15-16 BEDFORD STREET

LONDON WC2

CITY OF WESTMINSTER

ARCHAEOLOGICAL WATCHING

BRIEF ON GEOTECHNICAL TEST

PITS AND BOREHOLES

SEPTEMBER 2004

BDO 04

DOCUMENT VERIFICATION

15-16 Bedford St, London WC2, City of Westminster

Watching Brief

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An Archaeological Watching Brief on Geotechnical Test Pits and Boreholes at 15-16 Bedford Street, City of Westminster, London

Central National Grid Reference: TQ 3025 8075

Site Code: BDO 04

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September 2004

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1 ABSTRACT

1.1 This report details the results and working methods of an archaeological watching brief on geotechnical test pits and boreholes at 15-16 Bedford Street, London WC2, City of Westminster. The work was designed to assess the nature of any surviving archaeological remains prior to the excavation of the site and was commissioned by Richard Hughes of Ove Arup & Partners on behalf of Lothbury Property Trust Company Ltd.

1.2 The work was undertaken on the 8th and 12th July 2004 and between the 31st August and 7th September 2004, and comprised the investigation of two boreholes and fourteen test pits.

1.3 Although terracing for the basements of the existing buildings has led to the truncation of archaeological layers; deep cut features such as rubbish pits and cesspits were recorded. The earliest features to survive were seven Middle Saxon rubbish pits, recorded in six test pits to the west of the site, whilst later features, dated to the 17th century, comprised brick-lined cesspits and a brick wall, also recorded in the western half of the site. The location of the features suggests that the western half of the site has a higher potential for the recovery of archaeological remains.

1.4 The works were carried out to a Written Scheme of Investigation submitted and approved for implementation by English Heritage. The investigation was monitored by Diane Walls for English Heritage and Richard Hughes for the developer.

2 INTRODUCTION

2.1 An archaeological watching brief on geotechnical test pits and boreholes was undertaken by Pre-Construct Archaeology Ltd. at 15-16 Bedford Street, London WC2, City of Westminster (Fig. 1). The site, previously used as offices, has recently been vacated, and whilst the listed 18th century building fronting onto Bedford Street will be retained, the proposed redevelopment work will involve the remodelling of the internal layout of the buildings. This will include the lowering of the basement ground level, the underpinning of the party and retaining walls and the provision of new services and a lift pit. The aim of this phase of work was twofold: to inform the structural engineer on the foundation design of the existing buildings; and to determine the depth and nature of surviving archaeological deposits and features so that an excavation programme can be determined. Richard Hughes of Ove Arup & Partners commissioned Pre-Construct Archaeology Ltd. to undertake the watching brief on behalf of Lothbury Property Trust Company Ltd. The site is centred at National Grid Reference TQ 3025 8075.

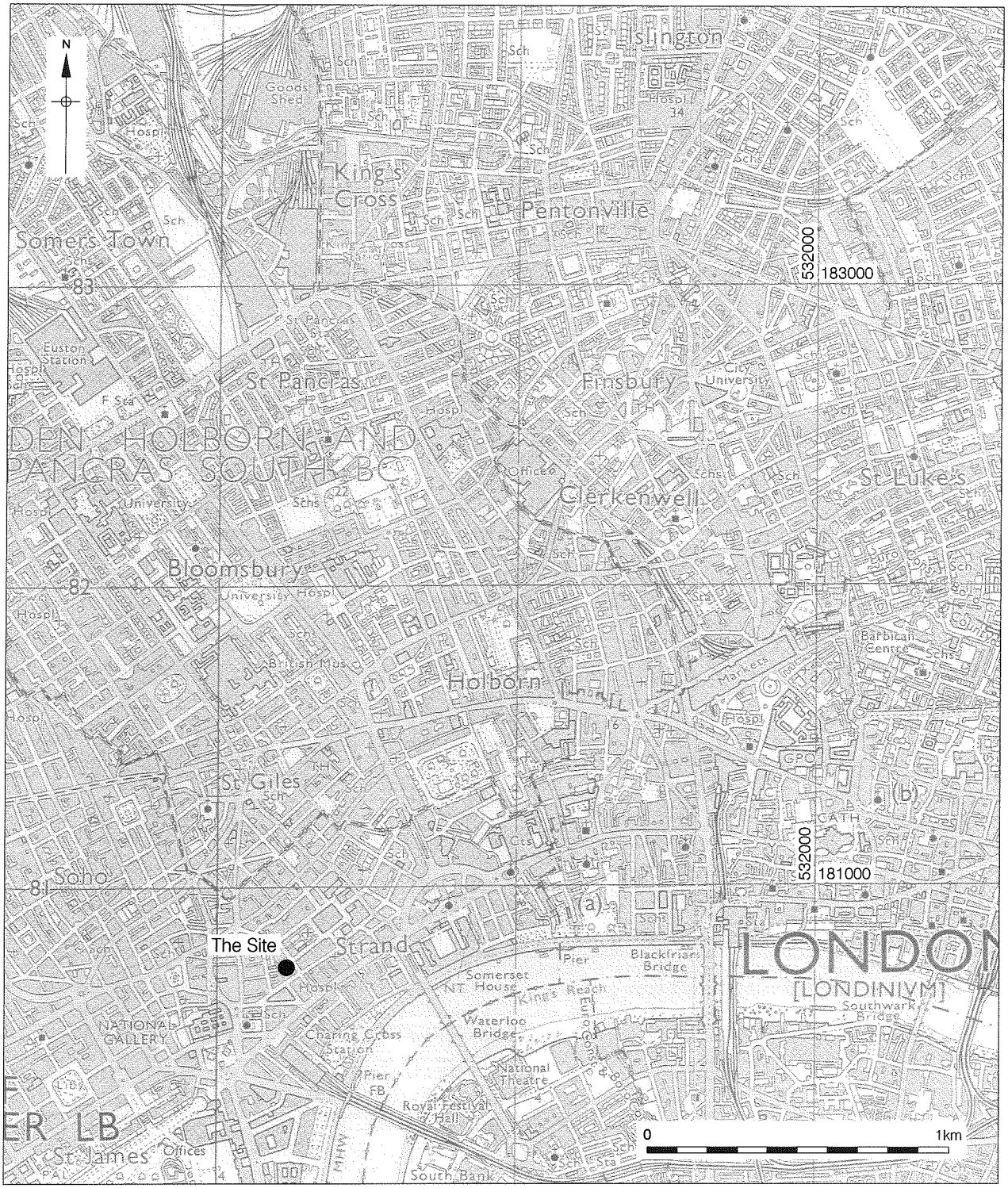
2.2 The site is bounded by Bedford Street to the east, Bedford Court to the north and west and retail outlets to the south.

2.3 The monitoring of the boreholes was conducted on the 8th and 12th July 2004, whilst the watching brief on the geotechnical test pits was undertaken between the 31st August and 7th September 2004. This work followed an Archaeological Desk Study[1] and a Method Statement[2]. Fourteen test pits measuring c. 1m x 2m and two boreholes were located across the site (Fig. 2).

2.4 The evaluation was monitored by Diane Walls of the Greater London Archaeological Advisory Service (GLAAS). The project manager for Pre-Construct Archaeology Ltd. was Jon Butler, and the work was supervised by Jim Leary.

2.5 The completed archive, comprising written, drawn and photographic records and artefacts will eventually be deposited either at the London Archaeological Archive and Research Centre (LAARC) under the site code BDO 04.

[1] Hughes, 2000
[2] Butler, 2004



Reproduced from Ordnance Survey 1:25,000. Crown Copyright 1987.

