An Archaeological Evaluation within the Walled Garden at Fulham Palace, London Borough of Hammersmith & Fulham

Site Code: FLB 03
Central National Grid Reference: TQ 2399 7602

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1 ABSTRACT

1.1 This report details the results and working methods of an archaeological evaluation undertaken by Pre-Construct Archaeology Ltd within the Walled Garden at Fulham Palace, Bishops Avenue, London SW6, London Borough of Hammersmith and Fulham between 24th August and 11th September 2009.

1.2 The archaeological investigation was commissioned by the London Borough of Hammersmith and Fulham, and designed by Gifford (archaeological consultant) to inform the design of a proposed restoration of the Walled Garden.

1.3 The evaluation comprised the excavation by hand of eight trial trenches at locations within the Walled Garden (Trenches 101 to 108). Additional to this main work and also included within this report are the findings from a series of small exploratory excavations associated with the examination of known services and areas associated with planned service routes (Trenches 109 to 116). These exploratory excavations took place within or around the Walled Garden, with the exception of trench 112 which was located adjacent to Gothick Lodge.

1.4 All work was undertaken in accordance with a Written Scheme of Investigation (Emery & Mayo 2009), which had been approved by Jane Sidell, Inspector of Ancient Monuments for the London area. The aims of this research were to:

- augment the mapping of the site's natural topography
- characterise the nature of occupation of the site from prehistoric times;
- test, in particular, the hypothesis that the moated enclosure originated as part of an Iron Age earthwork and settlement at a river crossing;
- augment the record of settlement on the site in the Roman period which was first highlighted in 1972/3 to the immediate south of the Walled Garden;
- establish the economic status of the site's inhabitants over time.
- establish the trading links of the site's inhabitants with special note of the immediate access to the River Thames
- evaluate the survival and legibility of features and deposits relating to horticultural activity and formal gardens;
- establish the presence, nature, location, extent and date of artefacts from the prehistoric to post-medieval periods and to interpret their relationship with the layout of the site as it evolved through these periods;
- evaluate artefact distribution, density, residuality and contamination in archaeological deposits (including the topsoil) across the Scheduled Monument;
- verify, augment and refine the interpretation of the results of the geophysical surveys undertaken by Archaeophysica Ltd between 21-23 July 2009
- examine any evidence of the historic layout and planting schemes within the Walled Garden, in particular any buried remains of paths, beds, planting pits, water management systems, structures, ornamental features and associated artefacts to inform the restoration design;
- establish, in particular, the precise historic alignments of the cross-paths;

- determine, in particular, the historic arrangement of the centre (where the paths cross) and the relationship between this and the extant dipping pond.

1.5 An initial programme of work associated with addressing these research aims was undertaken in July 2009 by Archaeophysica Ltd (working in collaboration with Gifford). This comprised a resistivity and magnetometry survey within the Walled Garden and also in a strip along the north-east edge of the Palace grounds between the Palace and the Walled Garden. The surveys revealed fragments of a number of different garden layouts with some marked by relict planting pits, others by paths and edgings. Additionally features believed to be unrelated to the Walled Garden and therefore possibly earlier (at least two channels or ditches) were also detected.

1.6 The results of this survey were used to design this stage of evaluation work.

2 INTRODUCTION

2.1 An archaeological evaluation and associated exploratory trenching was undertaken by Pre-Construct Archaeology at Fulham Palace, Bishops Avenue, London SW6, London Borough of Hammersmith and Fulham between 24th August and 11th September 2009.

2.2 The archaeological investigations were commissioned by the London Borough of Hammersmith and Fulham as part of the Bishops Park and Fulham Palace grounds Restoration and Revival project, and were designed by Gifford (archaeological consultants). The London Borough of Hammersmith and Fulham funded the archaeological investigations with assistance from the Heritage Lottery Fund and the Big Lottery.

2.3 The archaeological evaluation was within the Walled Garden of the Fulham Palace moated site (Scheduled Monument no. 134), and involved the excavation of eight archaeological trenches (Trenches 101-108). Additionally Pre-Construct Archaeology Ltd undertook the archaeological excavation and recording of eight small exploratory excavations associated with the examination of known services and areas associated with planned service locations (Trenches 109 to 116). These exploratory excavations took place within or around the Walled Garden, with the exception of Trench 112 (adjacent to Gothick Lodge).

2.4 The site is located at National Grid Reference TQ 2399 7602 (central point, Walled Garden).

2.5 The underlying geology at the site is London Clay. Ground level within the Walled Garden itself is relatively flat at 4.00m OD.

2.6 The work was monitored by Dr Jane Sidell, Inspector of Ancient Monuments for English Heritage. Phil Emery of Gifford (archaeological consultant) designed and managed the archaeological investigation.

3 PLANNING BACKGROUND

3.1 The site is located in the grounds of Fulham Palace Moated Site, Scheduled Ancient Monument (No. 134) under the Ancient Monuments and Archaeological Areas Act 1979, amended by the National Heritage Act 1983.

3.2 The evaluation and associated exploratory excavations form part of the scope of works encompassed by an application for Scheduled Monument Consent dated 9 June 2009 for geophysics, metal detecting and test pits. Consent was granted on 7 July 2009 (HSD 9/2/14149). A section 42 Licence to use a metal detector was granted in August 2009.

3.3 In November 1990 the Department of the Environment issued Planning Policy Guidance Note 16 (PPG16) "Archaeology and Planning" providing guidance for planning authorities, property owners, developers and others on the preservation and investigation of archaeological remains. In short, government guidance provides a framework which:

- Protects Scheduled Ancient Monuments;
- Protects the settings of these sites;
- Has a presumption in favour of in-situ preservation of nationally important remains;
- In appropriate circumstances seeks adequate information (from field evaluation) to enable informed decisions;
- Provides for the excavation and investigation of sites not important enough to merit in-situ preservation.

3.4 In considering any planning application for development, the planning authority is bound by the policy framework set by government guidance, in this instance PPG16, by current Development Plan Policy and by other material considerations.

4 GEOLOGY AND TOPOGRAPHY

4.1 The solid geology of the site is London Clay (British Geological Survey South London, England and Wales Sheet 270 Solid and Drift Edition). This is overlain by drift geology which comprises a series of sands and gravel terraces, with heavier sediments, such as sandy gravels deposited along the rivers margins.

4.2 The site is on level ground at around 4.00m AOD (above Ordnance Datum).

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 General

5.2 Fulham Palace was founded in medieval times but not on the site of the present building which dates from the early post-medieval period. An archaeological excavation to the south of the moated enclosure found Neolithic and Roman activity (Arthur & Whitehouse 1978). While survival of earlier structures and features on the site is believed to be high, modern landscaping has masked the position and extent of features such as the moat itself.

5.3 The origin of the moat is unknown with theories suggesting an Iron Age or Danish origin having been postulated. The earliest surviving documentary evidence of the moat itself dates to 1392. This refers to the 'great ditch' (magna fossa). A water-filled circuit is shown on maps from 1746 to 1916. Sections of the moat were subject to cleaning as late as the early 20th century. The sluice was built in 1618 and rebuilt in 1842 following a flood. The moat was eventually filled in with building debris by Fulham Borough Council between 1921-4, the bishop receiving payments from the council for this use (Emery 2009).

5.4 Prehistoric

5.5 Residual artefacts have been recovered from excavations across the moat, conducted by FARG in 1978, dating to the Mesolithic, Neolithic, Bronze and Iron Age. Excavations to the north of the palace have also produced residual material dating to the Neolithic and Iron Age. It is considered likely that the origins of the enclosure now delimited by the moat, lie in the later prehistoric or Roman period.

5.6 In addition, it is known that the terrace gravels of the Thames flood plain were widely exploited in the Mesolithic, Neolithic, Bronze and Iron Age periods. Transitory hunting and fishing in the area gave way to early farming settlements but the location of these settlements in the vicinity of the study area is not known. However, Fulham and Putney are situated on one of the few places along the Thames where the stable terrace gravels are not overlain by alluvial deposits and this, combined with their location at the extreme south of a large meander in the Thames, are thought to make this area of strategic importance throughout the prehistoric period.

5.7 The origins of occupation appear to be centred on a prehistoric ford across the river, a little up-river of the present Putney Bridge. This lay at the southern end of the conjectured route of a contemporary trackway, thought to run to the northeast along the line of Fulham Road. The conjectured line for this trackway is emphasised by a series of high quality finds dating from the Neolithic to the early Roman period which have been recovered from dredging of the River Thames.

5.8 Roman

5.9 Until 1972, the evidence for Roman activity in Fulham was limited to the discovery of the 1st century A.D. 'Fulham Sword' recovered from the Middlesex bank of the river in 1887. In 1972-73 excavations across the moat produced evidence of fourth century Roman occupation of the palace site. This took the form of a bank and gravel surfaces. This was preceded by a destruction/ demolition phase which in turn was preceded by a possible construction phase.

5.10 Excavations in the grounds immediately to the north of the palace produced evidence for 4th century occupation with a boundary ditch and demolition debris deriving from a Roman building (SMR Number 051004).

5.11 In addition a number of finds of Roman / Romano-British pottery have been recorded from the within the moat. The SMR records a find of Romano-British pottery from the throw of a tree to the south of the Walled Garden.

5.12 **Saxon and Medieval Periods**

5.13 During the Saxon and medieval periods the manor of the bishops of London was established on the site, almost certainly to the west of its current position within what is known as the 'homestead moat', a double-ditched rectangular enclosure in the southwest of the main moated site.

5.14 A number of artefacts have been recovered from this period, particularly in the extreme north of the moat where an assemblage of Saxon pottery was recovered.

5.15 The house was rebuilt during the 13th century to the east of the homestead enclosure when a less restricted site was needed for a larger residence. It was sited around the eastern courtyard and was thought to be associated with the formal delineation of the great moated enclosure, giving rise to the claim that this was the largest medieval moated enclosure in England.

5.16 During the 14th century the loose arrangement of buildings forming the manor house were restyled into one coherent structure set around the eastern courtyard. The later 15th century saw the erection of the great hall and service rooms.

5.17 The SMR also contains an entry for the medieval bridge and gate piers although those visible today are clearly Victorian.

5.18 **Post-Medieval**

5.19 The early post-medieval period saw substantial alteration and enlargement during this period. The three-storey porch at the western end of the screens passage was added in c.1500 when the western courtyard was developed.

5.20 Between 1506 and 1522 the bishop in residence was Fitzjames who built a new service range along the south side of the west court along with enclosing the Walled Garden to the east of the house. One of the gateways into this garden survives on the northwest side.

5.21 Also during the 16th and early 17th centuries, a state wing was added to the north side of the east court and a long gallery projecting from the east side of the same court. The latter was supported on a stone built garden gallery. These additions resulted in the creation of two further minor courtyards. This is thought to be the maximum size of the palace as during the 18th and 19th century the palace was substantially rebuilt and contracted in size as a result.

5.22 Excavations carried out immediately to the north of the palace produced evidence for the 17th-century gardens along with the remnants of a contemporary wall.

5.23 **Eighteenth & Nineteenth Centuries**

5.24 In 1715 the state wing on the north side of the east court was demolished to make way for a new north range.

5.25 Bishop Sherlock was responsible for a radical remodelling of the great hall. In c. 1750 he demolished the early parlour and solar block at the north end and built a grand new dining room.

5.26 During the occupancy of Bishop Terrick the eastern part of the house was completely changed with the demolition of the medieval chapel and restructuring of the east court, which was embellished with the trappings of the new and fashionable

"Strawberry Hill Gothic" style. This prompted the change of the layout of the grounds from a formal style to an informal landscape garden. The Walled Garden was created as a kitchen garden for Bishop Terrick in the late 18th century (Flower 1992).

5.27 The north-west wall and the gateway towards its north-eastern end are survivals from the previous layout. Comprising English bond red brick, the lower brickwork of this wall and some of the gateway appears to have been originally constructed in the mid/late 15th century, but altered in the early 16th century and rebuilt c.1765 (Brown 2009). Above the gate, a weathered stone panel, decorated with the arms of Bishop Fitzjames (Bishop of London 1506 to 1521-2), is set into the crow-stepped gable. There are blocked bee-boles in the north-west face of the wall opposite the Palace. Other walls were built c.1765 in Flemish bond brick. The vinery was built c. 1821 (English Heritage 2008) and consists of one central bay with two flanking bays, a single bay deep, curving in plan to follow the line of the south-facing wall. Abutting the outside of this curving wall is a Bothy comprising a range of garden storage and ancillary buildings including a potting shed constructed from c. 1821 (English Heritage 2008). The elliptical garden was created in the 1830s as a knot garden to set off the glasshouse range on the curved south-facing wall (Campbell 2009).

5.28 During the early 19th century, when Bishop Howley was in residence, the ornamentation associated with Terrick's occupancy was largely undone. The medieval kitchens were demolished and an entirely new range was built on the north side of the West Courtyard.

5.29 In 1866 the last major development was undertaken on the house when a new chapel was constructed as a projecting limb from the junction of the courts.

5.30 During the early 19th century Bishop Howley largely undid the ornamentation carried out by Terrick, He also demolished the medieval kitchens and had an entirely new range on the north side of the west court.

5.31 In 1866 the last major development was undertaken on the house when a new chapel was constructed as a projecting limb from the junction of the courts.

5.32 In 1884 the Ecclesiastical Commissioners conveyed the freehold of the Bishop's Meadow to the Fulham District Board of Works, on the condition that the land should be laid out and maintained as a public recreation ground (Fèret 1900, 211). In 1893 the completion of a concrete river wall enabled the laying out of Bishops Park (Fèret 1900, 212).

5.33 **Twentieth Century**

5.34 Between 1921 and 1924, The Bishop in Residence instructed the systematic infilling of the moat, charging local builders and contractors a fee per load to dump demolition rubble and builders' waste.

5.35 An anonymous visitor to the Museum of Fulham Palace, who had been involved in the cutting of trenches for laying water pipes in the Walled Garden in 1966, recalled the discovery of an extensive tunnel system when a large 'rotavator' fell into a large hole near the centre in the western quadrant. His recollections of a subsequent archaeological investigation taking 'several months' has yet to be corroborated as no other record of such a project have been traced. FARG undertook excavations between the Walled Garden and Bishops Walk in 1972/3 (Arthur and Whitehouse 1978) and just inside the south-west wall of the garden in 1975/6 (K. Whitehouse *pers comm*).

5.36 Two sections of the south-east wall of the Walled Garden had collapsed by c.1975 and, subsequently, a programme of repairs and repointing was undertaken to the walls generally (K. Whitehouse *pers comm*). The crossing avenues of fruit trees were planted in 1989. Photographs from as early as 1900 show the dipping pond or cistern

located to the immediate east of the central crossing standing proud of the ground surface by approximately 0.5m. This structure was partially filled in for safety by the gardeners in the 1980s (Chris Richardson pers comm).

5.37 **Previous Archaeological Investigations**

5.38 An Excavation by the Fulham Archaeological Rescue Group (FARG) in 1972-73 across the southern part of the moat revealed Mesolithic and Neolithic flints together with residual Iron Age pottery within Roman deposits. Considerable Roman activity dating mainly to the 3rd and 4th centuries was revealed in the form of a possible votive horse and dog skull within a pit, a ditch and features. The moat's inner bank would appear to date from the latter half of the 4th century (Whitehouse 1974a, 142-147; Arthur & Whitehouse 1978).

5.39 An Excavation by FARG at the Kings Head Public House on Fulham High Street revealed that the site was once an extension of the moat of Fulham Palace, possibly a pond. The silt may have dated to the late Saxon period (Bloice 1975, 257).

5.40 Investigations at Fulham Palace by FARG in 1975 inside the south-western edge of the Walled Garden revealed evidence of Roman occupation with a ploughed–up gravel surface (road?), 4th century ditch and debris and coins which was overlaid by Tudor demolition rubble deposited in the 18th century probably during the major rebuilding of the East Wing in c.1764. In the paddock area in the northwest corner of the moated grounds evidence of medieval occupation was provided by gravel surfaces, ditches, pits together with residual Roman coins and worked flints (Bloice 1976, 370).

5.41 An excavation and resistivity survey in 1976 confirmed that the northwest corner of the moated grounds (paddock) of Fulham Palace was moated off separately in medieval period by multiple banks and ditches enclosing c.1 acre. Building debris and crop marks indicate that this is the site of the Palace buildings from at least the 12th to 14th centuries. Excavation in the Walled Garden revealed two 4th century ditches at right angles and other features which may form an enclosure adjoining the riverside entrance. Some Neolithic pottery and a quantity of residual worked flints were also recovered (Richardson 1977, 36).

5.42 FARG during probing beneath floors and documentary research suggest that Great Hall of Fulham Palace was built during the 15th century and not the 16th century as once thought (Richardson 1978, 159).

5.43 A trial trench excavated by FARG in 1978 in Fulham Palace under the floor of the former 18th century Drawing Room revealed pottery and dumped debris dating back to the 13th century from earlier structures. Coupled with examination of existing buildings and documentary research it has been shown that the 18th century East Wing was built upon earlier foundations of medieval and Tudor buildings demolished c.1764 and parts of these buildings are incorporated in the extant walls (Richardson 1979, 263).

5.44 An archaeological investigation by Keith Whitehouse in 1984 at the Kings Head Public House, 4 Fulham High Street within the garden area which lies inside the Scheduled Monument revealed an unrecorded moat or ditch that appeared to run parallel with the main moat infilled in 1921-24. The ditch was filled with over 2m of silt and clay. C14 dating of organic matter beneath a clay lining gave a date of AD570 ± 80. A further 0.60m of silt fill deposits beneath this suggested an earlier date for the ditch (Richardson 1985, 51).

5.45 An excavation by FARG in 1986 to the north of Fulham Palace in 1986 revealed a few sherds of Iron Age pottery. A 4th-century Roman ditch also contained worked flints. A red-brick cellar wall with an infill core of medieval stone debris was observed extending to a depth of 6 feet (1.75m). This wall probably dated to the 17th century

and may be part of the buildings demolished in 1715. A dark deposit containing medieval pottery and a few minor 18th/19th-century garden features were found (Richardson 1987, 274).

5.46 An archaeological watching brief by FARG and Museum of London in 1987 on the insertion of a new gas main within the grounds of Fulham Palace revealed part of the substructure of the moat bridge consisting of brick chalk and ragstone. Between the bridge and the West quadrangle of the Palace culturally sterile garden soil was exposed to a depth of c.0.6m over a distance of some 75-80m along the driveway. A deep undated feature was observed adjacent to the gate of the West quadrangle and within the eastern corner of that quadrangle the top of a linear brick structure aligned ENE-WSW and possibly a drain were revealed at a depth of 0.2m (Richardson 1987, 274).

5.47 Three watching briefs by FARG were conducted within the area in 1987. Within the moated site several trees toppled over leaving craters near the site of the previous trial trench across the moat that revealed a handful of 3rd/4th-century Roman pottery. Within the Handicapped Adventure Playground the excavation of holes for a new boundary fence revealed no significant finds due to the shallowness of the holes. The re-laying of drainage in Bishops Park near the entrance to Fulham Palace revealed a handful of burnt stones and worked flints of possible Neolithic date (Girardon & Heathcote 1988, 411).

5.48 A watching brief by the Museum of London (DGLA) in 1990 in the Walled Garden and playground at Fulham Palace revealed post-medieval build-up and garden soil (Thompson et al 1998).

5.49 A watching brief by the Museum of London (DGLA) in 1991 at Fulham Palace revealed post-medieval wall foundations in a section of modern pipe trench (Greenwood & Thompson 1992, 417).

5.50 An excavation by the Museum of London Archaeology Service (MoLAS) in 1991-92 in the West courtyard of Fulham Palace revealed two sections of wall possibly 16th century in date, and post-16th century deposits. Foundations of the existing 18th century walls and garden soil were observed in the area of the Walled Garden (Greenwood & Maloney 1993, 78).

5.51 A watching brief by MoLAS in 1995 in Fulham Palace garden revealed topsoil overlying an undated silt deposit (Greenwood & Maloney 1996, 10).

5.52 Two watching briefs were conducted within the Scheduled Ancient Monument in 1997 by MoLAS. The first at All Saints Primary School, Bishops Avenue revealed modern made ground overlying natural deposits. The second in West Court, Fulham Palace revealed modern levelling material and some stone blocks that could have belonged to an earlier (1860s) fountain structure within a trench running from the East gate to the fountain in the centre of the courtyard (Maloney & Gostick 1998, 86).

5.53 A watching brief by MoLAS in 2000 at the Moat School, Bishops Avenue revealed natural brickearth, which may have been the result of flooding, overlaid by an undated marsh deposit in the central and north parts of the tennis courts works. The south part of the tennis court works showed that the marsh deposits had been reworked or replaced with a post-medieval garden soil (Maloney & Holroyd 2001, 76).

5.54 An archaeological watching brief in 2002 was conducted by PCA at Bishops Park Moat Garden, Fulham during landscaping of the gardens (Maher 2002a); all observed deposits were found to be modern although three sherds of Roman pottery were found residually within the topsoil.

5.55 A watching brief by PCA in 2002 on the insertion of bollards on the south side of Bishops Avenue revealed modern topsoil (Maher 2002b).

5.56 An archaeological watching brief in 2002 was conducted by PCA at All Saints Primary School, Bishops Avenue, Fulham, on the removal of topsoil to facilitate the construction of a new play area, the insertion of three manholes and one pipe trench, to the rear of the school. All underlying deposits were found to be modern or recent features associated with probable former allotments or garden features.

5.57 An excavation by MoLAS in 2002 at 31-35 Fulham High Street revealed evidence of occupation along the eastern side of Fulham High Street from the late 12th century into the medieval and post-medieval periods (Harward 2003a, 59-77).

5.58 An archaeological evaluation at 84-88 Fulham High Street in 2003 by MoLAS revealed possible evidence of the postulated Fulham Stream represented by lower alluvial fills containing a prehistoric flint and Roman ceramics and upper fills dating to the late medieval. Medieval activity in the form of a gravel surface and a brickearth and peg tile feature and post-medieval structures and pits were also observed (Harward 2003b).

5.59 A further phase of archaeological watching brief by PCA at All Saints Primary School in October 2003 (Bradley 2004), which involved the monitoring of ground works associated with the construction of a new path and access ramp on the north side of the school, revealed a sequence of topsoil overlying natural subsoil. No archaeological features or deposits were recorded, although several highly abraded pottery shards of probable Bronze Age or early Iron Age date were recovered from the topsoil, together with several fragments of burnt flint and a single struck flint.

5.60 **Recent Archaeological Investigations**

5.61 An Archaeological Evaluation was conducted between the 19th May and 5th June 2003 at Fulham Palace. The work consisted of seven trenches and an auguring survey to investigate the moat, the line of a proposed new access route into the Palace grounds, a sample area of a proposed new breather trench around the Palace buildings, a new fire exit and a new disabled access ramp within an inner courtyard (Hulka 2003).

5.62 An archaeological watching brief was conducted by PCA on behalf of Gifford & Partners on geotechnical window samples in November 2004 within the Warren and Bishops Park Moat Gardens on the proposed route of the new sewer (Sayer and Emery 2004). Within the Moat Garden the window samples identified the natural sands and gravels within six of seven of the window samples and archaeological deposits to a maximum depth of 5m below ground level (bgl). The archaeological sequence consisted of natural silting and peat deposits to a depth of 4.30m bgl, which are associated with either the moat or earlier natural streams, post-medieval activity towards the Fulham Palace Road to a depth of at least 5m bgl; 20th century made ground, some of which is probably associated with the in-filling of the moat in the 1920's. Across The Warren the window samples identified possible archaeological deposits to a depth of 1.88m bgl, with two possible archaeological features on the southwestern edge of the warren. The deposits consisted of sandy silts, sandy clays and clayey sands overlying the natural sands and gravels.

5.63 The Phase 1 Refurbishment work was monitored by Pre-Construct Archaeology Ltd as an archaeological watching brief. It revealed the presence of a possible prehistoric pit, Roman pits or ditches, enclosure ditches of the original palace enclosure, postholes, rubbish pits, a hearth and well all of which date to the medieval period, and the development of the palace during the post-medieval period, including features of the stable yard, Tudor buildings, drainage features and elements of the 19th century kitchen within Bishop Sherlock's Dining Room (Leary 2009; Emery & Mayo 2008).

5.64 In July 2008 a community excavation was undertaken by Gifford and PCA within the topsoil in the East Lawn in advance of repairs to the lawn.

5.65 In May-June 2009, an archaeological watching brief and associated excavations were undertaken by PCA (working in collaboration with Gifford) to inform a study into the feasibility of partial restoration of Fulham Palace moat (Payne & Pullen 2009). These investigations recorded part of a wall foundation believed to form part of the Tudor barn, a complete profile of the moat in front of Gothic Lodge from a transect of boreholes and the sluice gate and winding mechanism.

5.66 In July 2009 a metal detecting survey was undertaken by John Cole and Bill Meads under the supervision of Phil Emery (Gifford) in the Walled Garden.

5.67 At the same time in July 2009, Archaeophysica Ltd (working in collaboration with Gifford), undertook resistivity and magnetometry surveys, not only in the Walled Garden, but also in a strip along the north-east edge of the Palace grounds between the Palace and the Walled Garden. The surveys revealed fragments of a number of different garden layouts with some marked by relict planting pits, others by paths and edgings (Figs 3 and 4). However, features unrelated to the Walled Garden and therefore earlier – at least two channels or ditches – were also detected.

6 ARCHAEOLOGICAL METHODOLOGY

6.1 Recording and Methodology

6.2 All works were undertaken in accordance with English Heritage Guidance Papers and within the restrictions of the works being within the boundaries of a Scheduled Ancient Monument. As the site is a Scheduled Ancient Monument there was the presumption that all deposits and structures were significant as they were part of the setting of the Monument.

6.3 All structures, deposits and finds were recorded according to accepted professional standards as detailed in the approved Written Scheme of Investigation.

6.4 All records were assigned the Museum of London site code FLB03. This is a continuation of the previous phases of work by Pre-Construct Archaeology Ltd at Fulham Palace, and therefore all numbering (contexts, sections, trenches etc) was sequential from those previous phases.

6.5 Both the archaeological evaluation trenches and the exploratory test pits associated with locating services were included within this sequential numbering system.

7 SUMMARY OF THE ARCHAEOLOGICAL SEQUENCE

7.1 Site phasing

7.1.1 Four phases of activity were identified during the evaluation; Phase 1 represents the in-situ drift geology. This is followed by a period of Roman activity (phase 2). The third and main phase of activity (Phase 3, Walled Garden) has been divided into a number of sub-phases (3a to 3e) on the basis of a combination of ceramic dates, stratigraphic relationships and similarity in feature type. The final phase of activity (Phase 4) represents the most recent deposits recorded across the site.

7.2 **Trench 101**

7.2.1 Trench 101 measured 3.00m x 2.20m and was excavated to a maximum depth of 1.32m to 2.41m OD. This trench was so placed to target a large square pit revealed on the recent electrical resistance survey (Fig 4).

7.2.2 The earliest identified deposit was denoted as [1536] and comprised soft, yellow, silty sand, interpreted as the natural drift geology. This was only partially revealed at an elevation of 2.35m OD and was sealed by subsoil [1535]. This subsoil was similarly only partially exposed within the southern extent of the trench and identified from 3.27m OD, 0.39m thickness. This comprised firm, mottled brown, sandy silt with inclusions of chalk, mortar, animal bone, burnt flint, pottery and ceramic building material (CBM). The recovered CBM included peg tile as well as residual fragments of Roman tile, which provided a date range of mid 13th century to 1600 whilst the pottery is dated 1700 to 1900 (4, Section 256).

7.2.3 The subsoil was heavily truncated by numerous cut features. The earliest of these were cuts [1556] and [1524] which were located towards the southern limits of the trench. Feature [1556] was only partially exposed within the base of later cut [1526] to an extent of 0.33m x 0.30m x 0.15m depth. The shape of the cut in plan remains unknown, the edge, however, was curved with vertical sides and a flat base recorded at 2.96m OD. The upper limits of [1526] were encountered at 3.12m OD and the feature was filled in its entirety by firm, dark grey brown, sandy silty clay, with inclusions of CBM and sub-angular pebbles, denoted as [1555]. No dating materials were recovered from this context. Feature [1524] lay to the south of the former cut and extended 0.25m x 0.55m x 0.37m depth from 3.27m OD and extended beyond the south-eastern limit of excavation. This feature exhibited a curved edge, vertical sides and a gently southward sloping base recorded at 2.93m OD; the southern limits had been truncated by later cut [1522]. The fill of [1524] comprised firm, grey-brown clay and silty sand with occasional small sub-angular pebbles, burnt flint and CBM. (context [1523]), this contained ceramics which date from between 1700 to 1900. Features [1556] and [1524] are likely to be post-medieval garden bedding trenches. The clay-rich nature of the infilling deposit, which contrasted noticeably with a very sandy natural soil of the site, may indicate an attempt to retain moisture within the area of the root system (Fig 4, 3b and Section 256).

7.2.4 Cut [1522] extended 0.78m x 1.60m x 0.89m depth from 3.25m OD. This continued beyond the south-eastern and south-western limits of excavation. The feature appeared sub-circular in plan with vertical sides and flat base at 2.37m OD. The top and bottom breaks of slope were both sharp. The primary fill [1534] comprised firm, grey-brown clayey silt with occasional small pebbles containing CBM and pottery, recorded from 2.54m OD and 0.05m in thickness. Brick fragments assessed from this context included medieval and post-medieval examples of late 15th to early 18th century date, whilst the ceramics are dated from 1700 to 1900. The upper fill (context [1521]) comprised comparable firm, grey brown, sandy clay with occasional sub-angular pebbles and CBM, including stock moulded red brick and peg tile dating from 1480-1700 and ceramics which dated from 1760 to 1830. This deposit measured 0.84m thick and was recorded from 3.25m OD. It was also clay-rich and must also indicate an attempt to retain moisture within the area of the root system. An

environmental sample was collected from this deposit for off-site analysis (sample <57>). (Fig 4, 3e and Section 256).

7.2.5 Adjacent to [1522] was cut [1526], recorded from 3.23m OD. This extended beyond the north-western and south-western limits of excavation, 0.72m x 0.36m x 0.11m depth. The sides were concave with a sharp break of slope at top, whilst the base was recorded at 3.10m OD and appeared relatively flat. Deposit [1525] filled [1526] and comprised firm, grey-brown silty sand with frequent inclusions of small sub-angular pebbles and CBM. The CBM included tin-glaze tile and post-medieval peg tiles dating from 1600-1900. Both [1526] and [1522] were also interpreted as post-medieval garden features, although the variation in depth suggests a different plant within each. [1522] seems most likely to be for a tree, whilst [1526] may be for more ephemeral vegetation (Fig 4, 3e and Section 256).

7.2.6 To the north of the pits were two comparable stakeholes. Cuts [1528] and [1530] extended 0.24m x 0.20m x 0.13m depth and 0.24m x 0.18m x 0.15m depth from elevations of 3.24m OD and 3.25m OD respectively. Both features exhibited vertical sides and a sharp top break of slope. The base of cut [1528] tapered to a rounded point at 3.05m OD and the base of cut [1530] appeared flat at 3.09m OD. The fills were also comparable comprising firm, brown grey, silty sand and clay with occasional fragments of CBM, burnt flint, mortar and bone (contexts [1527] and [1529]). The CBM from both deposits is of post-medieval date (late 15th century to 1900) and included examples of type 2276 peg tile. These stakeholes are interpreted as garden features, possibly for tree/shrub planting or support frames (Fig 4, 3e and Section 256).

