

Research Department Report 4/2006

Chiswick House Facilities Development Project
Project 4584
Archaeological Evaluation Assessment Report

Dave Fellows

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Summary

As part of the Chiswick House and Grounds Regeneration Project, English Heritage's Archaeological Projects Team was approached to undertake an archaeological evaluation at Chiswick House in the London Borough of Hounslow. The evaluation was carried out between June 20th and July 1st 2005, and seven trenches were excavated. The trench locations were chosen to maximise the potential for archaeological discovery whilst minimising the level of disturbance to the site as a whole.

The results of the excavations exceeded expectations with a wealth of archaeological evidence surviving in each of the trenches investigated. Evidence was recorded for several of the buildings that formerly stood on the site, as well as important and intriguing evidence for the earlier garden design and layout. In some instances this corroborated the pictorial evidence from the historic estate views, whereas in others it has added to our previously-held understanding.

Keywords

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Chiswick House Facilities Development Project, Project Number 4584

Executive Summary

As part of the Chiswick House and Grounds Regeneration Project, English Heritage's Archaeological Projects Team was approached to undertake an archaeological evaluation at Chiswick House in the London Borough of Hounslow. The evaluation was carried out between June 20th and July 1st 2005, and seven trenches were excavated. The trench locations were chosen to maximise the potential for archaeological discovery whilst minimising the level of disturbance to the site as a whole.

The results of the excavations exceeded expectations with a wealth of archaeological evidence surviving in each of the trenches investigated. Evidence was recorded for several of the buildings that formerly stood on the site, as well as important and intriguing evidence for the earlier garden design and layout. In some instances this corroborated the pictorial evidence from the historic estate views, whereas in others it has added to our previously-held understanding.

The trenches positioned to investigate the remains of the Jacobean House were unfortunately the least successful in locating hard structural evidence, but they did reveal other archaeological features of great interest. A sequence of three gravel-rich-filled linear cuts parallel and to the south of the house front may relate to the construction or the drainage of the original building, with a raft of brickwork at the western end of the northernmost cut possibly forming part of the building's footings.

Several of the walls of the late 17th-century 'L'-shaped Stable Block were seen and recorded, as well as further walls from buildings added to the northern end of the original eastern range. Walls from several phases of structures linking the western end of the Stable Block with the buildings to the west (formerly to the Jacobean House, latterly to the 18th-century wing of Chiswick Villa) were recorded, with the walls surviving within 0.15m of the surrounding ground surface.

The early summer's dry weather had created parch marks on the grass lawns over some of the shallowly-buried walls, and at the eastern side of the area under investigation the wall lines of the 17th-century Stable Block of Moreton Hall, the next villa along from Chiswick, were traced and recorded. One of the wall corners was excavated to show the surviving level and condition of these walls.

The excavations across the garden deposits to the north of the Stable Block revealed what are arguably the most exciting and important remains seen during these small-scale evaluation trenches – evidence for the early garden designs. It was possible to identify two phases of inter-cutting garden bedding, with traces of the linear beds showing the extent of survival of the early formal garden layout. These were most probably the remains of the Knot Garden that can be seen in this area in the historic views of the site, and an important piece of dating evidence was retrieved from one of the Knot Garden bed deposits – an early 17th-century Nuremberg jeton.

An alignment of mortar and rubble footings seen in the same trench may have been the foundations of the aviary building constructed in Lady Burlington's garden and depicted on John Rocque's 1736 survey of Lord Burlington's Estate, and if so this is very significant as it is one of only a handful of investigations ever undertaken on this hitherto little-studied archaeological element of 18th-century pleasure garden design.

1 Background

1.1 Historical Background

Chiswick House is located in the London Borough of Hounslow, overlooking the River Thames NGR TQ21017752 (*see figure 1 – Location Map*). The house is set in extensive landscaped grounds, with well preserved garden and landscape features dating from four distinct 18th- and 19th-century phases. The gardens are Grade I listed on the Historic Gardens Register (GD1005).

The present house was built in the late 1720s by Richard Boyle, 3rd Earl of Burlington, and was constructed in the Palladian style. It was built adjacent to and to the west of an earlier ‘H’ plan Jacobean House, and was eventually linked to it. To the north-east of the Jacobean House there was a large L-shaped Stable Block, constructed in the 1680s, and possibly designed by the architect Hugh May.

In 1725 a fire destroyed the western wing of the Jacobean House, and this was rebuilt by Lord Burlington. In 1732 he added a two-storeyed link building between the Jacobean House and the Palladian Villa.

Following Lord Burlington’s death in 1753, the Chiswick Estate passed to Lord Hartington, the Fourth Duke of Devonshire, and it was the Fifth Duke of Devonshire who in 1788 demolished the Jacobean House and added wings to the Palladian Villa. The Stable Block was demolished in the 1930s, and the late 18th-century wings were removed in the 1950s.

The landscaped grounds of Chiswick House are owned by, and are in the care of, the London Borough of Hounslow, with Chiswick House itself in Guardianship and cared for by English Heritage. It is a Grade I listed building (LB ref 145054), and the area beneath and immediately to the north-east of the house (including the demolished Stable Block) is a Scheduled Ancient Monument (SAM No 85).

1.2 Topographical Background – Geology

Chiswick House and Grounds are located at the northern side of the land within a looping meander of the River Thames, 6 miles (10km) to the west of Central London (Westminster). The underlying geology is a mixture of river floodplain gravels to the south and glacial brick earths to the north (OS Geological Map 270).

1.3 Previous archaeological work

For the purpose of this report, the orientation of the buildings has been simplified to align with the cardinal axes. The true orientation of the long axis of the buildings is NE-SW, but to avoid complication and to maintain consistency with earlier reported works in the vicinity of the Villa at Chiswick, this has been taken to be E-W. All descriptive orientations are relative to these simplified axes.

There have been a large number of archaeological excavations, geophysical surveys and building surveys carried out at Chiswick, both on the House and in the Grounds. In preparation for the archaeological evaluation, a variety of sources were consulted to establish the expected level and condition of survival of the archaeological deposits. These included a search of the Greater London Sites and Monuments

Records; a search of the records and reports held by Juliet West, the Head of Property Management for Historic Properties and Inspector responsible for Chiswick House; a search of the Museum of London's on-line site database; a search of the archives and records held in temporary storage at English Heritage's offices at Fort Cumberland in Portsmouth; and a search of the Archaeological Data Services database.

Of the works previously undertaken on site, the most relevant to the current evaluation (and to future planning proposals) is the 1983 excavation carried out by the West London Archaeology Field Group, Department of Greater London Archaeology West London Unit, in the position of the temporary toilet block directly to the east of Chiswick House (to the south of the Summer Parlour) (DGLAW site code: CH82/83). The following summarises their findings.

This excavation measured 15m x 7m and encountered an extremely interesting and complex sequence of archaeological deposits (assigned to eight phases) relating to the structures at the northern end of the Jacobean House. A very short section of what was thought to be the northern wall of the Jacobean House was revealed, as were the later structural additions to the north. These included the walls of the buildings surrounding the open courtyard (with a curved or apsidal wall at the western side), and a circular brick well. The finds and dating evidence retrieved from the construction trenches of these indicated a late 17th- to early 18th-century date (possibly as late as 1730). It therefore seems likely that this northern addition to the Jacobean House was associated with the alterations and rebuilding work following the fire in 1725 and with the construction of the Link Building to the Villa in 1732.

Later features excavated include the curved walls of the corridor joining the Stable Block to the eastern wing added to Chiswick Villa in the late 1780s.

Features identified from earlier phases of work included a gravel surface that pre-dated the construction of the buildings to the north of the Jacobean House and that was dated to the late 17th century. Pre-dating this were several sub-phases of activity represented by a series of linear gullies and shallow 'scoops' (oval, circular and rectangular in plan) that appear to be the remains of the early garden features, possibly associated with the formal Knot Garden shown on the historic views.

Other archaeological projects were listed and summarised in the Project Design (Fellows, 2005 (1)).

Evidence from the earlier archaeological works strongly suggested that the archaeological potential of the area under investigation was very high. It was expected that well-preserved archaeological remains would be encountered during the evaluation, surviving at a very shallow depth, and this proved to be the case. The evaluation trench locations are shown on **Figure 2**.

In addition to the archaeological reports, a great deal of historical survey information exists for Chiswick House and Grounds, published in a variety of publications (see bibliography below), and reference to these was invaluable in establishing the locations of the evaluation trenches.

1.4 Curation

Chiswick House is a property that is in Guardianship and is Grade I listed (LB Ref 145054). The area beneath and immediately to the north-east of the house (including the demolished Stable Block) is a Scheduled Ancient Monument (SAM 85). The gardens are Grade I listed on the Historic Gardens Register (GD1005), and are owned and curated by the London Borough of Hounslow.

2 Evaluation Aims and Objectives

The aims of this project sit fully within the following of English Heritage's primary goals as set down in Exploring Our Past 1998 (English Heritage Archaeology Division, 1998):

Primary Goal A Advancing the understanding of England's Archaeology

Primary Goal B Securing the conservation of England's archaeological landscapes, sites and collections

Primary Goal D Promoting public appreciation and enjoyment of archaeology

2.1 Aims

The primary aim of this part of the project was to establish the level and nature of survival of the archaeological remains in the areas under consideration to the east of Chiswick House.

It was essential that a firm understanding of the archaeological deposits in this area was established to enable informed and timely advice to be made available to the Chiswick House and Grounds Regeneration Project Team (and the newly-formed Chiswick House and Gardens Trust) via the Inspector of Ancient Monuments. It was also an unrivalled opportunity to evaluate the remains of the Jacobean House and the related and later garden deposits.

2.2 Objectives

The following objectives are taken from the Project Design (Fellows, 2005(1))

2.2.1 To evaluate the archaeological, architectural and historical evidence for the extent, layout, condition and survival of the Jacobean House. **(Trenches 1 and 6)**

2.2.2 To determine where possible, through limited archaeological excavation and recording, the development of the Jacobean House with its later modifications, including the fire-damaged western wing and rebuilt pedimented central entranceway. This will include a trench excavated through the deposits towards the northern side of the original structure to establish the form and survival of the later additions. **(Trenches 1 and 6)**

2.2.3 To determine if possible, through limited archaeological excavation and recording, the likely survival of internal and external surfaces associated with the Jacobean House. **(Trenches 1 and 6)**

2.2.4 To evaluate the archaeological, architectural and historical evidence for the extent and layout of the 17th-century Stable Block to the east of the Jacobean House (*see Figure 3*, a view of Chiswick House in the 1730s by Jacques Rigaud, with the

newly-built Villa, Jacobean House and Stable Block to the east). This will include an evaluation trench to establish the nature and survival of the deposits forming the formal yard surface in front (to the south) of the Stable Block. **(Trenches 2, 4 and 5)**

2.2.5 To evaluate the survival, condition and extent of the archaeological deposits relating to the garden designs and features associated with the Jacobean House, and to the later modifications of these designs. This is of particular importance and significance to the north-east of the site of the Jacobean House where it is known that there have been a sequence of garden designs, ranging from the formal 17th-century knot gardens to the 18th-century Volerie or Aviary and Lady Burlington's Flower Garden in the 1730s. **(Trench 5)**

2.2.6 To evaluate the archaeological, architectural and historical evidence for the extent and layout of the building to the east of the Stable Block, first shown on the John Rocque survey of Chiswick in 1736 (*see Figure 4*). **(Trenches 3 and 4)**

2.2.7 To evaluate the archaeological deposits relating to the western wing of the neighbouring 17th-century Thames-side villa that stood to the east of the Jacobean Chiswick House, shown on Knyff and Kip view (dating from 1698-9 – *see Figure 5*), and shown following later modifications on the First Edition Ordnance Survey Map of 1871. **(Trench 3)**

2.2.8 To evaluate and characterise any other archaeological deposits and structures, including garden features, exposed during the excavations. **(All Trenches)**

2.2.9 To retrieve, where possible, material culture and ecofacts, which could further inform our understanding of the complex history of the buildings to the east of Chiswick House and the surrounding landscape. **(All Trenches)**

2.2.10 To provide expert advice to the Inspector of Ancient Monuments (IAM) regarding the long term management and presentation of the site.

2.2.11 To present the project's research elements (aims, techniques and results) to the public, and to report on the above.

3 Methodology

3.1 Trench Locations

To provide the necessary level of information to adequately address the research aims and objectives of the project, it was proposed that six separate evaluation trenches would be excavated. The location of a service run across the centre of Trench 2 meant this trench was divided in two – Trench 2A to the south, Trench 2B to the north.

The location plan (*figure 2 – evaluation trench location plan*) shows the locations of the evaluation trenches. The plan also shows the building and garden layout as recorded on the 1736 survey of Chiswick by John Rocque superimposed on the modern topographic survey.

As stated in the Greater London Archaeological Advisory Service's Archaeological Guidance Papers, *'In the case of archaeological evaluations the objective is to define*

remains rather than totally remove them'. Full excavation was therefore confined to those deposits that were agreed with the Inspector of Ancient Monuments responsible for Chiswick as being necessary to achieve the evaluation objectives.

3.2 Excavation Methodology

Prior to machining, the turf was stripped from the evaluation trench footprints (to varying degrees of success) with a de-turfing machine and stored on site in preparation for re-instatement. The overburden was then removed using a mechanical excavator operating under continuous archaeological supervision.

The use of the mechanical excavator was halted at the first sign of significant archaeological remains or deposits, and the trenches were then excavated by hand. The machine used a toothless bucket and removed the upper soil horizons in spits not exceeding 0.15m in depth, and the spoil removed by the mechanical excavator was examined for finds on removal.

To conform to responsible Health and Safety procedures, the site was cordoned off with restricted access, and the site boundary was secured using HERAS fencing with the relevant Health and Safety Hazard signage displayed.

Deposits were excavated stratigraphically and with the minimum level of intrusion required to achieve the evaluation objectives. Excavation was in accordance with English Heritage Archaeological Projects standards and procedures as set down in the latest version of the Centre for Archaeology Recording Manual (2004).

The character, composition and depositional sequence of the site's archaeological remains were recorded on pro-forma sheets, with a unique context number allocated to each distinct deposit, feature or structure. A drawing record was produced with each context recorded on a plan, section or elevation drawing as appropriate, and in accordance with the guidelines set down in the CfA Recording Manual (2004).

All encountered features were photographed in colour transparency and monochrome print according to the CfA Recording Manual (2004). In addition, general photographs were taken of the trenches at appropriate intervals, as well as "working" shots of the excavation in progress. A digital camera was also used to supplement the site photographic record.

Finds and samples from relevant contexts were retrieved and processed in accordance with CfA procedures (CfA 2004) and as detailed in sections 3.3 - 3.5 below.

The position of the trenches were surveyed using a Total Station Theodolite and were located within the site topographic survey grid co-ordinates.

3.3 Finds Methodology

A total finds retrieval and retention policy was adopted for all hand-excavated areas of the excavation. All finds work was carried out in line with the principles and techniques outlined in the CfA Recording Manual (CfA 2004) and under the guidance of the Project Finds Officer.

All finds were appropriately labelled and bagged and then transported to Fort Cumberland. Small or fragile items were boxed separately and clearly labelled.

As much of the initial finds processing work as possible (washing, cleaning) was undertaken on site, thanks to the materials and accommodation kindly provided by Adrian Cook of Hounslow Borough Council. Bulk finds were washed, marked, and bagged by context. The sherds from individual contexts were examined and recorded on the preliminary record form in order to give contexts a date range and a spot date. The nomenclature used for the fabrics and wares consisted of the common names in use in the area linked to National and/or Local Fabric Reference Collections where possible. Unidentified fabrics were given a brief description.

Bulk finds were quantified by context and objects and items defined as *small finds* were individually recorded. Storage was in line with the principles and techniques outlined in the CfA Recording Manual (CfA 2004).

3.4 Conservation Methodology

Initial care of finds was in line with the principles and techniques outlined in the CfA Recording Manual (CfA 2004).

3.5 Environmental Methodology

All closely dated, or datable, well-sealed deposits were sampled in order to assess the character of the environmental remains present at the site.

A standard flotation (bulk) sample of forty litres was taken from suitable deposits following the procedures laid out in CfA Recording Manual (CfA 2004) and under the guidance of the CfA Environmental Officer.

Samples were transported to Fort Cumberland for processing by the Finds/Environmental assistant following the procedures laid out in the CfA Recording Manual (2004) and under the guidance of the Project Environmental Officer.

3.6 Archives

On site the archive was stored in a secure and clean environment, and staff were instructed in the code of good practice for the creation and maintenance of excavation archives employed by English Heritage's Archaeological Projects. Upon completion, the site archive will be accessioned by the Archaeological Archives team, and will remain unaltered – all subsequent amendments and additions will be made to the digital version of the project archive. The project archive will be curated by Archaeological Archives in accordance with the appropriate standards defined by English Heritage, the Institute of Field Archaeologists, the MLA (formally the Museums & Galleries Commission), and the United Kingdom Institute of Conservation.

The site archive (paper, drawn, photographic and digital) was prepared in accordance with MAP 2 Guidelines (EH, 1992). It was checked and cross-referenced, and relevant indices, catalogues and matrices constructed. The primary site archive was copied on to the appropriate digital format to provide a security copy which will form the basis of any future research archive. Site records have been

entered into an Archaeological Projects database and the site drawings have been scanned.

