OXFI		OXBEW		OXEST		WHEW				
Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date		
255							4	58																											13thC		
256									1	18																									M13thC		
266																	3	75	1	56															M16thC		
268																	1	23																	M16thC		
273																					1	12													M16thC		
284							2	28																											13thC		
285	1	11																																		11thC	
315																			1	14															M16thC		
323																	1	53	1	46															M16thC		
325																	1	131																	M16thC		
327							6	133																								2	39			19thC	
331					2	46	4	357											4	225																M16thC	
356																					1	25													13thC		
358																							1	2												17thC	
375			1	26			3	60																												13thC	
381							4	266									1	87																	M16thC		
383											1	6	2	4	2	5																				L15thC	
384							1	22																												13thC	
386	1	4					2	9							1	3																				L15thC	
404					1	8																										1	136			19thC	
405	1	4																	1	25																M16thC	
445							12	139																												14thC	
450																	1	109																		M16thC	
452					1	13																															L11thC
453	9	180			3	45	6	109																												13thC	
Total	13	209	1	26	14	204	71	1985	2	20	1	6	3	22	3	8	14	858	18	1365	2	37	1	2	2	188	1	20	1	41	1	37	3	175			

## 6 DISCUSSION

### 6.1 Brewhouse Courtyard

The earliest deposits seen were dated to the 13<sup>th</sup> century or slightly later. Unexcavated pits cut into these deposits were presumed of the same date. Above this level were a series of undated deposits including possible dump material indicated by at least a layer of mortar. Cut into these deposits were various pits and a small gully again all undated.

A building (Fig. 16, Building 1) is represented by wall [120] and robber trench [144]. The last floor within the building is dated to after 1550 and similarly dated deposits were to the west of the building. Following the demolition of the building the area was used to dig several small pits, one of which again is only dated to after 1550.

A later building (Building 2) is represented by walls [190] and [358] and beam slot [112]. A mortar floor north of the beam slot was identified in the evaluation trench. This building is later than a 17<sup>th</sup> century pit and maybe the building which first becomes apparent on Loggan's map of 1675, when the Brewhouse appears to have been extended to the north and to the west and lastly on Davis's map of 1797. The extension no longer appears on the Ordnance Survey map of 1850 suggesting that somewhere between 1797 and 1850 the extension was demolished.

### 6.2 Canon's Garden

Again early deposits probably dating to the 13<sup>th</sup> and 14<sup>th</sup> centuries were encountered in this area. One later probable garden deposit (403) contained a coin minted 1399-1413 (Henry IV) and was cut into by a north-south garden path (396). The earlier deposits are within the medieval tenement know as Ape Hall (*Survey* SE126=248). The path may date to after when the college acquired the land; Loggan shows formal gardens here. A further garden soil (420) overlaid the path and was cut by two small pits [422] and [424] that may have been planting pits. A later possible east-west path was also found. Drystone wall [429] (Fig. 7, Section 6) is probably a garden wall, as is north-south wall [460] immediately east of the Brewhouse.

Building 3 (Fig. 16) is part of Killcanon again shown on Loggan's map of 1675 and appears to be the SW corner of the original east-west wing.

### 6.3 Blue Boar Stair 2

Building 4 comprised walls [211]/[212], [213], [451] and [455]. This is dated to the mid 13<sup>th</sup> – 14<sup>th</sup> centuries when this area was Eagle Hall (*Survey* SE125). It was united with Ape Hall (to the south) and survived as late as 1478. In the 1493 it was part of Edward Hall.

A mid 13<sup>th</sup> century pit was found to the north of the building. The only other dated activity in the area is from after 1550 when pits and deposits area dated by Rhenish Stoneware and Red Earthenwares.