Figure 1
Site Location
1:20,000

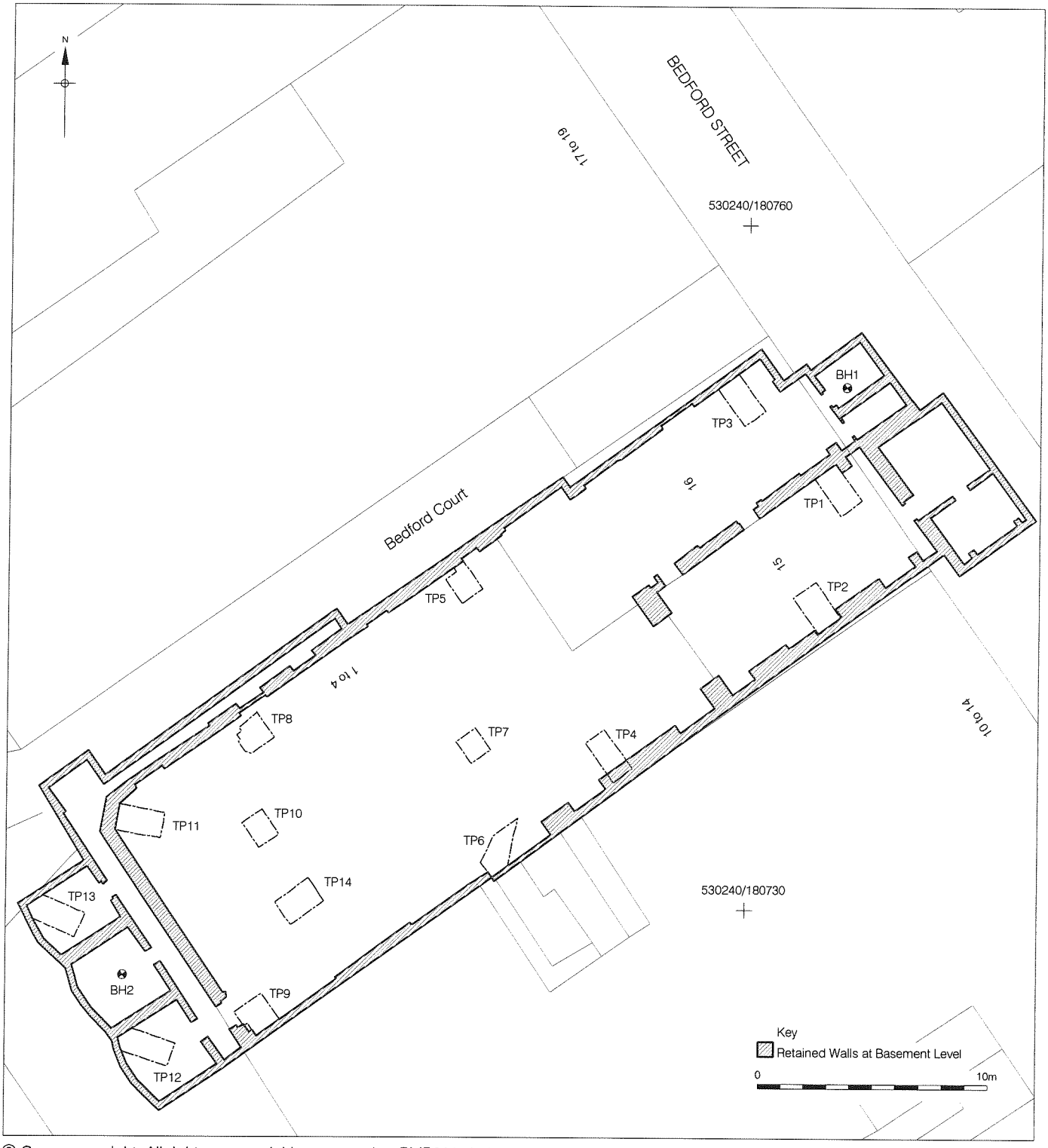


Figure 2
Trench Location
1:250

3 PLANNING BACKGROUND

3.1 The site lies within an 'Area of Special Archaeological Priority' as defined in the City of Westminster's Council Unitary Development Plan (UDP).
The UDP's written statement includes the following archaeological policies:

"Policy DES 18
(i)The City Council will promote the conservation, protection and enhancement of the archaeological heritage of Westminster and its interpretation and presentation to the public. Where the development may affect land of archaeological significance or potential, the City Council will expect applicants to properly assess and plan for the archaeological implications of their proposals. The policies in (ii) and (iii) below may apply elsewhere where the archaeological evidence suggests that this would be appropriate.

(ii) Within the City Council's Areas of Special Archaeological Priority a written assessment of the likely archaeological impact of development (archaeological statement) will normally be required as part of the documentation needed to complete a planning application.

(iii) Within the Areas of Special Archaeological Priority the City Council may request that an on-site assessment by trial work (archaeological field evaluation) is carried out before any decision on the planning application is taken.

(iv) The City Council will seek to ensure that the most important archaeological remains and their settings are permanently preserved *in situ* and where appropriate are given statutory protection. In such cases, if preservation *in situ* is both desirable and feasible, the City Council will require the development design to accommodate this objective.

(v) Where the preservation of archaeological remains *in situ* is not appropriate, the City Council will require that no development takes place on a site until archaeological investigations have been carried out by an investigating body to be nominated or approved by the City Council and such investigations shall be in accordance with a detailed scheme to be approved in advance by the City Council.

4 GEOLOGY AND TOPOGRAPHY

4.1 The British Geological Sheet No. 256 covers the geology of the area. This indicates that Drift Deposits of brickearth and Terrace Gravels overlie the London Clay, which in turn overlie Woolwich and Reading Beds. The Woolwich and Reading Beds and London Clay were formed during the Palaeocene and Eocene periods respectively, whilst the later drift deposits were laid down in the Pleistocene period. The site lays approximately 375m north of the River Thames, and there is a slope downwards to the south across the site, reflected in the modern ground surfaces.

4.2 Post-Medieval basements appear to have truncated the brickearth across the site. Terrace gravels were recorded in the test pits as truncated to a height of between 16.23m OD and 15.37m OD.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 The archaeological and historical background of the Site has been detailed in a desk-based assessment[3]. This information is summarised below.

5.2 Prehistoric

There is little evidence of prehistoric activity in the vicinity of the site, and the GLSMR reports only isolated finds across Westminster, possibly as the result of post-glacial river action.

5.3 Roman

The site is located to the west of Roman *Londinium*, and therefore away from this focus of activity. Residual Roman material has been recovered from many sites in the area, mainly from Middle Saxon contexts.

5.4 Saxon

The development site is located in the centre of the Middle Saxon settlement of London - or *Lundenwic*, which has been much discussed recently (for a detailed discussion see Leary *et al*, 2004; Malcolm *et al*, 2003). Excavations immediately to the south west of the site, at the Peabody Estate, Bedfordbury, revealed a good sequence of occupation activity, as well as a burial[4]. Similar archaeological resources would have existed, and may still exist, within the development site.

5.5 Medieval

The excavated sites in the area have revealed little evidence of medieval activity. This is supported by cartographic sources, which indicate that the area was used for gardens and pastureland until the 16th Century[5]. The SMR indicates that a religious house of the Mendicant Friars was founded in AD 1267 in the vicinity of the site[6].

5.6 Post-Medieval

In the late 16th century the 3rd Earl of Bedford constructed Bedford House on what is now Southampton Street, with extensive gardens to the north, and it is from this estate that Bedford Street takes its name. The streets and piazza of Covent Garden were laid out in 1631, to a possible plan of Inigo Jones, and it was during this phase of work that the original terraced buildings in the area were erected.

[3] Hughes, 2000
[4] Whytehead *et al*, 1989
[5] Hughes, 2000
[6] ibid.