The colour transparencies have been scanned onto CD Rom in uncompressed TIFF format at 24 colour bit, 2048 lines x 3072 pixels.

All digital data which forms part of the site archive will be created and managed in accordance with the CfA Digital Archiving Strategy (Section 2: Pre-Preservation Management). All digital data commissioned from external consultants will be subject to an appropriate specification covering documentation, file formats, and data standards.

Upon completion, the project archive will be deposited with English Heritage Curatorial Team (South Territory), which is registered with the MLA.

During the course of the background research for this project it became apparent that there are major concerns regarding the curation and storage of archives from previous archaeological works undertaken at Chiswick. Many of the interventions have not been catalogued or had entries lodged with the Greater London SMR, and most have not had their records archived, and therefore previous work is undocumented and information is dispersed.

A list of the 25 separate pieces of work within the grounds of Chiswick House that were consulted in preparation for the forthcoming evaluation was appended to the Project Design (Fellows 2005 (1)). Of these only three came up on the SMR search of sites within 750m of the house, an oversight that will require rectifying. The more pressing and important task to be completed is the archiving of the records produced by these projects, something that is unfortunately beyond the remit of the current project. Currently the files and boxes of records, along with cases of colour transparencies, are being stored by Juliet West, the Head of Property Management for Historic Properties, London, in Room 130, Savile Row.

3.7 Outreach

The location of Chiswick House in West London meant the project had the potential to reach a huge local audience. The site is of a high profile and the House and Grounds have many visitors, mainly using the grounds for recreational activities.

Prior to the fieldwork commencing, posters explaining the background to the project and detailing the aims of the evaluation were produced. These were displayed on site both before and for the duration of the evaluation works. Posters were fixed to the fencing adjacent to each trench, and were also displayed in the café and in the entrance to the Villa.

Each day a guided tour of the site was given for members of the public, and additional tours were given to the Friends of Chiswick House, The Chiswick Horticultural Society, and to a party of local schoolchildren.

Catherine Bloodworth of English Heritage, the Outreach Officer responsible for Chiswick, organised the Chiswick House & Grounds Community Festival over the weekend of 24th and 25th September 2005. Further posters detailing the initial archaeological findings of the evaluation were produced for this and were displayed in the information tent.

4 Resources

4.1 Site Work

The work on site consisted of two weeks of excavation, between 20th June and 1st of July 2005, with at least 10 staff members (plus volunteers) on site at all times.

4.2 Post Excavation Work

The completion of the site archive - digitising of planned information, completion of the Harris matrices, cleaning of drawings, sorting of finds, processing and sorting of samples has now been completed.

A summary report of the initial findings of the excavation was compiled (Fellows 2005 (2)) and was circulated to all the Project Team members on the 29th of July 2005.

5 Phasing Summary

The following summarises the phases identified during the evaluation works on site and details the main site activities occurring in each phase.

Phase 1 Construction of Jacobean House and associated garden and boundary features (c1610)

Phase 1 date range **1600-1680**

Phase 2 Construction of the Stable Block and the connecting structure between the Jacobean House and Stable Block (c1682); Modification of the Knot Garden

Phase 2 date range **1680-1700**

Phase 3 Construction of Lord Burlington's (Richard Boyle's) Chiswick Villa (late 1720s); Modification of the connecting structure between the Stable Block and the Jacobean House; Repair to the western wing of the Jacobean House following the fire (1725); Design and landscaping of gardens\grounds including the construction of Lady Burlington's Flower Garden and Aviary Garden (1730s)

Phase 3 date range **1700-1780**

Phase 4 Demolition of the Jacobean House by the 5th Duke of Devonshire and the construction of the new wings on the Villa (1788); Construction of the curved connecting corridor between the Stable Block and the eastern wing of the Villa (late 1780s)

Phase 4 date range **1780-1810**.

Phase 5 Purchase and demolition of Moreton Hall to allow eastwards expansion of landscaped grounds (1812). Further garden design modification, including the flower beds in honour of Edward VII's children (the Royal Flower Beds).

Phase 5 date range **1810-1920**

Phase 6 Demolition of the Stable Block (1930s) and late 18th-century wings of the Villa (1950s); continued modification of the parkland and flower beds.

Phase 6 date range **1920-present**.

6 Excavation Results

The following section summarises the results of each of the evaluation trenches in turn. The numbers referred to in the text are the unique context numbers that were assigned on site to each of the archaeological features encountered. A table listing the categories of all the contexts used, as well as their respective phase and dating information, is produced at the end of this report (*see Appendix 5*). Also included in the report are the Harris matrices produced for each of the trenches. These show the stratigraphic relationships between the contexts and show how the individual areas of the site developed.

A plan of each of the evaluation trenches (except Trench 6) is included in the report, and these show the location of the recorded archaeological features. An illustration showing the archaeological information super-imposed on the first edition Ordnance Survey of Chiswick (from 1871) is shown on *Figure 6*.

The archaeological results for each trench are set out in summary form, and for the more archaeologically complex trenches (Trenches 2A, 2B, 4 and 5), a further section breaking down the results by Phase has been included.

6.1 Trench 1

Trench 1 measured 12.4 x 1.8m and was located immediately to the south of the southern elevation of the Jacobean House. The excavations in this area revealed three parallel, vertical-sided, flat-bottomed, linear cuts (contexts 152, 154 and 156) through the natural gravels (context 159) (*see Figure 7 and Plate 1*). The central cut (context 156) was 0.80m wide, and each of the cuts was filled with a gravel-rich, orange-brown, silty clay loam. At the base of the western end of the northern cut was a 0.15m thick raft of unmortared brick rubble (context 157). The archaeological remains were encountered between 0.5 and 0.6m below the ground surface at a height of 6.20m AOD.

One of the aims of the evaluation was to attempt to establish the nature and level of survival of the remains of the Jacobean House, including any evidence for the fire-damaged western wing and rebuilt pedimented central entranceway. Unfortunately this trench was sited to the south of the building, and so little evidence was seen. It is possible that the northernmost linear cut recorded (context 152) was the construction cut for the south wall of the building (Phase 1), with the brickwork at the western end (context 157) being part of the building's foundations. All three linear cuts were cut from the same level and appeared to be contemporary, although the function of the two southern cuts is difficult to ascertain. One possible suggestion is that the cuts formed part of a drainage arrangement in front of the building. It is also possible that these trenches are from a later phase of works (the finds they contained contained little that was able to be dated – a single sherd in 153 has been dated to the 17thc+).

Later deposits recorded in the trench include a 0.26m deep deposit of bricks and mortar seen in the north-western corner of the trench (context 158). This is thought to be a deposit of demolition debris, possibly of 18th-century date following the demolition of the Jacobean House.

The whole area had been landscaped and levelled with a mid-brown deposit that varied in thickness between 0.20 and 0.30m, and above this was a 0.18m thick layer of topsoil (context 149).

See Figure 8 for the stratigraphic matrix for Trench 1

6.2 Trench 2

The original proposal for Trench 2 was the excavation of a 20m x 4m trench to the east of the Jacobean building and in front of the late 17th-century Stable Block. The location of a service run across the centre of the planned location meant this trench was divided in two – Trench 2A to the south, Trench 2B to the north.

6.2.1 Trench 2A

This trench measured 10m x 4m and was positioned to evaluate the deposits associated with the construction and use of the Stable Yard, and also the central oval-shaped 'island' around which the carriages would have turned. It was a very successful evaluation, locating a c0.20m thick layer of gravel from the carriageway surface at a height of 6.50mAOD, 0.34m beneath the surrounding ground surface. Also seen were several in-situ bricks forming the edging to the central island, and cutting through the gravel surface at the southern end of the trench was a linear cut for the insertion of an 18th-century brick drainage culvert (**see Figure 9**).

6.2.1.1 Phase 1 - 1600-1680

Several features were recorded that appeared to pre-date the construction of the Stable Block and yard. These included a series of three postholes (contexts 161, 164 and 165) recorded in the base of the trench cutting through the natural soil horizon, context 168.

There was also a decayed mortar surface (context 135 and 427) that may relate to an earlier structure, or may be from the construction works of the Stable Block building itself.

6.2.1.2 Phase 2 – 1680-1700

Associated with the construction of the Stable Block building was the laying out of the stable yard and carriage turning area to the south, between the Stable Block and the estate's boundary wall alongside Burlington Lane. The gateway was positioned in line with the eastern wing of the Stable Block and was set back from the road in an elegantly curved wall recess. This can be seen on the late 17th-century Kip and Knyff view of the estate (**see Figure 5**). This view also shows the arrangement of the space in front of the Stable Block building, with the large central turning 'island' with gravel carriageway. At regularly spaced intervals around the edge of the island were a series of bollards, and the island appears to be raised slightly above the surrounding surface (**see Plate 2**).

Following the removal of the topsoil in this trench a c0.20m thick layer of gravel from the carriageway surface was recorded (contexts 126, 420 and 427). This substantial gravel layer consisted of a number of distinct layers of slightly different gravels, and it is thought that these were the result of the periodic refreshing of the gravel surface whilst in use. The upper surface of the gravel was at a depth of 0.34m beneath the

surrounding ground level at a height of 6.50mAOD, (*see Plate 3*). Further deposits of gravel were recorded at the northern end of the trench, with contexts 408 and 411–414 used to describe the various refreshing episodes. As the driveway was in use until the Stable Block was demolished in the 1930s, the dating of these deposits is difficult to establish with any degree of certainty, and so may date from Phase 2 to Phase 6.

In the eastern side of the evaluation trench the deposits that formed the central carriageway island were recorded. This layer (context 125) consisted of re-deposited brick earth bounded by a brick kerb line or edging (several in-situ bricks were exposed during the excavation - context 127).

6.2.1.3 Phase 3 – 1700-1780

Cutting through the gravel surface at the southern end of the trench was a linear cut (context 131) for the insertion of an 18th-century arched brick drainage culvert (context 430) (*see Plate 4*). This culvert falls from east to west and may have connected and drained into the large brick culvert (context 222) recorded in Trench 2B to the north.

6.2.1.4 Phase 4 – 1780-1810

At the south-eastern corner of the trench a layer consisting of demolition rubble material was revealed (context 124). It is not certain where this material derived from, but it may have been from the demolition of the Jacobean House immediately to the west in the late 18th century.

6.2.1.5 Phase 5 – 1810-1920

No contexts attributable to Phase 5 were encountered in this trench, although the gravel carriageway would have been re-surfaced during this time.

6.2.1.6 Phase 6 – 1920-2005

At the northern end of the trench a rounded pit cut was recorded (context 409) and this is thought to be a tree-planting pit from the later landscaping works in this area following the demolition of the Stable Block.

See Figure 10 for the stratigraphic matrix for Trench 2A

6.2.2 Trench 2B

This trench measured 4m x 4m, and the archaeological features revealed are shown on **Figure 11**. The location was chosen to allow the assessment of the western end of the Stable Block and the various communication\connecting buildings constructed between it and the buildings to the west – initially to the Jacobean House, latterly to the late 18th-century eastern wing of the villa.

The archaeology in this area was surprisingly complex and survived at a very high level - only 0.15m beneath the surrounding ground surface (at a height of 6.42mAOD). The fills of two later service trenches cutting across the trench were removed (*see Plate 5*) revealing a wealth of evidence for structural remains. The heavily truncated western wall of the Stable Block was recorded, as was one of the

east-west walls of the building connecting the Stable Block to the Jacobean House (*see Plate 6*). A door threshold was also seen. A large north-south aligned brick culvert cut through and truncated the earlier archaeology on the eastern side of the trench, and on the western side the remains of the curved brick wall of the connecting building between the Stable Block and the eastern wing of the villa were uncovered (*see Plate 7*)

6.2.2.1 Phase 1 – 1600-1680

No contexts attributable to Phase 1 were encountered in this trench

6.2.2.2 Phase 2 – 1680-1700

The earliest feature recorded in this trench was the brickwork of a north-south aligned wall (context 232) that survived along the extreme eastern edge of this evaluation trench, and it is thought that this wall formed the western wall of the southern range of the Stable Block. This wall is constructed of red bricks laid with a light grey lime mortar, although not enough was exposed to determine the bonding pattern.

Two sections of brickwork at right angles to and to the west of the western Stable Block wall were recorded (wall 212). The surviving length of this east-west aligned brick wall measured 1.02m, and had been truncated to the west by the construction cut (223) for the late 18th-century curved corridor wall, and to the east by the later service trench cut 113. The wall would have formed the southern wall of the early connecting building between the Stable Block and the 'Old' (Jacobean) Chiswick House.

Less than 0.5m to the north of this wall, on the other side of the service trench cut, a further section of brickwork and limestone survived (context 230). The brickwork appeared to form the base of a brick jamb for a door opening, with the limestone threshold step to the west partially exposed.

It is possible that this door opening was associated with the first passageway built between the Stable Block and the Jacobean House. The historic views suggest that the passageway was initially very narrow (*see Figure 5* Kip and Knyff, 1698), but had been widened by the time of the 1736 Rocque estate survey (*see Figure 4*). It therefore seems possible that the wall associated with door jamb brickwork 230 formed the original southern wall of the connecting passageway (dating from the 1680s), whereas the brickwork to the south (212) formed the southern wall following the early 18th-century modification, and may therefore be from the Phase 3 works.

6.2.2.3 Phase 3 – 1700-1780

Cutting through the deposits on the eastern side of the evaluation trench was a 1.3m wide north-south aligned cut for a large arched brick drainage culvert (cut 220, culvert 222). Backfilling the construction trench was a mixed mid-brown silty deposit, and the construction of the culvert was seen to post-date the late 17th-century construction of the western wall of the Stable Block, wall 232.

6.2.2.4 Phase 4 – 1780-1810

The brick culvert had been heavily disturbed and repaired along its length. Several distinct repairs or modifications were seen and recorded, with at least three separate cuts into the brick arch of the culvert (cuts 225 and 233, repairs 226, 227, 228 and 229). These had been filled or repaired using re-used limestone slabs creating what have been interpreted to be inspection or access hatches.

Also assigned to this phase of works is a 1m length of a north-south aligned vertical-sided cut through the southern wall of the connecting passage. Beneath the fill of this (context 217) was a void within which an east-west running lead water pipe was seen (*see Plate 8*).

At the western side of the evaluation trench was a gently curving brick wall (213) (*see plate 7*). This wall was cut through by the later service cut, and in the sides of the service trench the brick footings to the wall could be seen. The curved wall survived for a height of two courses, beneath which were at least three further courses forming the foundations to the wall, with the foundations offset a distance of c0.10m to the eastern side of the wall line. This wall would have been the curved wall of the connecting passageway between the western end of the Stable Block and the eastern wing of the villa, dating from the late 1780s.

6.2.2.5 Phase 5 – 1810-1920

Some of the repairs to the arched brick culvert (context 222) at the eastern side of the trench detailed in phase 4 above could date to Phase 5.

6.2.2.6 Phase 6 – 1920-2005

The demolition of the Stable Block in the 1930s led to the deposition of a rubble demolition layer spread over the area, and this was recorded to the west of wall 213 as context 117, consisting of a mixture of brick, fragments of ashlar blocks, slate and mortar.

The two service trenches that cut across the trench (cuts 113 and 115) post-date the demolition of the Stable Block. At the south-eastern end of cut 113 was a rectangular inspection or access chamber constructed of brick supporting a limestone slab (context 234). The limestone slab had been re-used, possibly from a monument or a cornice, and had mouldings along one side and mason's marks on one end (*see Plate 9*).

See Figure 12 for the stratigraphic matrix for Trench 2B

6.3 Trench 3

A trench measuring 20 x 5m was planned, and this was located to establish the survival of the buildings at the eastern edge of Lord Burlington's Estate (as seen on the John Rocque survey of 1736 – *see Figure 4*), extending into the grounds of the late 17th-century Moreton Hall to the east (*see Figure 13* showing the Moreton Hall buildings in 1812).

Once on site it was obvious that a great deal survived of the buildings in this area, with the dry weather picking out the lines of the buried walls as 'parch marks' in the lawn area as the grass above the walls had started to die back (*see Plate 10*). It was decided that only a small trench was required to be opened up to establish the level

and condition of the surviving remains, and this was located over a readily-identifiable corner of a wall. A trench measuring 4.7 x 1.9m was excavated, and the brickwork of the walls (contexts 438 and 439) was encountered very close to the surface (c0.20m deep - at a height of 6.85mAOD) (**see Figure 14 and Plate 11**). This brickwork appears to have been from the north-western corner of the Stable Block of Moreton Hall, and within the building there was a roughly-pebbled floor surface (context 437).

Where parch marks were seen their locations were surveyed, and initial investigation of these shows that further walls of the Moreton Hall Stable Block (including what appear to be internal partition walls) have been recorded, as well as additional wall lines of structures within Lord Burlington's Estate.

See Figure 15 for the stratigraphic matrix for Trench 3

6.4 Trench 4

This trench was located at the northern end of the eastern range of the 'L'-shaped 17th-century Stable Block. A trench measuring 11.5 x 5m was opened up, and following the removal of the topsoil, the upper surviving courses of walls of several phases of construction were revealed, in very good condition and again very close to the ground surface (0.28m below the ground surface at a height of 6.70mAOD) (**see Figure 16**).