7.2.7 Layer [1532] sealed all previously mentioned features and was a 0.17m thick deposit of firm, grey-brown, silty sand with inclusions of sub-angular pebbles and was recorded from 3.43m OD. The deposit which contained CBM and clay tobacco pipe is interpreted as post-medieval garden soil. An analysis of the CBM proposed a date range of 1480-1700 and included examples of early post-medieval brick, peg tile and residual Roman brick. The ceramics give a closer date range from 1775 to 1820. This deposit was truncated along the northern limits of the trench by cut [1517], which exhibited a curved edge and extended 0.38m x 0.60m x 90mm depth a, continuing beyond the north-east and south-eastern limits of excavation. The cut was recorded from 3.46m OD with gently sloping sides to a gradual base break of slope and flat base at 3.37m OD. With comparatively little of the feature revealed in plan, it remains uncertain whether this formed part of a linear or rounded feature. It was filled by [1516], a loose, dark yellow-brown silty sand with frequent small fragments of charcoal, CBM and bone. The CBM included fragments of peg tile dating from 1700-1900. This feature is also interpreted as a 19th century garden feature, possibly the remnants of a bedding trench (Fig 4, Section 256).

7.2.8 The current ground surface was formed by topsoil [1512], recorded from 3.61m OD. This moderately compacted deposit of dark grey, silty sand, contained frequent inclusions of small rounded pebbles and CBM, 0.25m thickness. The CBM included examples of glazed tile dating from the mid 19th to mid 20th centuries plus residual Roman brick, whilst the ceramics date from 1820 to 1900 (Fig 4, Section 256).

7.3 **Trench 102**

7.3.1 Trench 102 extended 3.00m x 2.20m x 0.65m depth from a current ground level of 3.90m OD. This trench was so placed to target the main northwest-southeast garden pathway revealed on the recent electrical resistance survey (Archaeophysica 2009). In addition, excavation of this trench helped to ascertain the alignment of the service pipe running between test pits 114, 115 and 116 (Fig 5).

7.3.2 The earliest observed deposit comprised friable, brown-grey silty sand containing occasional inclusions of angular pebbles and charcoal flecks. Layer [1596] was only partially revealed from 3.48m OD within a 1.80m x 0.44m intervention excavated

along the southern limits of the trench. This deposit was interpreted as subsoil and contained fragments of residual Roman tile and post-medieval peg tile dating from 1480-1700 and ceramics which date from 1550 and 1700 (Fig 5, Section 259).

7.3.3 Sealing this subsoil was deposit [1595] which comprised loose, yellow-brown coarse sand with very occasional angular pebbles measuring 0.20m thick with a surface level of 3.71m to 3.50m OD. This deposit contained ceramics which date from 1570 to 1700, but also fragments of residual Roman CBM including tile and daub dated to 55-160. Partly overlying this was a loose, mottled dark blackish-grey and mid yellow silty sand with occasional small pebbles (context [1594]). This measured 0.11m in thickness and had a surface level of between 3.71m to 3.50m OD. Both these deposits are believed to represent deliberate levelling deposits associated with the construction of overlying gravel surface [1533] (Fig 5, Section 259).

7.3.4 Surface [1533] extended the width of the trench in a north-west south-east orientation and measured 1.40m in width x 0.16m thickness. This comprised compacted yellow-brown, coarse sandy gravel, recorded from 3.77m OD. In profile, this linear deposit exhibited cambered edges and was therefore interpreted as a gravel pathway with layers [1594] and [1595] representing preparatory levelling deposits (Fig 5, 3d and Section 259).

7.3.5 Two cut features were identified towards the north-eastern limits of the trench, beside the northeast edge of the gravel pathway. Both cuts were only partially revealed and continued beyond the limits of excavation. Cut [1575] was the easternmost of the features, extended 0.60m x 0.98m x 0.27m depth from 3.50m OD, was curved in plan, and exhibited vertical sides and a flat base at an elevation of 3.18m OD. Within this was a fill of firm, dark black-grey, sandy clay with occasional inclusions of angular pebbles, CBM and pottery. This was denoted as [1574]; an examination of the CBM provided a 1480-1700 date range, although these are clearly residual as the ceramics indicate a date of from 1780 to 1820. This clay-rich deposit must also indicate an attempt to retain moisture within the area of the root system. An environmental sample was collected from this deposit for off-site analysis (sample <59>). (Fig 5, 3d and Section 260).

7.3.6 The northernmost feature [1573] was also curved in plan, extended 1.60m x 1.04m x 0.59m depth and was recorded from 3.49m OD. The sides were distinctly stepped, and appeared concave with a moderate slope to a depth of 3.34m OD, then became vertical, and terminated in a flat base at 2.92m OD. The initial fill of this cut comprised a firm, dark black-grey sandy clay with occasional inclusions of angular pebbles, containing pottery, shell, CBM and animal bone fragments. This clay-rich deposit must also indicate an attempt to retain moisture within the area of the root system. This context was denoted as deposit [1586] and was recorded with a thickness of 0.37m, sealed by secondary fill [1572]. The latter comprised friable, mottled dark brown and brown-yellow, sandy silt, 0.24m thickness with occasional inclusions of angular pebbles and post-medieval CBM of late 17th century to early 20th century date and ceramics which date from 1850 to 1900. An environmental sample was collected from this deposit for off-site analysis (sample <58>). All fills were organic rich and consistent with horticultural soils. Features [1573] and [1575] were therefore interpreted as garden features, probably bedding trenches. The shallow profile of the top of cut [1573] seems unlikely to be a deliberate part of the cutting event and is more likely to be the result of extensive bioturbation (Fig 5, 3d and Section 260).

7.3.7 A later phase of garden features or garden layout was possibly indicated by cut [1577]. This extended across the width of the trench in a north-west south-east orientation x 1.70m width x 0.40m depth. The cut was encountered at 3.84m OD and truncated fills [1572], [1575] and possibly the edge of path [1533]. The cut had stepped sides and an almost flat base, recorded at 3.41m OD. Within this feature were fills [1571] and [1564] in turn. These comprised comparable deposits of friable, dark grey black, fine sandy silt with occasional inclusions of sub-rounded and sub-angular pebbles, and thicknesses of 0.22m and 0.09m respectively. Fragments of

CBM and pottery were recovered from primary fill [1571] that implied a date range of 1700-1900, whilst the upper fill contained ceramics which date from 1830/40 to 1900 (Fig 5, 3e and Sections 259 and 260).

7.3.8 Immediately to the southwest of pathway [1533] was linear cut [1601]. Cut [1601] followed a comparable alignment to that of the path extending beyond the east, west and southern limits of excavation to a maximum width of 0.44m x 0.66m depth. The feature was not fully excavated, its base lying below 3.02m OD. The side revealed appeared steep to vertical and was cut with a sharp top break of slope at 3.70m OD. The fill of this cut [1587] comprised friable, mottled dark grey-brown, silty sand with occasional sub-angular pebbles. Although the fill contained type 2271 peg tiled dating from the 17th to 19th centuries and pottery with a date of from 1770 to 1830 these are clearly residual as the presence of a steel water pipe within the cut clearly indicate that this feature represents a continuation of the pipe trench as identified within test pits 114-116. An anecdotal reference to the laying of a water pipe in 1966 probably gives the most accurate date for this cut (see *para* 5.35). As this cut respected the alignment of the earlier gravel path it seems probable that the path was still in use at this period (Fig 5, 3e and Section 259).

7.3.9 Sealing the trench was a topsoil that was excavated in three 'spits'. These were denoted as contexts [1576], [1519] and [1513], the latter representing current ground surface. All comprised dark grey-black, sandy silt with inclusions of small angular or sub-angular pebbles, and were recorded with the respective thicknesses of 0.05m, 0.09m and 0.10m from 3.90m OD. Dateable CBM was recovered from all contexts and included peg tile ([1519] and [1513]), glazed peg tile and red brick ([1576]), which provided a general date range of 1450 to 1700 for the deepest deposit (context [1576]) through to 1900 for the remaining two. The pottery assemblage, however, shows no stratigraphic consistency, with the lowest spit (context [1576]) containing pottery of 1850 to 1900, whilst of the remaining two spits, context [1519] contained pottery from between 1825 to 1830+ and the latest spit, context [1513] contained sherds dated from 1850 to 1900 (Fig 5, Sections 259 and 260).

7.4 **Trench 103**

7.4.1 Trench 103 measured 3m x 1m x 0.52m depth and was located towards the north-eastern limits of the Walled Garden. This was excavated from a current ground level of 4.21m OD to 3.70m OD. The trench was so placed to investigate the possibility of a northwest-southeast orientated pathway running alongside the interior side of the main north-eastern wall of the Walled Garden (Fig 6).

7.4.2 Subsoil [1624] was the earliest observed deposit within this trench. This comprised a friable, mottled brown-yellow, sandy silt with moderate inclusions of pebbles, identified within the northern extent of the trench at an elevation of 3.90m OD. Both the ceramics and CBM recovered, which included yellow London stock brick of type 3034 nr 3035, suggest a date range of between 1780 to1900 (Fig 6, Section 263).

7.4.3 The southern limits of [1624] were truncated by linear cut [1623] which continued beyond the east and western limits of the trench in a north-west south-east orientation. Cut [1623] extended to a maximum width of 2.20m, as seen within the trench, x 0.15m depth from 3.90m OD. The side exhibited a moderate slope to a flat base at 3.75m OD. This was filled by an organic garden soil, comprised of friable, dark grey-brown sandy silt denoted as deposit [1622]. As the projected alignment of the cut appeared to respect the current alignment of the north-eastern perimeter wall of the garden, this cut is interpreted as a garden feature, most likely the remnants of a bedding trench. The edge of the cut lay approximately 1.60m from the main garden wall and the higher level of the subsoil here, in the intervening space is believed to indicate that this area was originally occupied by a now absent garden path (Fig 6, 3e and Section 263). However, this contradicts Maclure's parish map (1853) which depicts the path to be separated from the wall by two to three metres, presumably by beds.

7.4.4 The trench was subsequently sealed from current ground level by 0.29m thick deposit of friable, dark grey-black sandy silt topsoil, denoted as context [1608]. Within the topsoil were fragments of worked flint and peg tile dated to 1480-1900 (Fig 6, Section 263).

7.5 Trench 104

7.5.1 Trench 104 extended 3m x 2m x 0.92m depth and was excavated from a current ground level of 3.87m OD to a maximum depth of 3.10m OD. The trench was located within the eastern half of the Walled Garden and was so placed to target an anomaly revealed on the recent electrical resistance survey (Archaeophysica 2009), and tentatively interpreted as a brick edging (Fig 7).

7.5.2 The earliest exposed deposit comprised firmly compacted, light yellow-brown sandy silt with frequent small sub-angular pebbles and evidence of root disturbance. Layer [1615] extended throughout the base of the trench from an uppermost elevation of 3.48m OD and was interpreted as subsoil (Fig 7, Section 265).

7.5.3 Extending through the trench on a north-north-east south-south-west alignment, cut [1614] was recorded. This extended beyond the north, south and western limits of excavation to a maximum length of 3.50m x 1.04m width x 0.40m depth. Excavation revealed vertical sides with an almost flat base at 3.21m OD, cut from 3.47m OD. This was filled by deposit [1613], moderately compact, yellow to dark brown sand with flecks of coal and fragments of pottery, flint and CBM. All the CBM examined was Roman with a date range of 71-160. This feature is clearly orientated with the pathways within the Walled Garden and so is likely to represent a bedding trench containing residual Roman material. The lack of post-medieval dating within this cut is unusual, and although suggested as a phase 3e cut, could be earlier, possibly 3a phase feature (Fig 7, 3e and Section 265).

7.5.4 Within the south-eastern corner of the trench, a second linear cut was identified. Feature [1612] was identified at 3.39m OD and extended 1.80m x 0.60m x 0.22m depth, base at 3.22m OD. The cut exhibited gradually sloping sides and an uneven base which it is believed was created by rooting. This followed an east-west alignment and contained a single fill deposit [1611] that comprised soft, dark brown, silty sand with occasional small sub-angular pebbles and very occasional small fragments of pottery that date from between 1550 to 1700. Cut [1612] was subsequently interpreted as a bedding trench or other garden feature (Fig 7, 3e and Section 265).

7.5.5 The trench was sealed by a topsoil, which was excavated in three 'spits' (contexts, [1607], [1602] and [1540]). These were recorded from an uppermost elevation of 3.87m OD and had a combined thickness of 0.52m. Deposits [1602] (containing a small lead disc or weight; sf 80) and [1607], recorded from 3.89m OD comprised friable, dark brown silty sand containing small angular and sub-rounded pebbles, CBM, glass and pottery, whilst the final deposit, [1540] was greyish–black in colour. A review of the CBM suggested a date range of late 17th to early 20th century for all three deposits. The ceramic assemblage shows some evidence of stratification, from 1775 to 1800 for the lowest spit (context [1607]), 1825 to 1840 for the middle spit (context [1602]) and 1850 to 1900 for the final spit, context [1540] (Fig 7, Section 265).

7.6 Trench 105

7.6.1 Trench 105 was excavated roughly centrally within the Walled Garden and was so placed to target the intersection of the main garden pathways. Also the presence of a small cistern or tank, thought to have replaced an earlier dipping pond, was deemed worthy of further investigation. The area excavated initially measured 3.00m NW-SE x 2.20m NE-SW, but this was subsequently extended by a further 2.00m to the northwest to investigate a linear feature revealed on the recent electrical resistance survey (Archaeophysica 2009). The trench was excavated to a maximum depth of 1.30m below existing ground level (Figs 8 & 9).

7.6.2 The earliest deposit recognised was a light yellow coarse sand with no visible inclusions (context [1652]). The deposit had been heavily truncated by numerous cuts, making the original surface level difficult to ascertain with certainty. The deposit was seen at its highest within the northeast side of the trench extension and here a level of around 3.14m OD was recorded. This deposit is likely to represent in-situ natural sand. No artefactual evidence was recovered from this deposit (Fig 9, Section 266).

7.6.3 Partly truncating deposit [1652] was an east-west orientated cut, which was defined at its eastern end by a rounded terminus (context [1640]). Although the cut was only partly revealed within the trench, it is believed to represent an elongated pit rather than a ditch terminus. The cut was 0.30m deep, had a variable side profile with a flat base. The base had a surface level of 2.83m OD. The single fill (context [1639]) comprised a compacted mid grey silty sand containing struck flint, CBM and ceramics with a 1480-1900 date range, whilst the CBM included residual fragments of Roman tile. Also of interest was a Urbs Roma/Wolf and Twins Roman coin (sf 82) dating to 335. (Fig 8, 3a & Fig 9, Section 266).

7.6.4 Overlying the previously discussed feature was a 0.42m thick layer of mid brown silty sand (context [1638]). This deposit was extensively truncated both to the north and east by later activity, whilst the western and southern extents continued beyond the limit of excavation. As seen the deposit measured 0.80m NE-SW x 1.76m NW-SE and had a surface level of 3.55m OD. This deposit is believed to represent a remnant of a subsoil deposit, which it is believed has survived the more intense horticultural activity associated the Walled Garden because of its location beneath gravel path [1570]. Two separate features were seen to cut into this subsoil deposit. (Fig 9, Section 266).

7.6.5 Cut [1667] was partly revealed within the northeast side of the trench extension and appeared as a northwest-southeast truncation. As seen the cut measured 0.60m deep and had a steep, straight side profile with a flat base. The base had a surface level of 2.88m OD. The single fill (context [1666]) comprised a compacted mid brown silty sand. It is believed that this cut represents the southern edge of substantial bedding trench, and its location slightly beneath, but parallel with the line of gravel path [1570] may indicate the existence of an earlier, now absent pathway. (Fig 8, 3b & Fig 9, Section 266).

7.6.6 Cut [1606] was also within the trench extension and appeared as a 0.54m long curving edge of a heavily truncated cut. Its southwest extent continued beyond the limit of excavation, whilst its south-eastern extent was defined by truncation from cut [1604]. The cut had a steep to vertical side profile and survived to a depth of 0.76m. The lowest surviving level of the cut was at 2.71m OD, although this was not the base of the cut, which was not seen. The single fill (context [1605]) comprised a loose mid greyish-yellow silty sand containing no artefactual evidence. It is believed that this cut represents a small remnant of a construction cut for the first phase of structure [1655], which it is believed has undergone substantial alterations associated with construction cuts [1604] and [1662]. (Fig 8, 3b & Fig 9, Section 267).

7.6.7 Overlying what remained of cut [1604] and extending westwards through the remainder of the trench was a 0.05m thick layer of loose light yellowish-brown gravel (context [1588]). Both its southwest and northwest extent continued beyond the excavation limits, whilst its northeast extent was defined by an untruncated edge. As with the previously discussed feature its south-eastern extent was defined by truncation from cut [1604]. As seen the deposit measured 0.60m NE-SW x 1.60m NW-SE and had a surface level of 3.56m OD. This deposit is believed to represent a truncated remnant of an earlier pathway, contemporary with construction cut [1604]. (Fig 9, Sections 266 and 267).

7.6.8 The north and western edge of cut [1604] was revealed within the trench extension and appeared as a 1.30m long, northeast-southwest orientated curved cut, which extended across the whole width of the trench. The associated structures in the cut

extended south-eastwards within the trench for around 1.70m, but clearly continued beyond the limit of excavation. The cut had a vertical, straight side profile and was excavated to a depth of 1.05m, or to a level of 2.50m OD, although this was not the base of the cut, which was not seen. The cut itself clearly represents a construction cut for all or part of brick structure [1655] and is likely to be roughly circular with a diameter of around 3.40m. (Fig 8, 3c & Fig 9, Section 267).

7.6.9 The main feature within cut [1604] was structure [1655] which comprised what is likely to be a circular construction of which around ⅛ of its diameter was revealed within the trench. As seen the structure measured 0.90m NE-SW x 1.00m NW-SE x 1.20m in height. The whole structure comprised two distinct elements, the first of which was a brick base, the top of which had a level of 2.70m OD. It was constructed of red bricks lain horizontally with headers facing outwards, forming an even curved face to the structure. Only the exterior face of this was revealed and as seen the bricks measured 100mm wide x 60mm thick, bonded with a light greyish white mortar. Three courses of this brickwork were revealed, but it clearly continued beyond the excavated depth. (Fig 8, 3b & 3c, Fig 9, Section 267).

7.6.10 Lain directly onto of the previously discussed brickwork was a brick dome, also context [1655]. This comprised a mixture of mainly red, with a few yellow bricks that measured 180mm long x 50mm thick, lain with stretchers facing outwards and bonded with a light greyish white mortar. Only the exterior face of this was revealed, which formed an even curve that gradually decreased in diameter with height. This dome survived to a height of 0.50m or 3.20m OD, which equates to around nine courses of bricks, at which point a capstone was lain, context [1656]. (Fig 8, 3c & Fig 9, Section 267).

7.6.11 The possible presence of the two construction cuts ([1604] and [1606]) associated with this structure may indicate that structure [1655] could represent two distinct phases of construction, possibly with the lower part of the structure originally continuing above the existing ground surface and forming an open well. If this hypothesis was correct the domed covering seen topping the structure is likely to represent the same phase of construction as the subsequently discussed structural elements (contexts [1656] and [1657]).

7.6.12 Capstone [1656] comprised a 0.04m thick rectangular stone slab measuring 0.60m E-W x 0.72m N-S lain directly onto the domed top of structure [1655] at a level of 3.25m OD. The stone was bonded to [1655] with light grey mortar and located on the western side of structure [1655], adjacent to structure [1657], (see below and Fig 8, 3c & Fig 9, Section 267).

7.6.13 Structure [1657] was located roughly centrally above structure [1655] and comprised a square brick pillar measuring 0.35m NW-SE x 0.35m NE-SW x 0.32m high, which comprised four courses of red bricks each measuring around 210mm x 120mm x 50mm bonded with a light greyish white mortar. This was capped with a well dressed limestone block, with the four top edges bevelled at around 45˚. The block was bonded to the underlying brickwork using the same light greyish white mortar and measured 0.35m NW-SE x 0.32m NE-SW x 0.19m high and a top level of 3.70m OD. Of particular interest was the presence of a 0.14m circular hole located centrally within the top face of this stone. This was sealed with an iron cap or dowel, which had clearly once accommodated an additional structural element, probably an above ground water pump. (Fig 8, 3c & 3d, Fig 9, Section 267).

7.6.14 Fill deposit [1603] represents the final context within construction cut [1604] was a 1.03m thick mid greyish-yellow silty sand with a surface level of 3.55m OD. This clearly represents the deliberate infilling of the cut undertaken as the final phase of the construction process. This was partly truncated both by later pit cutting as well as being overlain by gravel surfacing [1570]. (Fig 9, Section 267).

7.6.15 Cut [1600] was partly revealed within the trench and truncated deposit [1603]. It comprised a curved cut, defined at its southwest extent by rounded terminus. It is believed to represent a pit rather than a ditch terminus, although as the northeast extent lay beyond the limit of excavation this cannot be proven. The extent as revealed measured 0.58m NE-SW x 1.10m NW-SE x 0.47m deep, with a base level of 3.21m OD. The single fill (context [1599]) comprised a compacted mid yellowish-grey silty sand containing ceramics which date from between 1700 and 1820 plus CBM dating from 1600 to1900, and included examples of peg tile and sandy red brick. (Fig 8, 3d).

7.6.16 Deposit [1581] partly overlay deposit [1603] and extended westwards through the remainder of the trench. It comprised a 0.10m thick layer of loose light brown sand with gravel lenses. Both its southwest and northwest extent continued beyond the excavation limits, whilst its northeast extent was defined by an untruncated edge. As seen the deposit measured 0.76m N-S x 2.00m E-W and had a surface level of 3.62m OD. This deposit is believed to represent a preparation/levelling deposit for gravel surface [1570]. (Fig 9, Section 267).

7.6.17 Deposit [1570] was seen to overlay deposit [1581] and also extended westwards through the remainder of the trench. It comprised a 0.16m thick layer of compact mid yellowish-grey sand and gravel. As with the previously discussed deposit, this also extended to the southwest and northwest beyond the excavation limits, whilst its northeast extent was defined by an untruncated edge. However this deposit was revealed over a greater area of the trench than [1581] and measured 1.04m N-S x 3.60m E-W and had a surface level of between 3.83m to 3.77m OD. Fragments of CBM were recovered from this context which included peg and pan tile dating between 1666 and 1850 as well as ceramics which date from 1700 to 1900. This deposit clearly represents a gravel surface associated with the Walled Garden. Two later cuts partly truncated this surface. (Fig 8, 3d & Fig 9 sections 266 and 267).

7.6.18 Cut [1610] was partly revealed within the trench and partly truncated the northern edge of surface [1570]. It comprised an irregular shaped cut, which itself was completely truncated to the north by a later pit, whilst its western extent continued beyond the limit of excavation. The extent as revealed measured 0.90m NE-SW x 0.54m NW-SE x 0.32m deep, with a base level of 3.43m OD. The single fill (context [1609]) comprised a compacted mid grey silty sand containing flint, CBM and ceramics of late 17th to 19th century date. (Fig 8, 3e & Fig 9 Section 266).

7.6.19 Cut [1662] appeared as a 2.20m long, northeast-southwest orientated straight cut, which extended across the whole width of the trench. The southern extent of the cut was not recognised during the excavation, although its function as a construction cut associated with the insertion of structure [1658] into the earlier Well structure [1655] seems certain. The cut had a 0.66m deep vertical, straight side profile with a single 0.10m wide step. The base was flat with a surface level of 3.10m OD. (Fig 8, 3e & Fig 9 Section 267).

7.6.20 Associated structure [1658] was located above structure [1655] and to the north of structure [1657]. It comprised a fragment of 0.10m diameter stoneware pipe orientated east-west, which at its western end fed into structure [1655]. This was achieved via a short stretch of drain channel constructed of slates stood-on-end with a mortar base that occupied the intervening space between the end of the stoneware pipe and an opening cut through structure [1655]. This was seen for a length of around 0.84m, although it clearly continued eastwards beyond the limit of excavation. Surface levels varied from 3.28m OD at its eastern end to 3.23m OD at its western end. Although the function of this structure, as a drain seems clear, the reason for its existence is less certain. The most likely explanation is that it was originally connected to an external basin or tank that would have been directly serviced by a pump attached to structure [1657], so enabling unused water to be recycled. Fragments of type 2276 peg tile were recovered from this context, giving a 1480-1900 date range. (Fig 8, 3e).

7.6.21 Deposit [1664] was the final context within construction cut [1662] and was a 0.66m thick compacted light brown sandy gravel with a surface level of 3.65m OD. This deposit clearly represents the deliberate infilling of the cut combined with the reinstatement of gravel pathway [1570] and was clearly undertaken as the final phase of the construction process. (Fig 9 Section 267).

7.6.22 Directly to the northeast of gravel path [1570] a final sequence of bedding trenches were observed, some of which partly truncated the pits described earlier.

7.6.23 Cut [1598] was partly revealed within the trench and partly truncated earlier pit cuts [1600] and [1610]. It comprised a curved cut located within the northern corner of the trench, with both its northeast and northwest extent beyond the limit of excavation. The extent as revealed measured 0.46m NE-SW x 1.08m NW-SE x 0.24m deep, with a base level of 3.22m OD. The single fill, context [1597] comprised a loose dark yellowish-grey silty sand containing glass and ceramics which date from between 1700 and 1900. (Fig 8, 3e & Fig 9 Section 266).

7.6.24 Deposit [1637] was seen to partly overlay pit cut [1610] and also extended westwards through the remainder of the trench. It comprised a 0.15m thick layer of loose mid yellowish-brown silty sand, which equates to a lower topsoil deposit. This deposit had a surface level of between 3.83m OD and contained flint, CBM and ceramics of 1580 to 1900 in date. (Fig 9 Section 266).

7.6.25 Cut [1585] was partly revealed within the trench and partly truncated earlier pit cut [1598] and lower topsoil deposit [1637]. It comprised an almost right-angled cut located within the northern corner of the trench, with both its northeast and northwest extent beyond the limit of excavation. The extent as revealed measured 0.56m NE-SW x 1.00m NW-SE x 0.19m deep, with a base level of 3.39m OD. The single fill, context [1584] comprised a loose very dark brown silty sand containing struck flint, glass, metal, CBM and ceramics dating from 1600-1900 and included type 2271 peg tile. (Fig 8, 3e & Fig 9 Section 266).

7.6.26 Cut [1583] was located alongside the northeast edge of the trench and partly truncated earlier pit cut [1600]. It comprised a rectangular cut with vertical sides and a flat base, measuring 0.46m NE-SW x 0.40m NW-SE x 0.48m deep, with a base level of 3.16m OD. This was filled by a concrete matrix, which enclosed the remains of a squared timber post (context [1582]) and is clearly of very recent date (Fig 8, 4).

7.6.27 Sealing the previously discussed archaeology, throughout the trench was thin 0.07m thick dark greyish-black sandy silt, context [1542] with a surface level of 3.85m OD. This deposit represents the existing topsoil, prior to the commencement of the excavations. Fragments of peg tile, daub and residual Roman tile were recovered from this context dating from the mid 13th to mid 15th centuries and ceramics dating from 1830 to 1900. (Fig 9 sections 266 and 267).

7.6.28 Two further contexts were recorded which were visible above the existing topsoil. The first was [1661] which comprised an irregular cut measuring 0.82m NE-SW x 0.44m NW-SE x 0.48m deep, with a surface level of 3.84m OD. This was filled by a dark soil and the remains of a badly decayed wooden post or tree stump (context [1660]) and is clearly of very recent date. (Fig 8, 4).

7.6.29 The final context number [1663] was allocated for a cistern or tank which lay partly within the eastern corner of the trench. This comprised an oval shaped structure measuring around 2.05m NW-SE x 1.52m NE-SW rendered with a hard grey cement into which a linear pattern had been scored in imitation of stonework. The interior of the tank had been infilled recently and was not re-excavated. However a probe was undertaken to ascertain its interior depth, which was seen to be around 0.40m. The top of the structure lies around current ground level at 3.85m OD (Fig 8, 4). This feature is located within the area of the former Dipping Pond, although it clearly

represents a late adaptation of the original structure that was presumably constructed of clay and stone.

7.7 Trench 106

7.7.1 Trench 106 extended 3m x 2.20m x 1.15m depth. This was excavated in 0.10m thick spits to 2.75m OD exposing natural sandy clay. The trench was located within the northeast quadrant of the Walled Garden and was so placed to investigate an area of high resistance revealed on the recent electrical resistance survey, which was tentatively interpreted as a possible footing (Fig 10).

7.7.2 The earliest identified deposit comprised friable, yellow-brown sandy silty clay [1590]. This contained occasional small rounded pebbles and extended throughout the trench. The layer was recorded from elevations of 2.84m OD and 2.78m OD and is believed to represent the natural drift geology (Fig 10, Section 258).

7.7.3 Layer [1580] sealed natural the deposit from 2.92m OD and extended throughout the trench and was 0.12m thick. This comprised friable, light yellow-brown sandy silt with occasional rounded pebbles, occasional pottery, CBM and charcoal fragments. The material was all notably abraded and included examples of type 2452 Roman brick. This infers a date range of 55-160, but the scarcity of finds would suggest this to be an alluvial deposit as opposed to deliberate dumping or levelling (Fig 10, Section 258).

7.7.4 Cut [1579] truncated the northern extent of [1580] and was recorded from 2.89m OD. This extended 1.82m x 1.10m x 0.17m depth, was ovoid in plan and exhibited an undulating base at 2.79m OD and gently sloping sides (Fig 10, 2). The backfill of this feature comprised light yellow-brown, compact, sandy silt with charcoal flecks, small rounded pebbles, pottery, and CBM fragments, denoted as [1578]. Within the deposit were fragments of abraded Roman tile dating to 55-160 and a fresh sherd of a small jar dated between 350-400 AD. It was considered highly likely that the pit was cut from a higher level but not recognised as such during excavation. It was therefore probable to have contained a dump of stones recorded as deposit [1562], although these were recognised within the overlying deposit [1663]. These stones were recorded from elevations of 3.12m OD and 3.10m OD and comprised a group of large stone and flint nodules covering an area 0.60m x 0.50m.

7.7.5 Overlying pit [1579] was a 0.10m thick heavily compacted yellow-brown sandy silt, denoted as 'spit' [1563]. This was encountered at 3.04m OD, continued throughout the trench and contained flecks of charcoal, occasional pottery, bone and daub fragments. The daub examined produced no conclusive dating, with a date range of 50BC-1666. This context was overlain by 'spit' [1544] from 3.12m OD; and was also a heavily compacted, yellow-brown sandy silt with inclusions of rounded pebbles, charcoal flecks, pottery, CBM and burnt flint. An assessment of the CBM gave a date range of 55-150 and included examples of Roman tile and Combed box flue, whilst the ceramic sherds from this deposit dated from between 300-350/400 AD. The upper boundary of this deposit was observed to be uneven and irregular as a result of post-medieval horticultural activity (Fig 10, Section 258).

7.7.6 Roman horizons were sealed by five spits of subsoil. These comprised very heavily compacted mid brown, sandy clayey silt with inclusions of small-medium rounded pebbles, charcoal flecks, glass, CBM and pottery. The layers were numbered sequentially [1520], [1531], [1537], [1538] and [1541] from an uppermost elevation of 3.63m OD; each measured 0.10m thickness (Fig 10, Section 258). The lower spits, deposits [1537], [1538] and [1541] all contained residual fragments of Roman brick and tile, with the greatest concentration of this material deriving from [1538]. All fragments however, were found in association with later examples of post-medieval brick and peg tile. A review of the CBM and the ceramics suggest a date range of late 15th to 20th century. These spits do show some evidence of stratigraphic sorting, if the earliest proposed date is used for each spit. This method would give a date range of c1700 for the lowest spit through to c1850 of the highest. This must of course be

treated with caution as all are likely to represent mixed/bioturbated post-medieval garden/subsoils. Noteworthy were the recovery of two Roman coins from deposit [1537], one example dating to 270-290 and a later House of Valentinian coin dating to 364-378 (SFs 77 and 78 respectively).