6 ARCHAEOLOGICAL METHODOLOGY

6.1 The watching brief consisted of the monitoring of fourteen geotechnical test pits, located to inform the developer on the foundation design of the existing standing buildings, as well as two boreholes, which determined the nature of the underlying geology. The test pits were designed to be larger than necessary (c. 2m x 1m) so that archaeological considerations could be addressed at the same time, e.g. to determine the depth and nature of surviving archaeological features as well as to aid research objectives for the subsequent archaeological excavation phase of the development.

6.2 The watching brief followed a Method Statement prepared by Pre-Construct Archaeology Ltd[7]. All works were undertaken in accordance with the methodology set out in Archaeological Guidance Paper 3: Standards and Practices in Archaeological Fieldwork in London; Archaeological Guidance Paper 4: Archaeological Reports; Archaeological Guidance Paper 5: Watching Briefs[8]; guidelines issued by the Institute of Field Archaeologists in IFA Code of Practice[9] and Management of Archaeological projects[10].

6.3 All test pits were broken out and the modern overburden removed by contractors, under the supervision of an archaeologist. The test pits were then cleaned and recorded by an archaeologist. Where necessary, portions of archaeologically sensitive features were hand-excavated by an archaeologist; allowing a section through the feature as well as providing the developer access to the full depth of the wall foundations. No features were fully excavated.

6.4 All levels in this report were established from spot heights taken from the developer's plans.

[7] Butler, 2004
[8] GLAAS, 1998
[9] IFA, 1994
[10] English Heritage, 1990

7 THE ARCHAEOLOGICAL SEQUENCE

7.1 TP1

7.1.1 The only deposit recorded in TP1, on the east side of the site, was loose, mid-brown natural sandy gravel (terrace gravels) with some green staining towards the upper surface, [31]. The top of this deposit was recorded at a height of 16.20m OD.

7.2 TP2

7.2.1 TP2 was also located on the east of the site and again only recorded natural deposits. The earliest deposit, [30], was loose mid brown sandy gravel, the upper levels of which had a green hue, and was recorded at a height of 16m OD. Overlying the terrace gravels was firm greyish green clay, [29], and 0.17m deep. This may represent the base of the truncated brickearth deposit or, alternatively, a natural lens within the gravels.

7.3 TP3

7.3.1 A similar green stained deposit was recorded in TP3, [32], which was also located to the east of the site. This deposit was recorded at height of 16.23m OD.

7.4 TP4 (FIG. 3 & 6)

7.4.1 Located against the southern wall in the centre of the building, TP4 recorded mid brown terrace gravel, [9], at a height of 15.9m OD.

7.4.2 This was cut into on the western side by pit [8], which measured 0.5m north south (as seen) and 0.45m deep. The fill, [7], was dark brown to black and comprised clayey silt with inclusions of oyster shell. The pit had been truncated by the existing footings to the south and by recent truncation to the east and was therefore only recorded in section, although the pit continues beyond the test pit to the west. The similarity of this pit to Saxon pits recorded elsewhere in Lundenwic would indicate that it is likely to be of Saxon date.

7.5 TP5

7.5.1 Located opposite TP4, against the northern wall, TP5 revealed mid yellowish brown sandy gravel, [47], at a height of 16m OD. A modern service trench had truncated this deposit, and no other features were recorded.

7.6 TP6 (FIG. 3 & 6)

7.6.1 TP6 was excavated against the southern party wall within the light well area. The earliest deposit recorded was [14], loose greenish yellow brown terrace gravels, recorded at a height of 15.94m OD.

7.6.2 Cut into the gravel was pit [13]. This was recorded as measuring 0.9m north south and 0.6m east west with a maximum depth of 0.82m, although the pit extended under the existing footings to the south and west. Pit [13] was primarily filled with friable dark brownish black silty clay, [12], with inclusions of animal bone (indicating consumption waste), oyster shell and daub, and was recorded at a height of between 15.49m and 15.55m OD, measuring between 0.2m to 0.32m deep. Overlying this fill was a second, later, fill, [16], which comprised moderately compact mid orangey brown sandy gravelly clay and measured between 0.34m and 0.44m deep. This fill may represent a capping layer (a feature well known in both Lundenwic and Hamwic) to prevent the noxious smells one would expect from organic waste escaping and/or to prevent scavengers and pests infesting the area.

7.6.3 Cutting pit [13] on the eastern side was a second pit, [11]. This oval pit extended under the existing footings to the south and beyond the test pit to the east and measured (as seen) 1.2m by 0.6m with a maximum depth of 0.85m. As with pit [13], the primary fill was dark brownish black silty clay, [10], with very frequent inclusions of animal bone, as well as moderate inclusions of oyster shell, daub and five sherds of pottery, including Sand-tempered ware and Chaff-tempered ware (c. AD 650-750). The faunal assemblage from the site comprised cattle, pig, domestic fowl and sheep, the elements of which indicate consumption waste, although the presence of cattle phalanges suggests that at least some of the material was derived from butchery waste. Craft activity is indicated by the presence of a sawn red deer antler beam. A cat humerus was also present, as was a small fish mandible. Also recovered from this fill was a small, pale green glass rim fragment, probably derived from a beaker or cup, as well as a small quantity of iron slag. The maximum depth of this deposit was 0.7m with an upper height of between 15.94m OD and 15.76m OD. Pit [11] also had an apparent capping layer - overlying the thick primary fill was a thin, relatively compact fill, [15], comprising orangey brown sandy gravelly clay. Again the purpose of this fill seems to be for hygienic reasons.

7.7 TP7 (FIG. 3 & 7)

7.7.1 TP7 was also located in the light well area, opposite TP6 and against the northern wall. Due to modern concrete intrusions only a small area of this test pit was available for examination. The earliest recorded deposit was terrace gravel [3], recorded at the truncated height of 15.44m OD.

7.7.2 Truncating the gravel was pit [2], the size and shape of which was not seen since it was truncated to the north and east by deep existing footings, to the west by a modern drain and to the south by a concrete beam. The pit was, however, recorded as being at least 0.95m deep. Filling the pit was [1], a very dark brown to black clayey silt with occasional oyster shell and daub inclusions. The composition and colour of this fill suggests that it is of a Saxon date, and the presence of a sherd of a fine Ipswich-type ware jar (AD 730/50 to AD 870) confirms this. Animal bone, such as cattle, sheep, pig and domestic fowl, indicating both butchery and consumption, was recovered from this fill, as was a segment of a sawn red deer antler, indicating craft activity.

7.8 TP8 (FIG. 4 & 6)

7.8.1 Loose mid yellowish brown terrace gravels, [41], were recorded in TP8 to the west of the site, at a height of 15.37m OD.

7.8.2 The western section of this test pit revealed fragmentary evidence of a possible Saxon pit, [40]. The cut of the pit had been entirely removed by footings to the north and south and a modern drain to the east, whilst the base had been removed by a modern buttress associated with the existing building, which had presumably been constructed by tunnelling through and under the pit. The pit may extend further west. The fill, [39], comprised dark brown clayey silt with inclusions of oyster shell, bone (pig metatarsal) and daub - some of which contained wattle impressions.

7.8.3 Cutting the natural deposits were two intercutting post-medieval, vertically sided, rectangular pits - possibly cesspits, although they were not brick-lined. The earliest pit, [38], measured (as seen) 0.6m north south, 0.3m east west and 0.56m deep. The fill comprised dark brown clayey silt [37] and contained a large fragment of post-medieval brick. The second pit, [36], cut the eastern side of [38] and measured (as seen) 0.8m north south, 0.6m east west and 1.06m deep. The fill [35] was greyish brown sandy silt, which contained a single sherd of a plain white delftware type A porringer, dated 1630-1700. This date is further confirmed by the presence of a clay tobacco pipe bowl dated 1660-1680.