The Stable Block is known from the historic views of the estate (Kip and Knyff, 1698, **Figure 5**, and on the photograph from the early 1900s, **Plate 2**) to have consisted of brickwork with a rendered finish. It was a building of two storeys, with additional accommodation provided in the roof space that was lit by evenly-spaced dormer windows.

At the northern end of the eastern range was a narrower single-storey addition\extension, and running perpendicular and to the west of this building was a low and narrow building with what appear to be stable doors along its southern elevation.

The north-eastern corner of the Stable Block was modified in the early 18th century (as recorded by the Rocque survey of 1736 **see Figure 4**), with an additional structure built to the east of the range. Further additions were also made to the yard side of the Stable Block, with a structure built at the junction between the south and east ranges.

The aim of this evaluation trench was to establish the level of survival of the archaeological remains in this area and to establish, where possible, the nature and sequence of the modifications to the eastern Stable Block range.

The walls of several distinct phases were recorded in this trench. These included walls from the initial Stable Block construction; walls from the narrow northern extension; and walls from the later structure attached to the east of the range (**see Plates 12 and 13**). Also revealed was a very good sequence of brick-built drainage features in the later building constructed to the north, with brick-sided, slate-bottomed drains running into a circular brick sump (**see Plate 14**). To the west of the brick sump was a rectangular brick pit, although this was only partially exposed during these works.

6.4.1 Phase 1 – 1600-1680

No features that could definitely be attributed to the phase 1 works were recorded in this trench, although the following were earlier than the eastern extension of the Stable Block range and thus may possibly be part of the 17th-century works.

In the north-eastern corner of the trench and pre-dating the eastern range extension was a large pit cut (295) filled by a very firm gravel-rich infill (context 288). This had straight western and southern edges and measured 2.05 x 1.75m, although the overall extents were not established as it continued beyond the limits of excavation beneath the eastern and northern trench edges.

Also pre-dating the eastern extension was what appeared to be a robbed out wall line (context 294). Although no structural evidence was recorded of this north-south aligned wall, the later flooring deposits to either side (contexts 283 and 287) respected the alignment. The southern wall of the eastern extension (context 177 and 298) overlaid this robber trench.

6.4.2 Phase 2 – 1680-1700

The brick walls of the northern and eastern extents of the Stable Block were exposed and recorded (walls 174 and 178). These walls were bonded together and were constructed of red bricks (measuring 0.22 x 0.10 x 0.06m) laid in English Bond with a pale lime mortar. Within the building the original flooring deposits were recorded (context 183) consisting of a sand floor make up level. On the surface of this deposit were two parallel impressions of what appeared to be the original flooring joist timbers. These measured 0.04-0.05m (1½ - 2") wide and were laid at 0.24m (9½") centres.

A short 0.29m length of wall of unknown function that had subsequently been truncated was recorded butting against and running north from the north-eastern corner of the Stable Block (structure 200).

The brick walls from the extension northwards of the eastern range were recorded. Wall 176 formed the eastern elevation of the range with wall 175 forming the western. These measured 0.40 and 0.38m wide respectively and were constructed of hand-made reddish-purple brick (measuring 0.22 x 0.10 x 0.06m) laid in English Bond with a pale brown lime mortar. At the southern end of wall 176, at the junction between it and the northern elevation of the main Stable Block structure, was a brick threshold to a door opening (contexts 273 and 194).

Butting against brick wall 175, but of contemporary construction, was a rectangular brick-lined pit (context 180). The northern extent of the pit was not established as it continued beyond the limit of the excavation, but the exposed extents measured 1.45 x 0.48m. Samples taken from the pit fill (context 197) revealed the presence of ostracods showing that this context either held water, or received water from elsewhere, although unfortunately no evidence indicating the presence of cess was recovered – the initial interpretation of pit's function.

6.4.3 Phase 3 – 1700-1780

By the time of the estate survey in 1736, the eastern Stable Block Range had been extended to the east with the construction of a rectangular building (*see Figure 4*). The east-west aligned southern wall of this structure was seen during the evaluation – a 5.6m length of a 0.50m wide brick wall consisting of headers laid on edge was recorded as contexts 177 and 289. What appeared to be an internal partition wall was seen in the north-eastern corner of the evaluation trench (context 290), although its relation to the Stable Block extension wall was not established due to later truncation by services.

Situated in the south-eastern corner of the extension building was a series of three brick drainage channels, radiating around a 0.70m diameter circular brick sump (context 179). Initially there were two drainage channels serving the sump; the brick-sided slate-bedded drain running east to west from inside the southern side of the extension building lead into the sump; this then drained out through the similarly-constructed drain that cut through the threshold within the north-south aligned wall 176 (cut 199), and ran along the east-west aligned northern Stable Block wall (wall 174). A further drain was added later running from the north into the sump, drain 186, and this was constructed with brick sides with a base of pan-tiles set on edge. The sump fill was excavated to a depth of 0.46m (not bottomed) and sampled to retrieve any archaeobotanical remains, and the presence of elder, blackberry and raspberry seeds and eggshell in the fill suggests that the sump may have received kitchen or garden waste.

In the northern end of the Stable Block range a flooring deposit was recorded (context 173) overlying the earlier floor level (context 183). This later floor consisted of a very clean and smooth sand layer that may have formed the bedding for a paved surface. Recovered from this surface deposit was a single sherd of late 16th – early 17th-century pottery.

6.4.4 Phase 4 – 1780-1810

The western drain leaving the circular sump and cutting through the threshold (cut 199) was blocked with brickwork (context 189), and the bricks of the drain sides and most of the slates from the bed were removed.

6.4.5 Phase 5 – 1810-1920

Within the northern end of the Stable Block a mortared rubble foundation to a partition wall was recorded (context 185). The construction trench for this wall cut through the earlier flooring deposit (context 173).

Later service cuts had in places truncated the archaeological remains. Running east-west along the top of the earlier wall line (wall recorded as contexts 177 and 298) were two gas pipes in a single trench. The earlier pipe was laid in a cast-iron tray, with the later replacement pipe laid directly on top. It is likely that the secondary supply pipe remained in use until the Stable Block was demolished in the 1930s. Built against the eastern face of the east wall of the Stable Block (wall 178) was a brick drainage structure (181), possibly of early 20th-century date, and associated with this was a firm make-up deposit, context 279.

6.4.6 Phase 6 – 1920-2005

Two ceramic drains (contexts 281 and 190) set in concrete were recorded running north-south through the trench to the east of the circular brick sump.

See Figure 17 for the stratigraphic matrix for Trench 4

6.5 Trench 5

Trench 5 was a 'T' shaped trench that was located at the northern side of the Stable Block. One length of the trench ran along the line of the northern wall of the Stable Block (15x 5m), with the other extending away from and at right angles to the wall line and through the garden deposits to the north (17 x 5m) (**see Figure 18**)

The trench was positioned to evaluate the survival of the Stable Block foundations and associated deposits, with the northern extension through the garden deposits allowing the evaluation of the range of gardens and garden features that are known to have existed in this enclosed area (bounded to the south and east by the Stable Block buildings; to the west by the northern extension of the Jacobean House; and to the north by the gravel path leading from the north front of the Villa to the Inigo Jones Gateway to the east). The garden is known to have been a formal Knot Garden in the 17th century, and was modified in the early 18th century by Lady Burlington (and William Kent) to form a garden with a circular pond and fountain, landscaped beds, and other garden structures (**see Figure 19**). This garden was known as both Lady Burlington's Flower Garden and the Volerie (or Aviary) Garden.

Following the removal of the topsoil in this trench it was evident that archaeologically significant features and deposits survived in very good condition within 0.30m of the surface. At the northern end of the trench, important evidence for the 19th-century planting scheme was revealed, and to the south the remains of the Stable Block walls and associated deposits were encountered. To establish the level and condition of survival of the earlier garden features it was decided to deepen the central section of the trench (an area 6.7 x 5m) following the recording of the later garden deposits (mainly levelling and landscaping deposits). This allowed the earlier garden features to be seen, including the important and exciting discovery of the remains of the formal garden planting beds.

6.5.1 Phase 1 – 1600-1680

The Knot Garden beds

The central section of the northern length of Trench 5 was excavated down through the upper garden levelling deposits, following recording, in an attempt to establish whether any earlier garden features survived. A section of trench 6.7 x 5m was machined down a level of approximately 5.80mAOD (c0.80m below the surrounding ground level). At this level it was possible to see evidence for a series of linear bedding trenches, the fragmentary remains of a formal garden layout. Only the lowest levels of these beds survived (in places the deposits being less than 0.05m deep) and they had been heavily truncated by the later works making the design of the layout difficult to establish.

The formal layout, as far as could be seen, consisted of a grid of north-south and east-west aligned linear beds, spaced between 0.8 and 1.2m apart. (**see Plate 15**, which shows the darker 'L'-shaped bed in the base of the trench, and **Figure 20**, a plan showing the phasing of this trench with the Knot Garden Beds shown in red -

Phase 1). The beds themselves were between 0.3 and 0.4m wide and were filled with fine brown sandy deposits. A sample taken from one of the beds (fill 328 of bed 374) as being typical of the linear bed fills was unusual that it contained a large proportion of very fine grained sand (estimated 700-300 microns in grain size) suggesting that this material had been deliberately added during planting (unfortunately this sample did not produce any plant remains pertaining to the planting of the garden).

This design does not appear to be that shown on the historic views of the grounds (Kip and Knyff, 1698 - **see Figure 5**) and thus may be the earlier formal garden of the Jacobean Chiswick House. Further evidence for this was seen with the discovery of a Nuremberg token or jeton in the fill 339 of the northernmost east-west aligned bed, context 390. This has been dated to between 1610 and 1616 and was possibly made by Hans Krauwinkel, though from an unsigned series. It shows on the obverse Queen Elizabeth seated on a canopied throne, holding the sword and sceptre: REGI ANG. The reverse shows a Shield bearing the 'three lions' of England: surmounted by a crested helmet, above which is a crowned rampant lion brandishing a sword: INSIGNIA REGIS ANGLI (**see Plate 16**). The token was in an excellent condition with the lettering and relief crisp and un-worn, suggesting that it had not been in use for long before finding its way into the fill of the bedding trench. If that is the case then it suggests that the formal garden beds date from the early-mid 17th century, and are thus associated with the landscaping and garden design of the Jacobean House (built in around 1610).

6.5.2 Phase 2 – 1680-1700

Modification\planting alterations

The formal garden of the early 17th century (Phase 1) was altered or re-designed during the second half of the 17th century, although evidence for these modifications is again fragmentary due to truncation by the later works. Several linear bedding trenches were recorded (contexts 370, 371 and 358) in the southern third of the deepened section of the trench. Three sections of a 3.3m long and 0.3m wide curved bed were also recorded (contexts 379, 308, 309 and 303), and this bed is thought to be from this phase of works. Parts of two further beds at the north-eastern end of the trench (cut 338, fill 332; cut 375, fill 330) were recorded cutting through the earlier formal bedding trenches, either re-cutting or replacing them.

The Stable Block building

The removal of the topsoil along the southern side of this trench exposed the footings of the north wall of the Stable Block surviving at a level of 6.47mAOD. The wall was recorded in two sections to either side of the threshold of a 1.45m wide door opening within the wall. The wall to the west of the door opening (wall 202) was 0.60m wide and extended for a length of 6.30m to the edge of the excavation trench. It was constructed of hand-made orange-red facing bricks, with poorer quality yellow and purple bricks creating the core of the wall. The remains of a layer of slates inserted between the lower brick courses as a damp-proofing measure survived in places. To the east of the opening the wall (wall 203) was of identical construction and survived for a length of 2.4m before being truncated by a linear robber trench cut (the fill of the robber trench was recorded as context 259). Whether the footings of the robbed out section of wall exist at a greater depth was not established during the evaluation.

Two of the internal brick walls of the Stable Block building were exposed and recorded. Wall 204 was a brick wall bonded to the outer wall of the Stable Block (wall 203) to the east of the door opening. Wall 262 was a brick wall a further 1.2m to the east of wall 204.

6.5.3 Phase 3 – 1700-1780

The Aviary footings

Higher up in the stratigraphic sequence of archaeological deposits than the early formal garden beds were a series of four parallel rectangular cuts filled with a mortar-rich fill, reminiscent of demolition rubble. The two that were seen in plan measured 2.6 x 0.7m (long axis running east-west), and all four formed a north-south alignment (*see Plate 17*). It is interesting to note that these features are on the line of the aviary building shown on John Rocque's 1736 estate survey (*see Figure 4*). The two seen in plan are the same length as the width of the aviary building (2.6m) and may well represent the footings for its construction.

The drainage features

Two sections of an arched red brick drainage culvert were recorded. The top of the eastern of the two (context 257) had been damaged, whereas the western culvert (context 211) was intact. It is thought that the two linked together with the fall running from east to west (falling from 6.38mAOD to 6.33mAOD across the length of the trench).

6.5.4 Phase 4 – 1780-1810

Two features have been assigned to the late 18th-century modifications in this trench. If the above interpretation is correct regarding the footings of the aviary building (see 6.5.3 above) then these two features follow the dismantling and removal of the aviary building. They consist of two sub-rectangular pits (contexts 312 and 317), 0.8 x 0.75m in size, filled with an orange-brown silty sand deposit (fills 318 and 314)

6.5.5 Phase 5 – 1810-1920

In the late 19th and early 20th century the area to the north of the Stable Block had a gravel path surface around a central circular bed (*see Figure 6* - the First Edition Ordnance Survey). Around the edges of the gravel surface were formal planted beds.

The Royal Flower Beds

In the trench through the garden deposits to the north, a sequence of deposits of high archaeological interest and importance were excavated. At the extreme northern end of the trench three rectangular flower beds were revealed (cuts 141, 143 and 145) with paths between them (contexts 147 and 148). These beds had their long axis aligned north-south, and the central bed measured 2 x 1.5m (although its northern extent was not seen as it continued beyond the limit of excavation). Immediately to the south of these was a 0.85m wide gravel layer (context 140) that formed the adjacent path. It is thought that these beds are three of the 19th-century 'Royal Flower Beds' created in this area, named after (and occasionally tended

during their visits to Chiswick by) Edward VII's children (George, Maude, Albert, Louise and Victoria). The level of the upper flower bed deposits was 6.35mAOD.

Planting alterations

The flower bed that ran along the length of the north wall of the Stable Block was recorded (context 378). The bed was filled with a 0.8m wide strip of dark soil (context 207) and had the remains of a brick retaining wall along its northern edge (context 208). A single course of edging bricks were also recorded separating the bed from the northern Stable Block wall (context 205) (**see Plate 18**).

A square brick drainage sump or soak-away was excavated (context 112) from beneath the surface landscaping levels.

6.5.6 Phase 6 – 1920-2005

The Stable Block was demolished in the 1930s and some of the brick demolition rubble was used as a levelling material - recorded within the footprint of the Stable Block building as context 201. Within this were fragments of plaster that had been painted green showing the final colour of the internal decorative scheme of this part of the building.

In the eastern half of the trench the bricks from the walls had been more extensively robbed, with the line of the robber trench fills recorded (contexts 258 and 259), and to the east of the surviving wall footings (context 203) the deposits had been heavily disturbed by later works, such as the insertion of drainage runs (context 269 and 269).

Evidence for further modifications to the planting scheme was recorded, with two 1m diameter roughly circular planting pits seen in the northern part of the trench (contexts 324 and 326).

Following the demolition of the Stable Block this area was landscaped and planted, with a large shrub bed above the western end of the Stable Block, and a lawned area with five rectangular beds to the north. A record was made of these where their removal was necessary for the evaluation trenches.

See Figure 21 for the stratigraphic matrix for Trench 5

6.6 Trench 6

Trench 6 measured 2 x 1.9m and was located within the footprint of the Jacobean House. It was excavated to a depth of 0.8m (down to a level 6.10mAOD), and encountered a sequence of dump layers and demolition rubble deposits. The lowest of these that was excavated was a loose mortar layer (context 344) containing a high proportion of early brick fragments, and it is likely that this layer (at 6.15mAOD) is the demolition rubble that came from the Jacobean building when it was demolished in the late 18th century (**see Plate 19**). No internal walls or surfaces were seen during the excavation of this trench, although to assess whether the house had been cellared – one of the original research aims of the project – would have required a larger excavation and machine access, something that was not possible during the short time available for the evaluation.

See Figure 15 for the stratigraphic matrix for Trench 6

7 Summary

7.1 The Jacobean House

The evidence recovered from the evaluation trenches relating to the Jacobean House was the most disappointing aspect of this stage of the project. It had been hoped that locating Trench 1 along the southern front of the Jacobean House would reveal evidence either for its construction, or for the post-fire (1725) modification of the western wing.

The positioning of the trench on site was constrained by the mature conifer hedge screening the English Heritage staff car park. The trench was eventually excavated immediately to the south of the expected house wall line (taken from Rocque's 1736 survey of the Estate), and it now seems likely that the hedge has been planted (possibly fortuitously) directly over the wall. It was not possible during these works to establish the extent of damage that the tree planting had caused to the archaeological remains in this area, although as the trees are shallow rooted and the root systems are not very extensive, the expected damage would be limited.