7.7.7 The topsoil was similarly divided into three spits, comprising layers [1514], [1515] and [1518] with the combined thickness of 0.30m from 3.96m OD. The uppermost deposit, [1514] comprised firm, light yellow-grey sandy silt, whilst the lower deposits were by comparison heavily compacted but comprised of comparable sandy silt. The layers contained occasional small rounded pebbles, charcoal flecks, and pottery, CBM and clay tobacco pipe fragments. An initial assessment of the CBM gave a date range of 17th to early 20th century, with examples of type 2276 peg tile being recovered from all contexts in addition to unglazed floor tile and transitional brick types. The ceramic assemblage shows a minor variation in date range, from 1830 to 1840 for the lowest spit (context [1518]) whilst the remaining two spits contain ceramics from between 1830 through to 1900. (Fig 10, Section 258).

7.8 Trench 107

7.8.1 Trench 107 measured 3.10m x 2.16m and was excavated to a maximum depth of 0.50m. This was located within the northeast quadrant of the Walled Garden above an area of a sharp change in electrical resistance as indicated by the recent electrical resistance survey (Fig 11).

7.8.2 The earliest observed deposit comprised subsoil [1567]. This was observed at the base of the trench from 3.67m OD and consisted of compact, grey-yellow silty sand. This had been heavily truncated by four cut features (Fig 11, Section 257).

7.8.3 Posthole [1566] was encountered to the south of trench 107. This circular cut had vertical sides and a base which tapered to a rounded point at 3.61m OD. The feature measured 0.16m x 0.18m x 0.19m depth from 3.80m OD. Fill [1565] comprised loose, brown-grey sandy clay and was undated (Fig 11, 3d).

7.8.4 Pit cut [1561] was partially revealed to the east of this feature, which extended 1.76m east-west x 0.46m x 0.27m depth, and continued beyond the eastern limit of excavation. The sides appeared vertical with a sharp break of slope at top from 3.67m OD; the feature was not fully excavated and therefore the depth of the base remains unknown. Within the cut was friable, brown-grey, sandy clay backfill [1560], containing occasional fragments of charcoal, CBM and flint pebbles. An environmental sample was collected from this deposit for off-site analysis (sample <56>). Among the CBM were examples of pan and peg tile, plus ceramics dating from 1670 to 1926. Additionally several fragments of residual Roman tile were found. The shape and character of this feature bore a close resemblance to pit cut [1522], located within trench 101 and it is possible they represent a linear arrangement of trees or shrubs within the Walled Garden (Fig 11, 3d).

7.8.5 To the north of [1561], a second cut was identified. Feature [1569] extended 2m x 0.62m and extended beyond the north and eastern limits of excavation. This was left *in situ.* The shape of [1569] was difficult to ascertain with such a limited exposure but may represent the terminus of a linear, bedding trench. Similarly, it wasn't possible to establish with any certainty whether this extended in a north-east south-west or north-west south-east orientation. The upper elevation of the cut was recorded at 3.61m OD and it was filled by friable, brown-grey sandy clay backfill. This was denoted as deposit [1568] and contained inclusions of flint pebbles and CBM. Features [1566], [1561] and [1569] all truncated subsoil [1567]. These were similarly all interpreted as post-medieval garden features (Fig 11, 3d).

7.8.6 A compact layer of dark yellow-brown, silty sand sealed [1568]. This was identified at 3.78m OD, measured 1.60m x 2.15m x 0.14m thickness, and extended beyond the north and southern limits of excavation. This layer was denoted as context [1559] and

interpreted as garden soil. All the finds examined infer a post-medieval date for the deposit and included post great fire brick, peg and pan tile with a date range of 1666-1900, whilst the ceramics date from 1720 to 1750/80 (Fig 11, Section 257).

7.8.7 The southern half of the trench was truncated by cut [1558]. This extended the full width of the trench x 1.50m width x 0.18m depth from 3.77m OD. The side exhibited a shallow gradient and the base appeared flat, recorded at 3.61m OD. The fill [1557] comprised compact, dark grey, silty sand containing occasional small fragments of CBM, pottery and flint pebbles. The brick and tile fragments examined suggested a 1780-1900 date range, whilst the ceramics date from 1770 to 1830. This feature was also interpreted as post-medieval garden feature, possibly a late 19th century bedding trench (Fig 11, 3e & Section 257).

7.8.8 Sealing the trench was a topsoil deposit excavated in two separate 'spits'. Context [1543] was overlain by context [1539]. Both comprised friable, dark grey-black, fine sandy silt with inclusions of sub-rounded and sub-angular pebbles. The spits were recorded respectively from 3.96m OD and 4.14m OD with thicknesses of 0.17m and 0.18m. An examination of CBM recovered from these deposits included residual Roman tile and brick, in addition to peg tile and post-medieval brick. Date ranges of 1666-1800 and 1700-1900 were proposed for [1543] and [1539] (Fig 11, Section 257). A small cast bronze finial, probably part of a decorative furniture fitting was also recovered from context [1539] (sf 79).

7.9 **Trench 108**

7.9.1 Trench 108 extended 3m x 1m and was excavated to a maximum depth of 0.84m from current ground level at 4.00m OD. This was also located within the northeast quadrant of the Walled Garden, adjacent to the originally targeted area of high electrical resistance as indicated by the recent electrical resistance survey. This trench could not target the area proposed precisely because the presence of a large tree made excavation impractical (Fig 12).

7.9.2 Layer [1659] was exposed at the base of the trench between 2.39m OD and 2.31m OD. This comprised friable, light yellow-brown fine sandy silt, containing occasional charcoal flecks and small rounded pebbles. The upper boundary of this deposit undulated as a result of post-medieval horticultural activity. Layer [1659] was interpreted during excavation as an upper level of a Roman horizon, given the recovery of Roman pottery fragments from the interface between [1659] and subsoil [1648]. A stratigraphic sequence similar to that revealed in trench 106 seems likely to continue beneath this deposit (Fig 12, Section 268).

7.9.3 Deposit [1648] sealed [1659] from 3.59m OD and comprised friable, yellow-brown, silty sandy clay. This extended throughout the trench, was 0.51m thickness and interpreted as subsoil. Within the deposit were inclusions of occasional CBM and moderate pottery and animal bone fragments. The ceramics date from between 1770 to 1820 whilst the fragments of CBM recovered included residual Roman tile of fabric types 3023 and 2452 which have a date range of 50 to160. This deposit clearly represents a subsoil deposit of post-medieval date (Fig 12, Section 268).

7.9.4 The northern limits of [1648] were truncated by sub-circular cut [1647]. This extended 0.90m x 1.00m x 0.31m depth and continued beyond the north, east and western limits of excavation. The feature exhibited a sharp top break of slope, gradual at base, with concave sides and an undulating base. The upper and lower elevations of the feature were recorded at 3.54m OD and 3.23m OD respectively. This was filled in its entirety by friable, dark brown-grey sandy clayey silt deposit [1646]. This fill contained moderate inclusions of rounded pebbles, occasional pottery, CBM and animal bone fragments in addition to coal and charcoal flecks. The ceramics date from between 1770/80 to 1800 whilst within the CBM post great fire brick was present. This feature represents a post-medieval garden feature, most likely a bedding trench or planting hole (Fig 12, 3e & Section 268).

7.9.5 The trench was subsequently sealed by 0.40m thick topsoil layer [1641]. The topsoil comprised friable, dark brown-grey sandy clayey silt with inclusions of rounded pebbles, pottery, CBM (post-medieval peg and pan tile), glass, coal and charcoal (Fig 12, Section 268).

7.10 **Test Pit 109**

7.10.1 Test Pit 109 measured 1m x 0.46m x 0.46m depth and was located outside the northern limits of the Walled Garden along the proposed line of a planned service pipe and excavated, to assess the archaeological potential of a proposed service route (Fig 13).

7.10.2 Context [1617] comprised compact, light yellow-brown sandy silt with evidence of extensive root disturbance. This was the earliest observed deposit within the test pit and was encountered at 3.97m OD and excavated for 0.31m thickness and interpreted as subsoil (Fig 13, Section 261).

7.10.3 The subsoil was overlain by topsoil [1616]. This was recorded from 4.12m OD and comprised compact, dark grey-brown sandy silt which measured 0.18m thickness. Within the inclusions were occasional small sub-angular gravels, plus ceramics and fragments of CBM such as type 3033 red brick and peg tile. These residual artefacts give a date range of 1480-1900 (Fig 13, Section 261).

7.11 **Test Pit 110**

7.11.1 Test Pit 110 was located to the north of the Walled Garden, adjacent to the former Vinery and Bothy. The trench measured 1.00m x 0.52m x 0.61m depth. This was also located along the proposed line of the proposed service route, approximately 30.00m to the south of Trench 109 (Fig 14).

7.11.2 The earliest observed deposit within test pit 110 comprised firm, mid yellowish brown sandy silt. This remained *in situ* and was only identified at the base of the trench, denoted as deposit [1631]. The layer extended 0.68m x 0.55m in plan from an elevation of 3.54m OD and was interpreted as a lower subsoil horizon (Fig 14, Section 264).

7.11.3 The southern limits of this subsoil were truncated by feature [1630]. Cut [1630] appeared sub-circular in plan and extended 0.60m x 0.55m x 0.18m in depth, continuing beyond the limit of excavation at 3.55m OD. The sides of the cut were vertical and exhibited a sharp break of slope at top, recorded at 3.61m OD. This feature was lined by brick structure [1629]. The highest level for this brick structure was also 3.61m OD and was constructed using purple and yellow shallow-frogged bricks sized 220mm x 110mm x 65mm arranged in random coursing. This structure was clearly of post-medieval date and interpreted as a well or soakaway, with associated construction cut. A projected alignment of this structure gives an internal diameter of approximately 0.80m (Fig 14, plan & Section 264).

7.11.4 Within the northern extent of the test pit, deposit [1628] was identified. This sealed subsoil [1631], but had no physical relationship with [1630]. The surface of this deposit was encountered at 3.89m OD and comprised a firm, mid yellow-brown fine sandy clayey silt with occasional inclusions of charcoal, coal flecks, small CBM fragments, clay tobacco pipe stems and occasional small fragments of pottery that date from between 1700 to 1900. This layer extended 0.71m x 0.55m x 0.36m thickness and extended beyond the north, east and western limits of excavation. Layer [1628] was therefore interpreted as a subsoil horizon (Fig 14, Section 264).

7.11.5 Cut [1627] was recorded at 3.89m OD and truncated both brickwork [1629] and subsoil deposit [1628]. In plan this appeared sub-circular, extended 0.45m x 0.55m x 0.35m depth and continued beyond the limits of excavation. The cut exhibited a sharp break of slope at top, with steeply sloping sides, roughly at a 45º angle. This was

entirely filled by a loose deposit of mid grey and purple silty gravel and clinker. The deposit was denoted as [1626] and interpreted as backfill of [1627]. The cut was interpreted as either a demolition cut, to remove the upper brickwork from structure [1629] or part of an original construction cut for a now absent structure overlying [1629] (Fig 14, Section 264).

7.11.6 The test pit was sealed by a 0.20m thick topsoil deposit, recorded from 4.06m OD. This was a mixed deposit, comprised of loose, mid brown-grey fine-medium gravel and silt. The deposit may therefore represent a combination of a former gravel path and garden soil (Fig 14, Section 264).

7.12 **Test Pit 111**

7.12.1 Test Pit 111 measured 1m x 0.46m x 0.48m depth. This was excavated to a maximum depth of 3.84m OD and was located outside the northern boundary wall of the Walled Garden, approximately 65.00m to the east of test pit 111 and 5.00m to the north of the Walled Garden. Its function was to determine the archaeological conditions of the area (Fig 15).

7.12.2 The earliest deposit exposed, comprised compact, light brown-grey, sandy silt containing very occasional inclusions of small sub-angular pebbles. Layer [1621] was identified from 4.23m OD and extended 0.55m x 0.46m x 0.32m thickness as seen, continuing beyond the limit of excavation. This deposit was heavily truncated to the west by cut [1620] (Fig 15, Section 262).

7.12.3 Cut [1620] was recorded from 4.22m OD and extended 0.46m north-west south-east x 0.70m north-east south-west x 0.37m depth. The feature was not fully revealed in plan and extended beyond the north, south and eastern limits of excavation, and continued in depth beyond the base of the test pit at 3.89m OD. The cut exhibited steep sides and a sharp break of slope at top. This was filled by a loose deposit of dark grey-brown, sandy silt. Fill deposit [1619] contained frequent inclusions of CBM including whole bricks, and occasional fragments of glass, and metal objects such as pipe and bucket fragments. The function of [1620] is unclear, although the mixed nature of the fill and its location immediately to the east of the former Vinery and Bothy suggest an association with this structure. The post-medieval date is supported by an analysis of the ceramics and CBM, which included examples of stock, frogged, reused bricks of mid 19th to mid 20th century date (Fig 15, plan & Section 262)..

7.12.4 Overlying this pit was topsoil deposit [1618] that comprised loose, dark grey-brown sandy silt, 0.14m thickness from 4.37m OD (Fig 15, Section 262).

7.13 **Test Pit 112**

7.13.1 Test Pit 112 was located adjacent to the Gothic Lodge which lies some distance to the west of the Walled Garden and measured 1m x 0.44m x 0.45m depth. This trench was within the approximate area of known services and excavated to determine their exact location (Fig 16).

7.13.2 Deposit [1635] was the earliest deposit encountered within this trench and was a loose, dark brown-grey, sandy silt containing frequent inclusions of CBM and rounded pebbles that overlay a small diameter steel pipe which appeared to follow a rough north-west south-east alignment. The pipe was encountered at 3.87m OD and [1635] clearly represents the backfill of the trench for the pipe; however the cut was not exposed during the excavations. Ceramics from within this deposit date from between 1580 to 1900 whilst the fragments of glazed tile date from the mid 19th to mid 20th centuries (Fig 16, plan & Section 269).

7.13.3 A second pipe trench was identified as truncating the fill of the earlier pipe trench. This later cut, context [1633] extended 0.60m length x 0.45m x 0.31m depth, and followed a roughly east-west orientation. The cut exhibited vertical sides, at an uppermost

elevation of 3.86m OD and extended beyond the western limits of excavation. This was filled by deposits [1632] and [1636] in turn. The former comprised loose, dark grey-brown, sandy silt with frequent inclusions of mortar and CBM fragments. This was recorded from 3.86m OD, 0.31m thickness. Within this fill was a second, much larger pipe, which lay at 3.79m OD. Deposit [1636] was the final fill of [1633] and was recorded at 3.96m OD, 0.10m thickness, and comprised loose, brown-greyish yellow sand containing occasional inclusions of rounded pebbles and small CBM fragments. Both deposit [1636] and [1632] were interpreted as backfill for pipe trench [1633] (Fig 16, Section 269) (Fig 16, plan & Section 269).

7.13.4 Sealing these deposits within the test pit was topsoil [1634]. This was recorded from 3.99m OD and comprised a 0.17m thick layer of firm, grey-brown clayey silty sand (Fig 16, Section 269).

7.14 **Test Pit 113**

7.14.1 Test Pit 113 was located along the north-eastern face of the extant northern boundary wall of the Walled Garden, approximately 5.00m to the east of trench 111. The trench measured 0.68m x 0.36m x 0.55m depth and was located against an existing standpipe and excavated to determine to below-ground direction of this service (Fig 17).

7.14.2 The water pipe comprised the earliest identified feature within this trial pit. The pipe was within a trench that had truncated part of the garden boundary wall and was aligned north-east south-west, continuing through the Garden boundary wall and into the Walled Garden. The top of the standpipe was at 4.31m OD above current ground level, whilst the below ground service was encountered at 3.73m OD and 3.75m OD to north and south respectively (Fig 17). Deposit [1654] sealed the pipe and comprised loose, dark grey, sandy silt containing frequent inclusions of angular pebbles and CBM. This was observed to a maximum extent of 0.68m x 0.30m x 0.38m thickness from 4.09m OD and was interpreted as backfill for the pipe trench. An incidental reference to the laying of a water pipe in 1966 probably gives the most accurate date for this pipe (see *para* 5.35).

7.14.3 Sealing this deposit within the trench was a 0.17m thick deposit of topsoil. This comprised loose, dark brown sandy silt and was recorded from 4.26m OD.

7.15 **Test Pit 114**

7.15.1 Test Pit 114 was located towards the south-eastern limit of the subject area and extended 0.45m x 0.45m x 0.90m depth. This was also located against an existing standpipe and excavated to determine to below-ground direction of this service (Fig 18).

7.15.2 The earliest identified deposit comprised layer [1644], a loose, light brown-yellow coarse sand. This was encountered at 3.18m OD, and was exposed to a maximum extent of 0.15m x 0.45m x 0.25m thickness within the eastern limits of the trench only. The sand layer was truncated to the west by a pipe trench and interpreted as a naturally derived sand layer, probably alluvial in origin.

7.15.3 Sealing natural sand was a layer of friable, mid brown, silty sand denoted as context [1643]. This was recorded from 3.43m OD, contained no inclusions and was subsequently interpreted as an *in situ* layer of subsoil.

7.15.4 The western limits of the trench were truncated by a pipe trench excavated for the insertion of a 0.04m diameter water pipe, aligned north-west south-east, which was encountered at a level of 2.93m OD (Fig 18). The trench had been backfilled by 0.50m thick deposit that comprised friable, mixed black and yellow sandy silt, containing moderate inclusions of pebbles and CBM (context [1645]). This deposit was observed to a maximum extent of 0.45m x 0.32m, at 3.43m OD and continued

beyond the north, east and western limits of excavation. Within this deposit were fragments of type 3047 paving brick (1690-1900). As with the previously discussed pipe trench the incidental reference to the laying of a water pipe in 1966 probably gives the most accurate date for this cut (see *para* 5.35).

7.15.5 Test pit 114 was capped by friable, dark grey-black sandy silt topsoil. This was denoted as [1642] and extended 0.40m thickness from 3.83m OD.

7.16 **Test Pit 115**

7.16.1 Test pit 115 measured 0.50m x 0.60m x 1m, and was excavated to a maximum depth of 3.00m OD. This was also located roughly centrally within the Walled Garden against an existing standpipe and excavated to determine to below-ground direction of this service (Fig 19).

7.16.2 The earliest feature identified comprised the 0.04m diameter water pipe. The top of the existing standpipe was 4.30m OD (above ground level), whilst the base level of the pipe was at 3.00m OD. The below-ground service was orientated north-west south-east and clearly represents a northwest continuation of the pipe seen within trenches 102 and 114. Sealing the pipe was a deposit of firm, light brown, mixed sand. This was denoted as fill deposit [1650], recorded from 3.63m OD, 0.74m thickness, and was interpreted as backfill for the pipe trench; the cut of which was not identified within this trench (Fig 19, plan & Section 271).

7.16.3 Sealing the trench from ground level at 4m OD was 0.26m thick layer of firm topsoil, denoted as deposit [1649] (Fig 19, Section 271).

7.17 **Test Pit 116**

7.17.1 Test pit 116 was located approximately 4.00m from the northwest wall of the Walled Garden, roughly centrally along its length and around 130.00m to the west of trench 115. It was also placed beside an existing standpipe to investigate the below ground direction of the pipe that services this standpipe. Additionally it was decided to extend and deepen this trench as compensation for a planned investigative intervention that had been abandoned because of problems with unauthorised removal of the surveying points, which made the trench difficult to relocate with accuracy. The area excavated measured 0.80m NW-SE x 0.90m NE-SW and to a maximum depth of 1.35m below existing ground level (Fig 20).

7.17.2 The earliest deposit recognised was mid yellowish-brown coarse sand with occasional sub-angular pebbles, which was partly excavated to a depth of 0.47m (context [1672]). The extent revealed measured 0.30m NE-SW x 0.35m NW-SE and a level of 3.12m OD was recorded for the surface. This deposit is likely to represent in-situ natural sand. No artefactual evidence was recovered from this deposit (Fig 20, Section 270).

7.17.3 Overlying this sand was a 0.51m thick deposit of dark brownish-grey sandy silt which contained occasional fragments of CBM and sub-angular pebbles (context [1671]). The extent revealed measured 0.40m NE-SW x 0.82m NW-SE and a level of 3.70m OD was recorded for the surface. This deposit is likely to represent an in-situ subsoil deposit. No artefactual evidence was recovered from this deposit (Fig 20, sections 270 and 272).

7.17.4 Deposit [1670] overlay deposit [1671] and comprised a 0.08m thick layer of friable mid yellowish-orange coarse sand. As seen the deposit measured 0.35m NW-SE x 0.30m NE-SW and was truncated at is southeast extent by the cut for the water pipe. The surface level of the deposit was between 3.76m to 3.65m OD. This deposit is believed to represent a preparation/levelling deposit for gravel surface [1669] (Fig 20, sections 270 and 272).

7.17.5 Gravel pathway [1669] was encountered at 3.85m OD and comprised firm, yellow sandy gravel. This was only partly revealed within the trench and as seen measured, 0.90m x 0.82m x 0.10m thickness, continuing beyond the north, east and western limits of excavation. The southern limits of this deposit were truncated by trench cut [1674]. This feature is clearly the westwards continuation of the gravel path revealed within trenches 102 and 105 (Fig 20, sections 270 and 272).

7.17.6 This was overlain by loose, dark brown-grey silty sand layer [1675] that extended 0.23m x 0.90m x 0.17m thickness from 3.83m OD. This continued beyond the south-eastern limit of excavation and is interpreted as a layer of garden soil (Fig 20, Section 270).

7.17.7 Truncating this soil was cut [1674]. This extended 0.64m in length x 0.50m x 0.65m depth in a north-west south-east orientation through the centre of the trench, continuing beyond the south-eastern limit of excavation. The feature was cut from 3.77m OD and exhibited vertical sides and was excavated until the known water pipe was located, which here was seen to continue in a southeast direction and clearly represents the northwest limit of the pipe exposed within trench 115. The base of the cut was not exposed and can be assumed to continue beyond 3.23m OD. Fill deposit [1673] comprised friable, dark grey-black and mid yellow, sandy silt, containing moderate inclusions of pebbles and modern plastics. Cut [1674] represents the northwest terminus of the pipe trench as recorded within trenches 115, 102 and 114 from northwest to southeast respectively throughout the subject site (Fig 20, plan & Section 272).

7.17.8 Sealing test pit 116 from 4m OD was a 0.20m thick deposit of loose, dark brown sandy silt topsoil, denoted as [1668]. This directly overlay backfill [1675] (Fig 20, sections 270 and 272).

8 INTERPRETATION AND CONCLUSIONS

8.1 Introduction

8.1.1 The original research aims proposed for this phase of work were relatively wide ranging, covering the general and specific. These aims have been addressed individually within the following text.

8.2 To augment the mapping of the site's natural topography

8.2.1 Only minimal additional information was gained concerning the original topography of the site. This was in many ways due to the main focus of the evaluation, which was mainly concerned with archaeology associated with the Walled Garden and as a consequence precluded the total excavation of the stratigraphic sequence in all but one trench (Trench 106). Also the relatively small area over which the trenches were spread does not allow for a comprehensive understanding of the sites original topography to be achieved. Despite this a very general picture of the underlying topography can be hypothesised through an examination of the level at which the natural sand was encountered within four of the interventions (Trenches 101, 105, 106 and 116). These appear to indicate that the underlying topography does slope gradually down towards the south (from 3.14m OD in Trench 105 to 2.31mOD in Trench 101). This slope appears to begin approximately 120m to the north of the southeast corner of the Walled Garden along an east-west axis. To judge by the similarity in the levels of Trenches 105 and 116 the topography to the north of this line is relatively flat (3.14m and 3.12m OD). More work is clearly required to understand confidently the buried topography of the site.

8.3 To characterise the nature of occupation of the site from prehistoric times;

8.3.1 No definitive evidence of prehistoric settlement was discovered during this evaluation. However, of the 104 context numbers allocated for excavated soils almost 1/5 (20 contexts) contained lithics, many of which are likely to be of prehistoric date. How far this lithic material has travelled and by what means is of course unknown, but the location of the site so close to the River Thames is likely to have encouraged human activity from the prehistoric period onwards.

8.4 To test, in particular, the hypothesis that the moated enclosure originated as part of an Iron Age earthwork and settlement at a river crossing;

8.4.1 No definitive evidence associated with Iron Age occupation was revealed during the evaluation, although as mentioned previously the limited nature and scope of the work may account for this.

8.5 To augment the record of settlement on the site in the Roman period which was first highlighted in 1972/3 to the immediate south of the Walled Garden;

8.5.1 Evidence of Roman activity was revealed during the evaluation in the form of 83 sherds of largely abraded Roman pottery and a large quantity of Roman tile and brick, which again was abraded and likely to be residual. Additionally, within Trench 106 a cut feature (pit [1579]) containing fresh sherds of Roman pottery was discovered. The Roman CBM all appears to be of early date and this is in contrast to the bulk of the pottery which dates to the late Roman period. This late date for the pottery is paralleled by the late date of four Roman coins which were recovered.

8.5.2 This information when combined with the previous excavations carried out within the area (FARG in 1972-73 *1975 Whitehouse 1974a, 142-147; Arthur & Whitehouse 1978*), which revealed extensive evidence of Roman activity, reinforce the hypothesis that significant occupation occurred within the Fulham Palace area in the late Roman period.

8.6 **To establish the economic status of the site's inhabitants over time.**

8.6.1 The finds assemblage generally is concentrated within two specific time periods, late Roman and post-medieval.

8.6.2 The Roman ceramics represent a relatively small assemblage, which precludes any wide ranging assessment of the site's status during the Roman period. The frequent presence of CBM may indicate the existence a fully Romanised settlement during the early Roman period.

8.6.3 Of the post-medieval ceramic assemblage industrial tablewares typical to the late 18th and 19th centuries represent the most frequent type identified and are not of any particular status. A high number of flowerpots were identified which would be expected given the excavation was within the Walled Garden. Despite this inconclusive evidence from the ceramic assemblage a single turkey wing bone from deposit [1596] is a certain indication of high status as this species was not introduced into this country until the 16th century.

8.7 **To establish the trading links of the site's inhabitants with special note of the immediate access to the River Thames**

8.7.1 No evidence was discovered which can be definitively associated with the trade links of the sites inhabitants and access to the River Thames.

8.8 **To evaluate the survival and legibility of features and deposits relating to horticultural activity and formal gardens;**

8.8.1 The evaluation established that features and deposits associated with horticultural activity are preserved extensively throughout the area excavated. An apparent exception to this being Trench 106. This may be due to conditions of excavation, as the initial stages of excavation within this trench were undertaken in extremely dry conditions, which may have made the recognition of ephemeral garden features impossible. It must be noted, however, that the excavated 'spits' through this trench do show evidence of stratification and this has been used as a basic framework in the compilation of the site matrix.

8.8.2 Although the evaluation did record the presence of numerous horticultural features, actually tying these to a legible garden plan is far more difficult. This would only be feasible with excavation of a much more extensive area. In this way a broader overview of the garden features could be gained and, even then, it is likely that only formal garden layouts could be recognised through alignments, and similarities in feature dimensions. The fact that the garden was originally created as a kitchen garden, rather than a formal garden probably resulted in a rapidly, possibly seasonal, floral distribution, with only the pathways and fruit trees remaining as constant features. If this is the case a detailed understanding of the garden layout is likely to be difficult to achieve.

8.9 **To establish the presence, nature, location, extent and date of artefacts from the prehistoric to post-medieval periods and to interpret their relationship with the layout of the site as it evolved through these periods;**

8.9.1 The presence, nature, dates and location of artefacts from the site were recorded using the recognised archaeological procedures as laid out within the method statement. This methodology enabled retrieved artefacts to be securely located both spatially and stratigraphically across the evaluated area. Within the excavated areas the presence of Roman artefacts intermixed with post-medieval finds indicate that a degree of truncation has occurred to the Roman deposits. However, within Trench 106 evidence was revealed for archaeological deposits which appear to be exclusively Roman in date. What the presence of early Roman CBM and late Roman pottery within these deposits signifies is at present unclear. More significantly the lack of any

recognisable archaeological remains dating from between the Roman and post-medieval periods may indicate that this truncation has severely impacted upon deposits from these historical periods.

8.9.2 The vast bulk of both the physical and material evidence is post-medieval, but the more precise attribution of features to before or after the establishment of the Walled Garden in the late 18th century under Bishop Terrick is sometimes equivocal. Much of the ceramic material is residual, having clearly arrived unintentionally from the process of composting the garden.

8.10 **To evaluate artefact distribution, density, residuality and contamination in archaeological deposits (including the topsoil) across the Scheduled Monument;**

8.10.1 The artefact date and distribution within the Walled Garden could be incorporated into a more extensive examination of finds distribution across the Scheduled Monument. In general the deposits excavated during this phase of work could be ascribed to the Roman and post-medieval periods.

8.10.2 Stratigraphic phasing of the post-medieval features was recorded, although the date ranges for the artefacts retrieved from individual features are relatively wide. This no doubt is the result of extensive horticultural activity throughout the period of the Walled Garden's existence. Within the topsoil itself very little stratigraphic sorting was recognised and the reason for the lack of pre-modern artefacts discovered during the recent metal detector survey is probably due to a general lack of detectable artefacts rather than a stratified topsoil.

8.11 **To verify, augment and refine the interpretation of the results of the geophysical surveys undertaken by Archaeophysica Ltd between 21-23 July 2009**

8.11.1 Of the eight trenches excavated as part of the evaluation (excluding exploratory trenches) two were moved from their original location and so were unable to assist in refining the results of the geophysical survey (Trenches 105 and 108). Of the remaining six trenches, two (Trenches 101 and 107) confirmed the presence of a large pit and a gravel path, as suggested in the original interpretation of the results of the survey. The remaining four trenches targeting possible stone or brick structures revealed no such evidence, only archaeological cuts, fills and layers. The findings from each trench are briefly summarised below:

Trench 101

Trench rationale from geophysical survey - 'SW squarish pit fill, NE former cultivation/culvert'.

Within this trench a total of 7 individual cut features and 4 distinct soil layers were recognised generating total of 19 contexts. Of these it is probable that circular pit cut [1522] equates closest to that indicated as being in the southwest of the trench. This is in the correct location and the fill was clay-rich and contrasted sharply with the surrounding natural sandy soil (*para* 7.3.4).

Curving pit cut [1517] located within the northeast corner most closely equates to the position of the feature identified from the survey data for the northeast corner of the trench. This was the first archaeological feature recognised in this part of the trench and was seen at a depth of 0.23m below ground level, lying directly below the topsoil (*para* 7.3.7).

Trench 102

Trench rationale from geophysical survey - 'SE possible plinth/footing /camber'.

Within this trench a total of 4 individual cut features and 6 distinct soil layers were recognised generating total of 17 contexts. Of these it is probable that surface [1533] which extended across the trench in a north-west to south-east orientation equates closest to that indicated in the survey. The high point of this feature was encountered at a depth of 0.12m below ground level and the continued alignment of the feature can be seen as a clear 'crop mark' extending across the Walled Garden (*para* 7.4.4).

Trench 103

Trench rationale from geophysical survey - 'Sample of enclosing path and path edging - assume the same exists SE of Trench 106'.