7.9 TP9 (FIG. 5)

7.9.1 TP9 was located in the south western corner of the building and recorded natural mid brown sandy gravel, [33], at a height of 15.37m OD.

7.9.2 This deposit had been cut by a brick-lined structure, possibly a cesspit, [34]. Although this feature was not excavated, two sherds of pottery were associated with it, both of which were from chamber pots, confirming the use of [34] as a cesspit. The sherds were of Surrey-Hampshire Border ware: one yellow glazed and the other green glazed, and both dating to between 1650-1700. Also associated with structure [34] was a non-local clay tobacco pipe, stamped on the heel with a raised hand. This find requires further identification and its provenance needs to be defined.

7.10 TP10

7.10 TP10, to the west of the site, revealed only natural sandy gravel [28], which had been truncated to the north and west by modern service trenches. The gravel was recorded at a height of 15.90m OD.

7.11 TP11 (FIG. 4)

7.11.1 The earliest deposit recorded in TP11 was [6] - natural mid brown sandy gravel, noted at a height of 15.63m OD.

7.11.2 A large pit, probably of Saxon date, cut this deposit. The pit, [5], measured 1.2m by 1.1m and was 0.6m deep. The fill, [4], comprised dark brown to black clayey silt, from which animal bone, such as cattle and pig, was recovered.

7.12 TP12 (FIG. 5)

7.12.1 Natural sandy gravel, [24], was recorded in TP12, to the south west of the site, at a height of 15.64m OD.

7.12.2 The gravel had been cut into by two post-medieval brick structures: to the north of the test pit was north south wall [26], which comprised four courses of unfrogged red brick, dated to between 1666 and 1725, and presumably representing earlier building foundations. The wall had been trench built (construction cut [27]), which had been backfilled with [25], grey sandy silt. The wall had been truncated by modern footings to the north but extended beyond the limit of excavation to the south. To the south of TP12 was a further row of bricks [21], possibly representing one side of a brick lined cesspit, the fill of which, [23], was not excavated.

7.13 TP13 (FIG. 4)

7.13.1 Located in a vault under Bedford Court to the north west of the site, TP13 revealed natural terrace gravels (which had been stained green towards the top) at a height of 15.66m OD.

7.13.2 Cutting into the gravel at the northern end of the test pit was pit [18], which measured 0.7m by 0.6m and 0.5m deep (extending under the modern footings to the north and west). The fill [17] comprised dark brown clayey silt with animal bone inclusions (cattle, pig and sheep) and, based on the similarity to other Saxon pit fills, can be broadly dated to the Saxon period.

7.14 TP14 (FIG. 5)

7.14.1 The natural gravel in TP14 (also in the western half of the site), [46], was recorded at a height of 15.78m OD, and comprised loose mid yellowish brown sandy gravel.

7.14.2 This was cut on the western side by a post-medieval brick-lined (possible) cesspit, [44]. The bricks are broadly dateable to between 1450-1700, with the latter part of this range being the more likely date. This feature remained unexcavated.

7.15 BH1

7.15.1 BH1, situated to the east of the site on Bedford Street, was located over a modern manhole and therefore recorded truncation to a depth of 1.2m, after which natural gravels were recorded.

7.16 BH2

7.16.1 BH2 was located on the western side of the site in Bedford Court, and identified natural gravels overlain by approximately 0.8m of made ground.