Although none of the main structural elements of the Jacobean House were seen, the excavation did reveal some intriguing archaeological features that may relate to the building's construction. There were three parallel east-west aligned linear cuts recorded to the south of the house. These were filled with gravel-rich fills that contained very little dating evidence, although the few (3) sherds of pottery recovered from them were of 16th- to 17th-century date, suggesting a 17th-century date for their excavation (and therefore possibly related to the Jacobean House construction works). It has been suggested that these trenches may have been part of the drainage system to the front of the house.

At the western end of the northern linear cut, seen in the side and base of the evaluation trench, was a raft of unmortared brick rubble. This brickwork would have been on the line of the western wing of the Jacobean House, the wing that was destroyed by the fire in 1725, and it is possible that the brick raft formed a platform for the construction of the walls above.

The trench inside the footprint of the Jacobean House, Trench 6, was excavated down through the later levelling layers until a demolition rubble layer was encountered. This layer consisted of soft red hand-made brick fragments in a mortar-rich matrix, and this was interpreted as being the rubble resulting from the demolition of the Jacobean House in the late 18th century.

The objectives of the project relating to the development and use of the Jacobean House (objectives 2.2.1-2.2.3) were therefore only partly met by the evaluation works, and further excavation would be necessary to answer these more fully. Further evidence for the layout and arrangement of the building, as well as establishing the location, survival and condition of the walls, could be achieved by undertaking a larger-scale excavation in the car park area, although this would require the removal of a number of the adjacent trees.

It is interesting to note that the archaeology in the footprint of the Jacobean House is not currently included in the designated Scheduled Monument area, and this is an omission that should be rectified.

7.2 The Knot Garden

The excavations to the north of the Stable Block revealed a sequence of extremely significant and important garden deposits, including evidence for the early formal knot garden layout (objectives 2.2.5 and 2.2.8). A grid pattern of inter-connected linear beds was uncovered, and an early 17th-century Nuremberg jeton was retrieved from the fill of one of these. The date and condition of the jeton suggest that the knot garden beds recorded were part of the early formal garden design of the Jacobean House.

A series of secondary bedding trench cuts was identified, and these appear to have been later 17th-century modifications to the garden design. A curved linear bed may have been the edge of one of the beds in the gardens to the north of the Stable Block shown on the Kip and Knyff bird's eye view of Chiswick from 1698.

These early garden deposits were fragmentary and, not surprisingly, had been heavily truncated by later works, and in places the beds only survived to a depth of less than 0.10m.

It is very likely that further excavation in this and in the surrounding area will reveal more evidence for the layout of the early gardens.

7.3 The Aviary Garden

The Aviary Garden, constructed on the site of part of the Knot Garden (see 7.2 above), was designed by William Kent for Lady Burlington, and the design had been executed by the time of John Rocque's survey of Chiswick in 1736.

The northern part of the evaluation trench (Trench 5) was located through the garden deposits to the north of the Stable Block, and on the expected alignment of the aviary structure. Excavation revealed four rectangular mortar and rubble filled cuts, and it is likely that these formed the footings to the arcaded aviary building shown on Rocque's estate views (objective 2.2.5). If so this is a very significant survival as usually very little archaeological evidence survives of these structures, and it is therefore one of only a handful of excavations ever undertaken on this hitherto little-studied archaeological element of 18th-century pleasure garden design.

7.4 The later buildings on site

A great deal of evidence was recorded during the evaluation for the later buildings on site, with the most significant building identified being the late 17th-century L-shaped Stable Block. Not only were the lengths of several of the walls of this building exposed, but also seen were internal partition walls and one of the door thresholds (objectives 2.2.4 and 2.2.6). Later additions to this building complex were seen at the northern end of the eastern range, with a sequence of drainage structures (including a circular sump and a brick water tank) recorded.

Walls from several phases of structures linking the western end of the Stable Block with the buildings to the west (formerly to the Jacobean House, latterly to the 18th-

century wing of Chiswick Villa) were also revealed and recorded, although later service cuts (including a large arched brick drainage culvert) had removed much of the earlier building remains.

The early summer's dry weather had created parch marks on the grass lawns over some of the shallowly-buried walls, and at the eastern side of the area under investigation the wall lines of the 17th-century Stable Block of Moreton Hall, the next villa along from Chiswick, were traced and recorded. One of the wall corners was excavated to show the surviving level and condition of these walls (objective 2.2.7).

What was surprising with the structural remains across the site was their excellent condition of survival, and how close to the surface they survived, with the walls often encountered within 0.15m of the surrounding ground level. This will need to be taken into consideration in the management and conservation plan for the site, as well as for any future landscaping or development proposals.

8 Statement of potential for further analysis of the stratigraphic record

The main aim of this stage of the project was to assess the nature and level of survival of the archaeological remains in the areas identified for consideration to the south and east of Chiswick House. To this aim the evaluation works were very successful, and as outlined above a great deal of archaeological information was retrieved that will be invaluable to the future management proposals for this part of the site.

The context record has been assessed and a series of Harris Matrices (one for each of the evaluation trenches) have been compiled showing the inter-relationships of the 317 contexts recorded (*see Figures 8, 10, 12, 15, 17 and 21*). From the stratigraphic sequence outlined on the site matrices, it is clear that a series of distinct and major episodes of construction and modification were encountered and identified in the evaluation trenches. The site phasing and stratigraphic sequence have been refined further using the additional information from the finds spot dating, the assessment of the environmental material, the assessment of the animal bone, and a review of the historical pictorial evidence. The initial assessment has gone some way to providing a framework for the phased sequence of the archaeological remains recorded, although the restricted scale of the evaluation trenches and the limited time scale of the works have left some of the original research objectives only partially addressed.

The evaluation trenches were excavated down to the upper levels of the surviving archaeological remains, with limited further excavation where necessary to contextualise the remains. Further work to tie in the archaeological deposits excavated with those from the earlier excavations, in particular the 1983 excavation carried out by the West London Archaeology Field Group, Department of Greater London Archaeology West London Unit (DGLAW site code: CH82/83), would have a high potential to provide a better understanding of the archaeological development of the site.

There is a wealth of historical plan and artistic evidence for the development of Chiswick House and Grounds, and although this was consulted in part in preparation for the evaluation works, further and more detailed analysis of this historical evidence in conjunction with the excavated archaeological evidence would have a high potential for enhancing our understanding of the site. Combining the historic

plan data and the parch mark information recorded during the evaluation works (see 7.4 above) also has a high potential to allow further interpretation to aid our understanding of the buildings to the east of Chiswick House (associated with Moreton Hall).

Future targeted evaluation trenches addressing the present project's unanswered or partially answered research objectives, such as the survival of elements of the Jacobean House, or the extent of survival of the early garden deposits, would be of great benefit. Should there be a more extensive programme of excavation works in this part of the grounds, then a more detailed analysis of the present project's stratigraphic record in conjunction with that of the later works would have significant potential to address those outstanding research objectives.

Any further analysis of the context record would also have a high potential to support the specialist analytical works.

An Updated Project Design has not been produced at this stage of the project as further evaluation and excavation works are likely to be carried out during the next phase of the facilities development programme.

9 Archive Summary

The archive consists of the following:

- 317 Context records
- 37 A1 and A3 sheets of polyester draughting film with 34 drawings
- 81 Colour photographs
- 81 Black and white photographs
- 19 Digital photographs
- 3 Environmental samples
- 43 individually numbered object records

10 Acknowledgements

The author wishes to thank to all colleagues involved in the successful completion of this stage of the project, with special thanks to the archaeologists and volunteers who toiled through the hottest weeks of the summer to achieve such stunning results in a very tight time schedule (supervised by Magnus Alexander and Caroline Powell). Thanks also to Jeremy Ashbee, EH Inspector for Chiswick, for his support and advice during the course of the project, and for his comments on the draft of this report.

Special thanks to Adrian Cook of Hounslow Borough Council for his help and advice, both in preparation for and during the site works. He also kindly provided drawings, photographs and historical information, not to mention the temporary office accommodation. Also thanks to John Yates of CIP for his advice and for the loan of site equipment.

Finally, thanks to all the helpful and friendly staff at Chiswick House.

11 Bibliography

Centre for Archaeology, 2004 *Centre for Archaeology Recording Manual*
Portsmouth: English Heritage.

Fellows, D 2005 (1) *English Heritage Chiswick House Facilities Development Project. Project Number 4584. Project Design for Archaeological Evaluation.*
Unpublished document. Portsmouth: English Heritage.

Fellows, D 2005 (2) *English Heritage Chiswick House Facilities Development Project. Project Number 4584. Provisional Summary of Findings of the Archaeological Evaluations.* Unpublished document. Portsmouth: English Heritage.

Harris, J 1995 *The Palladian Revival – Lord Burlington, His Villa and Garden at Chiswick.* Yale University Press

Hewlings, R 1989 *Chiswick House and Gardens.* English Heritage Guidebook

Seaby *Catalogue of Jetons, Medalets & Tokens, Volume 1, The Medieval Period and Nuremberg,* p 471 no 1665.

White, R 2001 *Chiswick House and Gardens.* English Heritage Guidebook

Appendix 1 Finds Archive and Assessment Report

A total finds retrieval policy was in operation for the excavations at Chiswick House. The individually recorded items and the bulk finds were processed and recorded as specified in the CFA Recording Manual (CFA 2004). Most of the initial processing was undertaken on site, during the excavation. The outstanding work was completed at Fort Cumberland immediately after the close of the excavations.

Individually recorded objects

A total of 43 individual numbers was allocated to individually recorded items or groups of items. The groups mostly comprised collections of nails, but associated fragments in a couple of cases.

By and large most of the metal work represented the remains of structural fittings, such as a hinge pivot of a size normally associated with a door (200508020), part of a strap hinge terminal (200508018), and a couple of metal ties. Lead items included several off-cuts and at least one rectangular piece with two nail holes in one end, likely to be a roof repair (200508007).

The most significant item was a Nuremberg token (200508003), possibly made by Hans Krauwinckel although from an unsigned series, dating to 1610-1616 (Seaby vol 1, 471). Probably made in brass, this token is in unusually good condition as most are worn or very worn, suggesting it might not have been in circulation very long before it was lost. Copper alloy items are represented by a small coat button (200508005) and part of a ring (200508006). The only significant glass find was a small part of the flaring rim of a vessel, probably a table glass. This was fine and of good quality. The remainder of the glass was from wine and beer bottles, or was fairly modern window glass.

The pottery

The pottery assemblage is small, a total of 81 sherds. With only one or two exceptions the sherd/vessel ratio is 1:1. Most of the pottery was either local, or readily available locally and there are only two definite imported sherds (Chinese Export Porcelain) and one possible sherd from a Martincamp Type III flask.

None of this material is at all special, even the CEP was fairly common by the second half of the 18th century, and is the type of pottery that would be expected from any fairly ordinary household.

Table 1 Pottery spot dating

Trench	Context	Sherd count	Date range	Spot date
1	153	1	16 th – 18 th c	17 th c +-
1	155	2		16 th /17 th c
2A	130	1	15 th – 17 th c	17 th c
2A	160	1		16 th /17 th c
2A	429	1	18 th – 19 th c	Mid-18 th c +
2B	114	2	18 th – 20 th	Probably 20 th
2B	117	2	16 th – 19 th	Mid-18 th /early 19 th
2B	215	4	L16 th – 17 th	1 st half 17 th c
2B	219	1	L18 th – 19 th c	19 th c
3	434	20	17 th – 19 th c	19 th c
4	171	14	17 th – 20 th c	20 th c
4	173	1	16 th – 17 th c	Late 16 th /early 17 th c
4	197	5	18 th – 20 th c	2 nd half 19 th c
4	277	1	L 18 th – 20 th c	1 st half 19 th c
5	170	1	Mid 19 th / 20 th c	Late 19 th /earlier 20 th c
5	207	6	18 th – 20 th c	Late 19 th ? early 20 th c
5	210	4	17 th – 19 th	19 th c
5	270	1	L16 th – early 18 th	17 th c
5	303	2	17 th – 19 th c	2 nd half 18 th c +
5	304	1	L17 th – 19 th c	18 th c
5	307	2	14 th – 18 th	17 th c, ? plus
5	308	1	L12 th – 14 th c	13 th c
5	310	1	17 th – 19 th c	18 th /19 th c
5	328	5	15 th – 18 th c	L 17 th /18 th c
6	341	1	19 th – 20 th c	L 19 th /20 th c

Pottery: ware abbreviations used on recording sheets

CEP	Chinese export porcelain
TGE	tin-glazed earthenware
TPW	Transfer printed ware
VGF	Victorian flower pots
PMR	post medieval glazed red earthenware
St ware	stone ware
WW	white ware

Clay tobacco pipes

A small group of clay tobacco pipe fragments was recovered. This comprised two complete bowls, three fragmentary bowls, two mouth pieces, and numerous sections of stems. None was marked or stamped. There were three flat heels and two spurs. The stem sections exhibited a variety of bore diameters suggesting a fairly wide date

range, in line with the pottery dates, but none of the bowl forms are particularly late, certainly not 20th century. Most had been fairly or very well smoked.

Ceramic building materials

Many bricks were used in the construction of various structures on site, and only a sample of these was retained. Several deposits yielded a number of brick chips usually associated with continuous movement of soil. Other ceramic building materials include plain and black glazed pan tiles, peg tiles, unglazed flooring tiles or pampments, and a few pieces of very late wall tiles.

Summary

The finds assemblage from Chiswick House represents the debris and detritus from outbuilding and stables, as might be expected. Much of it derives from 19th-century activity in the area or is likely to have accumulated in the ground around that time. There is some material likely to be of 17th- and 18th-century date that is contemporary with its deposition and this includes the brass Nuremberg token dating to 1610-1616 from context 339 in Trench 5.

Assessment of potential

There is no evidence that most of the finds found in the trenches derives from primary occupation of the site, for example, the low sherd/vessel ratio indicates at the minimum secondary deposition. As a finds assemblage this material has no potential in its own right, it only has the potential to inform other aspects of work, such as the phasing, and does not require any further analysis.

Sarah Jennings
September 2005

Appendix 2 Conservation statement

The metalwork was examined by Karla Graham and discussed with Sarah Jennings. 9 ferrous finds were selected for x-radiography (200508013, 200508018, 200508021, 200508024, 200508030, 200508033, 200508038, 200508042, 200508043). The finds will be x-rayed for the purposes of identification, to assess the condition of the metalwork and to identify any investigative conservation requirements.

Three copper alloy finds (200508003, 200508005, 200508006) were x-rayed (X-radiograph P2170). Investigative conservation was undertaken on token 200508003: overlying soil and voluminous corrosion products were selectively removed to clarify the detail on the token for the purpose of identification. The majority of the surface detail of the token is visible and the surface has a relatively smooth patina with some localised pitting.

At this stage, no potential for further analysis can be identified.

Karla Graham
6th October 2005

Appendix 3 Assessment of plant remains from Chiswick House

Three samples were taken during this evaluation, one from the basal fill of a brick-lined pit, one from a possible drainage system, and one from a feature associated with the Knot garden.

Methods

Samples were floated using a modified Siraf tank, with a 250 micron mesh used for the flot and a 500 micron mesh used for the residue. 100% of the >4mm fraction of each residue was sorted, along with 25% of the 4-2mm fraction of each residue. 75% of the 4-2mm fraction of each residue and 100% of the <2mm fraction of each residue was retained unsorted, pending the results of overall assessment of the material from the site.

Each flot was assessed as to its contents by scanning part or all of the flot under a binocular-dissecting microscope at magnifications up to x 50. Notes were made on the amount of charcoal, cereal grain, other seeds, and any cereal chaff present in each flot using the following four point scale: 1= present, 2=frequent, 3=common, 4=abundant. Material recovered from residues was treated in a similar manner. Nomenclature follows Stace (1997).

Results

The only charred plant remains present in the samples were occasional fragments of well-preserved charcoal. Fragments of coal were also present and were especially abundant in sample 703 from the Knot garden feature (context 328). Some bones were also present in the flots.

Sample 701 from the basal fill of the brick-lined pit contained ostracods but no remains indicative of cess.

Sample 702 (context 196) produced uncharred robust seeds of elder (*Sambucus nigra*), raspberry (*Rubus idaeus*) and blackberry (*Rubus* section *Glandulosus*). An oosporangia of Characeae was also recorded along with remains of freshwater molluscs and ostracods. One fragment of eggshell was noted in the residue and occasional bones were present.

Sample 703 from the possible knot garden feature was unusual that it contained a fair amount of very fine grained sand (estimated 700-300 microns in grain size {M Canti}).

Discussion and statement of potential

The presence of ostracods in the brick-lined pit and the possible drainage system shows that these contexts either held water, or received water from elsewhere. The presence of elder, blackberry and raspberry seeds and eggshell suggests that this sump may have received kitchen or garden waste. The very few remains present mean that no further work is required on these samples, but further sampling of these features would be merited in any future excavations. In particular, study of diatoms in conjunction with ostracods is recommended.

The sample from the Knot garden feature did not produce any plant remains pertaining to the planting of the garden. However the presence of fine grade sand in this feature suggests that this material may have been deliberately added during planting. Further investigation of this aspect should form part of any further investigation of the Knot garden.