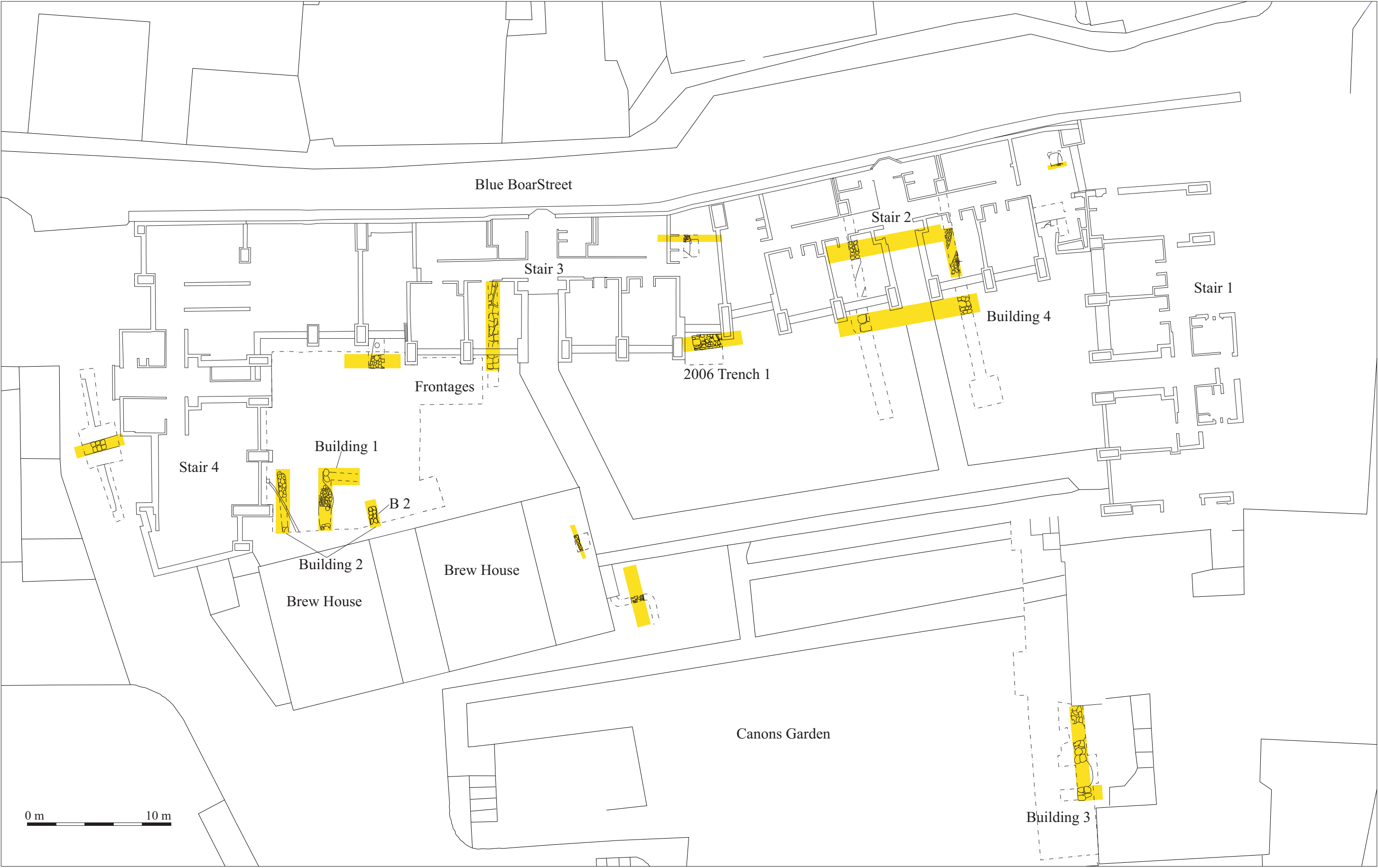


Figure 16. Area Outline showing projection of walls

## **6.4 Blue Boar Stair 3**

To the south of Stair 3 earlier pits were found in a geotechnical pit (JMHS 2006a). A mid 11<sup>th</sup> or 12<sup>th</sup> century pit was cut by a 13<sup>th</sup> century pit. The wall found in 2006 (Fig. 16, 2006 Trench 1) is dated to the 15<sup>th</sup> century or later. It is possible that this is part of the building shown on Agas' map of 1578 and subsequent maps until Wood's map of 1644.

Pits [247], [261], [268], and [274] were all recorded within Stair 3 although only pits [247] and [274] contained any dating evidence, pottery dating to after the middle of the 16<sup>th</sup> century. The stone structure (Fig. 11, Plan 14) is of similar date. The north-south wall again dates to after the mid 16<sup>th</sup> century.

The other walls must belong to buildings along the Bear Street/New Blue Boar Lane frontage shown on maps from Speed's (1604/5) onwards as small houses. It is possible that on Loggans 1675 map the buildings have been remodelled. A large wall has been built along Blue Boar Street, enclosing the college and Brewhouse, and the wall extends to where the buildings fronted the street. This suggests that when the wall was erected the buildings were remodelled into one larger building. The accuracy of these maps is not exact however and the change of three or four smaller buildings being remodelled into one larger building may be the result of the engraver.

## **6.5 Blue Boar Stair 4**

The wall west of Stair 4 is undated and could belong to a building from the medieval or post-medieval period. In the medieval period this was the site of the Area Predicatum of St Frideswide's fronting Fish Street (later St Aldates).

## **6.6 Brewhouse**

The possible remains of a fire pit for a brewing tank were observed. In the small service trench there appeared to be the northern stand [316] for a vat with a compacted floor level to the north (304) with deposit (303) being a dump over the floor. Small red brick wall [306] was strengthened along its inner edge (eastern) with mortar and reused limestone pieces (305). A stoking hole through [306] for the fire was not observed but could have been south of the service trench. South of stand [316] and contained on the western side by [306] were layers of charcoal (302) and deposits heavily mottled with charcoal. The inner side of the brewhouse wall showed the limestone had been scorched in this area. No dating evidence was recovered, but it was thought the brewhouse operated in the late 16<sup>th</sup> - early 17<sup>th</sup> century.

## **6.7 General comment**

The amount of damage done by existing and previous services made some features difficult to interpret and record. This was compounded by the narrow width of trenches dug for new foundations. In addition the paucity of reliable dating evidence from deposits prohibits more detailed interpretation of features and events.

The lack of 14<sup>th</sup> and 15<sup>th</sup> century pottery in this area is of interest. Either later 16<sup>th</sup> and 17<sup>th</sup> century building work has destroyed evidence for this period or else activity of this date in this part of Oxford was limited.

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