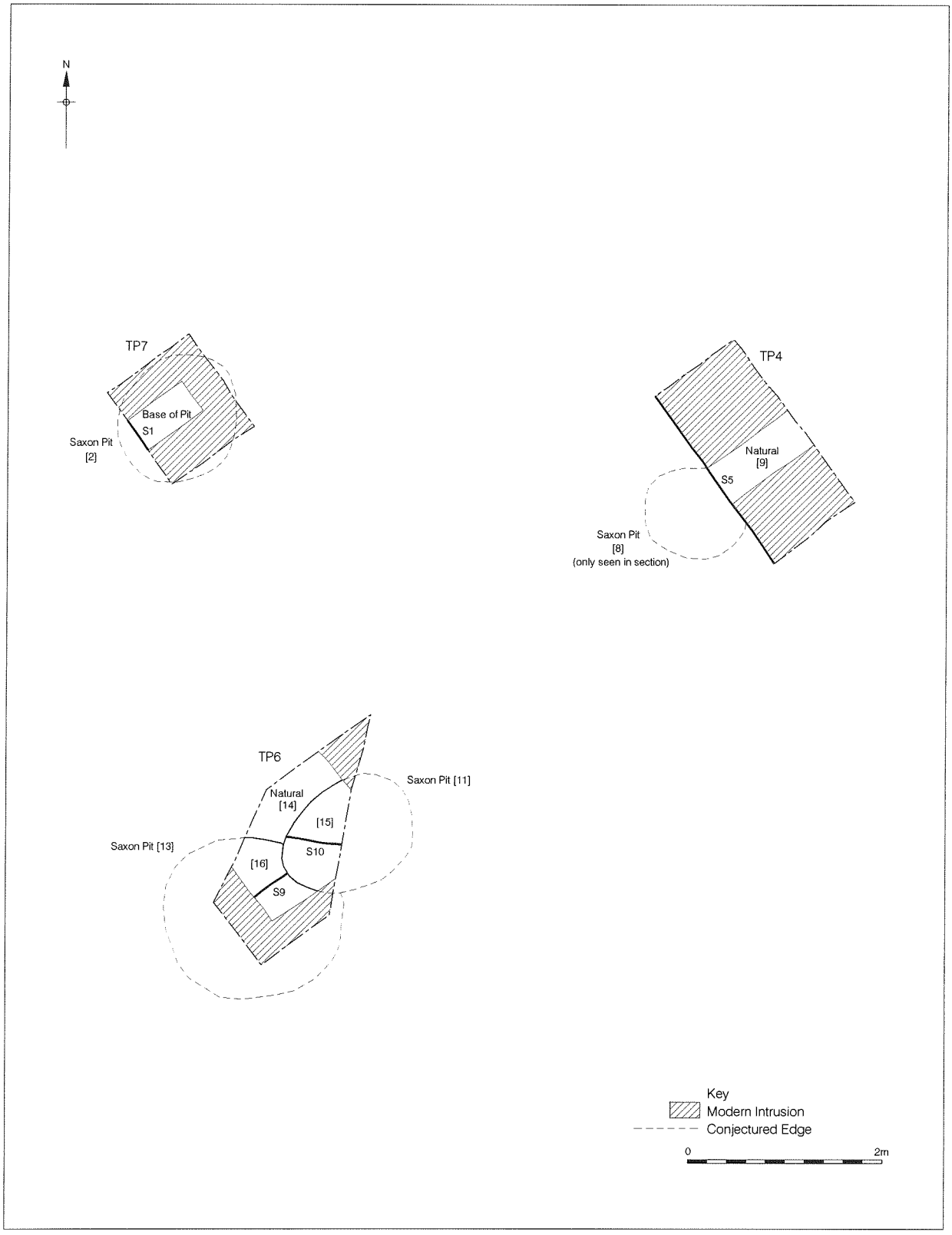


Figure 3
Test Pits 4, 6 & 7
1:60

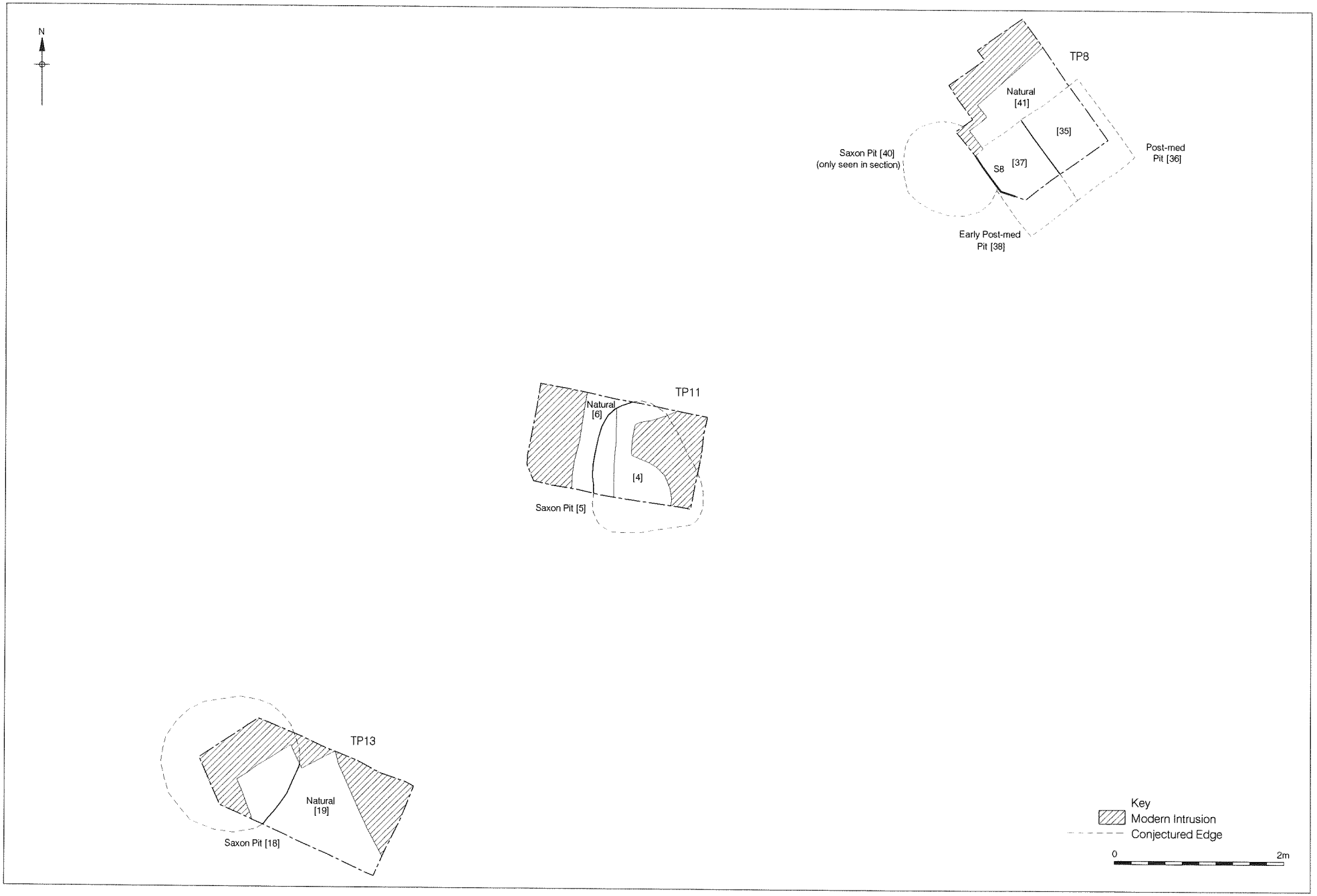


Figure 4
Test Pits 8, 11 & 13
1:60

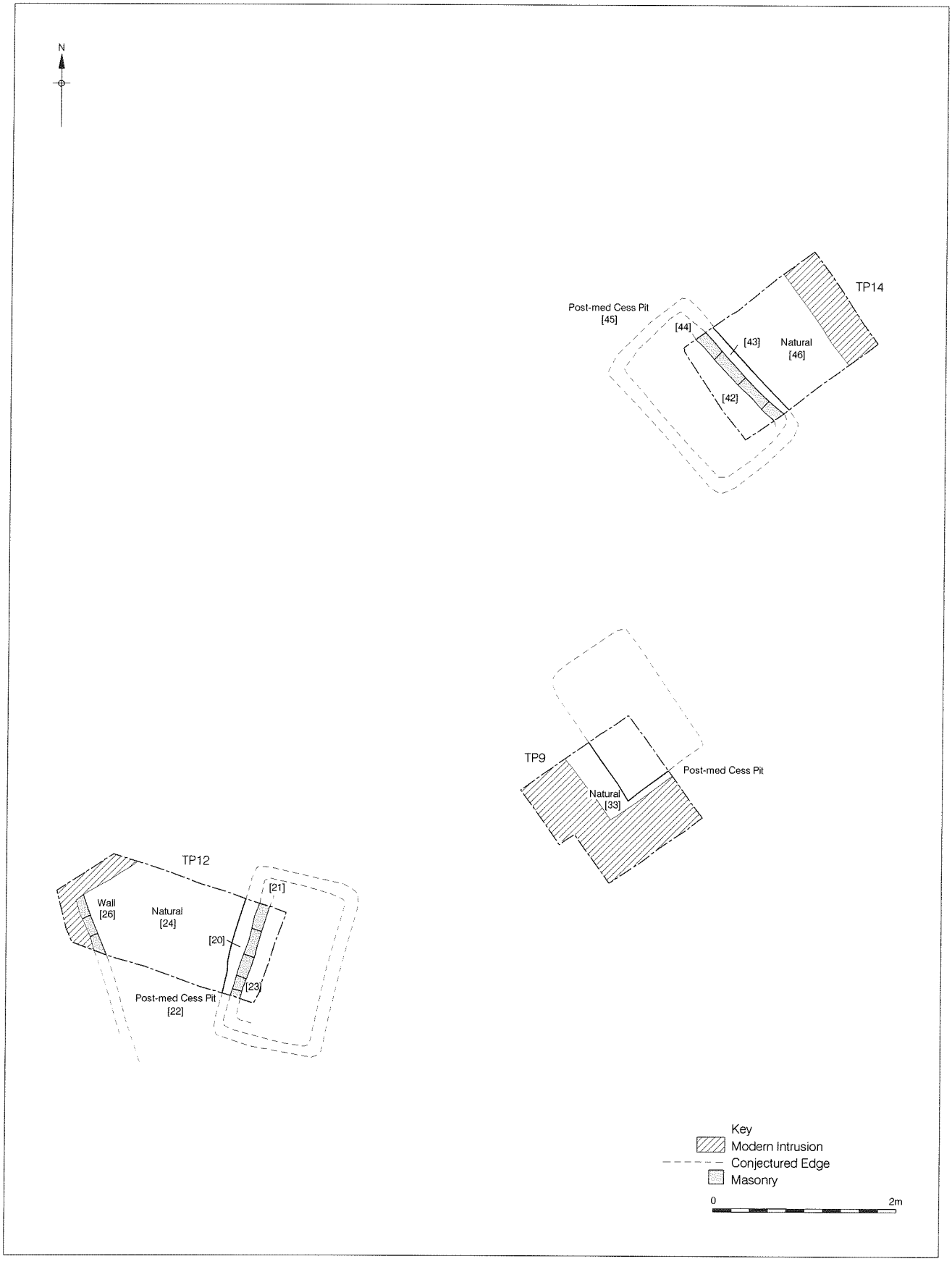


Figure 5
Test Pits 9, 12 & 14
1:60

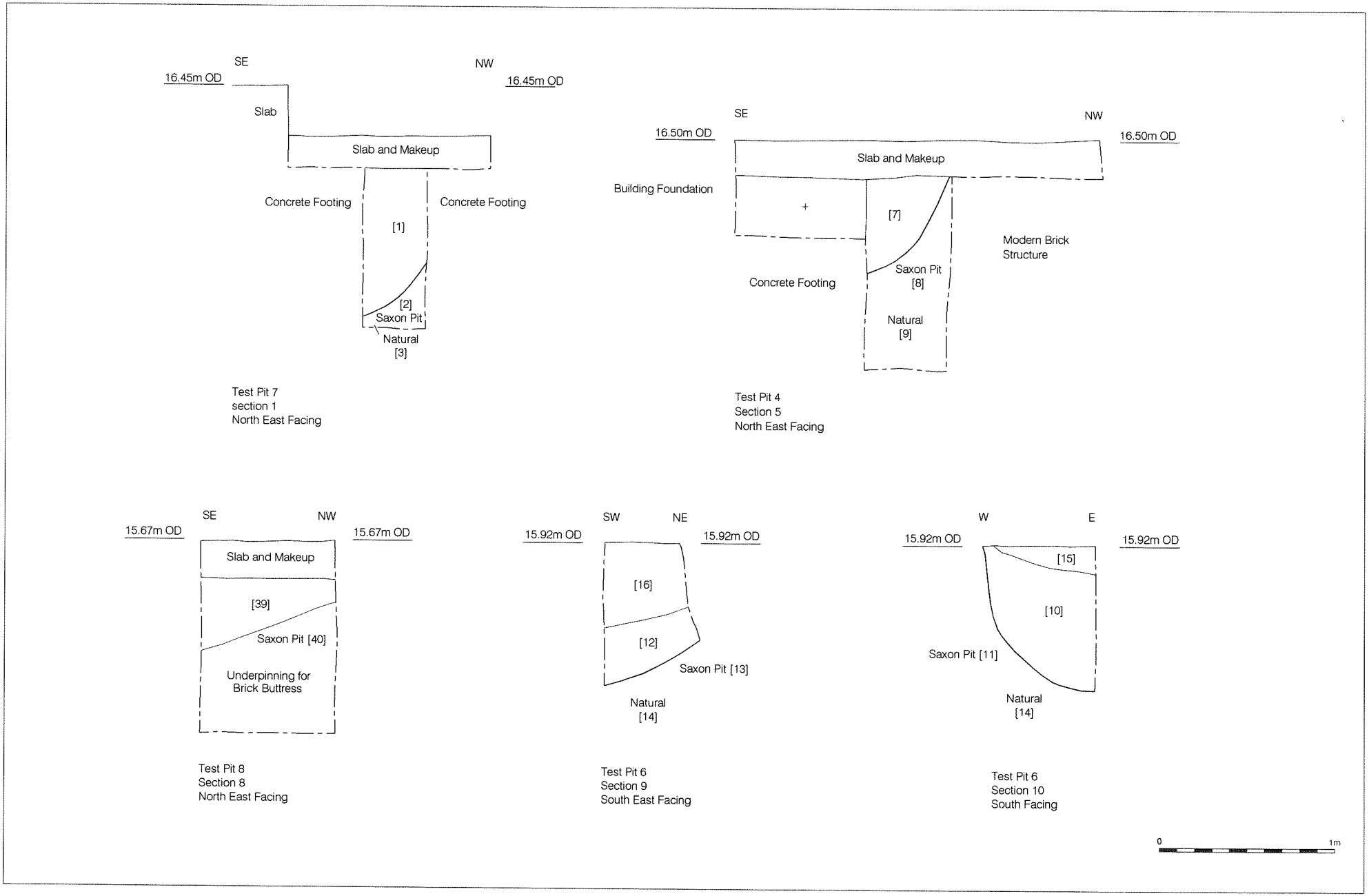


Figure 6
Sections 1, 5, 8, 9 & 10
1:30

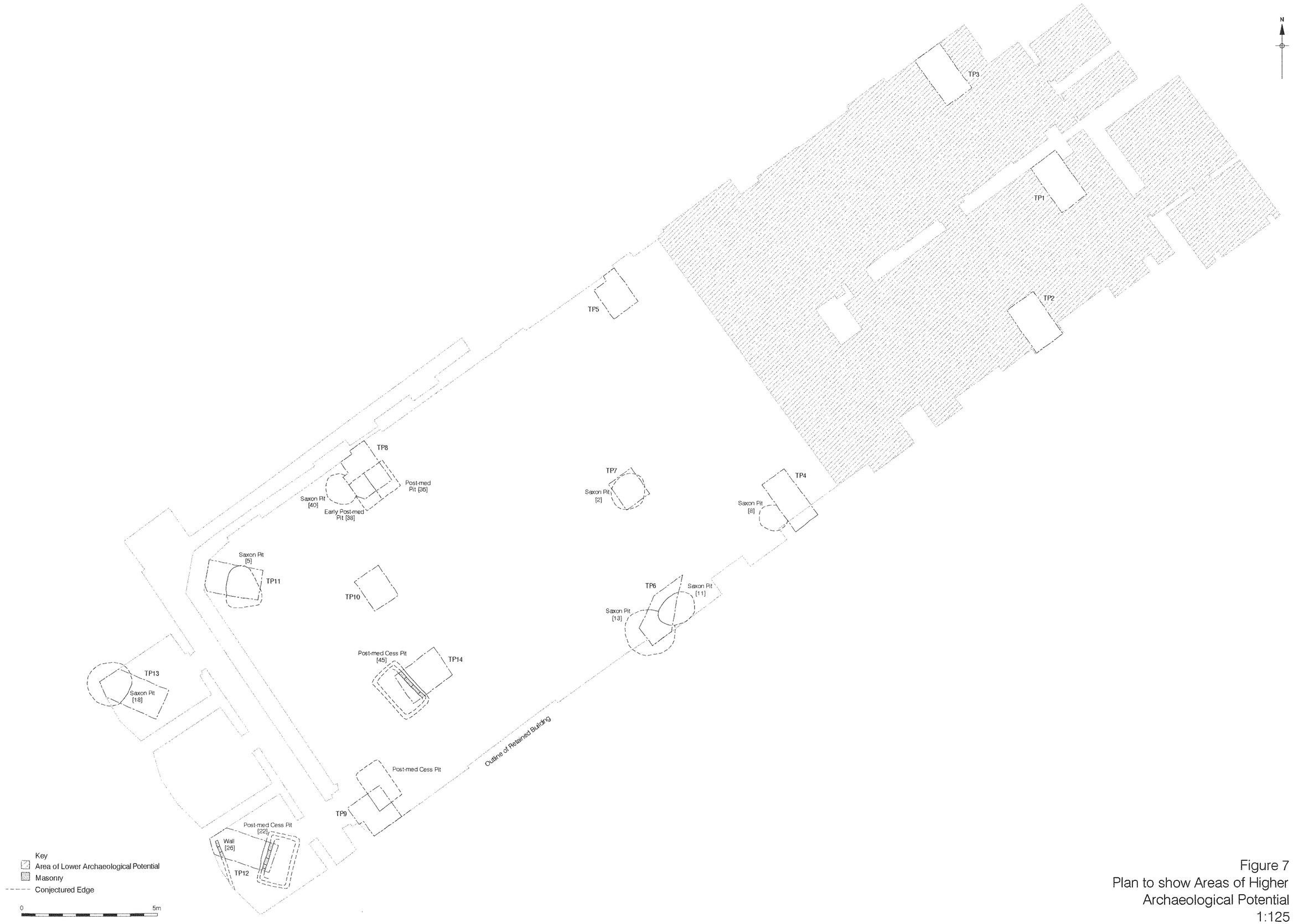


Figure 7
Plan to show Areas of Higher Archaeological Potential
1:125

8 DISCUSSION AND CONCLUSIONS

8.1 DISCUSSION

8.1.1 Although the made ground at the site has experienced a degree of truncation during terracing for the existing basements, deep cut archaeological features such as Middle Saxon rubbish pits and post-medieval cesspits have survived the truncation.