References

Stace, C, 1997 *Flora of the British Isles*, 2nd edn, Cambridge: Cambridge University Press

Gill Campbell
September 2005

Appendix 4 Assessment of the animal bones from Chiswick House

Excavations were undertaken at Chiswick House, London Borough of Hounslow, in August 2005 under the direction of Dave Fellows (Research Department, English Heritage). The aim of the excavations was to evaluate the archaeological potential of the grounds prior to further development. The investigations revealed much evidence of earlier buildings, including features possibly relating to the Jacobean House and to the layout of the Stable Block, as well as evidence of early garden design and modification (Fellows 2005).

During the excavations, a small assemblage of animal bones was recovered from a range of feature types, dating from the 16th c. to the present day. The assemblage was scanned rapidly, and then recorded following available phasing at the time. The presence of a range of species and of juvenile domestic animals suggested that however small, the assemblage might provide useful information about diet at Chiswick House, at least for Phase 2, which yielded most of the remains. This assemblage has been subsequently been reduced based on recent spot dating (Jennings 2005, Appendix 1, above).

Storage

The assemblage is stored at English Heritage, Fort Cumberland, Portsmouth, in one standard box (c. 40x25x20 cm; Site 4584, Box No. 9)

Phasing and feature type

A detailed description of the phases and associated activities is provided in Fellows (2005). Phase 2, which yielded most of the remains has been assigned the provisional date of 1680-1700. The later provisional phases are:

Phase 3: 1700-1780

Phase 4: 1780-1810

Phase 5: 1810-1920

Phase 6: 1920-present

Phase 2 activities include construction of the Stable Block (c. 1682) and building linking the latter with the Jacobean House. Modifications to the Knot Garden were probably undertaken during this time. Most of the finds from this phase are from fills of linear features in SSD (Site sub-division) 5. These features may be part of modifications to the Phase 2 formal garden layout, with the fills being planting beds. The fills contained ashy/cindery fills and unburnt bone, and there is the query as to whether bone was used to improve soil quality. The remaining finds from phases 3-6 are from a range of feature fills and layers in SSDs 4 and 5.

Methods

The assemblage was recorded on an Access database. The method of recording follows the "zone" system of Serjeantson (1996). The main limb bones, extremity elements, cranium, vertebrae and ribs are divided into eight zones and the zones are recorded as present where over half is preserved. In some cases, identifiable bones were recorded even where zones were less than half complete, if they provided important species or age information. Conversely, ribs were not recorded if zones 1 and 2 were absent and vertebrae were excluded if less than half of the centrum was present. Quantification is based on Number of identified specimens

(NISP). No teeth were present so tooth and mandible wear stage analysis could not be carried out. Measurements were recorded following von den Driesch (1976) (see database in archive). Unidentifiable bones were recorded in an excel spreadsheet.

Taphonomy

All but a few bones were recovered by hand-collection. The few samples retrieved yielded very few small bone fragments. The origin of the waste is uncertain, being primarily fill of linear garden features (see above). For the most part, the fragments are not very small and do not appear to have been crushed for use as fertiliser, although it is possible that many smaller fragments were present but not recovered. The animal bones and mollusca show for the most part good and uniform preservation, suggesting that little if any redeposition occurred after burial. Only one unidentifiable large/medium mammal fragment from context 310 is weathered and cracked. Some of the finds are rodent and canid gnawed however, suggesting that they were exposed for a period of time following discard. One large mammal fragment from context 196 is calcined.

Results and discussion

The assemblage includes a total of 142 bones, 44 of which are identified to taxon (Table 1). Phase 2 yielded 20 identifiable fragments, while the other phases yielded less than 10 identifiable bones each. The few bones recovered from samples include two fish bones (Phase 1, context 328, Sample 703, >4mm fraction), a cranial fragment and vertebra.

The Phase 2 assemblage includes bones from sheep (or sheep/goat), juvenile cattle, domestic fowl, and pigeon (*Columba* sp.), and oyster (*Ostrea edulis*). In addition, a phalanx of an unidentifiable juvenile large bird was recovered. Jaw and limb bones of juvenile cattle, and bones of older cattle are represented. Ribs and vertebrae of large and medium size mammals are present also. Some fragments show evidence of butchery, including chop and/or cut marks. The remains of domestic fowl include the main wing and leg bones and a phalanx of a medium size bird is present.

Few bones were recovered from later phases. A wader (Scolopacidae) - probably plover (*Pluvialis* sp.), is represented in phase 3. Duck (*Aythya* sp. and/or possibly *Anas* sp.) is present in Phase 4 (context 197). Part of a scapula of turkey (*Meleagris gallopavo*) was recovered from a layer in Trench 5 (Phase 5, context 207).

The assemblage of animal bones from Chiswick House is very small and probably consists of food waste, which was perhaps deliberately or accidentally incorporated into garden soil, and other fills. It is not possible to draw any conclusions regarding consumption patterns in each phase, given that the assemblage is very small and the origin of the material is uncertain. Some of the remains are from young animals, including veal, young domestic fowl and squab (juvenile pigeon). The latter may have been consumed, but equally it may be from a bird that died accidentally. Wild fowl (wader) and "seafood" are represented also. Many of these foods would have been considered privileged items in the 17th and 18th c. (see Brears et al. 1999 on diet and food prices), although beef from older cattle and mutton are represented also. Although not commonly identified in archaeological assemblages, the date (1920-2005) of the turkey (*Meleagris gallopavo*) scapula makes this an unsurprising find for the times (see Crawford 1984).

Given the limited assemblage size, it is not possible to comment on the mechanisms of provisioning in any phase. The presence of head, main limb bones and/or trunk of juvenile and mature cattle suggests that these meat “cuts” were consumed locally. Fowl and pigeon may have been raised locally or alternatively purchased. Some species such as oyster would have been brought from a distance. Brears et al. (1999, 234) note that fish and oysters were plentiful in town by the late 17th c. and so would have been available for purchase.

Assessment

No further work is required on this assemblage. Given the potential for recovery of fish, small birds and immature mammal bones, future excavations should include a detailed sampling strategy, following English Heritage Guidelines (English Heritage 2002).

References cited

Brears P, Black M, Corbishley G, Renfrew J, Stead J, 1993 *A Taste of History. 10,000 years of Food in Britain*. London: British Museum Press and English Heritage.

Crawford, R D 1984 'Turkey', in *Evolution of domesticated animals*, I L mason (ed), pp. 325-334. London and New York: Longman.

Driesch A von den 1976 *A guide to the measurement of animal bones from archaeological sites* (Bulletin 1). Cambridge, Massachusetts: Peabody Museum of Archaeology & Ethnology, Harvard University

English Heritage 2002 *Centre for Archaeology Guidelines* (2002/01). English Heritage.

Fellows, D 2005 *English Heritage Chiswick House Facilities Development Project. Project Number 4584. Provisional Summary of Findings of the Archaeological Evaluations*. Unpublished document. Portsmouth: English Heritage.

Serjeantson D 1996 'The animal bones', in Needham S & Spence T (eds) *Runnymede Bridge research excavations, volume 2 refuse and disposal at Area 16 East, Runnymede 2*). 194-223. London: British Museum

Polydora Baker
4th October 2005

Table 2: List of "countable " fragments (after Serjeantson 1996)

SSD: Site sub-division (Trench); HC: hand-collected; Juvenile fragments indicated by x

Bone ID	Provisional Phase	SSD	Category	Recovery	Context	Taxa	Element	Proximal fusion	Distal fusion	Juvenile
41	0	5	Deposit;Layer	HC	270	B	MD			x
	1	5	Deposit;Linear	HC	328	Fish	SK			
	1	5	Deposit;Linear	HC	328	Fish	VT			
35	1	5	Deposit;Linear Feature;Fill	HC	155	O	TI		F	
36	1	5	Deposit;Linear Feature;Fill	HC	155	O	SC		F	
49	1	5	Deposit;Linear Feature;Fill	HC	155	OYS	VA			
18	1	5	Deposit;Feature;Fill	HC	322	B	FE			x
19	1	5	Deposit;Feature;Fill	HC	322	B	HU	U		
47	1	5	Deposit;Linear;Fill	HC	327	OYS	VA			
26	1	5	Deposit;Linear	HC	328	B?	FE	F		
21	2	5	Deposit;Linear Feature;Fill	HC	306	OVA?	TI	F		
22	2	5	Deposit;Linear Feature;Fill	HC	306	GNP?	UL	P	P	x
23	2	5	Deposit;Linear Feature;Fill	HC	306	GNP?	UL	P		x
24	2	5	Deposit;Linear Feature;Fill	HC	306	GNP?	FU			x
25	2	5	Deposit;Linear Feature;Fill	HC	306	LB	PH2	U	P	x
28	2	5	Deposit;Linear Feature;Fill	HC	307	O	TI		U	x
2	2	5	Deposit;Linear Feature;Fill	HC	308	B	RA		F	
3	2	5	Deposit;Linear Feature;Fill	HC	308	B	TI		U	x
4	2	5	Deposit;Linear Feature;Fill	HC	308	B	C2			
5	2	5	Deposit;Linear Feature;Fill	HC	308	B?	PE			x
6	2	5	Deposit;Linear Feature;Fill	HC	308	MED	RB	U		
7	2	5	Deposit;Linear Feature;Fill	HC	308	MED	RB	U		
8	2	5	Deposit;Linear Feature;Fill	HC	308	GNP	MT		O	
9	2	5	Deposit;Linear Feature;Fill	HC	308	GNP?	TI	U	U	x
10	2	5	Deposit;Linear Feature;Fill	HC	308	GNP?	TI	U		x
11	2	5	Deposit;Linear Feature;Fill	HC	308	GNP?	RA	P	P	x
12	2	5	Deposit;Linear Feature;Fill	HC	308	GNP	CO	P		x
13	2	5	Deposit;Linear Feature;Fill	HC	308	COL	FE	P	P	x
14	2	5	Deposit;Linear Feature;Fill	HC	308	COL	UL		P	x

15	2	5	Deposit;Linear Feature;Fill	HC	308	GNP	UL	P	P	x
16	2	5	Deposit;Linear Feature;Fill	HC	308	GNP?	UL	P	P	x
17	2	5	Deposit;Linear Feature;Fill	HC	308	MB	PH1	P	P	x
45	2	5	Deposit;Linear;Fill	HC	334	OYS	VA			
27	2	5	Deposit;Layer	HC	358	B	MC		U	x
30	3		Deposit;Layer	HC	119	RAT?	FE	F	G	
31	3		Deposit;Layer	HC	119	GNP?	HU			
32	3		Deposit;Layer	HC	119	MED	RB			
44	3		Deposit;Layer	HC	119	OYS	VA			
34	3		Deposit;Fill	HC	130	B	FE	F		
46	3	5	Deposit;Fill	HC	304	OYS	VA			
29	3	5	Deposit;Fill	HC	310	PL?	UL			
20	3	5	Deposit;Fill	HC	311	O	FE		U	
37	5	4	Deposit;Fill	HC	197	AYT?	MT	O	O	
38	5	4	Deposit;Fill	HC	197	AYT?	MC	O		
39	5	4	Deposit;Fill	HC	197	O	UL			
43	5	5	Deposit;Layer	HC	207	MEG	SC			
48	5	5	Deposit;Layer	HC	207	OYS	VA			
50	5	5	Deposit;Layer	HC	210	OYS	VA			
1	6		Deposit;Service Trench Fill	HC	116	O	TI		F	
42	6	5	Deposit;Layer;Dump	HC	170	MED	RB			
33	6	4	Deposit;Layer	HC	171	O	TI		F	
40	6	4	Deposit;Fill	HC	193	B	SK			

Table abbreviations

Elements

Code	Element
C2	2 nd &3 rd cuneiform (2 nd &3 rd tarsal)
CO	Coracoid
FE	Femur
HU	Humerus
MC	Metacarpal
MD	Mandible
MT	Metatarsal
OC	Occipital
PE	Pelvis
PH1	1st phalange
PH2	2nd phalange
RA	Radius
RB	Rib
SC	Scapula
SK	Skull
TI	Tibia
UL	Ulna
VA	Valve
VT	Vertebra unspecified

Taxa

TaxaCode	Common name	Scientific name
AYT?	Pochards	<i>Aythya</i> sp.
B	Cattle	<i>Bos taurus</i>
B?	Cattle?	<i>Bos taurus?</i>
COL	Columbid	<i>Columba</i> sp.
GNP	Domestic fowl/Guinea fowl/Pheasant	<i>Gallus/gallus/Numida meleagris/Phasianus colchicus</i>
GNP?	Domestic fowl/Guinea fowl/Pheasant?	<i>Gallus/gallus/Numida meleagris/Phasianus colchicus?</i>
MED	Medium mammal (vertebra + ribs)	<i>Medium mammalia</i>
MEG	Turkey	<i>Meleagris gallopavo</i>
O	Sheep/Goat	<i>Ovis aries/Capra hircus</i>
OVA?	Sheep?	<i>Ovis aries?</i>
OYS	Oyster	<i>Ostrea edulis</i>
RAT	Rat	<i>Rattus</i> sp.
RAT?	Rat?	<i>Rattus</i> sp.?

Appendix 5 – Table showing details of context records used

Context	SSD	Category	Date	Phase	Spot Date	Date Range	Sherds
101	5	Deposit;Layer	1810-1920	5			
102	5	Cut;Feature	1920-2005	6			
103	5	Deposit;Feature;Fill	1920-2005	6			
104	5	Cut;Feature	1920-2005	6			
105	5	Deposit;Feature;Fill	1920-2005	6			
106	5	Cut;Drain	1920-2005	6			
107	5	Deposit;Drain;Fill	1920-2005	6			
108	5	Cut;Drain;Construction Cut	1920-2005	6			
109	5	Deposit;Drain;Fill	1920-2005	6			
110	5	Deposit;Drain;Fill	1920-2005	6			
111	5	Deposit;Topsoil Layer	1920-2005	6			
112	5	Structure;Soak-away	1920-2005	6			
113	2B	Cut;Service Trench	1920-2005	6			
114	2B	Deposit;Service Trench Fill	1920-2005	6	probably 20 th	18 th -20 th	2
115	2B	Cut;Service Pipe Trench	1920-2005	6			
116	2B	Deposit;Service Trench Fill	1920-2005	6			
117	2B	Deposit;Layer;Demolition	1920-2005	6	mid-18 th early 19 th	16 th -19 th	2
118	2B	Deposit;Layer	1920-2005	6			
119	2B	Deposit;Layer	1700-1780	3			
120	2B	Deposit;Topsoil	1920-2005	6			
121	2B	Deposit;Layer	1920-2005	6			
122	2B	Deposit;Layer	1780-1810	4			
123	2A	Deposit;Layer;Levelling	1920-2005	6			
124	2A	Deposit;Layer	1780-1810	4			
125	2A	Deposit;Layer;Levelling	1680-1700	2			
126	2A	Deposit;Layer	1680-1700	2			
127	2A	Deposit;Fill	1680-1700	2			
128	2A	Deposit;Layer;Demolition	1680-1700	2			
129	2A	Cut;Animal Disturbance	1920-2005	6			
130	2A	Deposit;Fill	1700-1780	3	17 th c	15 th -17 th c	1
131	2A	Cut;Culvert Cut	1700-1780	3			
132	2A	Deposit;Robbing Trench;Fill	1680-1700	2			
133	2A	Deposit;Fill	1810-1920	5			
134	2A	Cut;Post Hole	1810-1920	5			
135	2A	Deposit;Mortar Surface	1600-1680	1			
136	5	Cut;Cut for dump	1920-2005	6			
137	5	Deposit;Mortar Fill	1920-2005	6			
138	5	Deposit;Layer	1810-1920	5			
139	5	Deposit;Layer	1810-1920	5			
140	5	Deposit;Layer	1810-1920	5			
141	5	Cut;Flower Bed	1810-1920	5			
142	5	Deposit;Fill	1810-1920	5			
143	5	Cut;Feature;Pit	1810-1920	5			
144	5	Deposit;Fill	1810-1920	5			
145	5	Cut;Flower Bed	1810-1920	5			
146	5	Deposit;Fill	1810-1920	5			
147	5	Deposit;Path Surface	1810-1920	5			
148	5	Deposit;Surface	1810-1920	5			
149	1	Deposit;Layer	1920-2005	6			
150	1	Deposit;Layer	1780-1810	4			
151	1	Deposit;Fill	1600-1680	1			
152	1	Cut;Linear Feature	1600-1680	1			
153	1	Deposit;Linear Feature;Fill	1600-1680	1	17 th c +- (16 th - 18 th)		1
154	1	Cut;Linear Feature	1600-1680	1			
155	1	Deposit;Linear Feature;Fill	1600-1680	1	16 th /17 th c		2
156	1	Cut;Linear Feature	1600-1680	1			
157	1	Deposit;Linear Feature;Fill	1600-1680	1			
158	1	Deposit;Layer;Dump	1780-1810	4			
159	1	Deposit;Layer;Redeposited Natural		natural			
160	2A	Deposit;Layer	1680-1700	2	16 th /17 th c		1
161	2A	Cut;Post Hole	1600-1680	1			
162	2A	Deposit;Post Hole;Fill	1600-1680	1			
163	2A	Deposit;Layer;Dump	1680-1700	2			
164	2A	Cut;Post Hole	1600-1680	1			
165	2A	Deposit;Post Hole;Fill	1600-1680	1			