Within this trench a total of 1 cut feature and 2 distinct soil layers were recognised generating total of 4 contexts. Of these it is probable that the edge of linear cut [1623] equates closest the survey findings. This was located directly beneath the topsoil at a depth of 0.25m below ground level, cutting into a subsoil deposit. It continued beyond the east and western limits of the trench in a north-west south-east orientation, appearing to respect the current alignment of the north-eastern perimeter wall of the garden. As no path surface or associated path edging existed it is believed that the intervening space between the cut and the garden wall was originally occupied by a now absent garden path (*para* 7.5.3).

Trench 104

Trench rationale from geophysical survey - 'Part of *double* magnetic zigzag, perhaps brick edging?'

Within this trench a total of 2 individual cut features and 3 distinct soil layers were recognised generating total of 8 contexts. Both of the identified features were located at a depth of 0.50m below ground surface cutting onto the underlying subsoil. Both cuts were linear in plan and are interpreted as bedding trenches, associated with the horticultural activity within the Walled Garden. No brick structures or edging were seen within the excavated deposits (paras 7.6.3 & 7.6.4).

Trench 105

Trench rationale from geophysical survey - 'NW possible masonry/rubble, perhaps including brick debris?'

This trench was moved from its original position in order to target the convergence of the garden pathways in the centre of the garden. This trench identified 12 individual cut features, 8 distinct soil layers and 4 structures, generating a total of 34 contexts (para 7.7).

Trench 106

Trench rationale from geophysical survey - 'NW edge of high resistance area, footing? SE outermost edge of enclosing system of paths and planting'.

Within this trench a total 1 cut feature and 4 distinct soil layers were recognised generating total of 15 contexts. The identified feature comprised a partly revealed pit recorded at a depth of 0.90m below ground level which is of Roman date. All of the overlying contexts removed comprised sandy soils with few inclusions. No features were identified which can easily equate with the survey results. The trench was excavated onto the natural drift geology at a depth of 1.10m blow existing ground level (*para* 7.8).

Trench 107

Trench rationale from geophysical survey - 'NW Sample sharp change in electrical resistance as may reflect earlier structures. SE might catch edge of possible pit'.

Within this trench a total of 4 individual cut features and 3 distinct soil layers were recognised generating total of 12 contexts. Of these the only archaeological features located in the northwest of the trench comprised a stratified sequence of two phases of bedding trenches (contexts [1558] and [1569]) located at depths of 0.39m and 0.47m below ground level. Whether either or both of these equate to the survey results is unclear (*paras* 7.9.5 & 7.9.7). A more likely interpretation of the survey data is that it has identified a substantial animal burrow located in this part of the trench.

Curving pit cut [1561] located in the southwest of the trench most closely equates to the position of the feature identified from the survey data as lying within the northeast corner of the trench. This was the second archaeological feature recognised in this part of the trench and was seen at a depth of 0.40m below ground level, lying directly below the later bedding trench [1558] (*para* 7.9.4).

Trench 108

Trench rationale from geophysical survey - 'SW sample edge of high resistance area. NE across edge of possible filled structure to NE- channel/ditch?'

This trench was moved from its original position because of the presence of a large tree located close to the area targeted in the survey. This trench identified a total of 1 individual cut feature and 3 distinct soil layers generating a total of 5 contexts (*para* 7.10).

8.12 **Examine any evidence of the historic layout and planting schemes within the Walled Garden, in particular any buried remains of paths, beds, planting pits, water management systems, structures, ornamental features and associated artefacts to inform the restoration design;**

8.12.1 Evidence of horticultural activity associated with the Walled Garden is preserved extensively throughout the area excavated in the form of bedding trenches or planting pits. An apparent exception to this is Trench 106 (see *para* 8.10). The recognition of any formal layout to these is more difficult, except in the areas of the gravel pathways, which many of the features clearly respect. The exception to the inconclusive evidence is the 'hard' features, *i.e.* the pathways and brick structures. These do provide a basic ground plan for the Walled Garden with centrally placed cross pathways providing the main access both across the Garden and to the gardens water source, in the form of a central brick well (structure [1655]). This structure at some point appears to have undergone alterations, possibly with the addition of pumping mechanism and perhaps an open trough which allowed waste water to be recycled. Additionally some evidence was also revealed within Trench 103 for the existence of a perimeter pathway. These more tangible elements of the Walled Garden could clearly form a starting point for any planned restoration of the historic garden.

8.13 **To establish, in particular, the precise historic alignments of the cross-paths;**

8.13.1 The main northwest-southeast central pathway was securely located into two of the evaluation trenches (Trenches 102 and 105) and also in one of the exploratory trenches (116). This enables three reference points to be fixed, one at the southeast end of the path, one centrally and one at the paths northwest end. This should allow for a fairly accurate alignment of the path to be inferred. Of the main northeast-southwest pathway only a single intervention was excavated to establish its location (Trench 105). This in itself makes a projected alignment more difficult to ascertain.

However, if an assumption is made that it would have originally ran at an angle of 90˚ a fairly accurate location could be achieved.

8.14 **To determine, in particular, the historic arrangement of the centre (where the paths cross) and the relationship between this and the extant dipping pond.**

8.14.1 The location of Trench 105 within the central area of the Walled Garden greatly assisted in determining the historic arrangement of this area of the Walled Garden. The discovery of both the northeast-southwest and the northwest southeast pathways assisted in the understanding of the historic layout of the Walled Garden over a wider area.

8.14.2 The discovery of the large circular brick structure may be the remains of what was once a conventional well structure. The associated domed covering and brick and stone pillar which had clearly once accommodated an additional structural element, probably an above ground water pump, may represent a second phase of construction to this structure. The later addition of a drain that runs into the well is believed to have been originally connected to an external basin or tank that would have been directly serviced by a pump mounted on the stone and brick pillar. If this is correct the location of this external basin is likely to correspond with the existing dipping pond, although clearly the existing structure visible today has been greatly modified within the recent past.

8.15 **Summarised conclusions**

8.15.1 The evaluation proved the existence of surviving Roman features and archaeological layers within the area of the Walled Garden.

8.15.2 The absence of archaeological features of post-Roman through early post-medieval date may indicate extensive disturbance and possibly a deliberate thickening of the subsoil, probably through intensive horticultural activity. It is unclear at present whether this activity extends throughout the full extent of the Walled Garden. The presence of what appears to be stratified subsoil within Trench 106 may hint at the possibility of areas within the garden being relatively undisturbed, although this remains conjecture at this stage.

8.15.3 The extensive survival of recognisable garden features, could, if revealed over an extensive area, provide information on the layout of the garden over time, particularly with regard to pathways and the larger bedding trenches that are probably associated with tree alignments.

8.16 **Environmental Potential**

8.16.1 During this phase of work four bulk soil samples were collected and retained (Table 1). It is hoped that these may preserve evidence of the floral make-up of the historic garden. The limited number of samples are unlikely to provide an exhaustive body of additional information, but may if processed highlight the degree to which floral remains have been preserved. This could in itself provide a valuable barometer of potential should a wider more comprehensive phase of work be carried out within the Walled Garden.

8.16.2 These samples are as yet unprocessed and await further consultation between the relevant parties (Gifford, PCA and English Heritage).

Context	**Sample Number**
[1560]	<56>
[1521]	<57>

[1572]	<58>
[1574]	<59>

Table 1. Environmental samples

8.17 **Phasing**

8.18 Four phases of activity were identified during the evaluation and additionally the main phase of activity (Phase 3, Walled Garden) can be tentatively sub-divided into a number of sub-phases (3a to 3e). These sub-divisions have been created by a combination of ceramic dates, stratigraphic relationships and similarity in feature types. The problem is the linking of separate trench excavations into a single framework and with this in mind the sub-divisions within Phase 3 must be treated as an initial attempt to organise the numerous garden features encountered during the evaluation. These sub-divisions are open to revision should further work be undertaken or a refinement in dating be achieved.

Phase 1: Naturally derived sands (of fluvial origin?).
Phase 2: Roman.
Phase 3: Walled Garden and subsoil deposits.
Phase 4: Existing topsoil and visible features.

9 SPECIALIST REPORTS

9.1 Roman Pottery

by James Gerrard

9.1.1 The excavations produced 83 sherds of Romano-British pottery (Table 2). It survived in a variety of states but was largely abraded with fresh sherds present only in [1578]. The bulk of the pottery was late Roman in date with two contexts producing PORD, which is of late fourth-century date. This is in keeping with the finds from previous excavations and the coin list.

Context	Fabric	No	Spot date	Comments
1515	SAND, AHFA	3	300-400	
1519	SAND	1	50-400	
1534	NVCC, SAND	2	150-400	
1538	OXRC 7, AHFA	4	300-400	
1541	PORD, AHFA, OXRC	16	350-400	
1544	AHFA, CALC, SAND	12	300/350-400	
1563	SAND	15	50-400	
1572	BB2	1	120-250/350	
1578	PORD, CALC, AHFA	4	350-400	Fresh jar small
1586	OXRC, ?	3	300-400	abraded
1595	GAUL, OXPA, SAND	4	300-400	
1597	NVCC 3	1	250-400	
1609	AHFA	2	300-400	
1613	SAND 9A	1	70-400	
1637	BB2	4	120-250/350	
1639	AHFA COMB, BB2	2	300-400	
1641	BB2 4H	1	120-250	
1648	AHFA	7	300-400	

Table 2. Roman pottery

9.2 Roman coins

by James Gerrard

9.2.1 Four Roman coins have been identified (Table 3). They include: a single barbarous radiate, a Constantinian follis, and two nummi. The latest coin is an issue struck for the House of Valentinian (AD364-378). None of the coins is particularly unusual, although the Urbs Roma / Wolf and Twins is listed in RICVII as 'R4'. This means that when volume VII of Roman Imperial Coinage was published in 1966 only 2-5 examples of this particular issue were known.

9.2.2 Sixty-seven coins were listed by Arthur and Whitehouse (1978, 58) and these four are useful additions to that coin list. They reinforce the notion of significant late Roman occupation in the Fulham Palace area.

SF	Context	Date	Obv	Rev	Obv wear	Rev Wear	Ref	Diam (mm)	Comments	Reece Period
82	1639	335	VRBS ROMA	Wolf and Twins Delta//PCONST	UW	UW	RIC VII (Arles),	17	Listed as R4	17

							392			
75	1641	?4th century								
77	1537	364-378	House of Valentinian	[SECBRITAS-REI]PVBLICA E	VW	VW	As LRB CII, 273	17	Broken	19
78	1537	270-290	IMPCPOSTA VG	MONETA[AV] G	UW	UW	As RIC V(ii), 212	16	Good copy but obv legend not complete	14

Table 3. Roman coins

9.3 Post-medieval pottery

by Berni Sudds

9.3.1 Of the four boxes of post-Roman pottery recovered (Table 4) the majority dates to the late 18th and 19th centuries. A small number of medieval sherds were recovered, mostly late in date and all residual within later groups. A few late 16th and 17th century sherds were also present. A table listing the spot-dates for all contexts containing post-Roman pottery is presented below. With the exception of context [1586] the feature assemblages are all relatively small and the material demonstrates medium to high fragmentation.

9.3.2 Comprising a well-paralleled range of fabrics and forms the assemblage is of little intrinsic interest. Tablewares represent the most frequent type identified comprised predominantly of a range of industrial finewares typical to the late 18th and 19th centuries and not of any particular status. The relatively high number of flowerpots identified, however, is to be expected within the Palace gardens.

Context	Spot date
1512	1820 – 1900
1513	1830 – 1900
1514	1850 – 1900
1515	1830 – 1900
1518	1830 – 1840
1519	1825 – 1830+
1520	1850 – 1900
1521	1760 – 1830
1524	1700 – 1900
1531	1805 – 1900
1532	1775 – 1820
1534	1700 – 1900
1535	1700 – 1900
1537	1770 – 1830
1538	1760 – 1800
1539	1700 – 1900
1540	1850 – 1900
1541	1700 – 1900
1542	1830 – 1900
1543	1820 – 1830
1554	1700 – 1900
1557	1770 – 1830
1559	1720 – 1750/80
1560	1670 – 1926
1564	1830 – 1840/1900
1570	1700 – 1900
1571	1770 – 1830
1572	1820 – 1830/40
1574	1780 – 1820
1576	1850 – 1900
1584	1700 – 1900
1586	1850 – 1900
1587	1770 – 1830
1592	1700 – 1900
1595	1570 – 1700
1596	1550 – 1700
1597	1700 – 1900
1599	1770 – 1820
1602	1825 – 1840
1607	1775 – 1800
1609	1670 – 1900
1611	1550 – 1700
1616	1830 – 1900
1619	1805 – 1900
1624	1780 – 1900
1628	1700 – 1900
1635	1580 – 1700
1637	1580 – 1900
1639	1580 – 1900
1641	1825 – 1830/40
1646	1770 – 1780/1800
1648	1770 – 1820

Table 4. Post-medieval pottery

9.4 Glass

by John Shepherd

Summary

9.4.1 A total of one hundred and one items of glass from twenty-nine contexts were submitted for identification and assessment. All are described, in abbreviated form, in the spreadsheet FLB03 glass.xls.

9.4.2 The glass is very fragmentary and, apart from a small colourless cylindrical phial of 18th or 19th century date (context 1521), there were no other profiles. Diagnostic fragments were few and fragmentary.

9.4.3 All the glass dates from the late 17th century to the present. It is too fragmentary an assemblage to warrant further study.

Assessment

9.4.4 All of the glass dates to the post-medieval period, with an emphasis on the 18th and 19th centuries. Nine fragments of late 19th or 20th century machine-made bottle glass are also present (from contexts 1518, 1519, 1602 and 1641). Only a single fragment from an 18th or 19th century drinking vessel survives (Context 1539) – the greater majority of the fragments being body fragments from the common English wine bottle of the late 17th to 19th centuries – a total of 54 fragments from contexts 1515, 1520, 1521, 1531, 1532, 1536, 1537, 1538, 1539, 1542, 1543, 1557, 1559, 1560, 1574, 1597, 1602, 1607, 1635, 1641 and 1648.

9.4.5 Sixteen fragments of window glass fragments were also identified – from contexts 1514, 1518, 1520, 1531, 1538, 1541, 1572, 1635, 1641 and 1648. Six fragments of modern float glass were also recovered from contexts 1518, 1542 and 1635.

9.4.6 Finally, apart from the drinking vessel and cylindrical phial noted above, the remainder of the vessel assemblage comprised the bases of two further phials (contexts 1520 and 1543), a small fragment from the rim of a large cloche or bell jar (context 1559) and eleven body fragments from forms that cannot be identified (contexts 1514, 1515, 1530, 1541 and 1543).

Recommendations

9.4.7 The cloche fragment from context 1559 may be worthy of further note but the remainder of the assemblage is far too fragmentary to warrant further study. The large number of small fragments of post-medieval English wine bottles is consistent with general background material for this period. No discreet assemblages exist.

9.5 Faunal remains

by Kevin Rielly

9.5.1 The latest intervention provided 44 bones (all hand collected), taken from 13 contexts, the majority in a good state of preservation. All except two of these deposits could be dated. The bones are mainly composed of a mixture of cattle, sheep/goat and pig, each providing a general range of skeletal parts. Otherwise there were a few dog and cat bones plus a single turkey wing bone from a phase 3a deposit [1596]. This species was introduced to this country by the 16th century and is a certain indication of high status. One of the later deposits [1586] (phase 3d) provided a few large cattle and sheep, undoubtedly representing improved breeds, as well as some sawn cattle bones. Such large animals were entering London meat markets from the beginning of the 19th century, while the same period also witnessed the inclusion of the saw as a butchers tool, this trade previously reliant on the knife and the cleaver (Rixson 2000, 215; Albarella 2003, 74).

9.6 Ceramic building material

9.6.1 A total of 399 pieces of ceramic building material was recovered (Table 5).

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date
1521	3033 2276	peg tile and red stock moulded brick	15	1450	1900	1480	1900	1480-1700
1526	Tinglaze 2271 2276 2587	Tinglaze tile Post-medieval peg tiles	5	1180	1900	1480	1900	1600-1900
1528	2276	peg tile	1	1480	1900	1480	1900	1480-1900
1530	2276 3117 3101	White lime mortar peg tile	4	50BC	1900	1480	1900	1480-1800
1531	3036 1977 2276	Dutch paving brick Flemish floor tile and peg tile knob	10	1480	1900	1480	1900	1600-1800
1532	3033 3238 2587 2276	Early post med brick, Roman Silty brick, peg crse mld sand	12	71	1900	1480	1900	1480-1700
1534	3046 3033 2276 2587 3116	Med and early post med brick Chalk	7	1240	1900	1480	1900	1480-1700
1535	2271 2587 2452 3117	peg tile Roman tile	20	55	1800	1180	1800	1240-1600
1537	`3023 2271 2452 3035 3032	Imbrex Roman peg tile post-medieval brick	10	50	1940	1780	1940	1780-1900

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date
1538	2276 3032 3023 2271 3238	peg tile post-medieval brick. Frequent Roman tile and brick	15	50	1900	1664	1850	1664-1850
1539	3023 2276 3117	Roman tile and Fine moulded sand peg tile	6	50	1900	1480	1900	1700-1900
1540	2276	peg tile	12	50	1900	1480	1900	1700-1900
1541	2276 2586 2452	peg tile Residual Roman tile	9	55	1900	1480	1900	1480-1800
1542	3102 2452 2587	peg tile Daub Roman tile	6	50	1450	1240	1450	1240-1450
1543	2271 2587 2276 3033 3238 2452 3036	Roman tile and brick Coarse moulded peg tile med and post med Red brick Dutch paving Post Great Fire Bric	35	55	1900	1666	1900	1666-1800
1544	2452 3023 3004 3117	Roman tile Imbrex Combed box flue Brick large fragment	10	50	160	55	160	55-150
1557	3034 3033 3034nr3035 2276 2271 2586	Brick fragments peg tile	12	1450	1940	1780	1940	1780-1900

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date
1559	3033 3032 2271 2276	pan tile peg tile Post great fire Red brick	13	50	1900	1666	1900	1666-1900
1560	2279 2276 3238 3033	pan tile peg tile Residual Roman	8	71	1850	1630	1850	1630-1850
1563	3120	Daub	2	50BC	1666	50BC	1666	50BC-1666
1570	2276 2279 2587 3033 3034 3102 3117	peg and pan tile Brick Daub	11	50BC	1900	1450	1900	1666-1850
1571	2276 3033	peg tile find moulding sand and red brick	6	1450	1900	1480	1900	1700-1900
1572	3034 2276	Fine moulding sand peg tile Post Great Fire	6	1480	1900	1666	1900	1666-1900
1574	2276	peg tile Unglazed floor Flemish tile Mortar lime rich	2	1480	1900	1480	1900	1480-1700
1576	3033 2271 3120	Red brick Glazed peg tile Sarsen fragment	3	1240	1700	1450	1700	1450-1700
1578	2452	Roman tile abraded	1	55	160	55	160	55-160
1580	2452	Roman brick abraded	1	55	160	55	160	55-160
1584	2271 3117	peg tile Fine moulding sand Flint	5	50	1800	1180	1800	1600-1800
1586	3032 3034 3039 2276 3100	pan peg Flemish Floor tile Post Great Fire Well made 3032 and 3033	20	1480	1900	1664	1900	18001900

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date
		Moulded plaster						
1587	2271	peg tile fine moulding sand	5	1180	1800	1180	1800	1600-1800
1591	3033	Red stock brick frags	4	1450	1700	1450	1700	1600-1800
1595	2452	Roman tile Daub	2	55	160	55	160	55-160
1596	2452 3238 2276	peg tile Roman tile Coal	4	55	1900	1480	1900	1480-1700
1599	2276 3033	peg tile fine moulding sand red brick	4	1450	1900	1480	1900	1600-1900
1602	3032 3036 2276 2587	Post Great fire brick and Dutch brick peg tile	14	1180	1900	1666	1900	1666-1800
1603	3033nr3034 3033 clinkery 3032 earthy	Unusual transitional stock brick all unfrogged	4	1450	1850	1666	1850	1666-1800
1607	3117 2276 3033 3032	peg tile Post Med bricks	10	50	1900	1666	1900	1666-1900
1608	3117 2276	peg tile	5	50	1900	1480	1900	1480-1900
1609	3117 2276 3032	peg tile Heavy post great fire	18	50	1900	1666	1900	1666-100
1613	3117 3238 2452	Roman Tegula	1	50	1800	50	1800	71-160
1616	3033 2276	Red brick and peg tile	13	1480	1900	1480	1900	1480-1900
1619	3032 3035 3033	¾ BRICK frogged stock JJ Reused Yellow stock All resued	1	1750	1900	1780	1940	1850-1940
1624	3034nr3035	Yellow London stock brick	1	1780	1900	1780	1900	1780-1900
1635	Glazed tile	Glazed tile	1	1850	1950	1850	1950	1850-1950
1637	3117 3238 2276	Roman tile peg tile	1	50	1900	1480	1900	1480-1800

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date
1639	3117 1977 2276	peg tile	3	50	190	1480	1900	1480-1900
1641	2276 2279	peg tile pan tile	30	1480	1900	1480	1900	1666-1850
1645	3047	Paving brick	2	1690	1900	1690	1900	1690-1900
1646	3032	Brick post great fire	1	1666	1900	1666	1900	1666-1900
1648	3023 Sitly fabric 2452	Roman tile	3	50	160	50	160	50-160
1658	2276	peg tile	3	1480	1900	1480	1900	1480-1900

Table 5. Ceramic building material

9.6.2 Essentially the assemblage consists of post-medieval peg tile and brick with a large quantity of early Roman tile and brick (most of it residual).

9.6.3 Contexts yielding only Roman CBM were; [1544] [1578] [1580] [1595] [1613] and [1648].

9.7 Clay Tobacco Pipes

by Chris Jarrett

Introduction

9.7.1 Clay tobacco pipes from earlier archaeological work at Fulham Palace have been previously reported on (Jarrett 2003, Jarrett forthcoming a) and this assessment is for material recovered from contexts 1500-1650. A small sized assemblage of clay tobacco pipes was recovered from the site (one box). Most fragments are in a fairly good condition, indicating that they had not been subject to much redeposition or were deposited soon after breakage. Clay tobacco pipes occur in 40 contexts and all as small groups (under 30 fragments).

9.7.2 All the clay tobacco pipes (145 fragments and four are unstratified) were recorded in an ACCESS 2007 database and classified by Atkinson and Oswald's (1969) typology (prefixed AO) and 18th-century examples by Oswald's (1975) typology and prefixed OS. The pipes are further coded by decoration and quantified by fragment count. The degree of milling on 17th-century examples has been noted and recorded in quarters, besides their quality of finish. The tobacco pipes are discussed by their types and distribution.

9.8 The clay tobacco pipe assemblage from the site consists of fourteen bowls and 129 stems and two nibs. The clay tobacco pipe bowls range in date between 1640 and 1860. A number of bowl fragments could not be classified to type.

17th century

1640-60

9.8.1 AO9: one example of these spurred bowls is recorded and it has a fair quality finish and full milling of the rim.

1680-1710

9.8.2 AO20: a single heeled bowl is present with a rounded profile, but is a variant with a flared profile. It may represent a non-local bowl.

9.8.3 AO21: A single, heeled bowl of this type occurs with a rounded front and straight back, is of a good quality but its rim is missing.

9.8.4 AO22: A single heeled bowl is present with straight sides. It has three quarters milling of the rim and is of a good quality finish.

18th century

9.8.5 A single bowl fragment is dated broadly to the 18th century.

1700-1770/80

9.8.6 AO25: A single bowl fragment has been assigned to this bowl type with an upright profile and heel. It largely survives as a heel.

1700-40

9.8.7 OS10: A single damaged example has been characterised as this type and survives mostly as a heel.

1730-1780

9.8.8 OS12: a single bowl of this type with a typically narrow stem is present but the bowl is damaged.

1780-1830

9.8.9 AO27: a single bowl survives as a heel and probably belongs to this type, but may possibly be mid 19th century in date. It is initialled I P and possible makers are John Payne, 1799-11, Great Windmill Street, James Pitt, 1805-11, Richmond or Joseph Pratt, 1828, Shadwell. One other bowl survives mostly as a stem, but its appearance indicates that it dates from 1780 onwards.

19th century

1820-1860

9.8.10 AO28: A spur from this type of bowl is initialled S I, but no pipe makers are known for these letters. However, there are several makers with the initials I S, including Isaac Searle, 1828, Shepherds Bush who is the nearest maker to the site.

9.8.11 One fragment of a bowl is decorated with an acorn and oak leaf border and dates to the 19th century.

Distribution

9.8.12 Table 6 shows the distribution of the clay tobacco pipes, showing the trench, number of fragments and what clay tobacco pipe types are found in each deposit, together with a spot date.

Context	Trench No.	Frag count	Bowl type (and makers initials)	Spot date
[1512]	101	5	Stems	1580-1910
[1513]	102	2	Stems	1580-1910
[1514]	106	4	Stems	1580-1910
[1515]	106	8	AO28 (S I)	1820-1880
[1516]	101	1	Stems	1580-1910
[1518]	106	9	19th century nib	?19TH C.
[1519]	102	2	Stems	1580-1910
[1520]	106	4	Uncertain, oak and leaf border	?19TH C.
[1521]	101	5	Stems	1580-1910
[1524]	101	1	Stems	1580-1910
[1530]	101	1	Stems	1580-1910
[1531]	106	5	Stems	1580-1910
[1532]	101	3	Stems	1580-1910
[1534]	101	3	OS12	1730-1780
[1537]	106	10	AO25	1700-1770
[1538]	106	5	AO21	1680-1710
[1539]	109	1	Stems	1580-1910
[1540]	104	1	Stems	1580-1910
[1541]	106	2	Stems	1580-1910
[1542]	105	2	Stems	1580-1910
[1543]	107	2	Uncertain	1780+
[1557]	107	1	Stems	1580-1910
[1559]	107	3	Stems	1680-1710
[1560]	107	1	Stems	1580-1910
[1564]	102	3	Stems	1580-1910
[1570]	105	1	Stems	1580-1910
[1571]	102	2	Stems	1580-1910
[1574]	102	3	? AO27 (I P)	1780+
[1576]	102	1	Stems	1580-1910

[1584]	105	2	Stems	1580-1910
[1586]	102	7	Stems	1580-1910
[1587]	102	1	Stems	1580-1910
[1596]	102	1	Stems	1580-1910
[1599]	105	4	Stems	1580-1910
[1602]	104	3	OS10	1700-1740
[1607]	104	10	Uncertain	18TH C.
[1609]	105	1	Stems	1580-1910
[1613]	104	1	AO20	1680-1710
[1641]	108	3	Stems	1580-1910
[1648]	108	17	AO9	1640-1660

Table 6. Distribution of clay tobacco pipes.

Significance of the collection

9.8.13 The clay tobacco pipes are of significance at a local level and it is assumed that the assemblage is derived from sources on the site. The bowl types present on the site mostly fit within the typology for London. There is no evidence for clay tobacco pipe production on the site.

Potential

9.8.14 The main potential for the tobacco pipes is as an aide to dating the contexts in which they were found and to provide a sequence for them. One pipe bowl merits illustration. Other local pipe assemblages have been recovered from Fulham Island (Jarrett forthcoming, b) and allow for comparisons to be made with the tobacco pipes at FLB03.

9.8.15 The temporal distribution of the clay tobacco pipes may indicate different foci of activity on the site at different periods.

Recommendations for further work

9.8.16 The clay tobacco pipes from this phase of work should be published with the material recovered from earlier archaeological investigations involved with this project. The variant AO22 bowl requires further research and illustration.

9.9 Metal and Small Finds

by Märit Gaimster

9.9.1 Some one hundred metal and small finds were retrieved from the trial trenching; they are listed in Table 7. In addition, Table 8 lists the around 150 finds recovered through metal detecting across the Walled Garden, while Table 9 comprises the 50 objects produced by metal detecting in connection with building recording of the Vinery.

9.9.2 The vast majority of the excavated finds came from the topsoil, with a smaller number retrieved from garden features and the subsoil. The assemblage mostly represents general material in the form of iron nails and pieces of lead waste and slag, and undiagnostic fragments of metal fittings. There is also a relatively large amount of modern objects such as coins and plastics. However, a smaller group of finds consists

of household fittings and furnishings and includes fragments of lead window came, a possible iron pintle for hanging a door or shutter (sf 83) and door bolt (sf 91) and two small copper-alloy furniture knop handles (sf 86 and 94). Additionally, there is a copper-alloy upholstery pin and a cast bronze finial (sf 79), likely to be from furniture. A small copper-alloy ferrule is probably from a cutlery or knife handle (sf 87). To these objects can be added personal belongings, reflected in six copper-alloy buttons (sf 84, 85, 89, 90, 92 and 93) and a small iron buckle (sf 88). Further notable finds are a trilobe-shaped copper-alloy plant tag (sf 95), a lead disc or weight (sf 80) and an unstratified lead seal or plomb (sf 96). All these finds are likely to date from the late 18th or early 19th centuries.

9.9.3 Also the metal-detected finds from across the Walled Garden are dominated by modern objects, in particular coins and WW2 shell shrapnel, and undiagnostic fragments of metal fittings; again, lead waste makes up one of the largest individual categories of material. Of particular site-specific interest, however, is the group of garden-related finds, comprising three copper-alloy plant tags, six pieces of hose fittings and a pointed iron ferrule possible for a fence pole. The few finds related to buildings or households include two electro-plated nickel spoons, a wall hook and a decorative mount, possibly a book clasp, and two decorated mounts or ferrules that are likely to be from knives or cutlery. There is also a substantial inscribed copper-alloy hinged clasp; this may originate from a chest or coffer. Like the finds above, most of this material is likely to date from the late 19th or early 20th centuries; however, two pieces of furniture fittings, both possibly part of the same drawer handle, may be of an 18th-century date. A final category of finds is composed of eleven copper-alloy buttons. These include numerous dished suspender buttons and two military buttons; of particular interest here is a 19th-century livery button embossed with a heraldic crest.

9.9.4 The smaller group of metal-detected finds from the Vinery, too, include numerous small fixings and fittings; the many pieces of wire, together with iron staples for fastening and a wire tensioner, are directly garden-related finds. The numerous similar lead strips may relate to the Vinery building, while two small lead-alloy plugs are probably also related to garden or vinery activities. Again, numerous buttons were recovered. While the group is dominated by small dished suspender buttons, the area in front of the Vinery produced three more unusual or decorated disc buttons; one of these may be a reused older coin or jeton.