8.1.2 These features appear to have survived to a greater extent on the west side of the site, indicating that this area has a very high potential for further similar activity, whilst the archaeological resource appears more limited on the eastern side (Fig. 7). This dichotomy may, however, reflect the fact that a greater number of test pits (eleven) were excavated to the west compared with just three to the east. Further work may identify features to the east.

8.1.3 Seven Saxon pits were recorded in six test pits (TP4, 6, 7, 8, 11 and 13). These varied in depth from 0.45m to 0.95m and were concentrated to the western half of the site. The fill types were broadly homogenous, with inclusions of oyster shell, animal bone and daub, however a small quantity of pottery, recovered from two of the pits, suggests that more than one phase of activity is represented. A substantial quantity of well-preserved animal bone was retrieved from the pits, and analysis of the elements present indicates that the pits were used to discard waste from both domestic and industrial sources, informing on the dietary contribution of the various species. Craft activity was evident from the worked antler and the slag.

8.1.4 Five post-medieval cesspits were recorded in four test pits (TP8, 9, 12 and 14) and a 17th century brick wall was recorded in TP12. This phase, where dateable, appears to be 17th century and therefore contemporaneous with the original post-medieval layout of Covent Garden.

8.2 CONCLUSIONS

8.2.1 Features dating to the Saxon and post-medieval periods have survived across the western half of the site. These features, particularly the pits relating to the Middle Saxon period, are important archaeological resources and it is expected that further features will become evident during the main excavation phase of works. Pits are the most common feature of Lundenwic, and are often all that remain of the archaeological resource, such as has been recorded during the excavations at The Lyceum Theatre, The National Portrait Gallery, James Street and Maiden Lane. As a result, the contents of the pits, including the artefacts, faunal remains and

environmental deposits, provide the key to understanding Middle Saxon archaeology in Greater London, and as such are of regional value.

8.2.2 It is likely that some of the deeper Saxon features may contain the remnants of the overlying stratigraphy, slumped into the upper surface, providing an important insight into the layout and structure of Lundenwic. It is also possible that islands of stratigraphy may have survived towards the centre of the site. As well as numerous pits, there is the potential for other features such as wells and ditches to be revealed. The location and alignments of the pits are of importance as they may represent property or land boundaries, further indicating the structure and development of Lundenwic.

8.2.3 The environmental remains from the Middle Saxon pits represents a nationally important resource that, when tested in a laboratory, has the potential to significantly increase our understanding of the settlement. Further, a substantial quantity of well-preserved animal bone was retrieved from the watching brief phase; similar concentrations of faunal remains are predicted in the excavation, providing a significant assemblage that will permit detailed interpretations of animal use, butchery, consumption and disposal. The presence of worked antler and slag within the pits may suggest proximity to craft activities; the exact locations of which may become evident during the excavation.

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10 ACKNOWLEDGMENTS

10.1 Pre-Construct Archaeology Ltd. would like to thank Richard Hughes of ICHM for commissioning the work, and Lothbury Property Trust Company Ltd for kindly funding it. PCA would also like to thank Galliford Try for their hospitality and help on site.

10.2 Pre-Construct Archaeology Ltd. would also like to thank Diane Walls of GLAAS for monitoring the work.

10.3 The author would particularly like to thank Jon Butler for his project management and Hayley Baxter for the CAD work. Thanks to Chris Jarrett, Lisa Yeomans and John Brown for the specialist reports and Lisa Lonsdale / Rob Nicholson for technical support.

10.4 Thanks to the site staff: Mike Bazely and Chris Mayo, for their work.

APPENDIX 1: CONTEXT INDEX

CONTEXT	TYPE	DESCRIPTION	TEST PIT	PHASE	DATE	PLAN
1	FILL	Fill of [2]	7	2	Mid-Saxon	*
2	CUT	Pit	7	2	Mid-Saxon	TP7
3	NATURAL	Sands and gravel	7	1	Natural	TP7
4	FILL	Fill of [5]	11	2	Mid-Saxon	TP11
5	CUT	Pit	11	2	Mid-Saxon	TP11
6	NATURAL	Sands and gravel	11	1	Natural	TP11
7	FILL	Fill of [8]	4	2	Mid-Saxon	*
8	CUT	Pit	4	2	Mid-Saxon	*
9	NATURAL	Sands and gravel	4	1	Natural	TP4
10	FILL	Fill of [11]	6	2	Mid-Saxon	TP6
11	CUT	Pit	6	2	Mid-Saxon	TP6
12	FILL	Fill of [13]	6	2	Mid-Saxon	TP6
13	CUT	Pit	6	2	Mid-Saxon	TP6
14	NATURAL	Sands and gravel	6	1	Natural	TP6
15	FILL	Fill of [11]	6	2	Mid-Saxon	TP6
16	FILL	Fill of [13]	6	2	Mid-Saxon	TP6
17	FILL	Fill of [18]	13	2	Mid-Saxon	*
18	CUT	Pit	13	2	Mid-Saxon	TP13
19	NATURAL	Sands and gravel	13	1	Natural	TP13
20	FILL	Fill of [22]	12	3	17th century	TP12
21	MASONRY	Masonry wall	12	3	17th century	TP12
22	CUT	Construction cut	12	3	17th century	TP12
23	FILL	Fill of [21]	12	3	17th century	TP12
24	NATURAL	Sands and gravel	12	1	Natural	TP12
25	FILL	Fill of [27]	12	3	17th century	TP12
26	MASONRY	N/S wall	12	3	17th century	TP12
27	CUT	Construction cut	12	3	17th century	TP12
28	NATURAL	Sands and gravel	10	1	Natural	TP10
29	NATURAL	Natural clay	2	1	Natural	TP2
30	NATURAL	Sands and gravel	2	1	Natural	TP2
31	NATURAL	Sands and gravel	1	1	Natural	TP1
32	NATURAL	Sands and gravel	3	1	Natural	TP3
33	NATURAL	Sands and gravel	9	1	Natural	TP9
34	MASONRY	Cess pit	9	3	17th century	TP9
35	FILL	Fill of [36]	8	3	17th century	TP8
36	CUT	Cess pit	8	3	17th century	TP8
37	FILL	Fill of [38]	8	3	17th century	TP8
38	CUT	Cess pit	8	3	17th century	TP8
39	FILL	Fill of [40]	8	2	Mid-Saxon	*
40	CUT	Pit	8	2	Mid-Saxon	*
41	NATURAL	Sands and gravel	8	1	Natural	TP8
42	FILL	Fill of [44]	14	3	17th century	TP14
43	FILL	Fill of [45]	14	3	17th century	TP14
44	MASONRY	N/S wall	14	3	17th century	TP14
45	CUT	Construction cut	14	3	17th century	TP14
46	NATURAL	Sands and gravel	14	1	Natural	TP14
47	NATURAL	Sands and gravel	5	1	Natural	TP5

APPENDIX 2: POTTERY AND CLAY TOBACCO PIPE ASSESSMENT

Chris Jarrett

POTTERY

A total of nine sherds of pottery were recovered from this phase of excavation dating from the Mid-Saxon period (six sherds) and the 17th-century (three sherds).

Mid-Saxon

Deposit [10] produced five sherds of pottery from the same number of vessels and probably in the shape of closed forms. Chaff-tempered wares account for three sherds in fabrics CHAF and CHFS and include a base sherd and body sherds. There is also a sherd of fine sand-tempered ware with sparse organics (SSAND) and finally a sherd that needs further identification. This sherd is tempered with sparse large quartz grains, sparse flint and voids with a green deposit. The presence of chaff-tempered pottery in this context indicates deposition between c.650-750.