Context	SSD	Category	Date	Phase	Spot Date	Date Range	Sherds
166	2A	Cut;Post Hole	1600-1680	1			
167	2A	Deposit;Post Hole;Fill	1600-1680	1			
168	2A	Deposit;Natural		natural			
169	2A	Deposit;Layer	1680-1700	2			
170	5	Deposit;Layer;Dump	1920-2005	6	Late 19 th – early 20 th	Mid 19 th / 20 th c	1
171	4	Deposit;Layer	1920-2005	6	20 th	17 th – 20 th	14
172	4	Deposit;Layer	1920-2005	6			
173	4	Deposit;Layer	1700-1780	3	Late 16 th – early 17 th	16 th – 17 th	1
174	4	Structure;Wall	1680-1700	2			
175	4	Structure;Wall	1680-1700	2			
176	4	Structure;Wall	1680-1700	2			
177	4	Structure;Wall	1700-1780	3			
178	4	Structure;Wall	1680-1700	2			
179	4	Structure;Drain	1700-1780	3			
180	4	Structure;Cess Pit	1680-1700	2			
181	4	Structure;Drain	1810-1920	5			
182	4	Deposit;Layer	1700-1780	3			
183	4	Deposit;Layer	1680-1700	2			
184	4	Cut;Construction Trench	1810-1920	5			
185	4	Structure;Wall Foundation	1810-1920	5			
186	4	Structure;Drain	1700-1780	3			
187	4	Structure;Drain	1700-1780	3			
188	4	Deposit;Fill	1700-1780	3			
189	4	Structure;Drain;Blocking	1780-1810	4			
190	4	Structure;Drain	1920-2005	6			
191	4	Deposit;Fill	1920-2005	6			
192	4	Cut;Drain	1920-2005	6			
193	4	Deposit;Fill	1920-2005	6			
194	4	Structure;Sill	1680-1700	2			
195	4	Cut;Drain	1700-1780	3			
196	4	Deposit;Fill	1700-1780	3			
197	4	Deposit;Fill	1810-1920	5	2 nd half 19 th c	18 th – 20 th	5
198	4	Deposit;Fill	1780-1810	4			
199	4	Cut;Drain	1700-1780	3			
200	4	Structure;Wall	1680-1700	2			
201	5	Deposit;Layer;Demolition	1920-2005	6			
202	5	Structure;Wall	1680-1700	2			
203	5	Structure;Wall	1680-1700	2			
204	5	Structure;Wall	1680-1700	2			
205	5	Structure;Wall Foundation	1810-1920	5			
206	5	Cut;Tree Disturbance	1920-2005	6			
207	5	Deposit;Layer	1810-1920	5	late 19 th ? early 20 th c	18 th – 20 th c	6
208	5	Deposit;Layer;Dump	1810-1920	5			
209	5	Deposit;Layer;Accumulation	1680-1700	2			
210	5	Deposit;Layer	1810-1920	5	19 th c	17 th – 19 th	4
211	5	Structure;Drain	1700-1780	3			
212	2B	Structure;Wall	1680-1700	2			
213	2B	Structure;Wall	1780-1810	4			
214	2B	Deposit;Mortar Layer	1700-1780	3			
215	2B	Deposit;Layer;Dump	1780-1810	4	1 st half 17 th c	L16 th - 17 th	4
216	2B	Deposit;Layer	1780-1810	4			
217	2B	Deposit;Fill	1780-1810	4			
218	2B	Cut;Feature	1780-1810	4			
219	2B	Deposit;Layer	1700-1780	3	19 th c	L 18 th - 19 th	1
220	2B	Cut;Drain	1700-1780	3			
221	2B	Deposit;Fill	1700-1780	3			
222	2B	Structure;Drain	1700-1780	3			
223	2B	Cut;Foundation	1780-1810	4			
224	2B	Deposit;Foundation;Fill	1780-1810	4			
225	2B	Cut;Drain repair	1780-1810	4			
226	2B	Structure;Drain repair	1780-1810	4			
227	2B	Structure;Drain repair	1780-1810	4			
228	2B	Structure;Drain repair	1780-1810	4			
229	2B	Structure;Drain repair	1780-1810	4			
230	2B	Structure;Door Jamb	1680-1700	2			

Context	SSD	Category	Date	Phase	Spot Date	Date Range	Sherds
231	2B	Deposit;Fill	1780-1810	4			
232	2B	Structure;Wall	1680-1700	2			
233	2B	Cut;Drain repair	1780-1810	4			
234	2B	Structure	1920-2005	6			
235	2B	Deposit;Fill	1780-1810	4			
236-250	-	Unused		-			
251	5	Deposit;Fill	1700-1780	3			
252	5	Deposit	1700-1780	3			
253	5	Deposit;Fill	1700-1780	3			
254	5	Deposit;Fill	1920-2005	6			
255	5	Deposit;Fill	1920-2005	6			
256	5	Deposit;Fill	1700-1780	3			
257	5	Deposit;Fill	1700-1780	3			
258	5	Deposit;Fill	1920-2005	6			
259	5	Deposit;Fill	1920-2005	6			
260	5	Deposit;Fill	1920-2005	6			
261	5	Deposit;Layer	1920-2005	6			
262	5	Deposit;Fill	1680-1700	2			
263	5	Deposit;Layer	1680-1700	2			
264	5	Deposit;Layer	1680-1700	2			
265	5	Deposit;Layer	1680-1700	2			
266	5	Deposit;Fill	1920-2005	6			
267	5	Deposit;Layer	1920-2005	6			
268	5	Deposit;Fill	1920-2005	6			
269	5	Deposit;Drain;Pipe	1920-2005	6			
270	5	Deposit;Layer		unstrat	17 th c	L 16 th – early 18 th	1
271	5	Deposit;Layer;Redeposited Natural		natural			
272	4	Deposit;Surface;Gravel	1680-1700	2			
273	4	Structure;Sill	1680-1700	2			
274	4	Deposit;Layer	1700-1780	3			
275	4	Deposit;Layer	1700-1780	3			
276	4	Cut;Services	1810-1920	5			
277	4	Deposit;Fill	1810-1920	5	1 st half 19 th c	L 18 th – 20 th	1
278	4	Deposit;Fill	1700-1780	3			
279	4	Deposit;Layer	1810-1920	5			
280	4	Cut;Drain;Construction Trench	1920-2005	6			
281	4	Deposit;Drain;Pipe	1920-2005	6			
282	4	Deposit;Fill	1920-2005	6			
283	4	Deposit;Layer	1700-1780	3			
284	4	Deposit;Natural		natural			
285	4	Cut;Services	1780-1810	4			
286	4	Deposit;Fill	1780-1810	4			
287	4	Deposit;Layer	1700-1780	3			
288	4	Deposit;Fill	1680-1700	2			
289	4	Structure;Wall	1700-1780	3			
290	4	Structure;Wall	1700-1780	3			
291	4	Cut;Robbing Trench	1810-1920	5			
292	4	Deposit;Robbing Trench;Fill	1810-1920	5			
293	4	Deposit;Fill	1780-1810	4			
294	4	Structure;Wall	1680-1700	2			
295	4	Cut;Pit	1680-1700	2			
296	4	Deposit;Robbing Trench;Fill	1810-1920	5			
297	4	Cut;Robbing Trench	1810-1920	5			
298-300	-	Unused		-			
301	1	Deposit;Layer	1920-2005	6			
302	1	Deposit;Layer	1780-1810	4			
303	5	Deposit;Linear Feature;Fill	1680-1700	2	2 nd half 18 th c +	17 th -19 th	2
304	5	Deposit;Fill	1700-1780	3	18 th c	L 17 th – 19 th	1
305	5	Deposit;Fill	1700-1780	3			
306	5	Deposit;Linear Feature;Fill	1680-1700	2			
307	5	Deposit;Linear Feature;Fill	1680-1700	2	17 th c ? plus	14 th – 18 th	2
308	5	Deposit;Linear Feature;Fill	1680-1700	2	13 th c	L 12 th – 14 th c	1
309	5	Deposit;Linear Feature;Fill	1680-1700	2			
310	5	Deposit;Fill	1700-1780	3	18 th /19 th c	17 th – 19 th c	1
311	5	Deposit;Fill	1700-1780	3			

Context	SSD	Category	Date	Phase	Spot Date	Date Range	Sherds
312	5	Cut;Pit	1780-1810	4			
313	5	Deposit;Linear Feature;Fill	1600-1680	1			
314	5	Deposit;Feature;Fill	1780-1810	4			
315	5	Cut;Linear\Rectangular Pit	1700-1780	3			
316	5	Cut;Linear\Rectangular Pit	1700-1780	3			
317	5	Cut;Pit	1780-1810	4			
318	5	Deposit;Pit;Fill	1780-1810	4			
319	5	Deposit;Linear	1600-1680	1			
320	5	Deposit;Linear	1600-1680	1			
321	5	Deposit;Layer	1600-1680	1			
322	5	Deposit;Feature;Fill	1600-1680	1			
323	5	Deposit;Pit;Fill	1920-2005	6			
324	5	Cut;Pit	1920-2005	6			
325	5	Deposit;Pit;Fill	1920-2005	6			
326	5	Cut;Pit	1920-2005	6			
327	5	Deposit;Linear;Fill	1600-1680	1			
328	5	Deposit;Linear	1600-1680	1	L 17 th – 18 th c	15 th – 18 th c	5
329	5	Deposit;Feature;Fill	1600-1680	1			
330	5	Deposit;Feature;Fill	1680-1700	2			
331	5	Deposit;Feature;Fill	1600-1680	1			
332	5	Deposit;Feature;Fill	1680-1700	2			
333	5	Deposit;Feature;Fill	1600-1680	1			
334	5	Deposit;Linear;Fill	1680-1700	2			
335	5	Deposit;Feature;Fill	1600-1680	1			
336	5	Deposit;Fill	1700-1780	3			
337	5	Cut;Pit	1700-1780	3			
338	5	Deposit;Layer	1920-2005	6			
339	5	Deposit;Feature;Fill	1600-1680	1			
340	6	Deposit;Layer	1920-2005	6			
341	6	Deposit;Layer	1920-2005	6	L 19 th / 20 th c	19 th – 20 th c	1
342	6	Deposit;Layer	1920-2005	6			
343	6	Deposit;Layer	1780-1810	4			
344	6	Deposit;Layer	1780-1810	4			
345-349	-	Unused		-			
350	5	Cut;Feature	1600-1680	1			
351	5	Deposit;Layer	1810-1920	5			
352	5	Deposit;Layer	1810-1920	5			
353	5	Deposit;Layer	1920-2005	6			
354	5	Deposit;Feature;Fill	1920-2005	6			
355	5	Deposit;Layer	1810-1920	5			
356	5	Deposit;Layer;Redeposited Natural		natural			
357	5	Deposit;Layer;Demolition	1780-1810	4			
358	5	Deposit;Layer	1680-1700	2			
359	5	Deposit;Feature;Fill	1810-1920	5			
360	5	Deposit;Feature;Fill	1920-2005	6			
361	5	Cut;Feature	1920-2005	6			
362	5	Deposit;Layer	1920-2005	6			
363	5	Cut;Feature	1600-1680	1			
364	5	Deposit;Layer	1700-1780	3			
365	5	Deposit;Layer	1680-1700	2			
366	5	Deposit;Layer	1780-1810	4			
367	5	Deposit;Layer	1680-1700	2			
368	5	Deposit;Feature;Fill	1780-1810	4			
369	5	Cut;Feature	1780-1810	4			
370	5	Cut;Linear Feature	1680-1700	2			
371	5	Cut;Linear Feature	1680-1700	2			
372	5	Cut;Linear Feature	1680-1700	2			
373	5	Cut;Rectangular Pit Feature	1700-1780	3			
374	5	Cut;Linear	1600-1680	1			
375	5	Cut;Feature	1680-1700	2			
376	5	Cut;Feature	1600-1680	1			
377	5	Structure;Wall	1680-1700	2			
378	5	Cut;Feature	1810-1920	5			
379	5	Cut;Linear	1680-1700	2			
380	2A	Cut;Feature	1680-1700	2			
381	2A	Deposit;Layer	1680-1700	2			
382	5	Cut;Linear	1680-1700	2			
383	5	Cut;Feature	1600-1680	1			
384	5	Cut;Feature	1600-1680	1			

Context	SSD	Category	Date	Phase	Spot Date	Date Range	Sherds
385	5	Cut;Feature	1600-1680	1			
386	-	Unused		-			
387	5	Cut;Feature	1600-1680	1			
388	5	Cut;Feature	1680-1700	2			
389	5	Cut;Feature	1600-1680	1			
390	5	Cut;Feature	1600-1680	1			
391	5	Deposit;Layer	1920-2005	6			
392	5	Deposit;Layer	1920-2005	6			
393	5	Deposit;Layer	1600-1680	1			
394	5	Deposit;Layer	1680-1700	2			
395	5	Deposit;Layer	1600-1680	1			
396	5	Deposit;Layer;Redeposited Natural		natural			
397	5	Deposit;Layer;Redeposited Natural		natural			
398	5	Deposit;Feature;Fill	1600-1680	1			
399	5	Deposit;Feature;Fill	1600-1680	1			
400	5	Deposit;Layer;Redeposited Natural		natural			
401-403	-	Unused		-			
404	2A	Cut;Robbing Trench	1680-1700	2			
405	2A	Deposit;Layer	1680-1700	2			
406	2A	Deposit;Layer;Demolition	1920-2005	6			
407	2A	Deposit;Topsoil	1920-2005	6			
408	2A	Deposit;Layer	1700-1780	3			
409	2A	Cut;Pit	1920-2005	6			
410	2A	Deposit;Pit;Fill	1920-2005	6			
411	2A	Deposit;Layer	1700-1780	3			
412	2A	Deposit;Layer	1700-1780	3			
413	2A	Deposit;Layer	1700-1780	3			
414	2A	Deposit;Layer	1700-1780	3			
415	2A	Deposit;Post Hole;Fill	1920-2005	6			
416	2A	Deposit;Layer	1680-1700	2			
417	2A	Deposit;Layer	1680-1700	2			
418	2A	Deposit;Layer	1920-2005	6			
419	2A	Deposit;Layer	1920-2005	6			
420	2A	Deposit;Layer	1680-1700	2			
421	2A	Deposit;Layer	1780-1810	4			
422	2A	Deposit;Layer	1680-1700	2			
423	2A	Deposit;Layer	1680-1700	2			
424	2A	Deposit;Layer	1680-1700	2			
425	2A	Deposit;Layer;Dump	1680-1700	2			
426	2A	Deposit;Layer	1680-1700	2			
427	2A	Deposit;Surface;Mortar	1600-1680	1			
428	2A	Deposit;Fill	1600-1680	1			
429	2A	Deposit;Drain Fill	1700-1780	3	Mid 18 th c +	18 th -19 th c	1
430	2A	Structure;Drain	1700-1780	3			
431	2A	Cut;Feature	1600-1680	1			
432	-	Unused		-			
433	3	Deposit;Layer	1920-2005	6			
434	3	Deposit;Layer	1810-1920	5	19 th	17 th - 19 th	20
435	3	Deposit;Layer	1810-1920	5			
436	3	Structure;Wall;Rebuild	1780-1810	4			
437	3	Deposit;Surface;Cobble	1780-1810	4			
438	3	Structure;Wall	1780-1810	4			
439	3	Structure;Wall	1780-1810	4			

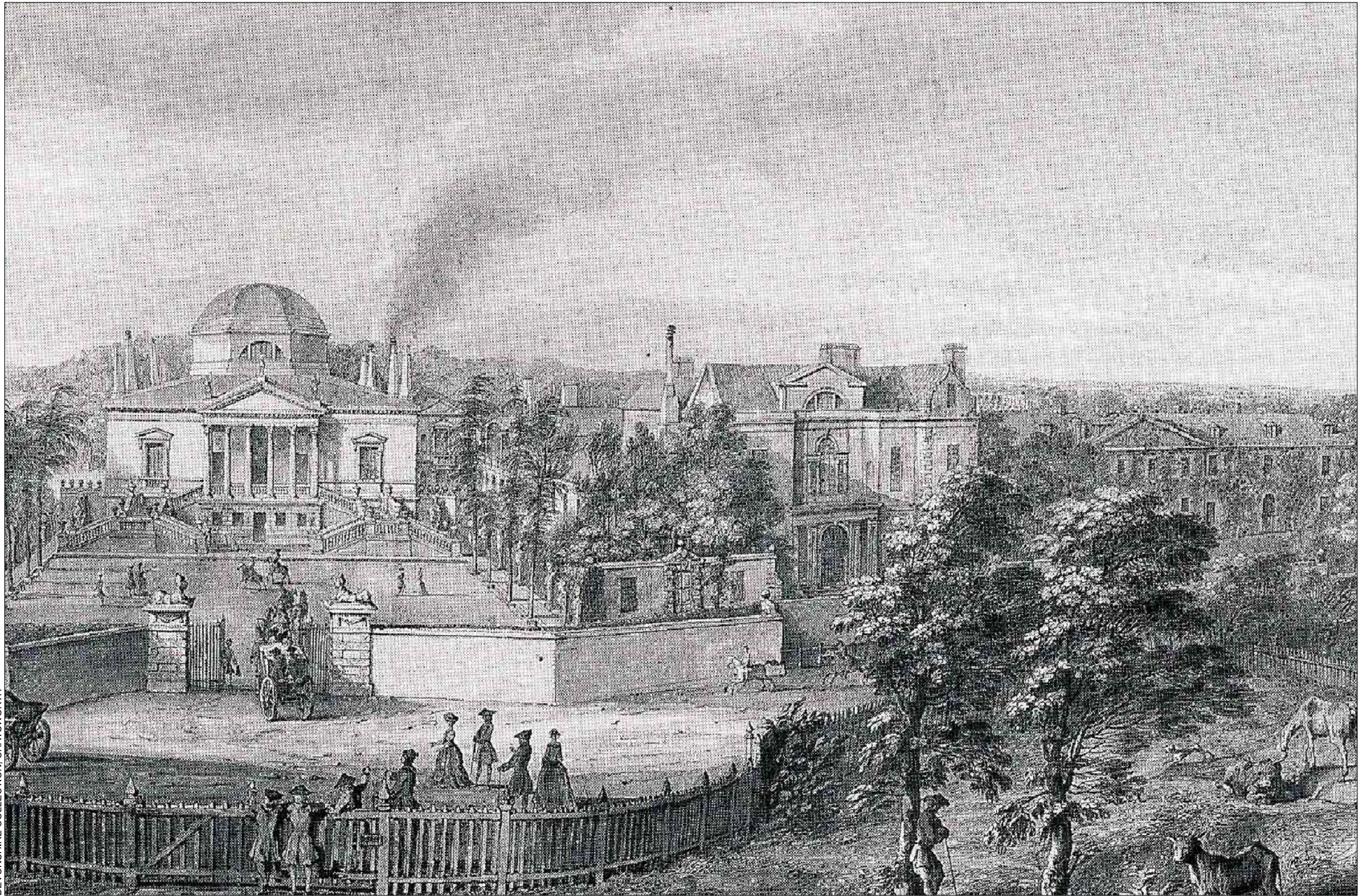


Figure 1. Maps showing the location of Chiswick House.