Recommendations

9.9.5 The metal and small finds from the Walled Garden form an integral part of the material recovered during excavation and should, where relevant, be included in any further publication of the site. In particular, this would apply to the assemblages of garden related finds where parallels and closer dating should be established. However, also some of the household fittings and furnishings, the buttons and other significant objects listed above deserve attention. These objects have all been annotated in Tables 7-9. To enable further identification, around twenty objects require x-ray, and two objects are recommended for cleaning: the bronze finial (sf 79) and the possibly reused coin or jeton from A14 – G19 in front of the Vinery.

context	sf	Description	spot date	recommendation
0	96	lead seal or plomb; incomplete; embossed center and tagged edge; diam.20mm		further id
1512		copper-alloy screw	1820-1900	
		copper-alloy ?fitting; flat fragment only	1820-1900	
		copper-alloy square-section pin/fitting with circular head; L 13mm; diam.6mm	1820-1900	
		lead shot; complete; diam.12mm	1820-1900	
		lead waste; two small pieces	1820-1900	
		three iron nails; one complete L 27mm	1820-1900	
1513		lead waste; three pieces	1830-1900	
		plastic threaded knob/switch; complete; diam.32mm	1830-1900	
		plastic ?handle; fragment only; green with moulded vertical ribs	1830-1900	
1514		coin; 20 pence 1989	1850-1900	
		coin; 20 penny 1977	1850-1900	
		copper-alloy looped fitting for fixing nail/screw; L 17mm	1850-1900	
		beer-can ring; metal tongue only	1850-1900	
		iron nails; two incomplete	1850-1900	
		plastic cigarette lighter; incomplete	1850-1900	
1515		copper-alloy waste; small triangual cut	1830-1900	
		lead window came; reeded; fragment only	1830-1900	
	83	iron ?pintle; incomplete	1830-1900	x-ray
		iron nails; six incomplete	1830-1900	
		slag; one piece	1830-1900	
1516		slag; one piece		
1518		copper-alloy base of a paper shotshell	1830-1840	
	84	dished copper-alloy button; complete; diam.13mm	1830-1840	
	85	tiny copper-alloy disc button; embossed with central rosette inside dotted border; complete; diam.10mm	1830-1840	
		thin copper-alloy disc/cap with central perforation; near-complete; diam.40mm	1830-1840	
		copper-alloy cap with folded edge; diam.20mm	1830-1840	
		copper-alloy eyelet; diam.20mm; ?from tarpaulin or marquee	1830-1840	
		copper-alloy upholstery pin with domed head; complete; diam.14mm	1830-1840	
		lead waste; three pieces	1830-1840	
		iron wire ?drop handle/fitting; incomplete; diam.2mm; L 100mm	1830-1840	
		iron nails; three incomplete	1830-1840	
		slag; one piece	1830-1840	
1519	86	moulded copper-alloy knop handle; complete; diam.13mm; ht.15mm; from drawer or cupboard	1825-1830+	
	87	small copper-alloy ferrule; diam.10mm; ht.9mm; ?from cutlery/knife handle	1825-1830+	
		lead waste; one piece	1825-1830+	
		iron nail; L 100mm	1825-1830+	
1520		mount/fitting of folded copper-alloy sheet, finished with a fine loop for fixing at either end; near-complete; W 50mm	1830-1900	
	88	rectangular iron buckle; complete but corroded; W 25mm; L 20mm	1830-1900	x-ray
		iron nail; incomplete	1830-1900	
		slag; one piece	1830-1900	
1521	89	copper-alloy disc button stamped with a central swirl design inside plain scalloped border; complete but heavily worn; diam. 22mm; 18th century	1760-1830	
1532		strap/mount of double-folded copper-alloy sheet; W 5mm; L 80mm+	1775-1820	

Table 7: metal and small finds from the excavation

context	sf	Description	spot date	recommendation
		triangular piece of iron sheet/object; ht.45mm	1775-1820	x-ray
		iron nails; two incomplete	1775-1820	
1537		lead window came; reeded; one piece; L 45mm	1770-1830	
		lead waste; one piece	1770-1830	
1538		slag; one piece	1760-1800	
1539	79	cast bronze finial; complete; moulded decoration; ht. 45mm; ?from furniture	1700-1900	clean for id
1540		copper-alloy jacket of full-metal cartridge; with ?wooden inset; L 25mm	1850-1900	
1541	90	copper-alloy ?disc button; diam.23mm	1700-1900	x-ray
		iron nails; three incomplete	1700-1900	
1542		circular metal base for ?receipt spike or similar object; painted black with central hole for spike/pin; diam.63mm	1830-1900	
1543	91	iron ?door bolt; tapering strap with curved narrow end and ?knop handle; W 23mm;L 200mm	1820-1830	x-ray
		lead waste; two pieces	1820-1830	
		iron ?vessel; fragment only	1820-1830	
		iron screw; incomplete	1820-1830	
		slag; four pieces	1820-1830	
1557		iron strap/fitting; W 20mm; L 100mm	1770-1830	x-ray
		iron ?nail; L 105mm	1770-1830	x-ray
1570		fragment of solid-cast iron ?drain cover or plaque; 50x110mm	1700-1900	
		slag; several large pieces	1700-1900	
1576		small flat metal fitting with pointed ends; W 8mm L 16mm; ?from toy	1850-1900	
1584		lead waste; one piece	1700-1900	
1586		lead window came; reeded; three pieces	1850-1900	
1587		cast iron ?object; one fragment only	1770-1830	
		four iron nails; one complete L 95mm	1770-1830	
		slag; one piece	1770-1830	
1597		iron nail; incomplete	1700-1900	
1602	80	lead ?disc/weight; diam.35mm; thickness 3–4mm	1825-1840	
		minute copper-alloy disc with four sunken eyes and slightly dished back; diam.7mm; ?failed screw head	1825-1840	
		copper-alloy rivet; incomplete	1825-1840	
		?repair patch of partly folded, partly overlapping copper-alloy sheet; 15 x 23mm	1825-1840	
		four iron nails; one complete; L 95mm	1825-1840	
1607		iron ?object; four pieces	1775-1800	x-ray
1608		rectangular flat metal fitting with cut-out and riveted strips; ?part of a harmonica; W 25mm		
		iron nails; three incomplete		
1613		lead shot; diam.13mm	70-400	
1617		lead waste; one piece		
1619		iron pipe with wall mount; incomplete; L 180mm; diam. 60mm	1805-1900	
		iron bucket handle; complete with one heart-shaped bucket mount extant; span 310mm	1805-1900	
1635		copper-alloy coin; Victoria halfpenny 186?9	1580-1700	
1641	92	flat copper-alloy button with four eyes; complete; diam.16mm	1825-1830/40	
	93	small copper-alloy disc button; complete; diam.14mm	1825-1830/40	
	94	small copper-alloy furniture knop handle; complete; ht.12mm; diam.10mm	1825-1830/40	
	95	plant tag of copper-alloy sheet; incomplete; trilobe design; W 55mm; ht.40mm	1825-1830/40	
		lead window came; reeded; one piece; L 60mm	1825-1830/40	
		iron nails; two incomplete	1825-1830/40	
1648		lead waste; one piece	1770-1820	

Table 7 (contd): metal and small finds from the excavation

grid square	description	date	recommendation
A 11	copper-alloy eyelet	modern	
A 11	metal hair grip	modern	
B 7	50 pence coin, 1981	modern	
B 8	metal keys; two on a small ring; for bicycle lock?	modern	
B 11	lead waste		
C 14	copper-alloy bracket		
C 14	copper-alloy plant tag; trilobe with two holes for suspension at top; complete but in two pieces; W 90mm; ht. 60mm	? 19th century+	x-ray
C 14	lead waste		
D 3	copper-alloy cap; ?from knife handle; diam.20mm; ht.40mm		further identify
D 4	US 5 cents coin, 1996	modern	
D 8	lead waste		
D 11	copper-alloy dished suspender button; 'J. AVERY// KENSINGTON'; diam.17mm	19th century+	
D 11	metal fitting	modern	
E 2	copper-alloy plate/mount		
E 6	copper-alloy dished suspender button; coarsely made with traces of stamps/stamped decoration; diam.18mm	?18th/19th centuries	x-ray
E 6	lead waste		
E 7	lead waste		
E 9	copper-alloy hose fitting; complete; diam.30mm; L 52mm	? 19th century+	
E 17	metal toy/child's fingerring with glass setting	modern	
E 18	copper-alloy mount/fitting		
F 2	lead waste		
F 5	50 pence coin, 1969	modern	
F 10	copper-alloy threaded fitting		
F 11	metal ?mouth organ; fragment only		
F 13	metal keys; seven on keyring	modern	
F 13	1 franc coin 1969	modern	
F 14	iron bolt		
F 14	copper-alloy hinged clasp; L 50mm+; W 35mm; inscribed ER…//..ISON//..REENS	19th century+	further identify
F 14	metal ?mouth organ; fragment only		
F 17	copper-alloy plant tag; bilobe with tongue for inserting into soil; incomplete; W 88mmht.75mm+	? 19th century+	x-ray
F 18	lead waste		
G 3	copper-alloy threaded hose fitting; complete with handles for turning; diam.45mm	? 19th century+	
G 4	US quarter dollar coin 1985	modern	
G 5	50 pence coin 1978	modern	
G 8	5 centimes coin 1979	modern	
G 9	lead waste		
G 11	copper-alloy label, 'THIS APPARATUS IS THE PROPERTY OF THE FULHAMBOROUGH COUNCILELECTRICITY DEPT….'; L 65mm; W 30mm	modern	
G 19	copper-alloy coin	pmed	x-ray
G 19	lead waste		
H 4	copper-alloy label, embossed with skier above 'VALL COLORADO'; L 40mm; W 20mm	modern	
H 10	iron plate/fitting		x-ray
I 5	lead waste		
I 15	copper-alloy ?cap; diam.15mm		
I 15	lead shot	pmed	
I 15	lead waste		
I 17	George V farthing coin 1931	modern	
J 2	copper-alloy washer		
J 8	lead waste		
J 11	copper-alloy mount, plain and incomplete		
J 17	copper-alloy buttons; two disc buttons; diam.16 and 18mm; one ?domed two-piece button with traces of moulded decoration; incomplete; diam.17mm	?19th century	
J 17	metal WW2 shell shrapnel	modern	

Table 8. metal finds from metal detecting survey of Walled Garden

grid square	description	date	recommendation
K 3	copper-alloy ?knife ferrule; diam.12mm; ht.5mm		
K 4	yellow-metal tweezers	modern	
K 4	metal WW2 shell shrapnel		
K 6	copper-alloy dished suspender button; inscribed but heavily corroded; diam.18mm	19th century+	
K 15	copper-alloy?tap handle; incomplete; W 30mm	? 19th century+	
K 16	lead waste		
K 17	copper-alloy military button; embossed CANADA with a maple leaf inside the Order of the Garter and below a crown; backmarked 'MADE IN ENGLAND'; diam.17mm	WW2 period?	
K 18	copper-alloy fitting		
K 18	lead waste		
L 13	copper-alloy mount/ ferrule; now flattened; W 25mm		
L 15	copper-alloy military button; 2nd South Middlesex Volunteer Corps; incomplete; diam. c23mm	?19th century	
L 16	copper-alloy plant tag; bilobe with tongue for inserting into soil; incomplete	? 19th century+	x-ray
L 16	copper-alloy ring/ ferrule, squashed but with traces of decoration; ht.10mm	pmed	x-ray
L 16	lead waste		
L 16	metal WW2 shell shrapnel	modern	
M 7	copper-alloy plate		
M 9	metal WW2 shell shrapnel	modern	
M 11	20 centimes coin 1964	modern	
M 16	50 pence coin 1982	modern	
M 18	iron ferrule; ?for fence pole		
M 18	iron ?file blade		
M 19	electro-plated nickel silver spoon; complete but bent; stamped 'NICKEL SILVER'; simple oval terminal stamped GR below a stylized crown; L 185mm	early 20th century; George V	
N 3	copper-alloy dished suspender button; 'BEST ?RING EDGE'; no backmark; diam.16mm	19th century+	
N 3	iron strap/binding		
N 10	copper-alloy belt/strap hook; simple rectangular 14 x 26mm eye	?19th century+	
N 12	copper-alloy pulley block		
N 13	iron rove and washer		
N 14	iron fitting		
N 16	copper-alloy door handle fitting	?19th century+	
N 19	lead waste		
O 2	George V penny 1920	modern	
O 2	lead waste		
O 3	copper-alloy livery button; heraldic crest depicting demi lion holding Tudor rose; coronet above; backmarked ?BIRMINGHAM; diam.25mm	?19th century	further identify
O 3	copper-alloy furniture fittings; incomplete teardrop handle and circular backplate with moulded concentric rings; diam. 30mm	18th/19th centuries	further identify
O 6	lead ?pipe		
O 11	copper-alloy threaded fitting		
O 12	lead waste		
O 14	iron bolt fittings		
O 14	50 Pfennig coins, two; 1969 and 1983	modern	
O 15	copper-alloy coin	pmed	x-ray
O 20	metal keys; three	modern	
P 3	copper-alloy threaded hose fitting; complete with handles for turning; diam.23mm	?19th century+	
P 3	lead waste		
P 4	?glass button/earclip	modern	
P 4	metal ?earclip	modern	
P 6	10 pence coin 1976	modern	
P 6	metal stanley knife blade	modern	

Table 8 (contd). metal finds from metal detecting survey of Walled Garden

grid square	description	date	recommendation
P 12	George VI shilling 1949	modern	
P 17	lead waste		
P 18	George VI shilling 1948	modern	
P 18	5 pence coin 1979	modern	
Q 3	copper-alloy hose fitting; complete; L 54mm; diam.23mm	?19th century+	
Q 3	copper-alloy thimble	19th century+	
Q 4	lead waste		
Q 6	electro-plated nickel silver spoon; complete but bent; stamped 'ELECTROPLATED NICKEL SILVER' and 'MADE IN ENGLAND'; simple oval terminal; l 190MM	late 19th/ early 20th centuries	
Q 6	10 pence coin 1969	modern	
Q 10	metal washer		
Q 11	metal toy figure of medieval knight; ht.40mm	modern	
Q 18	copper-alloy flat suspender button; coarsely made; possible traces of decoration; diam.16mm	?18th/19th centuries	x-ray
R 3	copper-alloy hose fitting; complete; L 37mm; diam.15mm	?19th century+	
R 6	lead waste		
R 7	copper-alloy mount/clip; cruciform plate with three sides each finished in three points, the fourth a tongue-shaped strap bent to form a ?clasp; W 40mm; L 30mm; possibly a book clasp	19th century+	further identify
R 8	tin plate		
R 11	50 pence coin 1976	modern	
R 17	50 pence coin 1973	modern	
R 19	lead waste		
S 3	iron ?fittings		x-ray
S 6	lead waste		
S 7	metal WW2 shell shrapnel	modern	
S 8	copper-alloy wall/door hook; simple long-oval plate	19th century+	
S 16	lead waste		
S 18	10 pence coin 1970	modern	
S 19	iron ?object		x-ray
T 4	?brass mount/ferrule with simple small disc finials, decorated with floral scrolls; complete but squashed; L 75mm; W 10mm	?19th century+	further identify
T 4	George VI halfpenny 1943	modern	
T 5	lead plug; diam.18mm		further identify
T 6	copper-alloy ?mount/ferrule; now squashed; ht.35mm+	modern	
T 6	10 pence coin 1976		
T 7	copper-alloy ?door fitting		
T 11	iron washer		
T 12	metal WW2 shell shrapnel	modern	
T 13	metal Swiss army knife with wine-bottle cork	modern	
T 16	iron nail		
T 18	shilling coin 1963	modern	
U 3	iron bolt with plates		
U 4	iron horseshoe; one branch only		
U 4	10 pence coin 1968	modern	
U 9	copper-alloy tap; complete; W 60mm; ht.48mm	?19th century+	
U 12	lead ?fitting		
U 16	copper-alloy threaded hose fitting; complete with two handles for turning; L 47mm; diam.30mm	?19th century+	
U 20	iron nail		
V 7	lead waste		
V 10	lead ?pipe		
V 18	metal ?mount		

Table 8 (contd). metal finds from metal detecting survey of Walled Garden

location	description	date	recommendation
V0 1 Bay 2	lead-alloy dished suspender button; diam.17mm	19th century+	
	iron tie/structural fitting; flat spike for fixing and flattened head at an angle; complete; L 75mm		
	small iron-wire staple; ht.28mm		
	iron wire; two lengths, partly twisted		
	iron nail; L 73mm		
V0 1 Bay 3	lead waste		
	small iron-wire staples; two; ht.28mm		
	iron wire; twisted		
	iron nail; incomplete		
	redware flowerpot; one piece		
V0 1 Bay 4	lead-alloy globular ?weight or finial; diam.20mm; ht.15mm		further identify
	iron nails; four		
	redware flowerpot; one piece		
V0 1 Bay 5	lead-alloy dished suspender button; '?WETHRBYS & SON'; diam.13mm	19th century+	
	lead waste		
	lead ?plomb; part of strip with circular finial		
	iron wire; partly twisted		
V0 1 Bay 7	lead strip mount; incomplete; W 10mm; one nail for fixing extant		
	plastic-covered gardening wire; one length		
V0 2 Bay 10	substantial moulded cast-iron mount with ?white-paint covering; incomplete; W 40mm; L 80mm+	? 19th century+	further identify
V0 2 Bay 12	lead strip; W 10mm; L 130mm; one hole for fixing extant		
V0 2 Bay 16	iron wire tensioner; L 215mm; substantial length of wire still attached	19th century+	
V0 3 Bay 14	lead-alloy ?plug with serrated edge; diam.15mm; ht.5mm		further identify
	lead strip; W 10mm; L 135mm; one hole for fixing extant		
V0 3 Bay 17	small fragment of tinfoil	modern	
V0 3 Bay 18	cast-iron ?lock escutcheon plate with L-shaped opening; two screws for fastening; 50 x 70mm	19th century+	
A 14-15	lead-alloy dished suspender button; diam.17mm	19th century+	
	small copper-alloy thimble; incomplete and squashed; diam. c13mm	19th century+	
	copper-alloy wire		
	metal bottle cap; 'MARTINI & ROSSI// LONDON'	modern	
	metal bottle cap; squashed	modern	
	metal ?milk bottle cap; incomplete and flattened	modern	
	tinfoil/wrapper	modern	
	lead strip; incomplete; W 20mm; one hole for fixing extant		
	lead strip/mount; incomplete; W 40mm		
	iron wire		
	iron washer; diam.23mm		
	cast-iron plate; fragment only		
	iron nail; L 23mm		
A14 – G19	copper-alloy coin	pmed	x-ray
	copper-alloy dished suspender button; 'W.H.LONG//RYDE'; diam.17mm	19th century+	
	thin, flat disc button with four central eyes; traces of decoration; diam.20mm; ?reused coin or jeton	pmed	x-ray/clean
	copper-alloy disc button; moulded decoration with six-pointed star	? 19th century	further identify
	very small copper-alloy ?disc button; diam.12mm		x-ray
	lead-alloy ?plug/finial; acorn-shaped; edge marked with double rows of punched indentations; diam.9mm; ht.13mm	? 18th/19th centuries	further identify
	stainless-steel fork; marked 'STAINLESS STEEL FOREIGN'	modern	
	lead strip; W 10mm; L 140mm; one hole for fixing extant		
	lead strip; W 15mm; L 65mm; one hole for fixing extant		
	rectangular lead casing; incomplete; 35 x 50mm		
	substantial ceramic fuse with copper-alloy end cap; incomplete; diam. 22mm	modern	

Table 9. metal and small finds from the Vinery

10 ACKNOWLEDGEMENTS

10.1 The author would like to thank Chris Mayo for his project management and Hayley Baxter for producing the illustrations. For their on site work; Ric Archer, Pat Cavanagh, Doug Killock, Tom Mazurkiewicz, Paul Mc Garrity, Denise Mulligan and the volunteer metal detectorists John Cole and Bill Meads. The author would like to thank the resident team of gardeners for their assistance in moving equipment and general on-site co-operation.

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Appendix 1 Context Register

Appendix 2 OASIS Form

OASIS ID: preconst1-65811

Project details

Project name	An Archaeological Evaluation within the Walled Garden at Fulham Palace, London Borough of Hammersmith and Fulham
Short description of the project	An archaeological evaluation was undertaken within the Walled Garden of the Fulham Palace moated site (Scheduled Monument no. 134). This involved the excavation of eight archaeological trenches (Trenches 101-108). Additionally the archaeological excavation and recording of eight small exploratory excavations associated with the examination of known services and areas associated with planned service locations (trenches 109 to 116). These exploratory excavations took place within or around the Walled Garden, with the exception of trench 112 (adjacent to the Gothic Lodge).
Project dates	Start: 24-08-2009 End: 11-09-2009
Previous/future work	Yes / Not known
Any associated project reference codes	FLB03 - Sitecode
Any associated project reference codes	HSD 9/2/14149 - Planning Application No.
Type of project	Field evaluation
Site status	Scheduled Monument (SM)
Current Land use	Other 5 - Garden
Monument type	PIT Roman
Monument type	GARDEN FEATURES post-medieval
Significant Finds	COINS X4 Roman
Significant Finds	CERAMICS post-medieval

Project location

Country	England

Site location	GREATER LONDON HAMMERSMITH AND FULHAM FULHAM Fulham Palace
Study area	460000.00 Square metres
Site coordinates	TQ 2399 7602 51.4690458232 -0.214700754393 51 28 08 N 000 12 52 W Point
Height OD / Depth	Min: 2.31m Max: 3.14m

Project creators

Name of Organisation	PCA
Project brief originator	Gifford
Project design originator	Phil Emery
Project director/manager	Chris Mayo
Project supervisor	John Payne
Type of sponsor/funding body	Borough Council
Name of sponsor/funding body	Fulham and Hammersmith

Entered by	john Payne (jpayne@pre-construct.com)
Entered on	15 October 2009

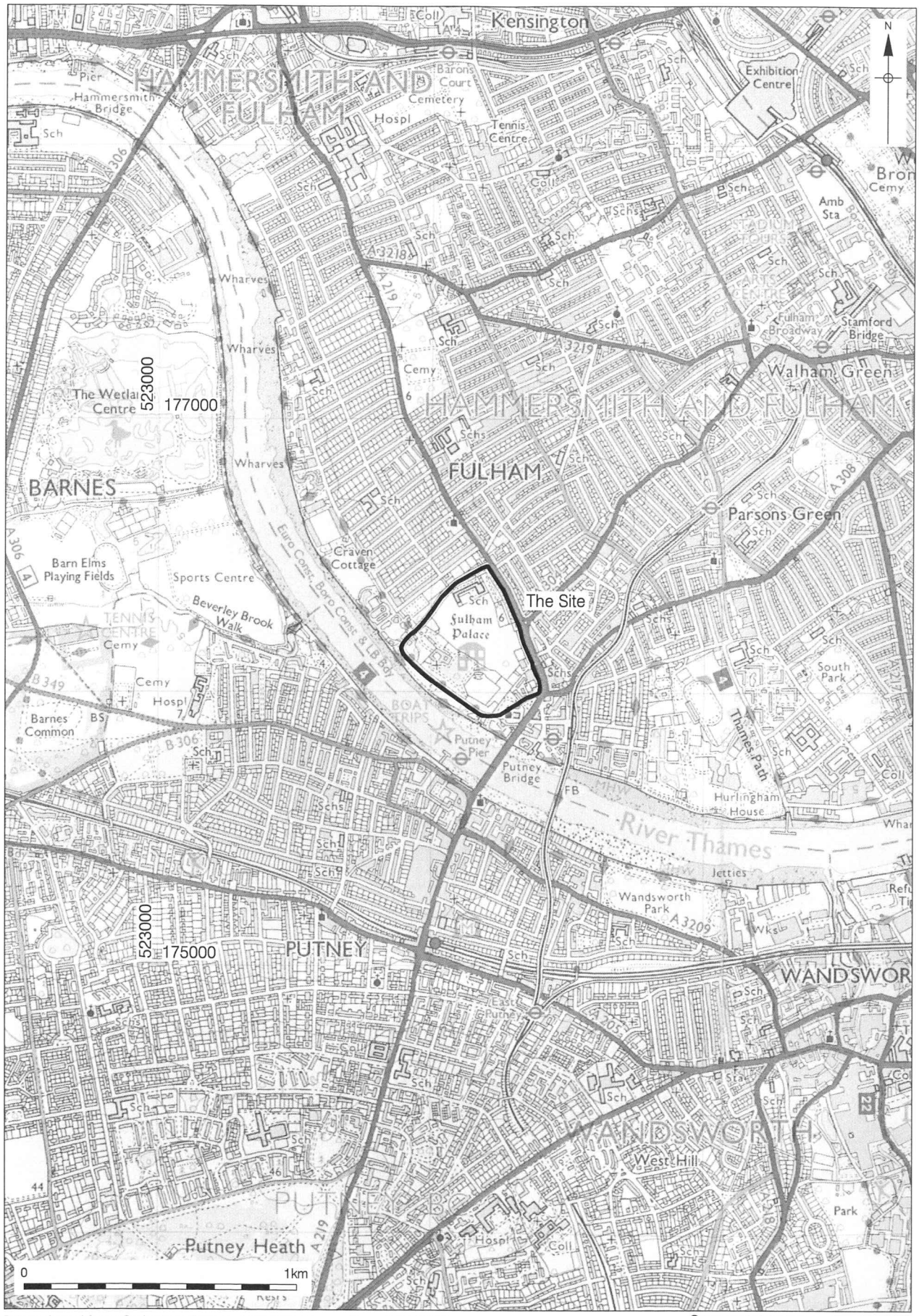
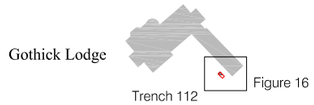


Figure 1
Site Location
1:20,000 at A4

Figure 2
Trench Location
1:1,250 at A3



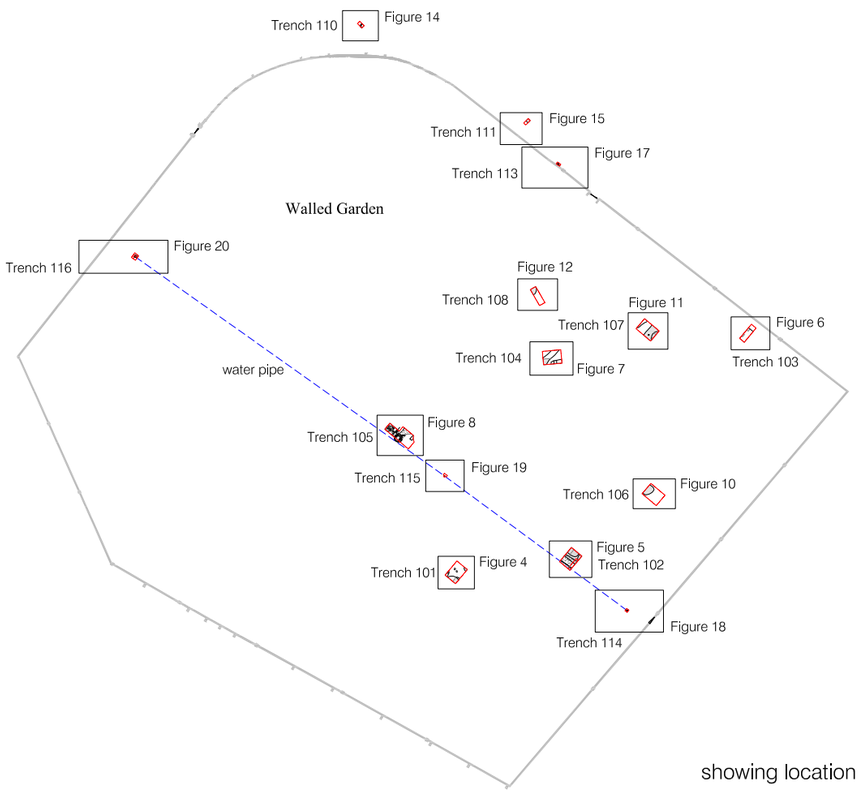
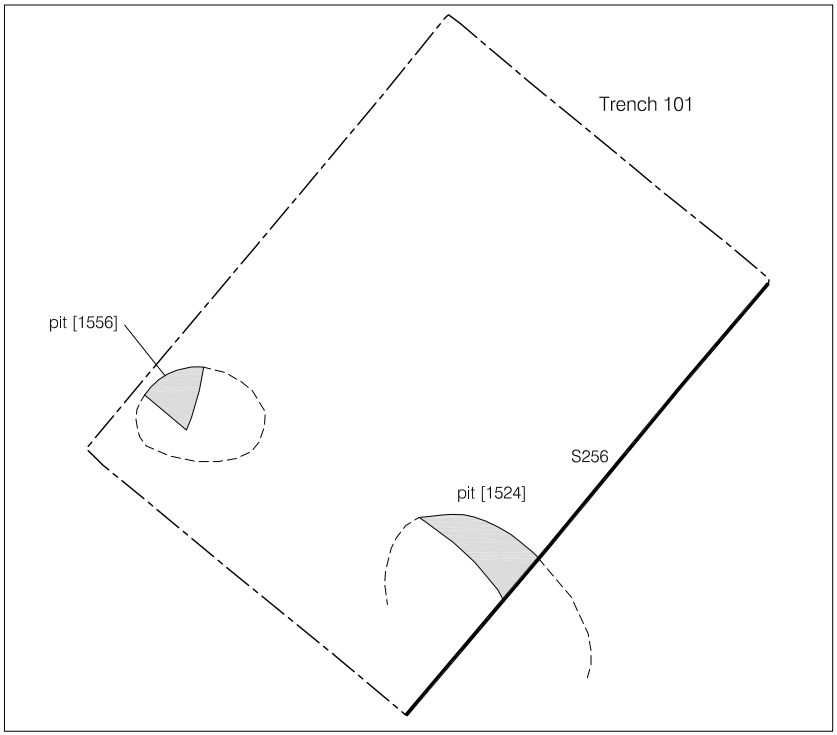
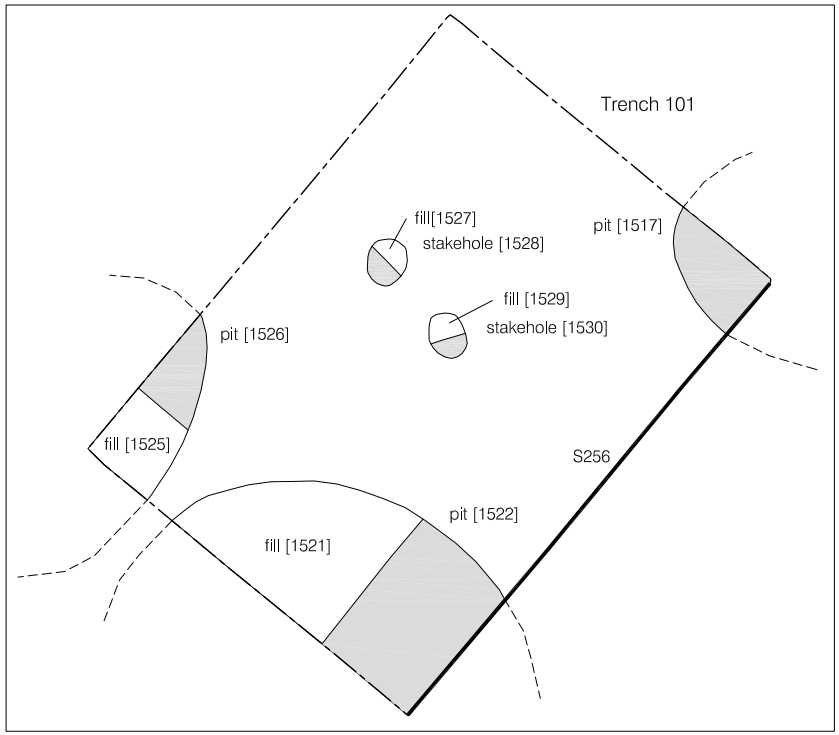