Context [1] produced a single sherd of a fine Ipswich-type ware (IPSF) jar and indicates deposition between 730/50 and 870.

17th century

Deposit [34] produced two sherds of Surrey-Hampshire Border ware, dated 1550-1700 and both sherds are in the form of chamber pots. The first sherd is yellow-glazed (BORDY) and is as a type 1 chamber pot with a narrow everted rim. The second vessel is a green-glazed type 2 chamber pot with a broad everted rim (BORDG CHP2) and this vessel dates the deposition of the context to between 1650-1700. A single sherd of a plain white delftware (TGW C) type A porringer (straight-sided) was recovered from deposit [35] and this is dated 1630-1700.

CLAY TOBACCO PIPE

Two clay tobacco pipes were recovered from this phase of the excavation and both date to the mid-17th century. Firstly, from context [35] is an Atkinson and Oswald (AO) type 15 bowl dated 1660-1680. Secondly there is a non-local bowl that needs further identification and its provenance defined. The bowl has a slightly curved back and bulbous front while its short heel is oval in plan with a stamp of the same shape featuring a raised hand in relief.

APPENDIX 3: CERAMIC BUILDING MATERIAL ASSESSMENT

John Brown

MID-SAXON CONTEXTS

One fragment of Roman brick (locally produced fabric 2452) from [10] is likely to be residual. The same context contained fragments of fired daub. Several other contexts, [1], [10] and [39], also contained fragments of fired daub, several of which showed withy impressions, representing nearby structures of Saxon date.

POST-MEDIEVAL CONTEXTS

Several masonry samples were retained and all contain brick fabrics produced in the London area from the mid-15th to 19th centuries (local orange 'Tudor' brick fabrics 3033 and 3065, 'post fire' brick fabric 3032). The area around Covent Garden was developed during the 17th century, and this concords with the suggested date range of the masonry features (see table below). The masonry samples were taken from a series of structures, such as cesspits and a wall.

Context	No frags	Weight (g)	Date range		Latest material		Best fit date		Context Date
21	*2*	*5210*	*1666*	*1900*	*1666*	*1900*	*1666*	*1900*	*1666 to 1900*
26	*2*	*5555*	*1664*	*1900*	*1666*	*1900*	*1666*	*1725*	*1666 to 1725*
34	*2*	*5380*	*1666*	*1900*	*1666*	*1900*	*1666*	*1900*	*1666 to 1900*
37	*1*	*1220*	*1666*	*1900*	*1666*	*1900*	*1666*	*1900*	*1666 to 1900*
44	*1*	*3165*	*1450*	*1700*	*1450*	*1700*	*1450*	*1700*	*1450 to 1700*

APPENDIX 4: ANIMAL BONE ASSESSMENT

Lisa Yeomans

A substantial quantity of well-preserved animal bone was retrieved from Saxon pits excavated during the watching brief phase at 15-16 Bedford Street. Similar concentrations of faunal remains are predicted in the excavation providing a significant assemblage that will permit detailed interpretations of animal use, butchery, consumption and disposal.

Context descriptions

The fill [1] of pit [2] yielded a mixture of butchery, consumption and craft waste with the latter represented by a thin sawn red deer antler segment and distal cattle metacarpal that was split with the end sawn off. The rest of the material comprises cattle, sheep/goat, pig and domestic fowl bones from both butchery and consumption.

A small quantity of bone was excavated from context [4] with cattle and pig present.

Context [10] produced the largest faunal assemblage; this contained a large element of consumption waste, which included cattle, pig, domestic fowl and, to a lesser extent, sheep/goat. Less common species are also present including goose and the presence of a cat humerus suggests that not all of the material derived from table refuse. Some craft waste is indicated by the presence of sawn red deer antler beam that had been chopped from the skull of a dead animal. Additionally there are some elements associated with the primary butchery process including cattle phalanges. There is, however, a notable absence of cattle and sheep/goat mandibles indicating that much of the primary butchery waste was discarded elsewhere.

A few bones were recovered from context [12] during the watching brief and these ribs and vertebral fragments are again more typical of consumption waste. A small quantity of bone from [17] contained limb bones of cattle, pig and sheep/goat. A single fragment of bone from [39] is a pig metatarsal.

Assemblage potential

All of the Saxon pits revealed in the evaluation were only partially excavated and following full excavation the faunal sample will be greatly enhanced. The pits were clearly used for the discard of waste from various sources and detailed analysis should aim at characterising the pits contents using species and body-part representation to define differences between accumulations. This will help determine the use of the area as domestic, craft production orientated or industrial. If, as the preliminary scan of the bone suggests, there is evidence of domestic waste the remains will also inform on the dietary contribution of the various species. The animal bone is in good condition and not extensively fragmented; compilation of metrical data will provide estimates of animal conformation that can be compared to other sites in the vicinity.

APPENDIX 5: OASIS DATA COLLECTION FORM

OASIS ID: preconst1-4022

Project details

Project name	15-16 Bedford Street, Westminster
Short description of the project	An archaeological watching brief on 14 geotechnical test pits and 2 boreholes. The aim of the watching brief was to determine the depth and nature of surviving archaeological deposits and features so that an excavation programme can be determined. Seven Saxon pits were recorded. These varied in depth from 0.45m to 0.95m and were concentrated to the western half of the site. The fill types were broadly homogenous, with inclusions of oyster shell, animal bone and daub, however a small quantity of pottery, recovered from two of the pits, suggests that more than one phase of activity is represented. A substantial quantity of well-preserved animal bone was retrieved from the pits, and analysis of the elements present indicates that the pits were used to discard waste from both domestic and industrial sources, informing on the dietary contribution of the various species. Craft activity was evident from worked antler and slag. Five 17th century cesspits were also recorded as well as a 17th century brick wall. This later phase is contemporaneous with the original post-medieval layout of Covent Garden.
Project dates	Start: 31-08-2004 End: 07-09-2004
Previous/future work	No / Yes
Any associated project reference codes	BDO 04 - Sitecode
Type of project	Field evaluation
Site status	Local Authority Designated Archaeological Area
Current Land use	Industry and Commerce 2 - Offices
Monument type	DOMESTIC PITS Early Medieval
Monument type	CESSPITS Post Medieval
Significant Finds	BONE Early Medieval
Significant Finds	POTTERY Early Medieval

Project location

Country	England

Site location	GREATER LONDON CITY OF WESTMINSTER CITY OF WESTMINSTER 15-16 Bedford Street, City of Westminster
Postcode	WC2
Study area	515 Square metres
National grid reference	TQ 3025 8075 Point
Height OD	Min: 15.37m Max: 16.23m

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd
Project brief originator	Consultant
Project design originator	Jon Butler
Project director/manager	Jon Butler
Project supervisor	Jim Leary
Sponsor or funding body	Lothbury Property Trust Company Ltd

Project archives

Physical Archive recipient	LAARC
Physical Contents	'Animal Bones','Ceramics','Glass','other'
Physical Archive Exists?	No
Digital Archive recipient	LAARC
Digital Contents	'Animal Bones','Ceramics','other'
Digital Media available	'Database','Spreadsheets','Text'
Digital Archive	No

Exists?	
Paper Archive recipient	LAARC
Paper Contents	'Animal Bones','Ceramics','other'
Paper Media available	'Context sheet','Drawing','Manuscript','Matrices','Photograph','Plan','Report','Section','Survey','Unpublished Text'
Paper Archive Exists?	No

Project bibliography 1

Publication type	An unpublished document/manuscript
Title	An Archaeolgical Watching Brief on Geotechnical Test Pits and Boreholes at 15-16 Bedford Street, City of Westminster, London
Author(s)/Editor(s)	Leary, J
Date	2004
Issuer or publisher	Pre-Construct Archaeology
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