Figure 2: Plan showing the location of the evaluation trenches

0 50m



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Figure 3: View of Chiswick House by Jacques Rigaud, 1730s

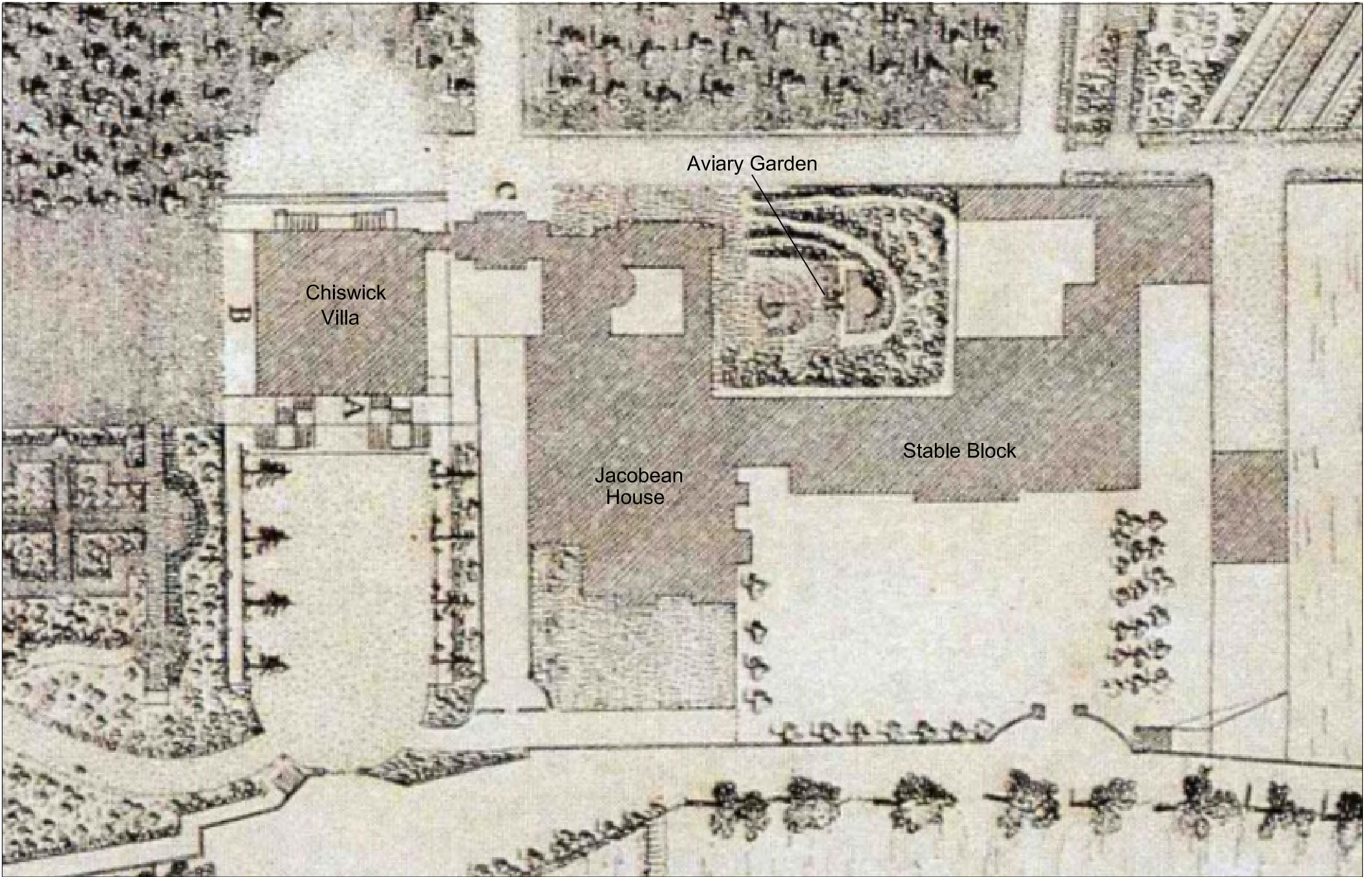
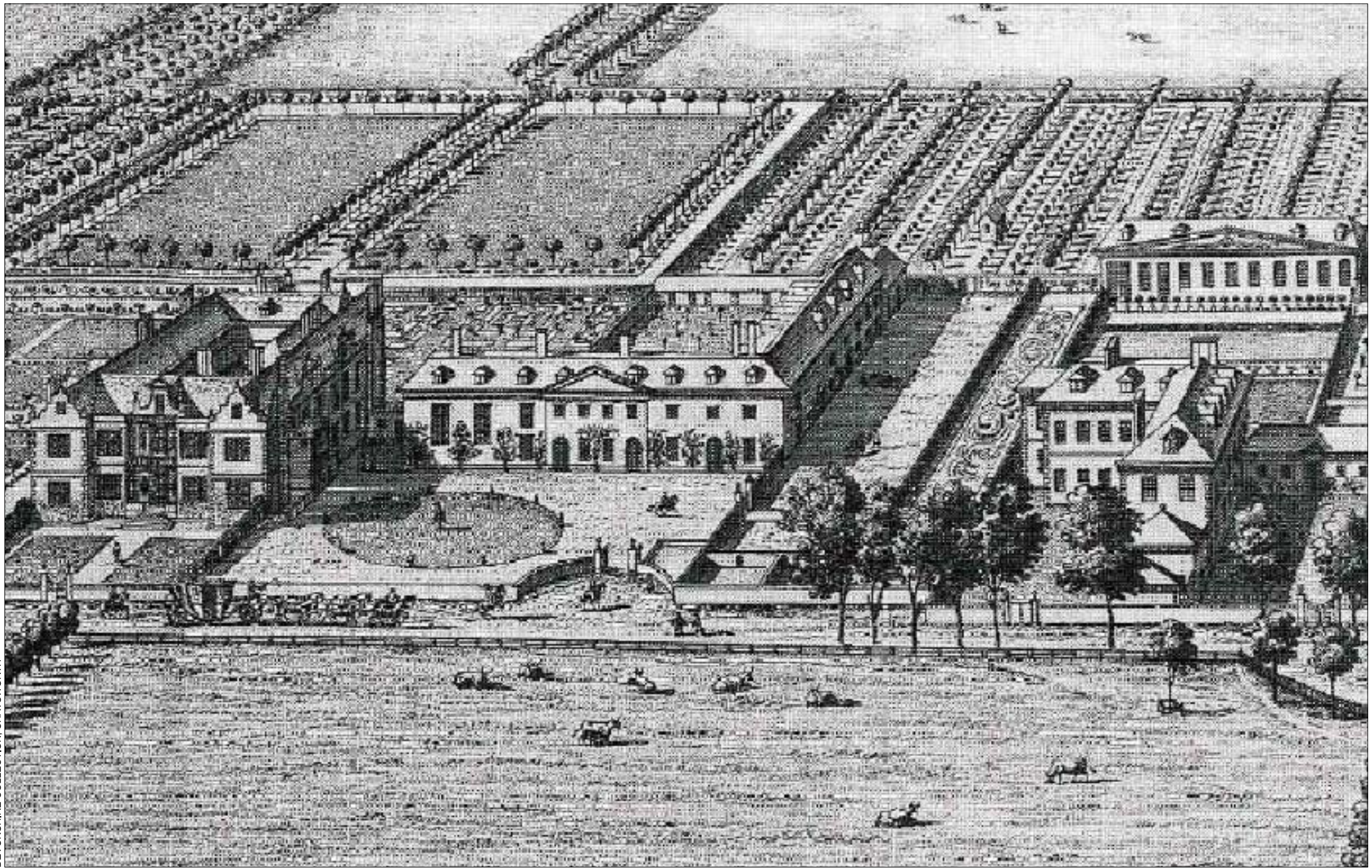


Figure 4: Detail of John Rocque's 1736 survey of Chiswick



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Figure 5: Bird's-eye view of Chiswick House by Leonard Knyff and Johannes Kip, 1698-9

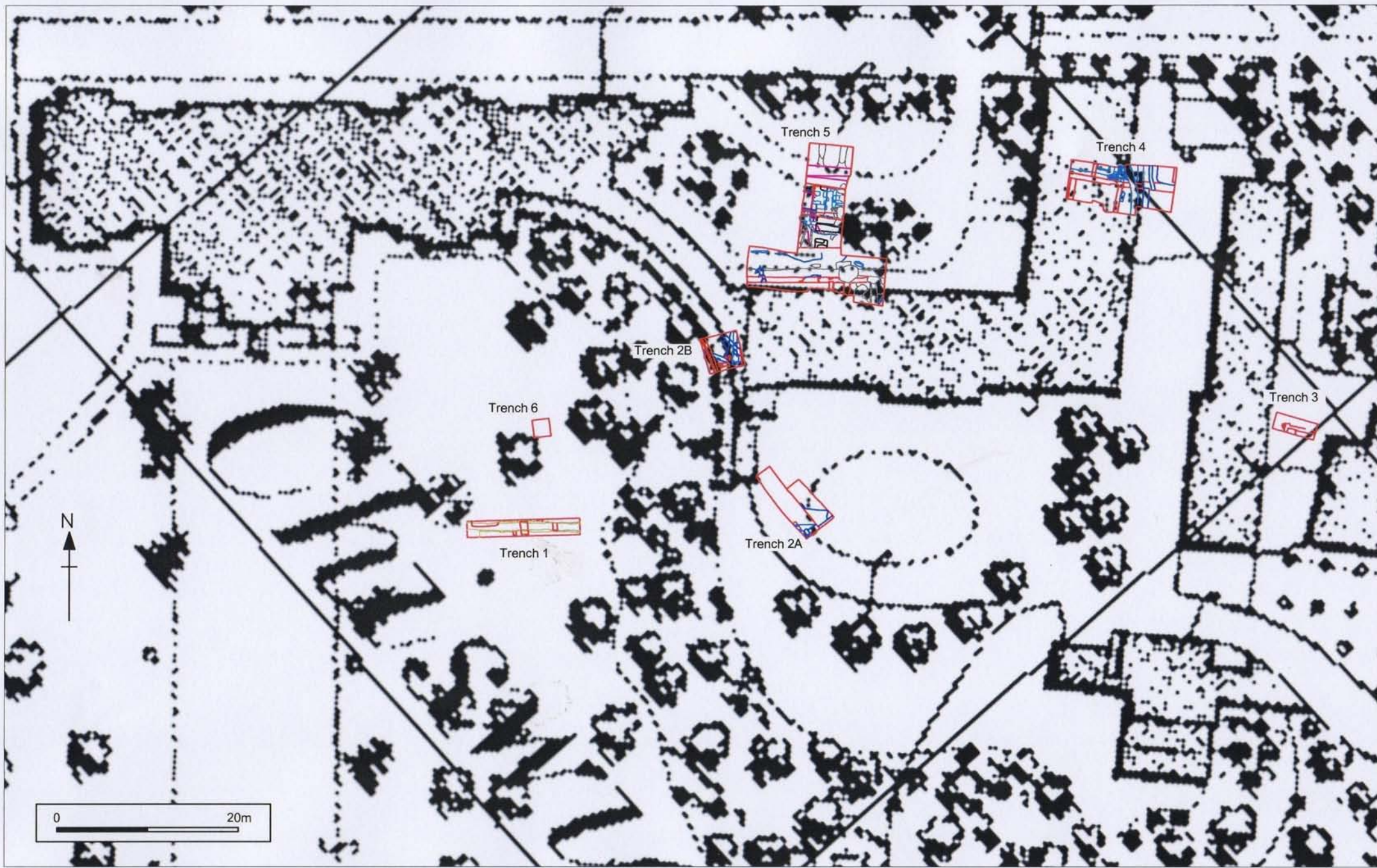


Figure 6: First Edition Ordnance Survey of Chiswick (1871) with the evaluation trench information super-imposed