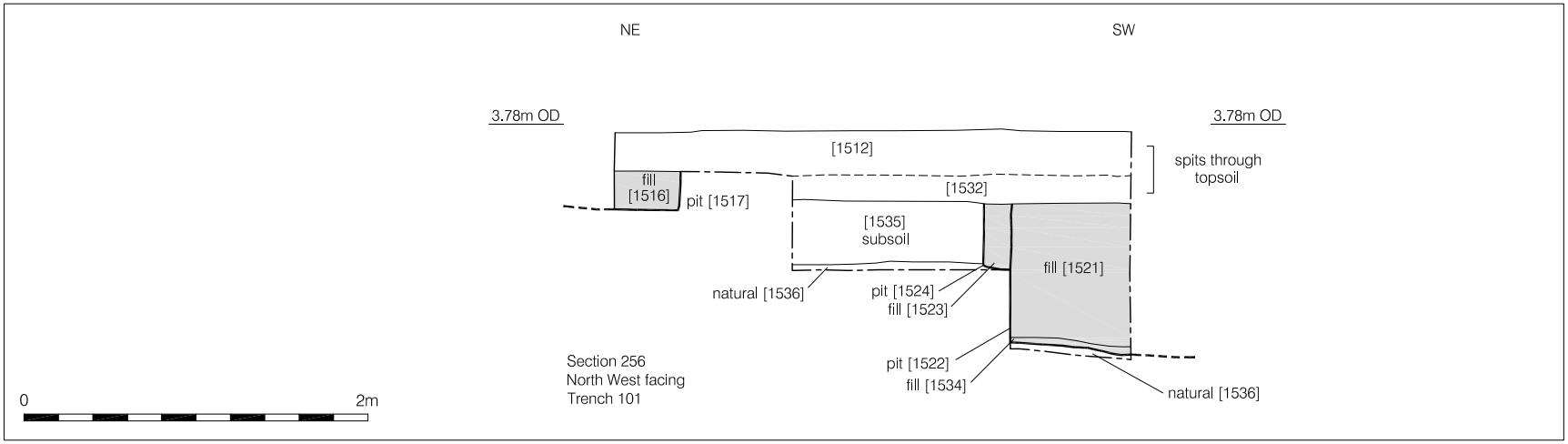
Figure 3
Trenches 101-116
showing location of water pipe within the Walled Garden
1:1,000 at A3



Plan of Phase 3b features

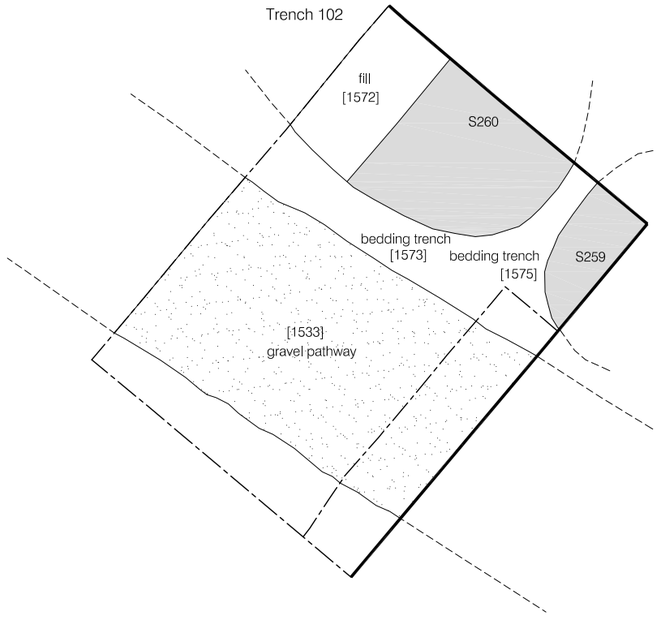


Plan of Phase 3e features



Section 256

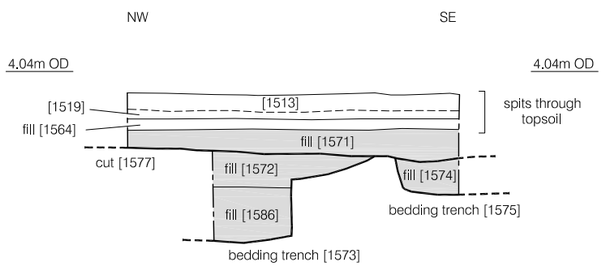
Figure 4
Trench 101
Phase 3 (Walled garden)
1:40 at A4



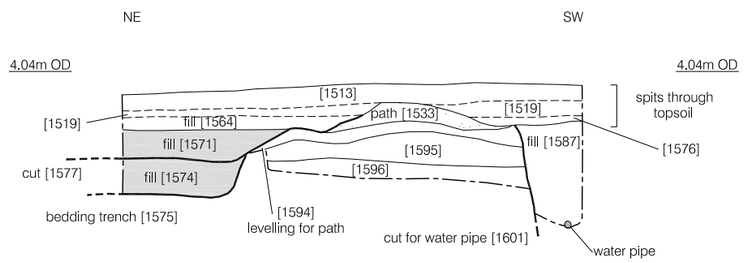
0 2m

Plan of Phase 3d features

Plan of Phase 3e features and water pipe



Section 260
South West facing
Trench 102

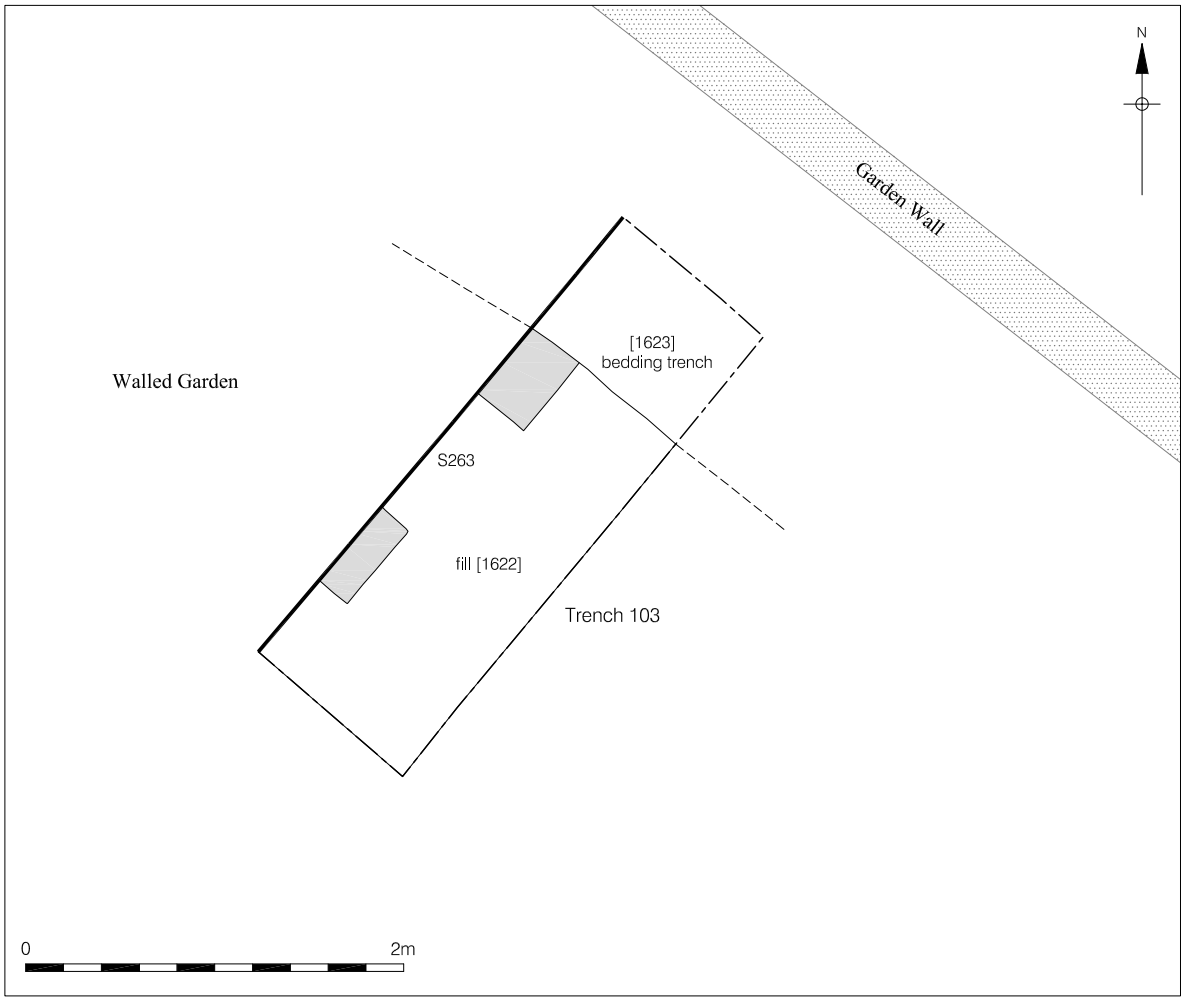


Section 259
North West facing
Trench 102

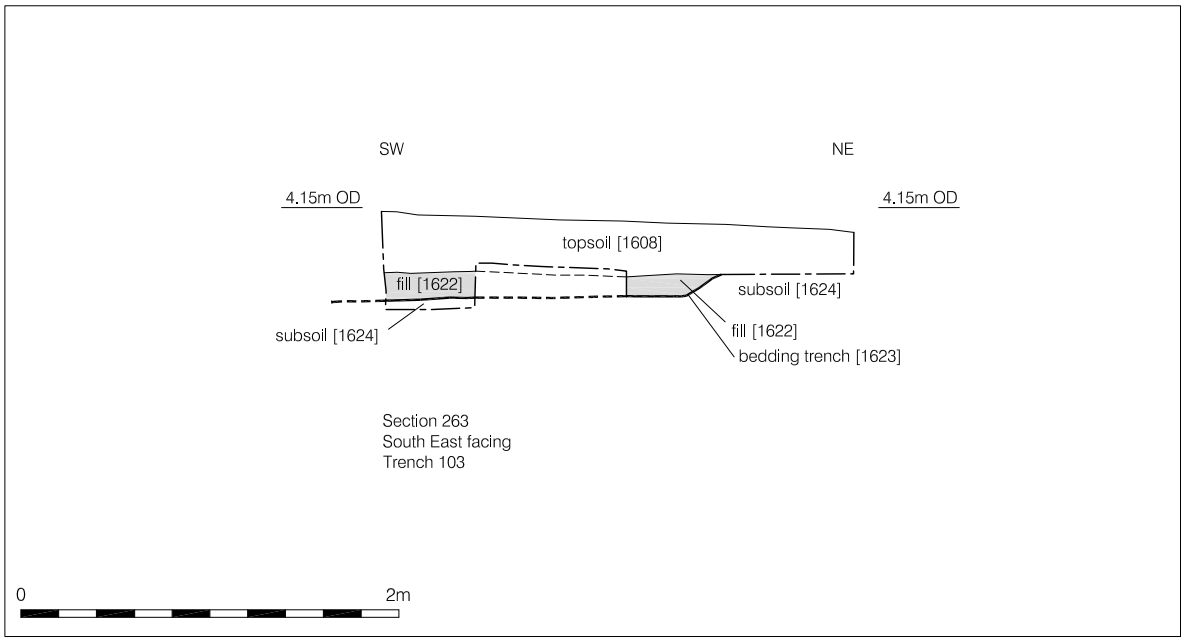
0 2m

Sections 259 & 260

Figure 5
Trench 102
Phase 3 (Walled Garden)
1:40 at A3

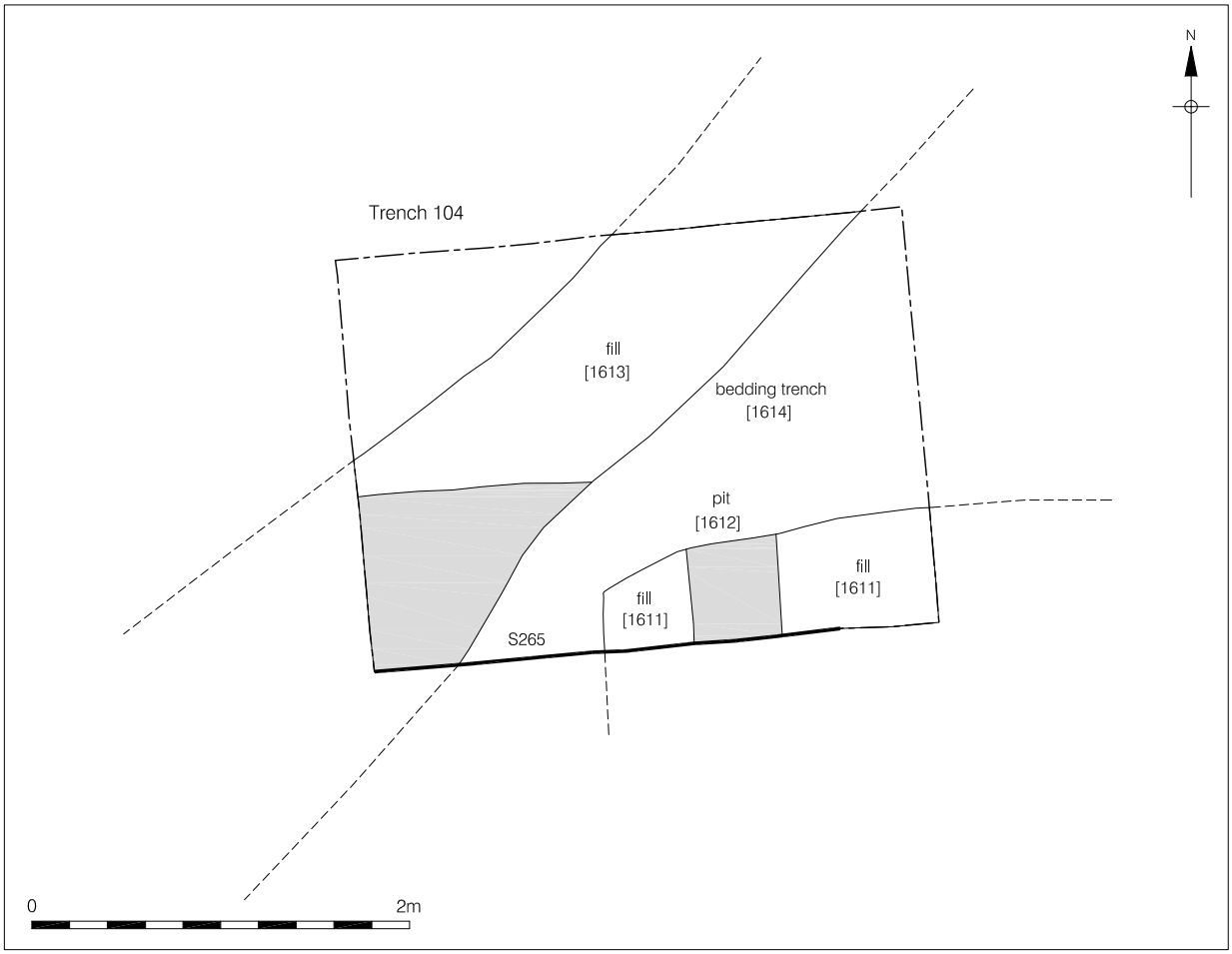


Plan of Phase 3e feature

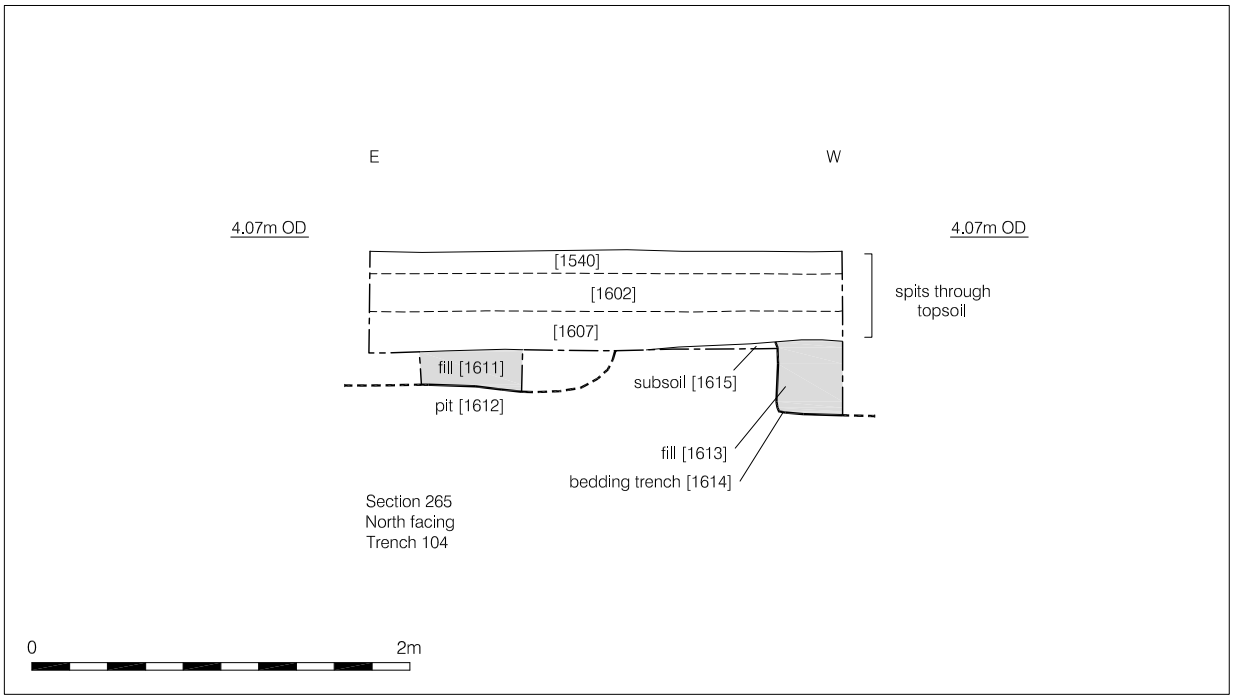


Section 263

Figure 6
Trench 103
Phase 3 (Walled Garden)
1:40 at A4

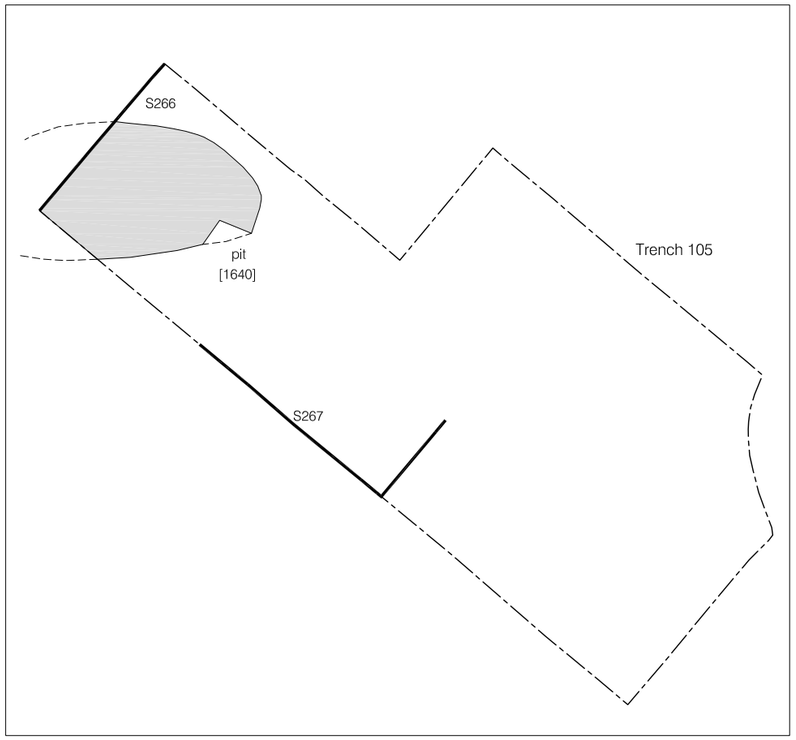


Plan of Phase 3e features

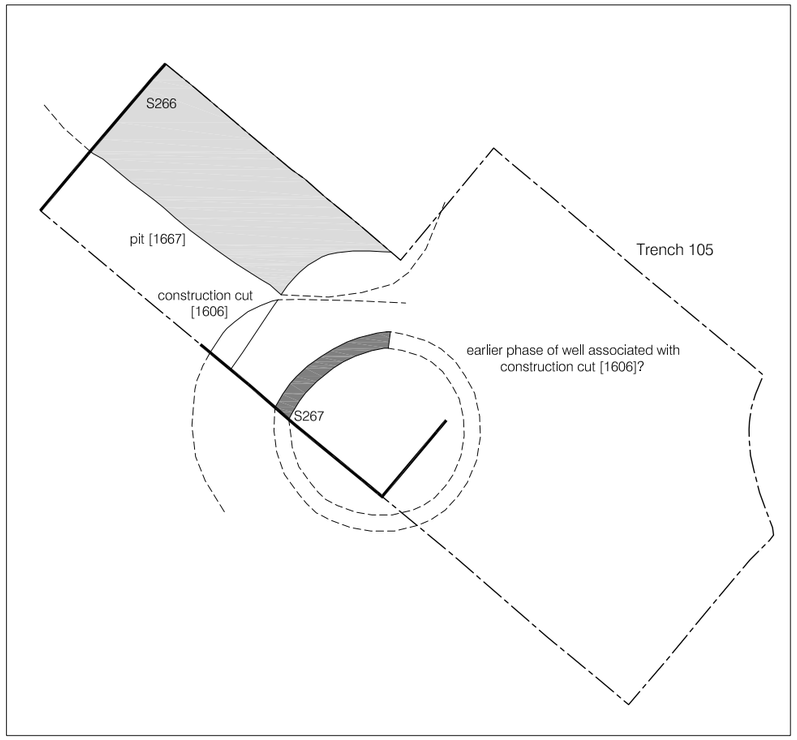


Section 265

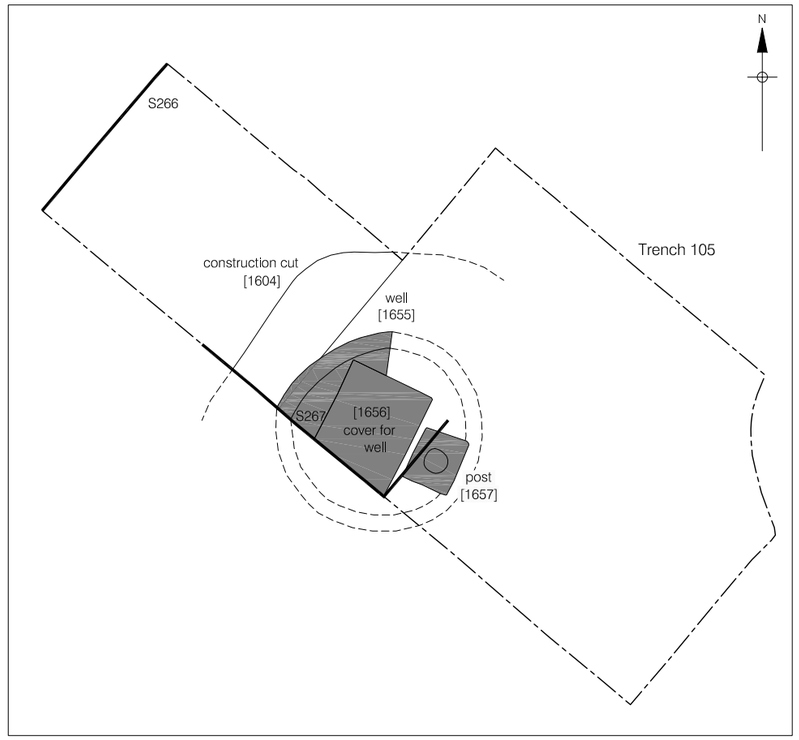
Figure 7
Trench 104
Phase 3 (Walled Garden)
1:40 at A4



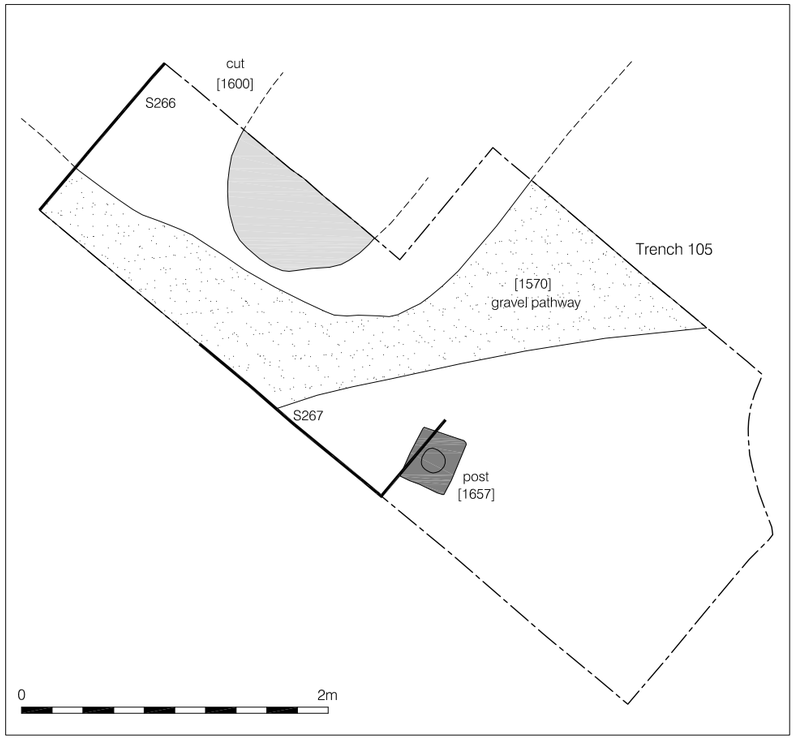
Plan of Phase 3a feature



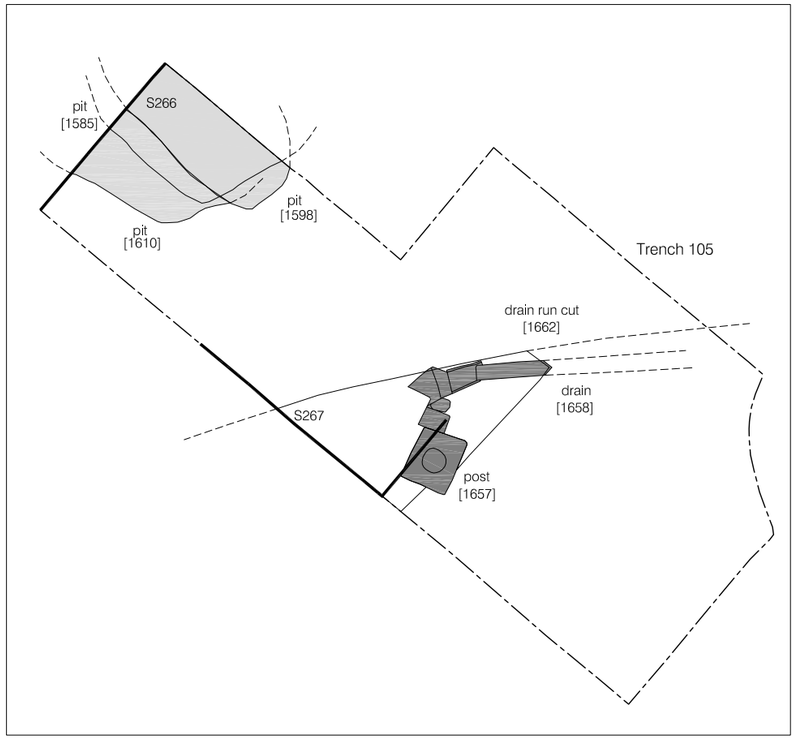
Plan of Phase 3b features



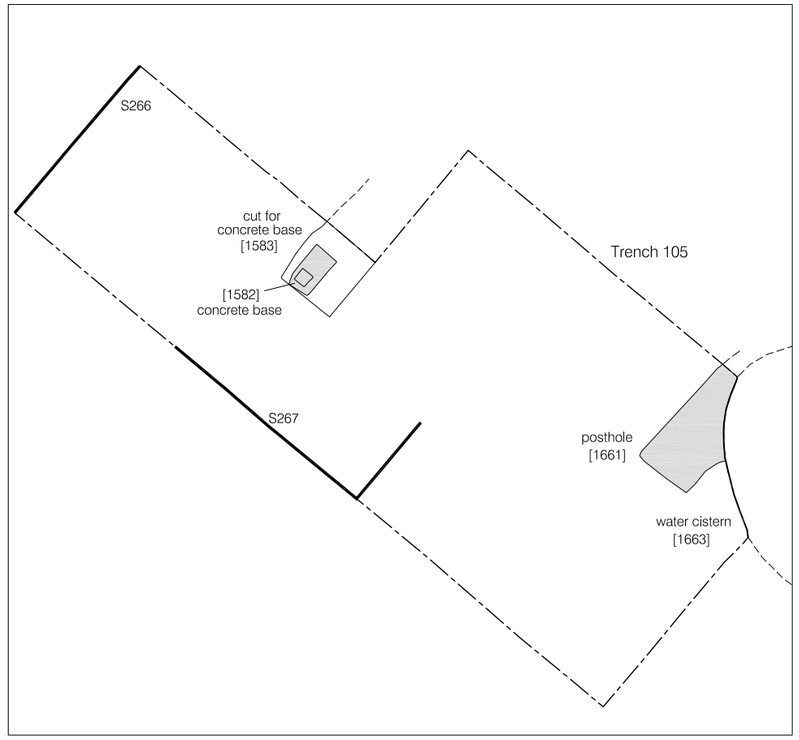
Plan of Phase 3c features



Plan of Phase 3d features

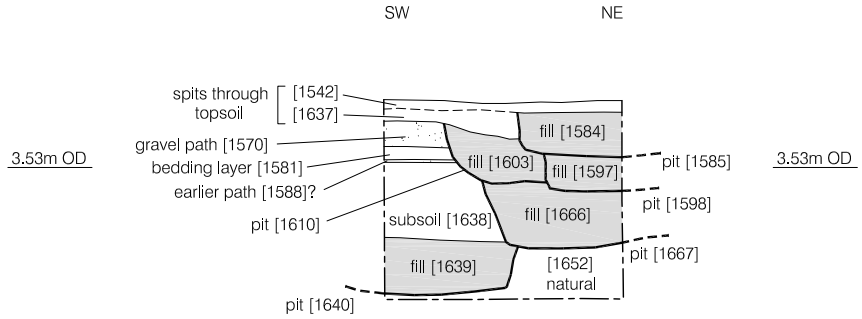


Plan of Phase 3e features

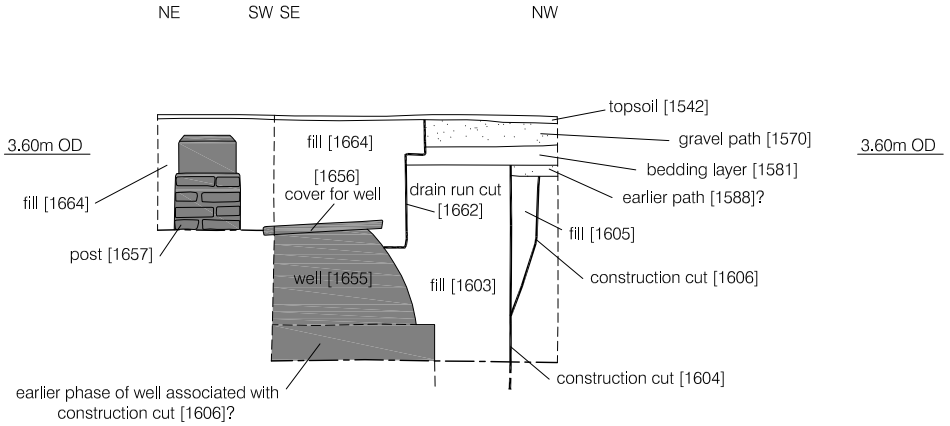


Plan of Phase 4 features

Figure 8
Trench 105
Phase 3 (Walled Garden) & Phase 4
1:40 at A4



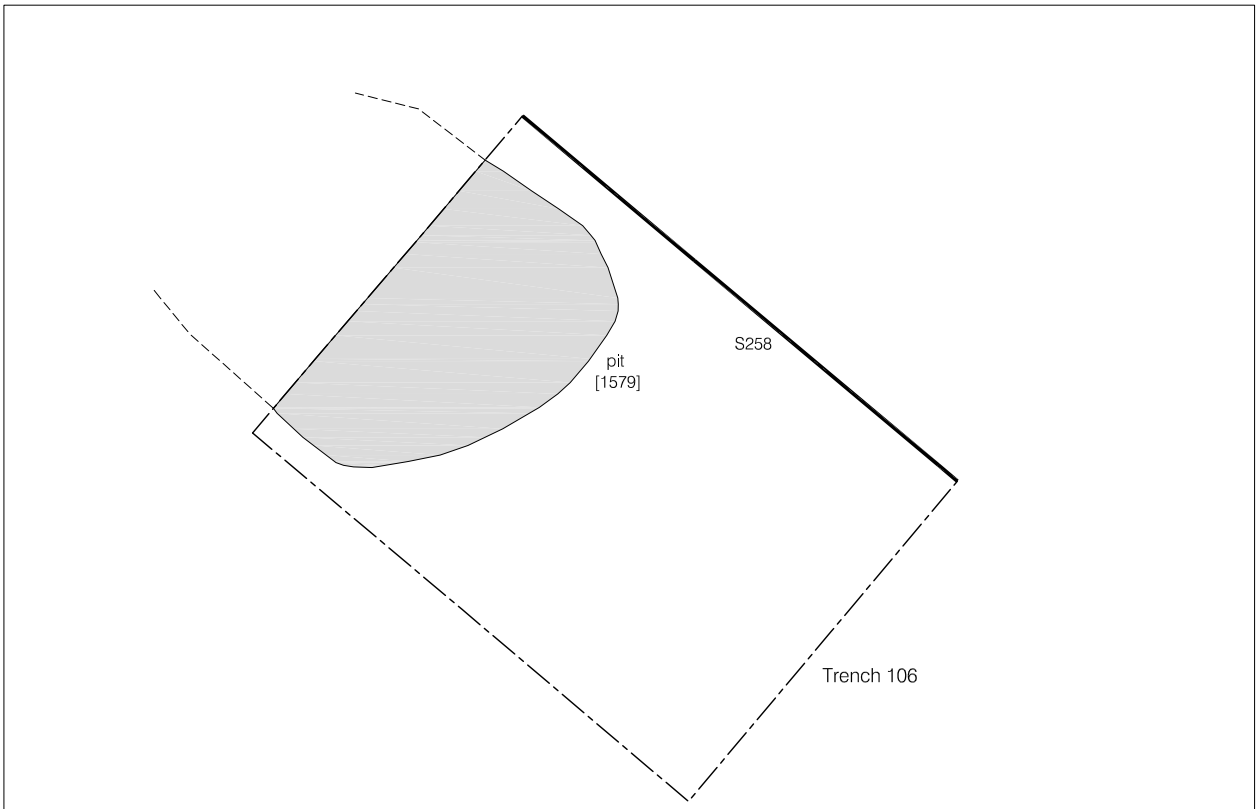
Section 266
South East facing
Trench 105



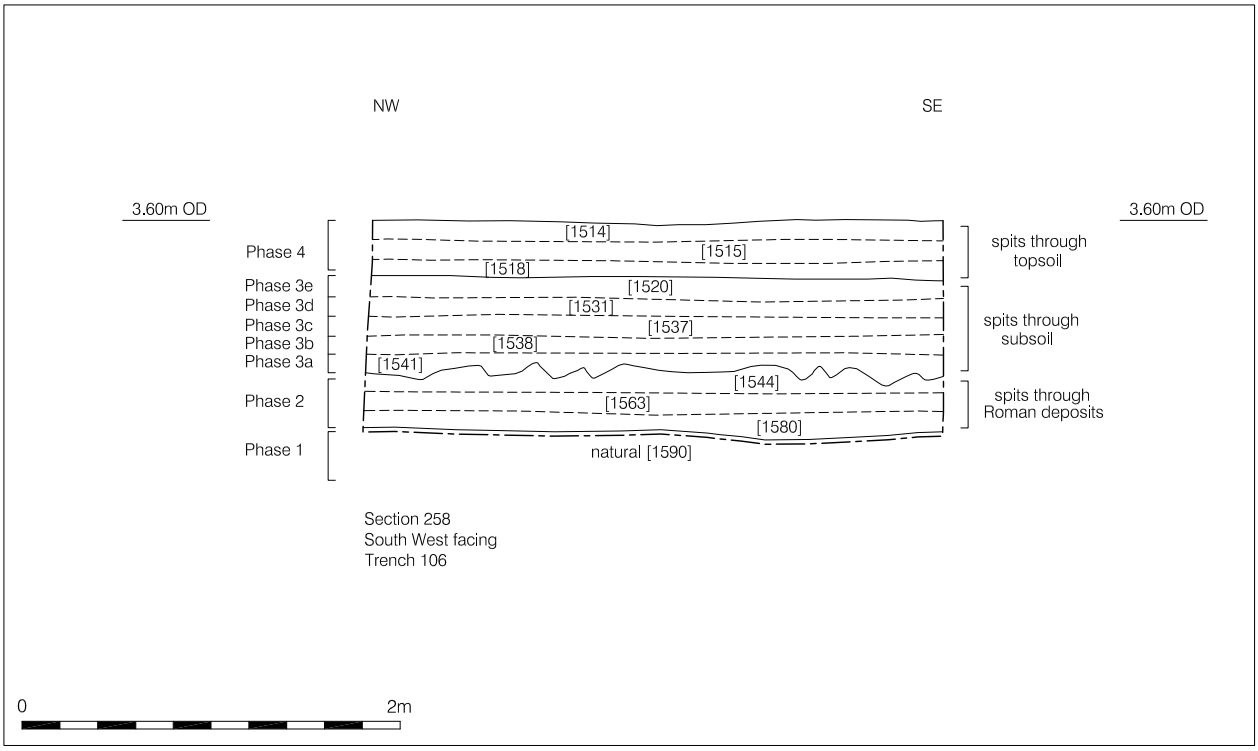
Section 267
North East & North West facing
Trench 105

0 2m

Figure 9
Trench 105
Sections 266 & 267
1:40 at A4

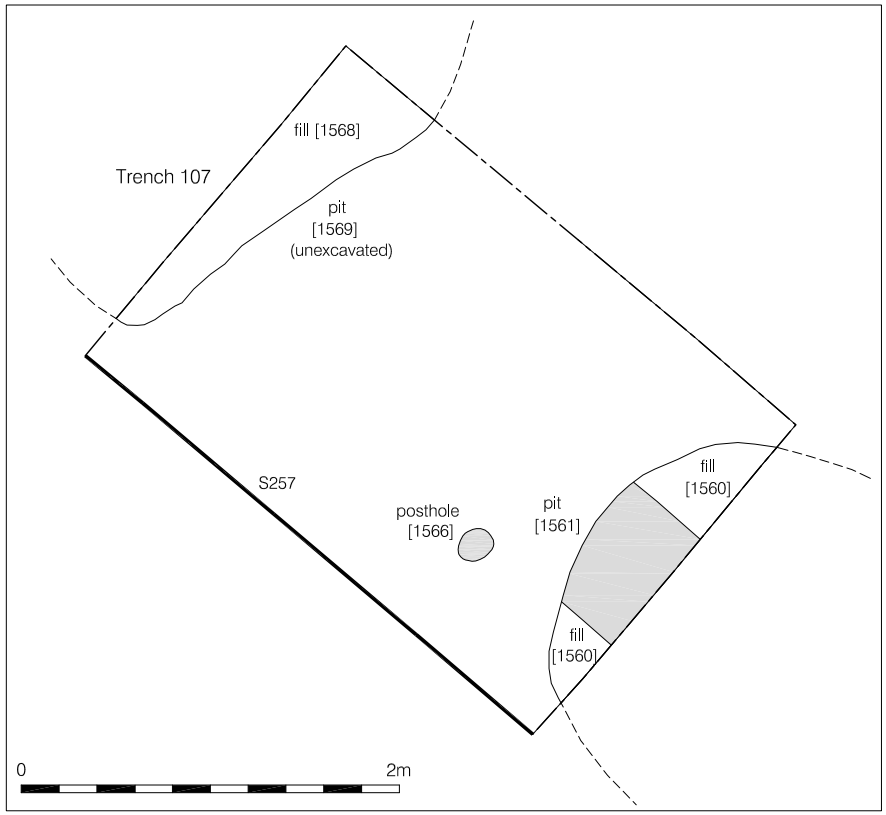


Plan of Phase 2 feature

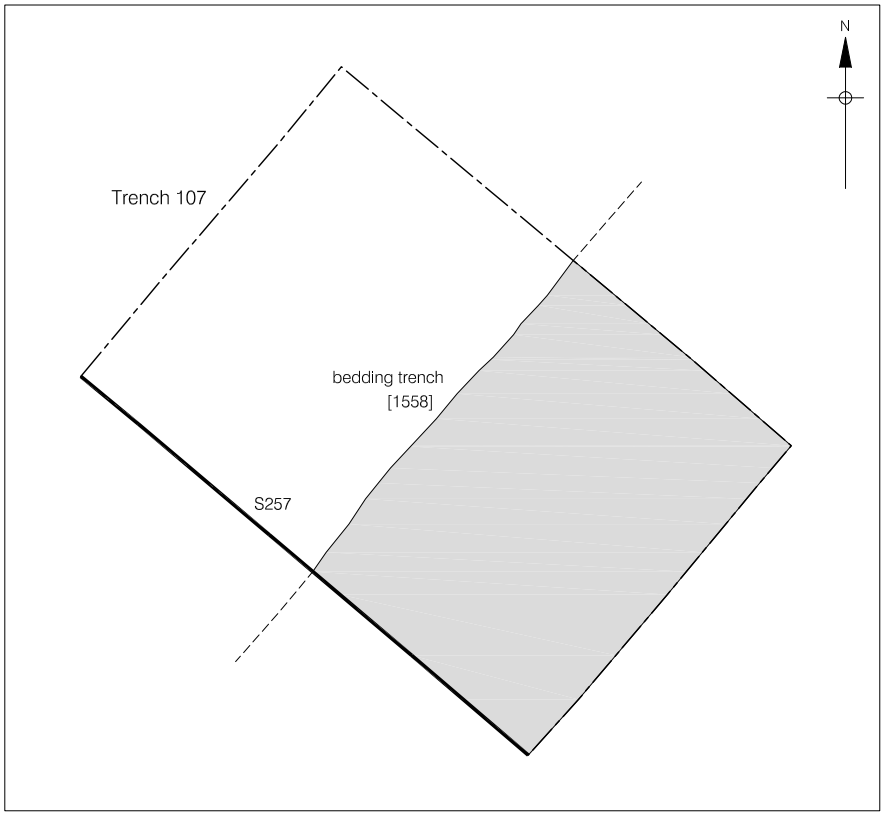


Section 258

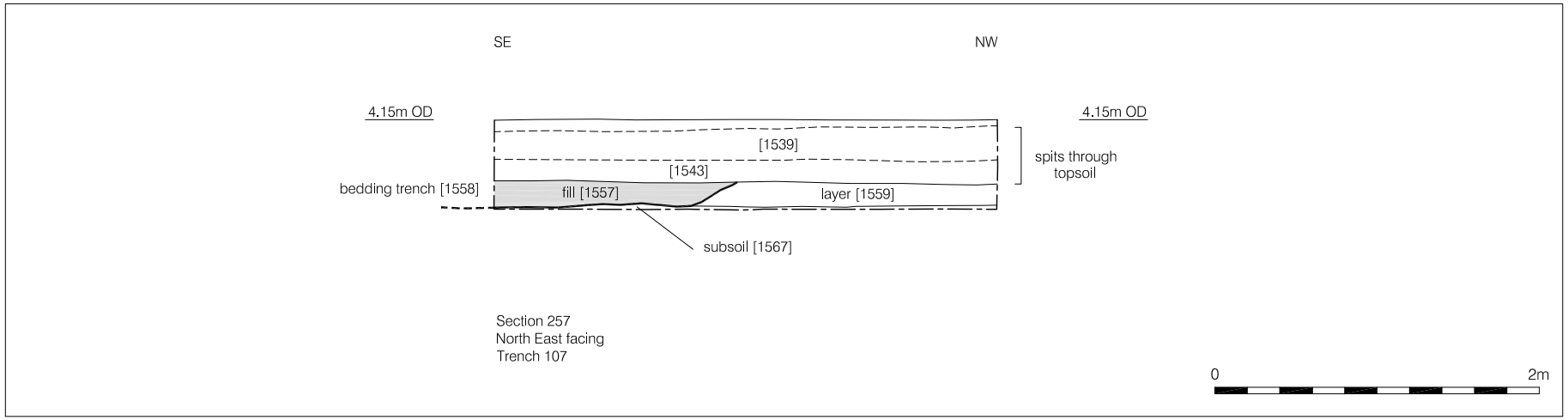
Figure 10
Trench 106
1:40 at A4



Plan of Phase 3d features

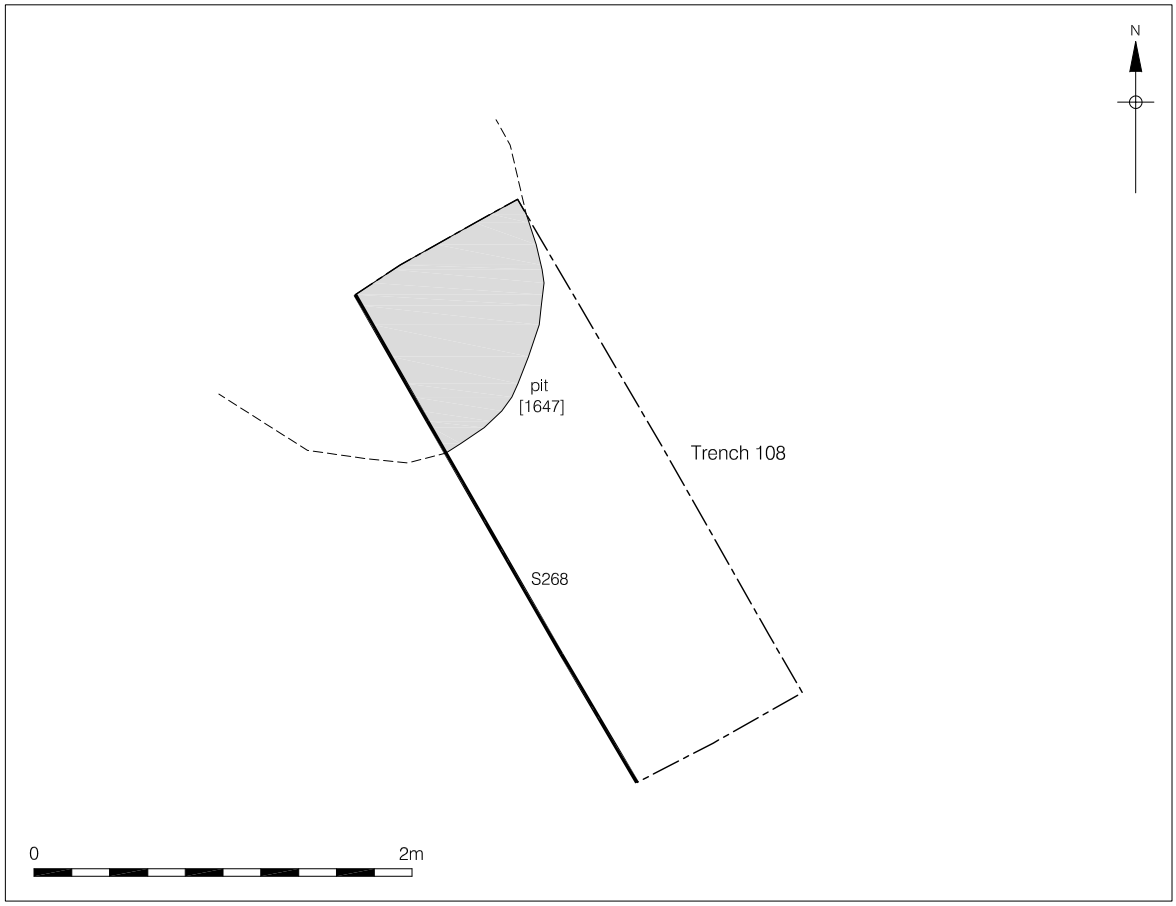


Plan of Phase 3e feature

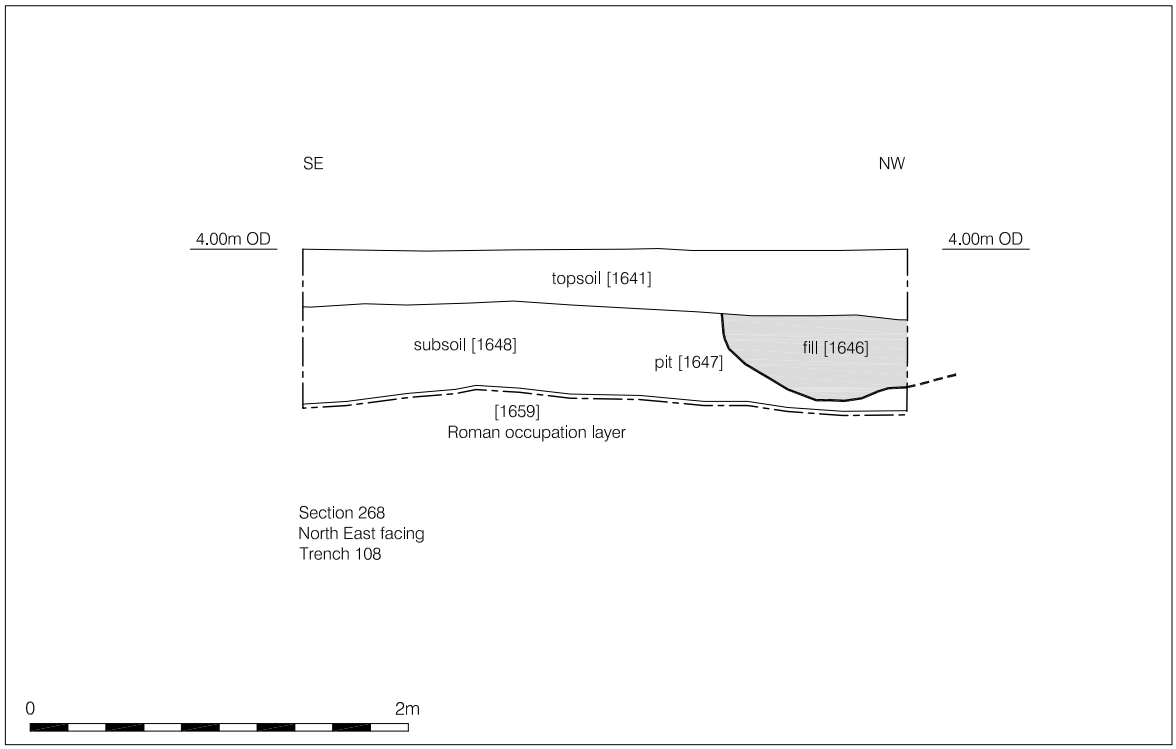


Section 257

Figure 11
Trench 107
Phase 3 (Walled Garden)
1:40 at A4

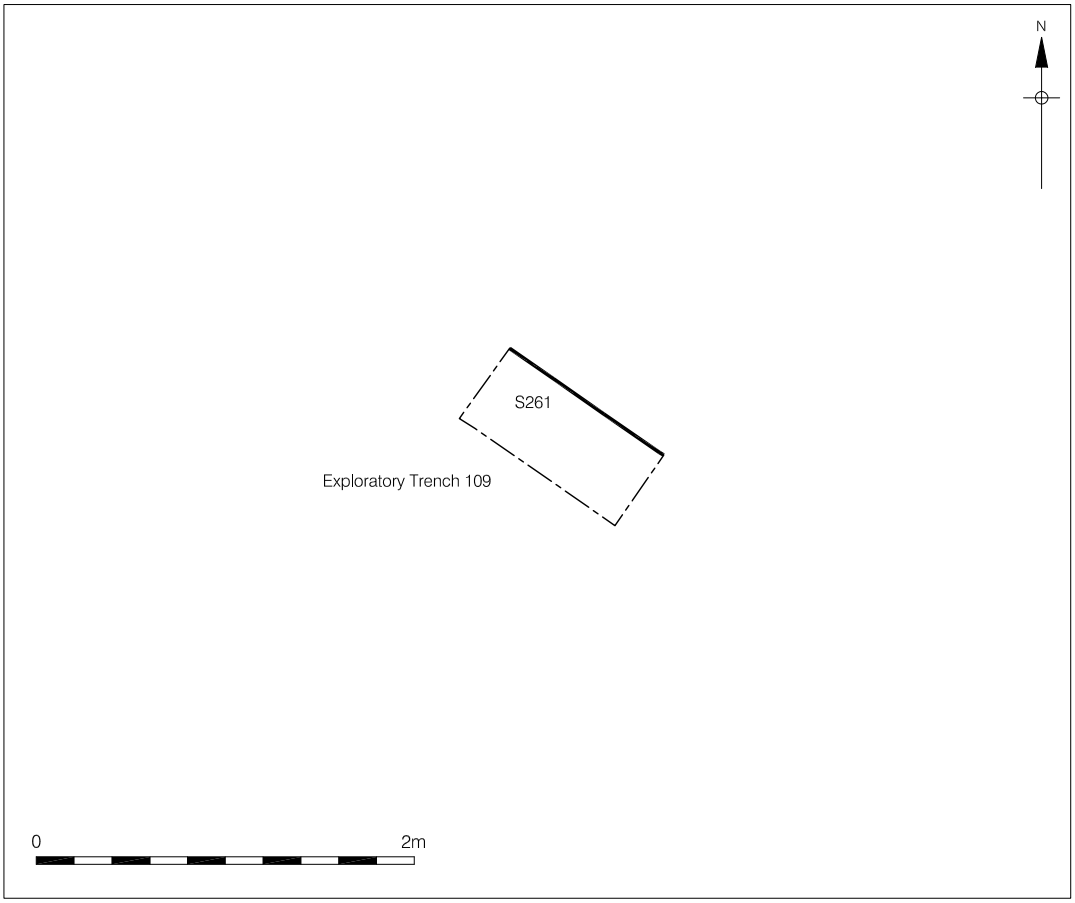


Plan of Phase 3e feature

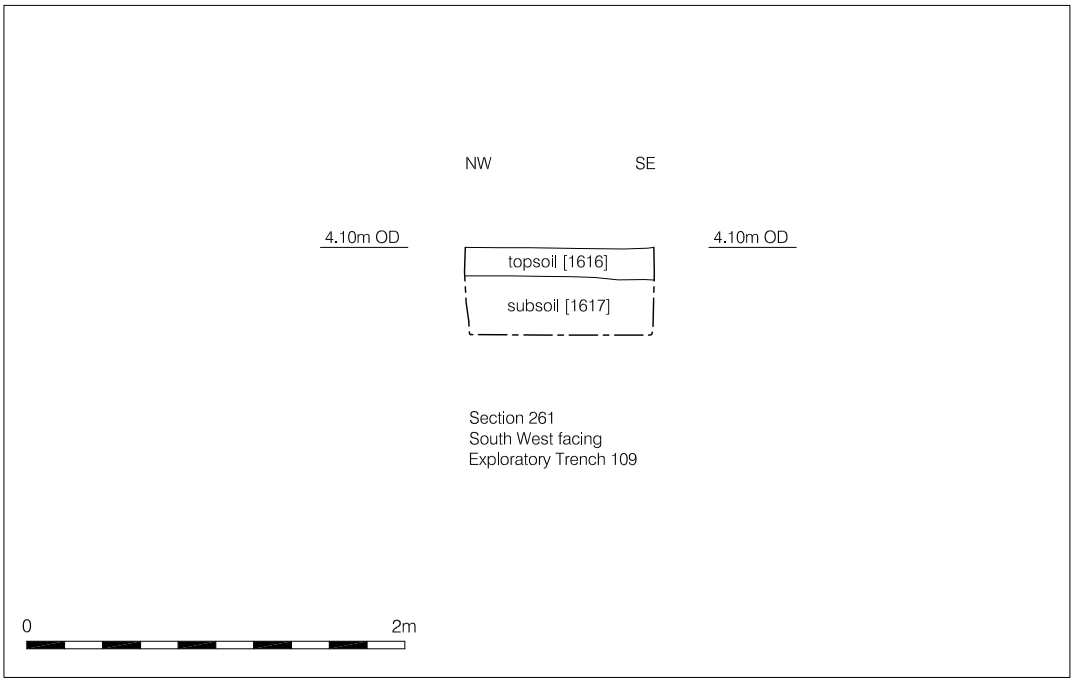


Section 268

Figure 12
Trench 108
Phase 3 (Walled Garden)
1:40 at A4

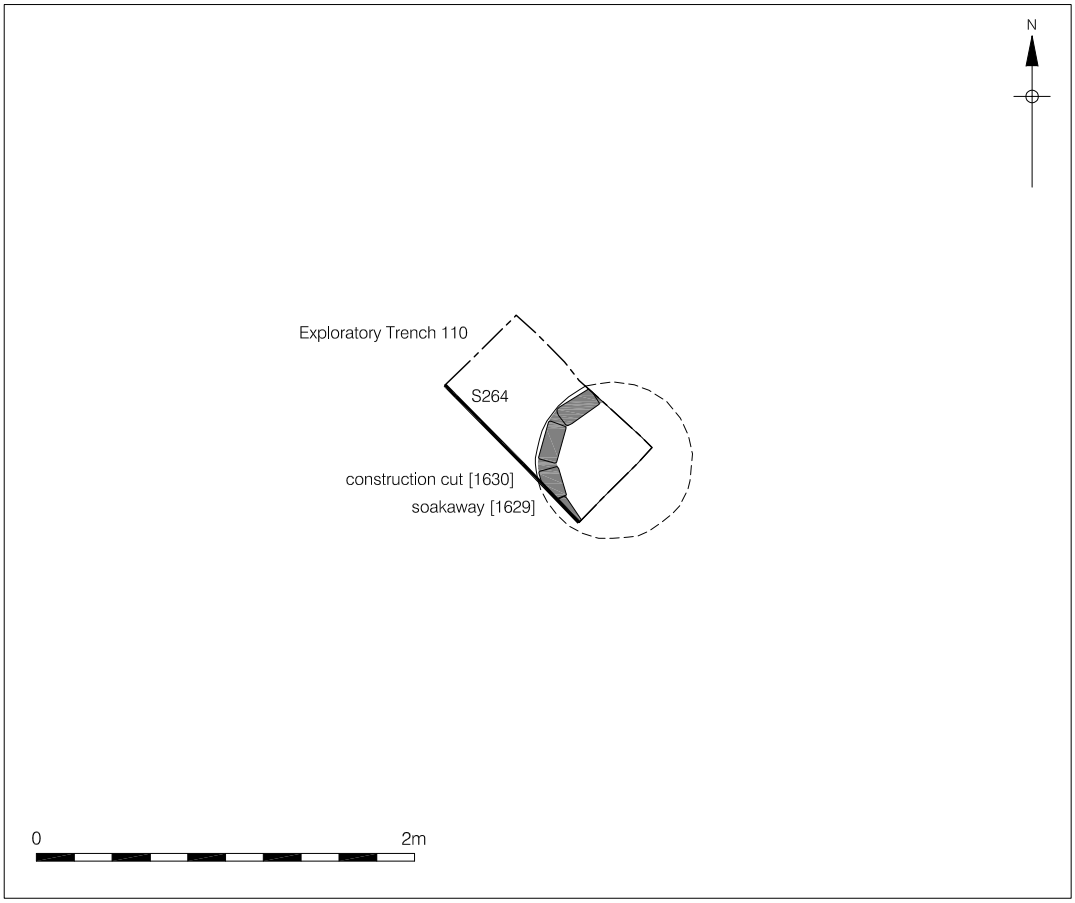


Plan of Exploratory Trench 109

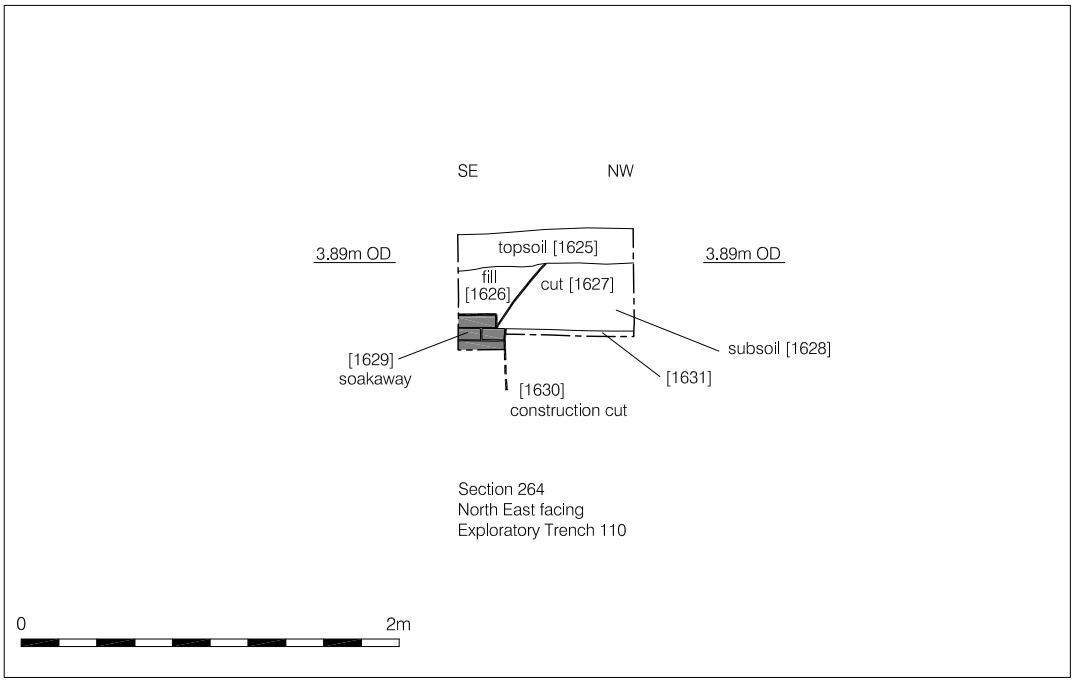


Section 261

Figure 13
Exploratory Trench 109
1:40 at A4

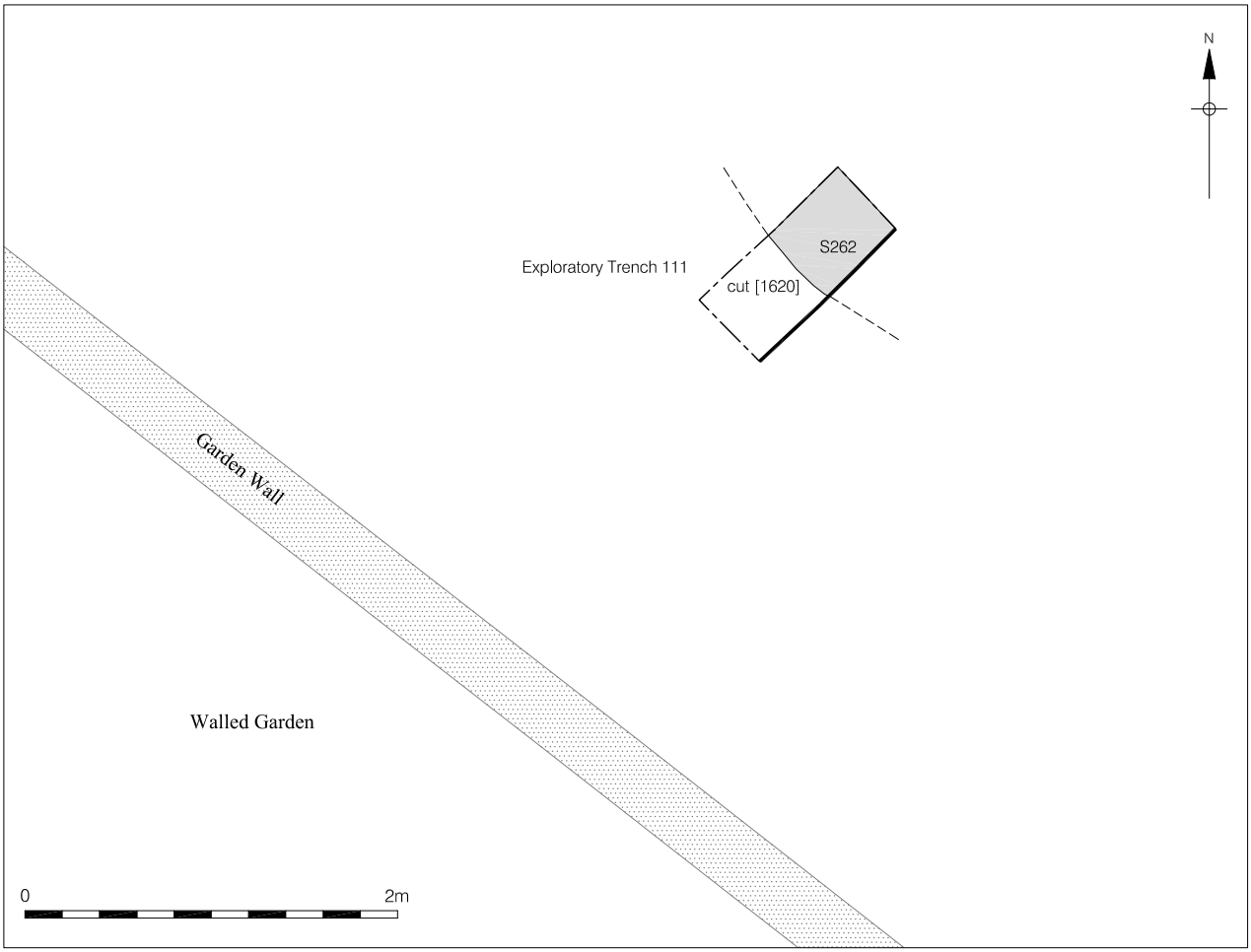


Plan of Exploratory Trench 110

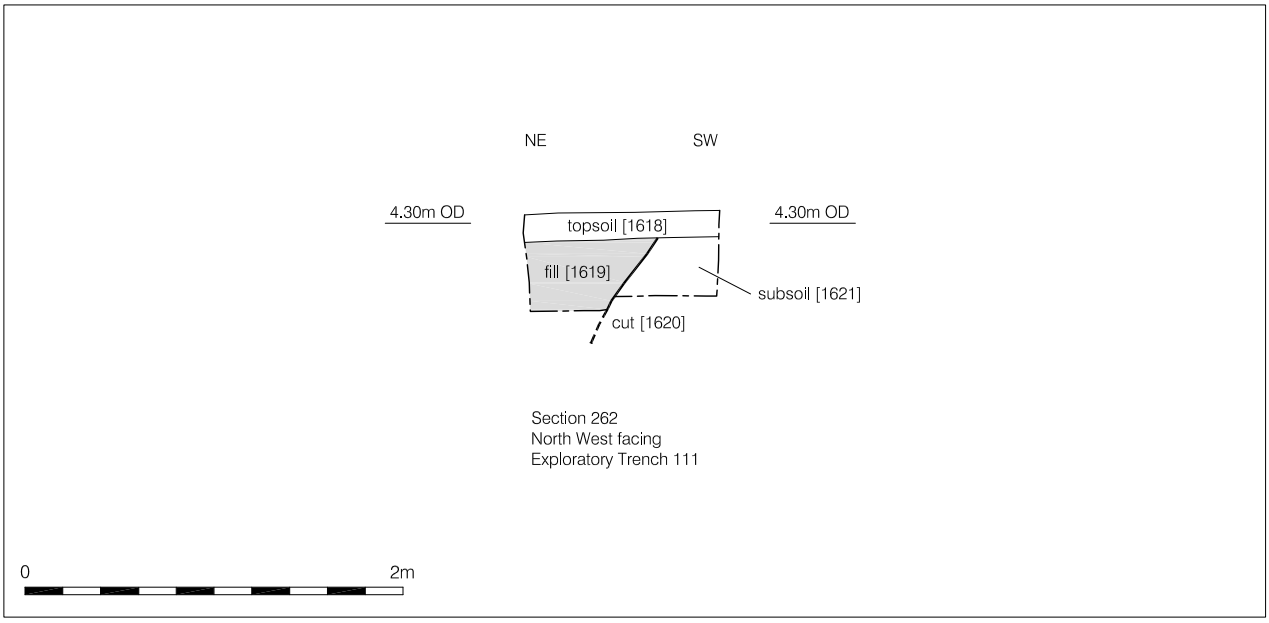


Section 264

Figure 14
Exploratory Trench 110
1:40 at A4

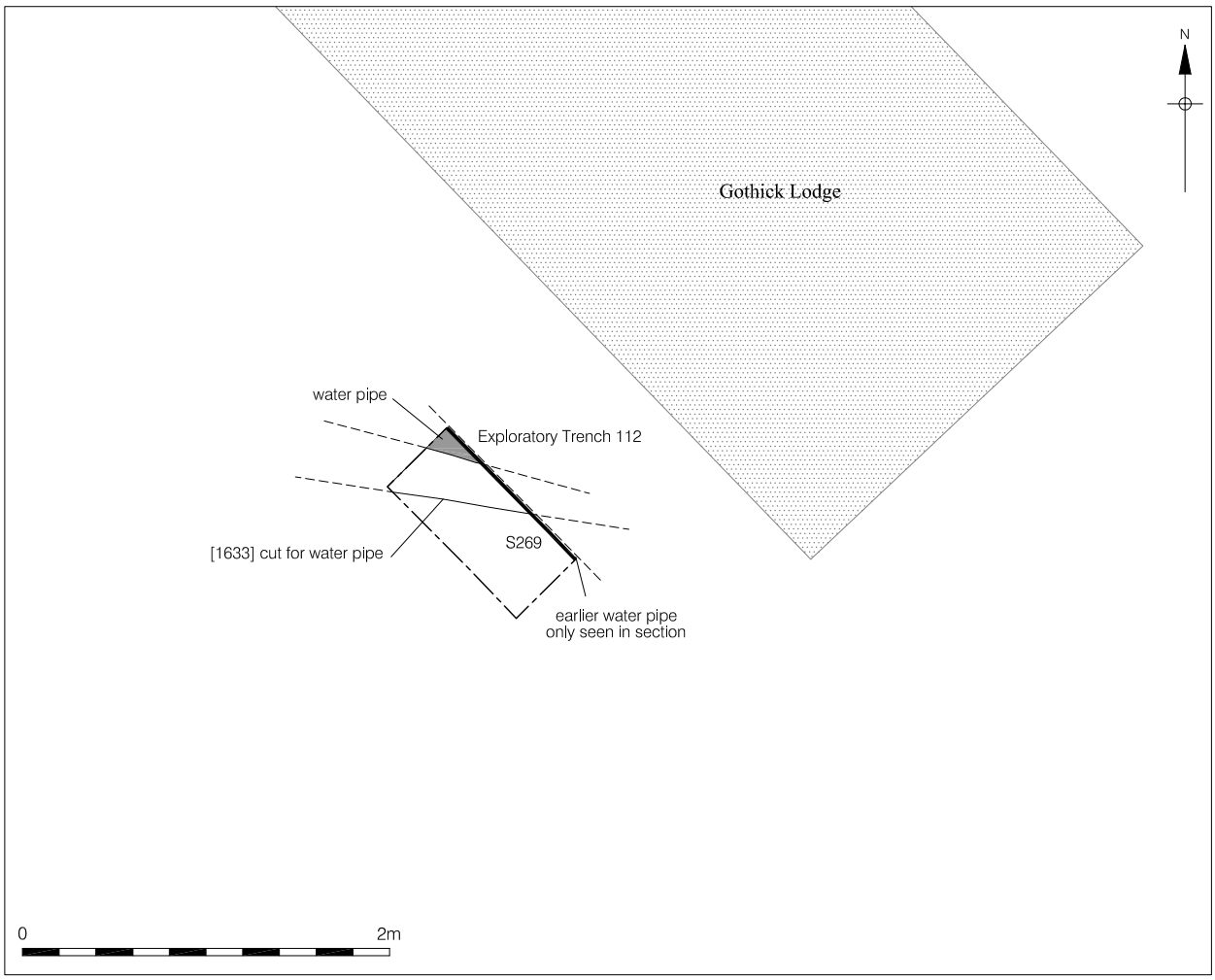


Plan of Exploratory Trench 111

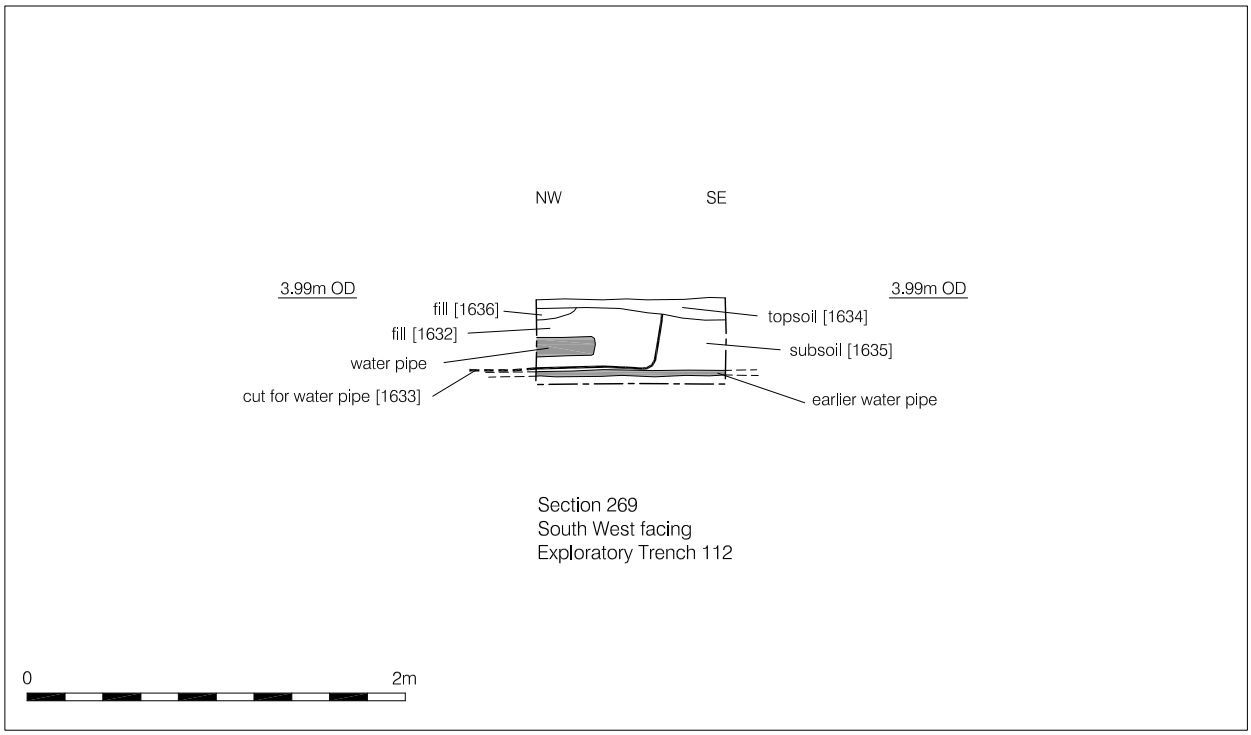


Section 262

Figure 15
Exploratory Trench 111
1:40 at A4



Plan of Exploratory Trench 112



Section 269

Figure 16
Exploratory Trench 112
1:40 at A4

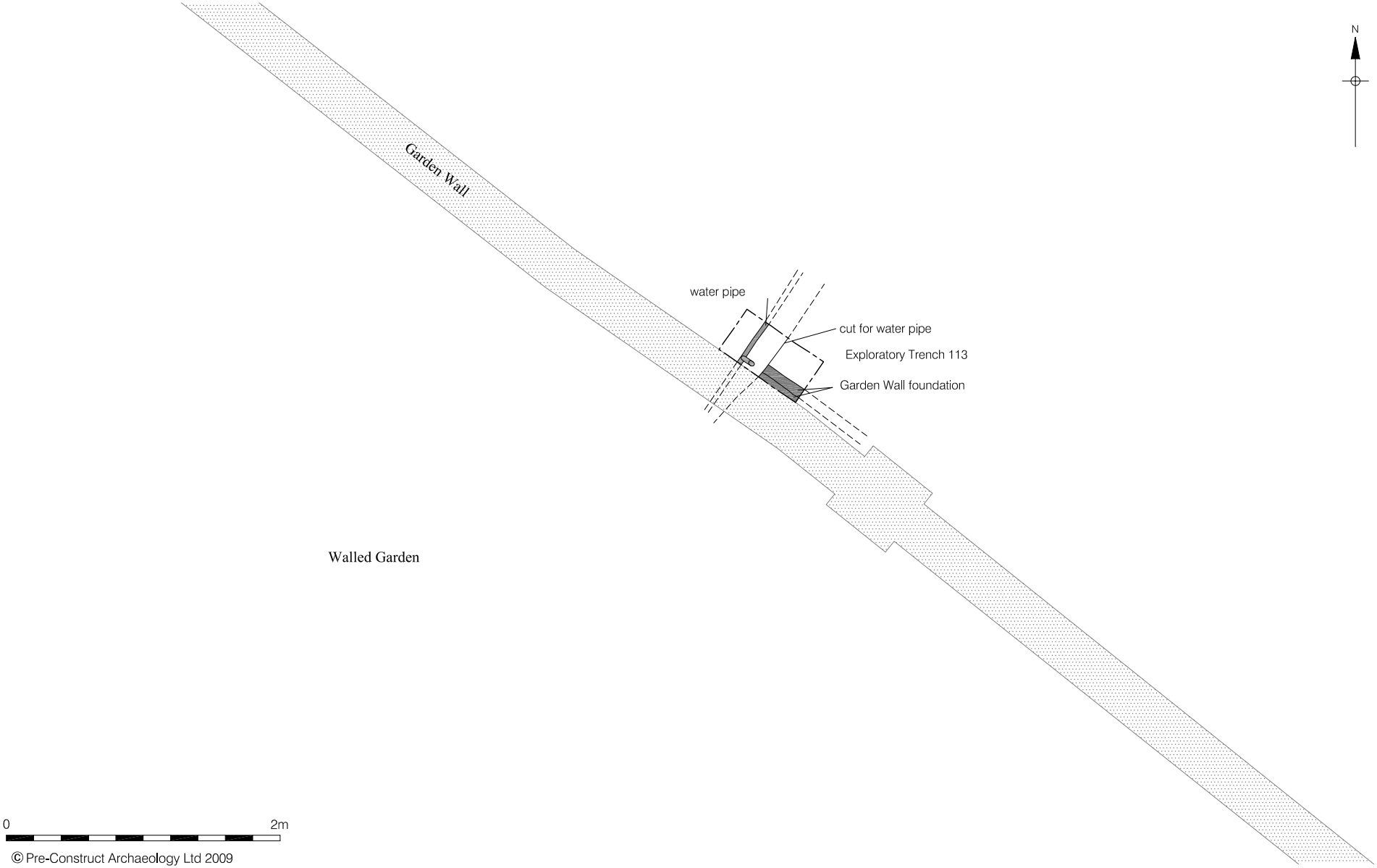
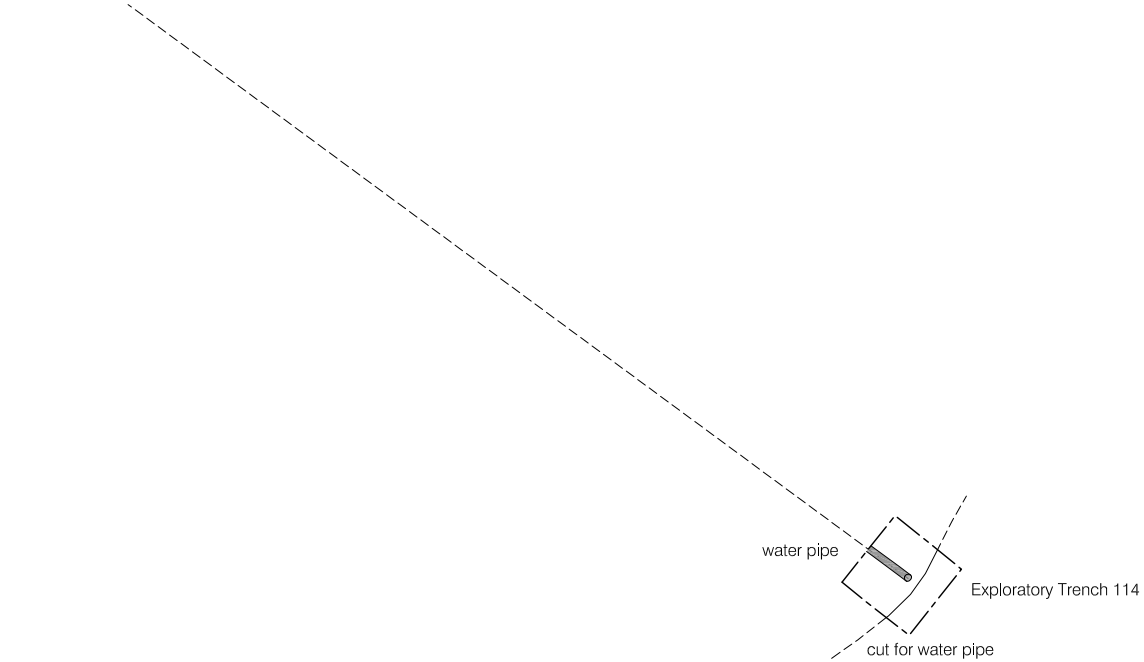
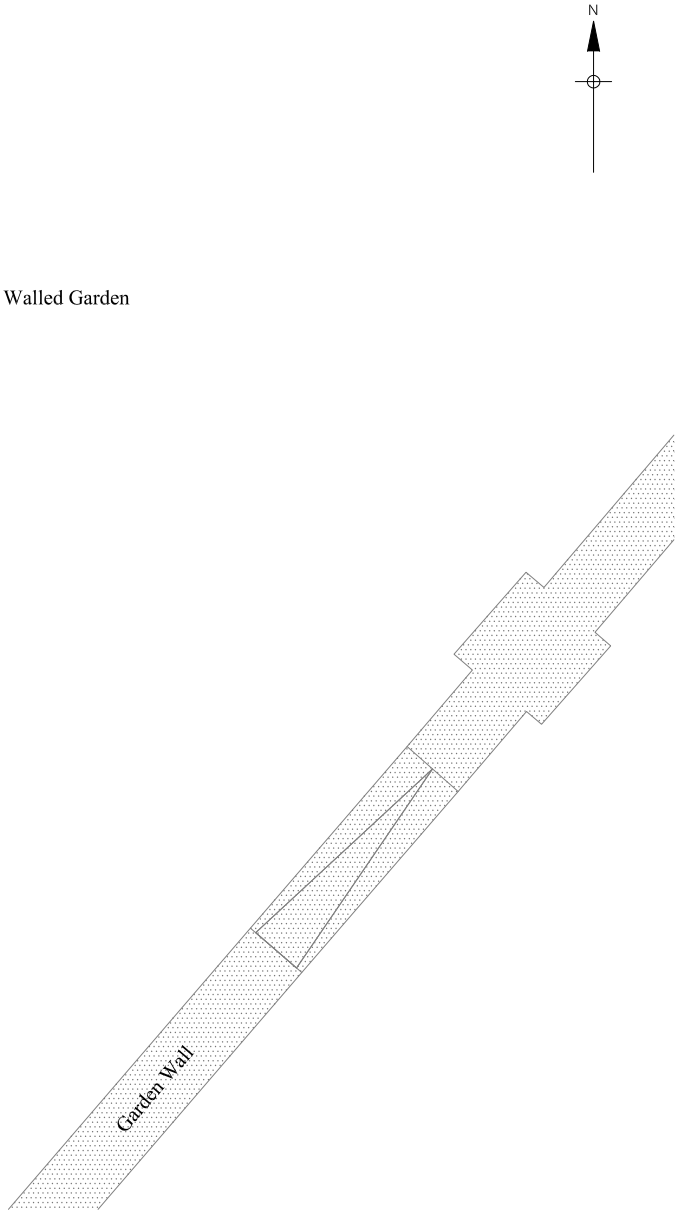


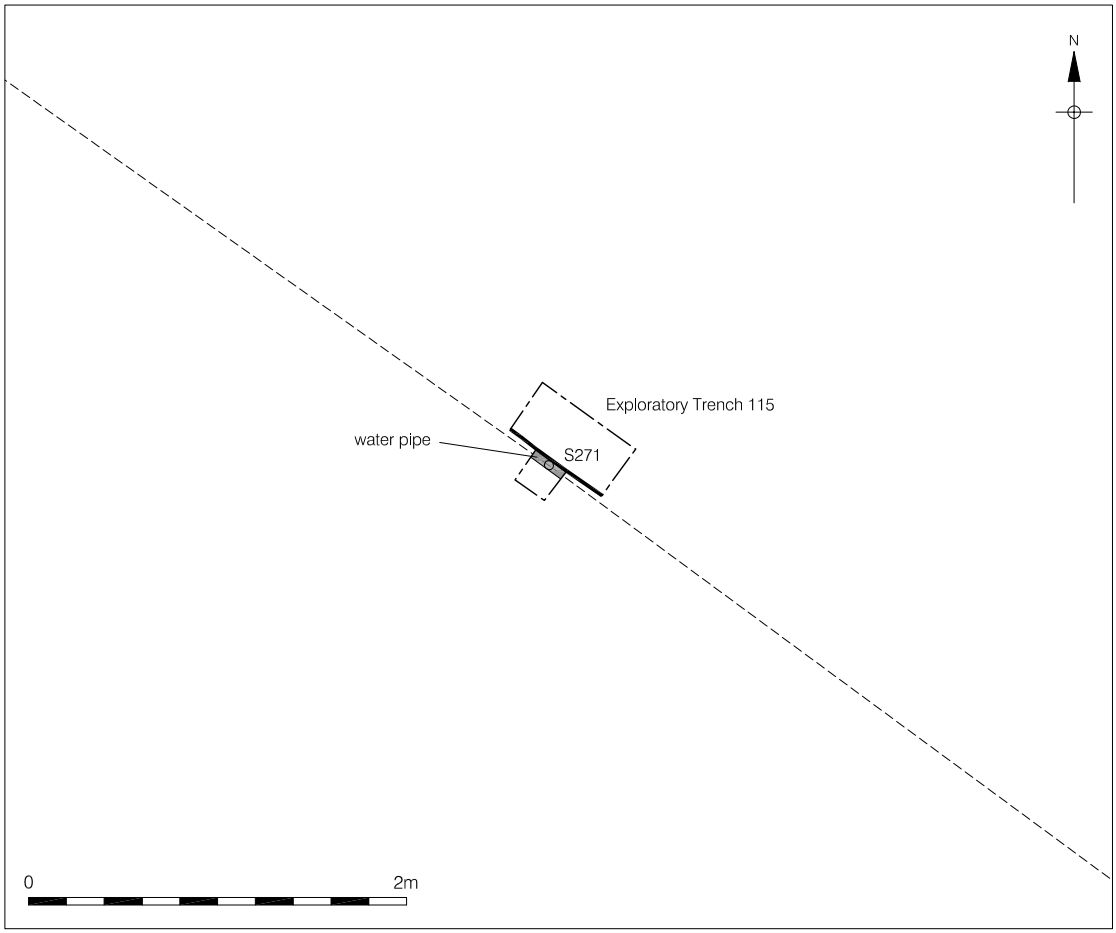
Figure 17
Exploratory Trench 113
1:40 at A4



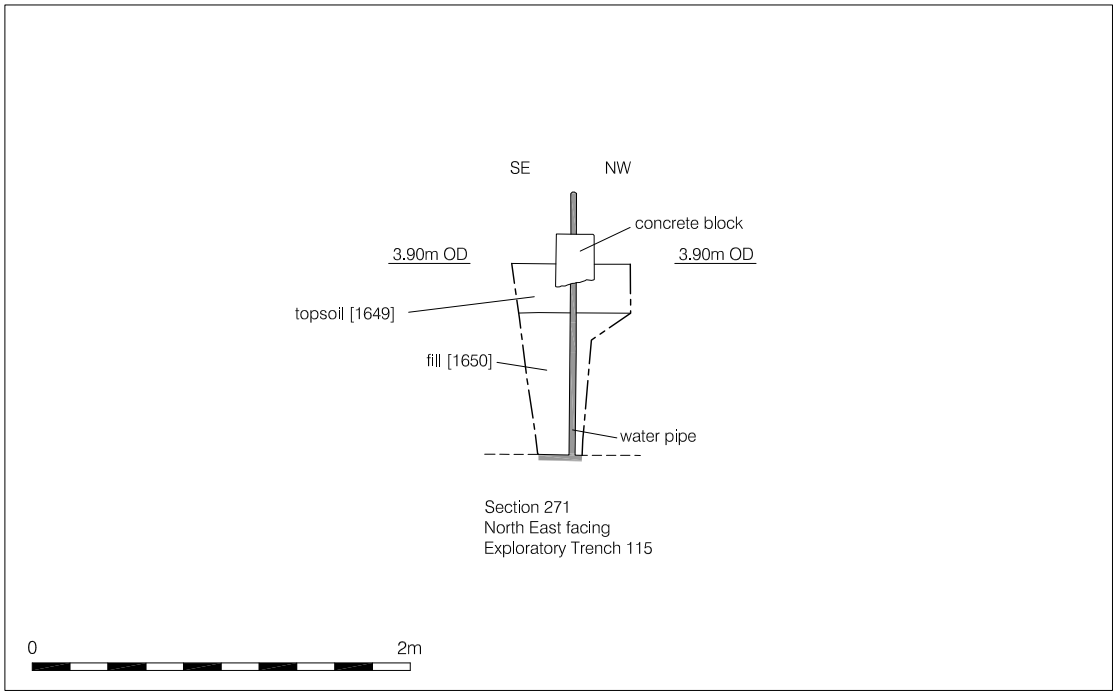


0 2m

Figure 18
Exploratory Trench 114
1:40 at A4

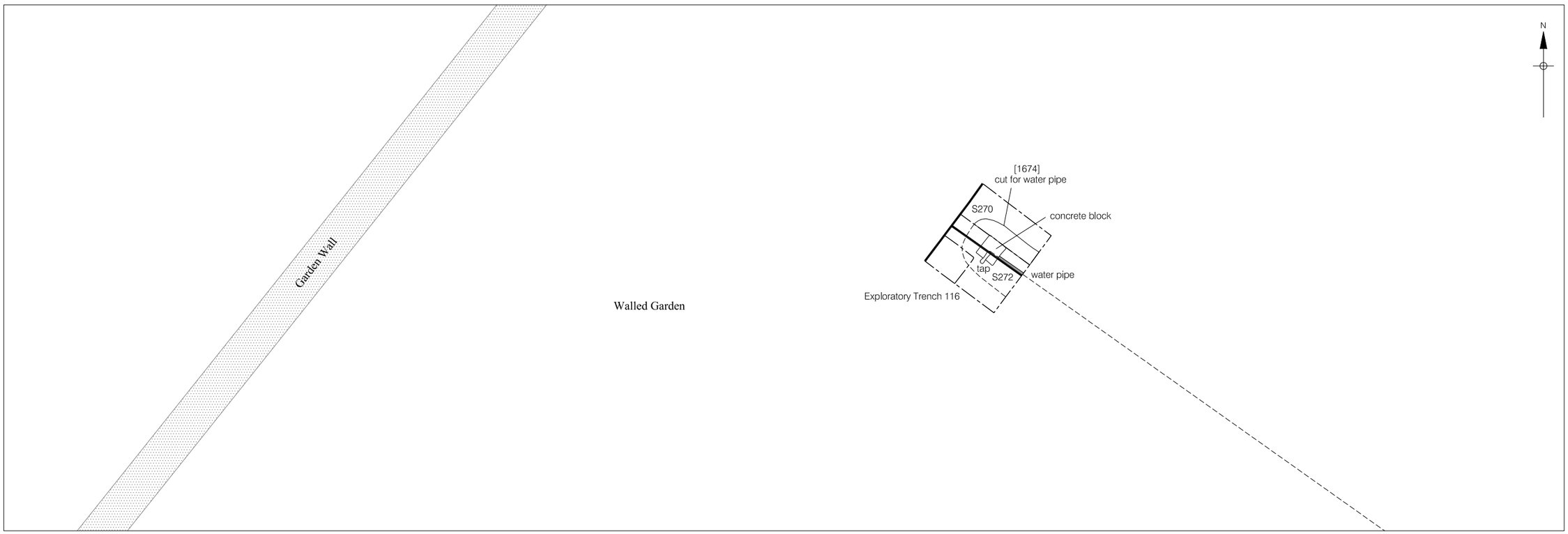


Plan of Exploratory Trench 115

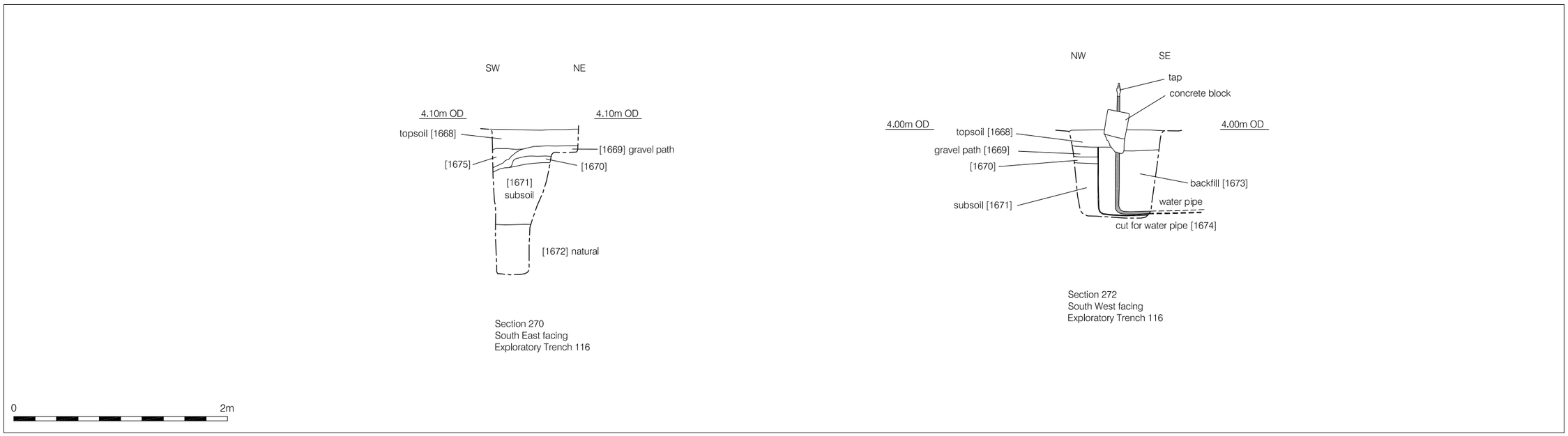


Section 271

Figure 19
Exploratory Trench 115
1:40 at A4



Plan of Exploratory Trench 116



Section 270
South East facing
Exploratory Trench 116

Section 272
South West facing
Exploratory Trench 116

Sections 270 & 272

Figure 20
Exploratory Trench 116
1:40 at A3