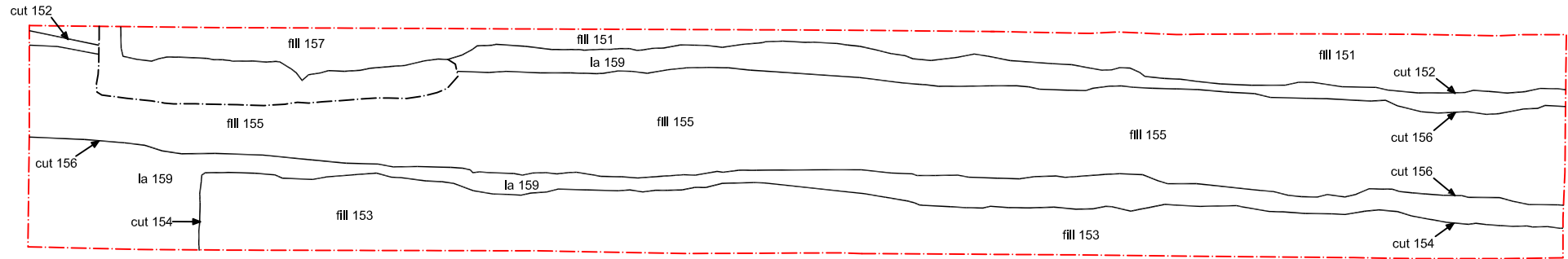


Figure 7: Plan showing the excavated features in Trench 1



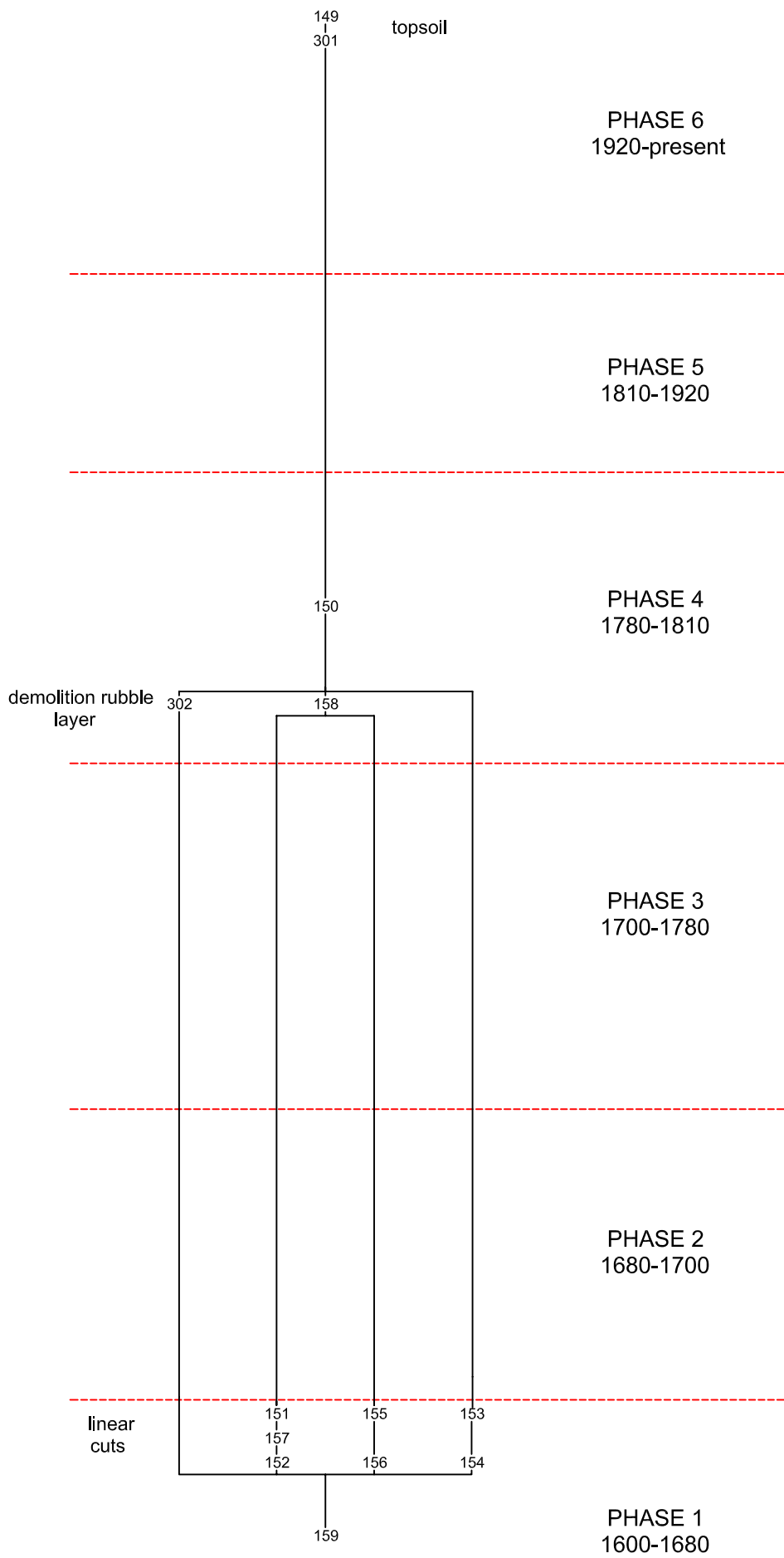


Figure 8: Stratigraphic matrix of Trench 1 contexts

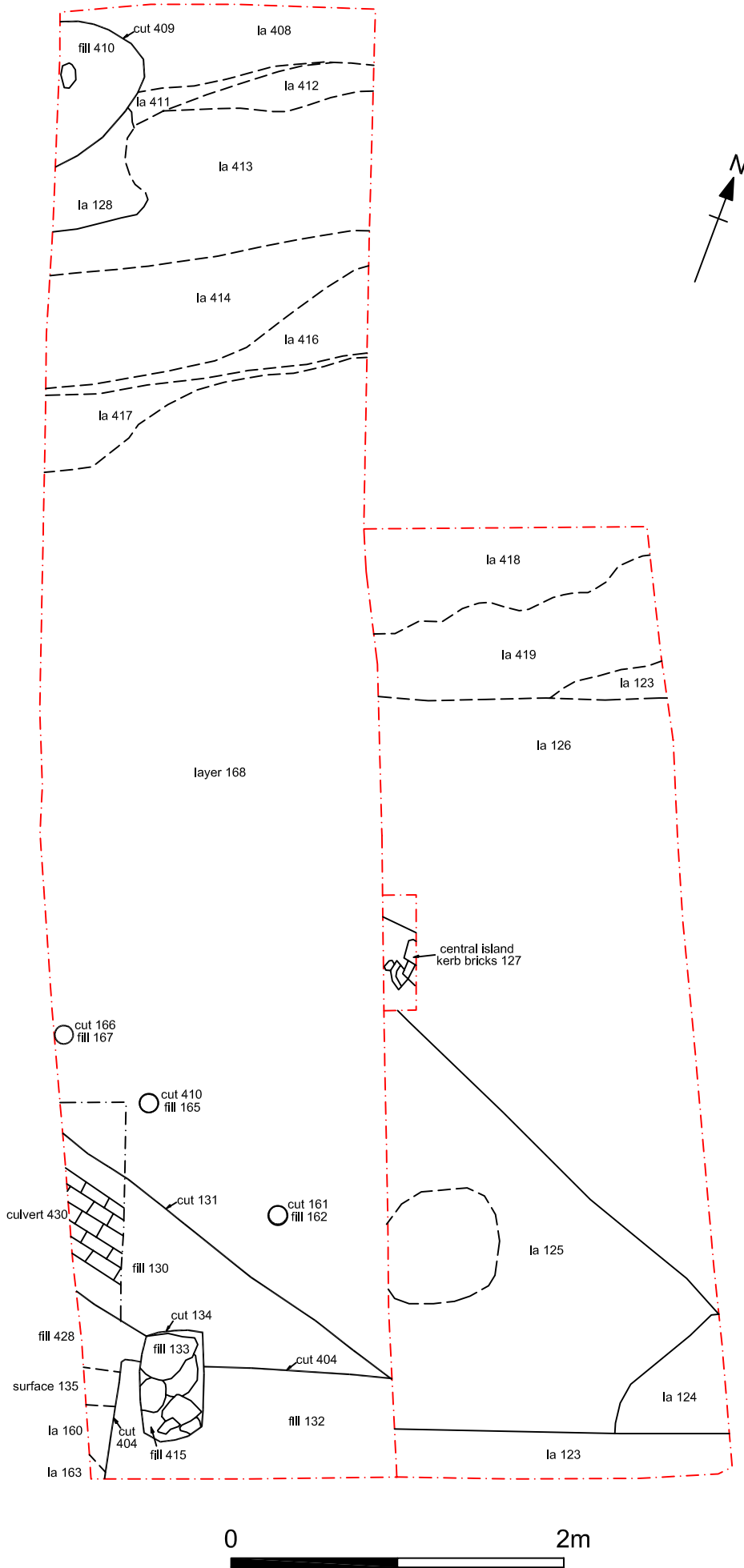


Figure 9 : Plan showing the excavated features in Trench 2A

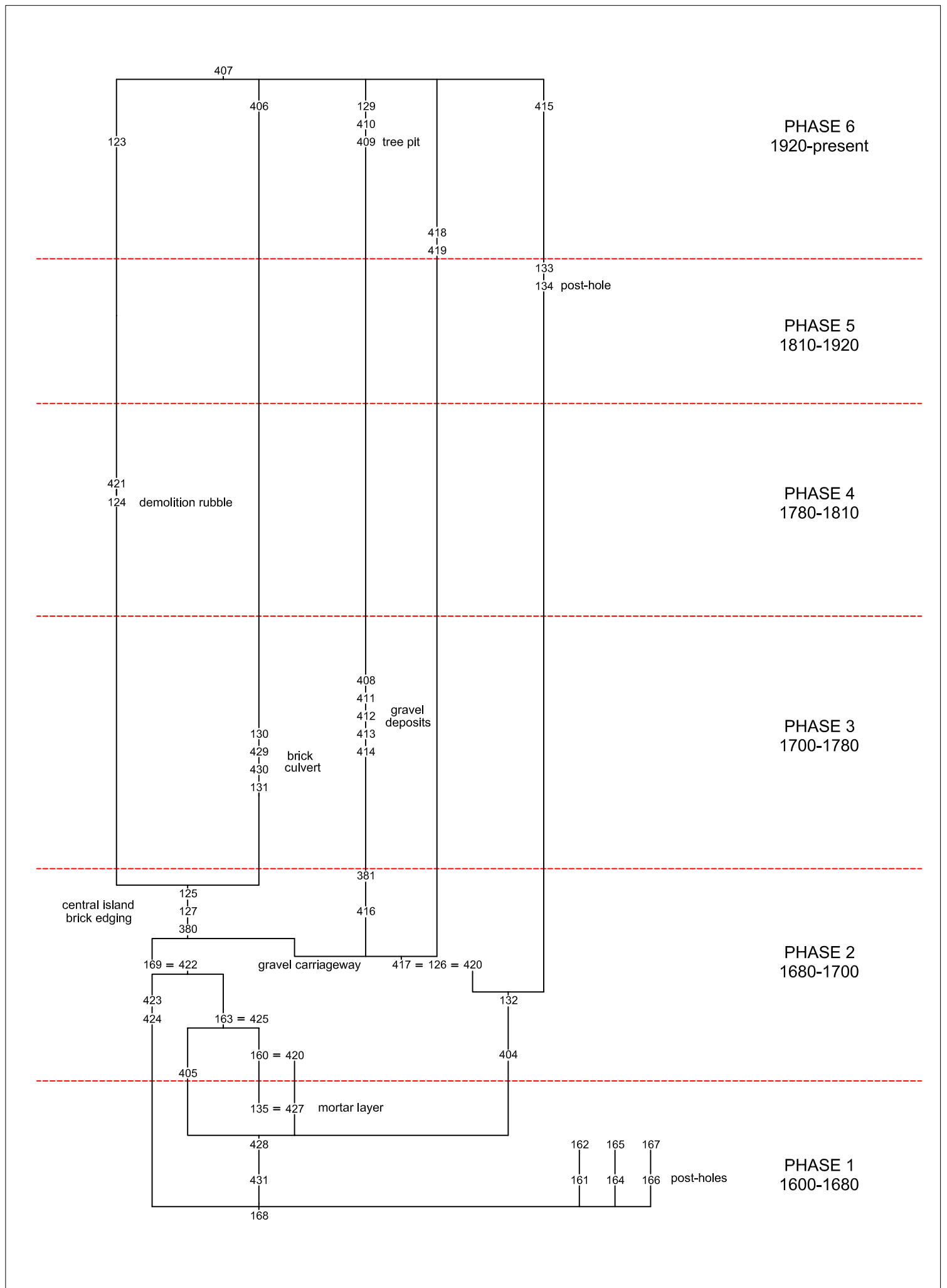


Figure 10: Stratigraphic matrix of Trench 2A contexts

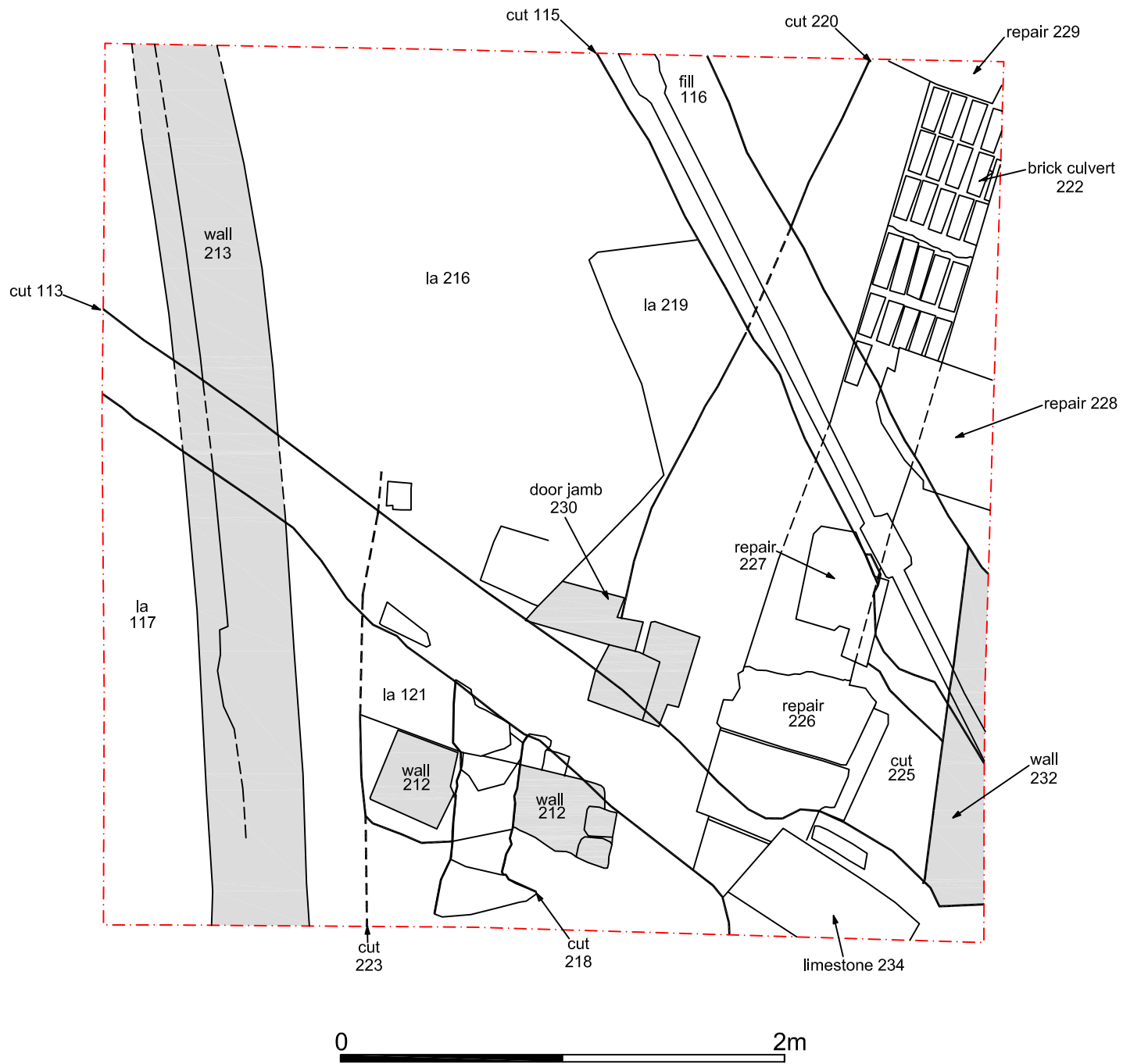


Figure 11: Plan showing the excavated features in Trench 2B

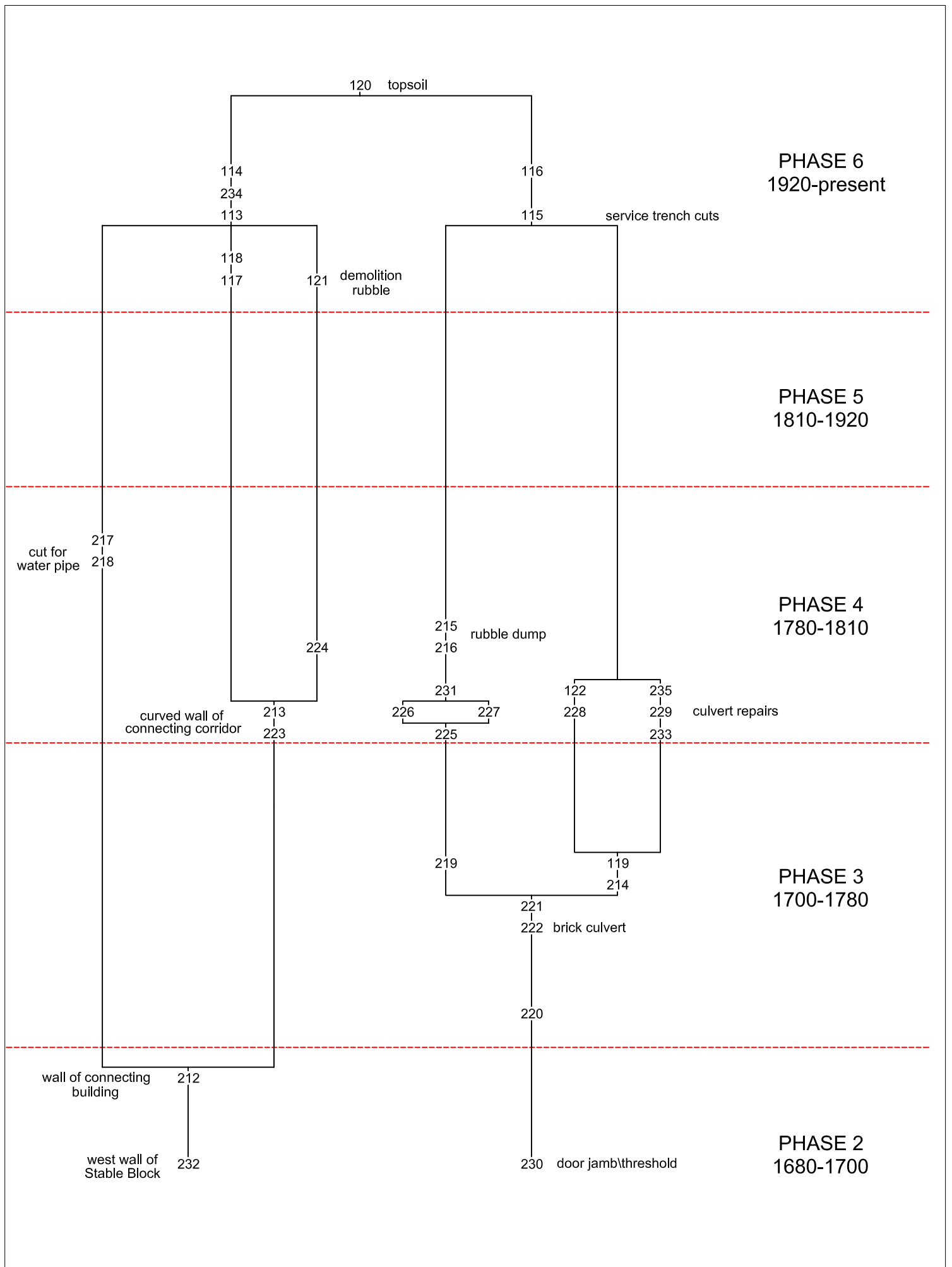


Figure 12: Stratigraphic matrix of Trench 2B contexts

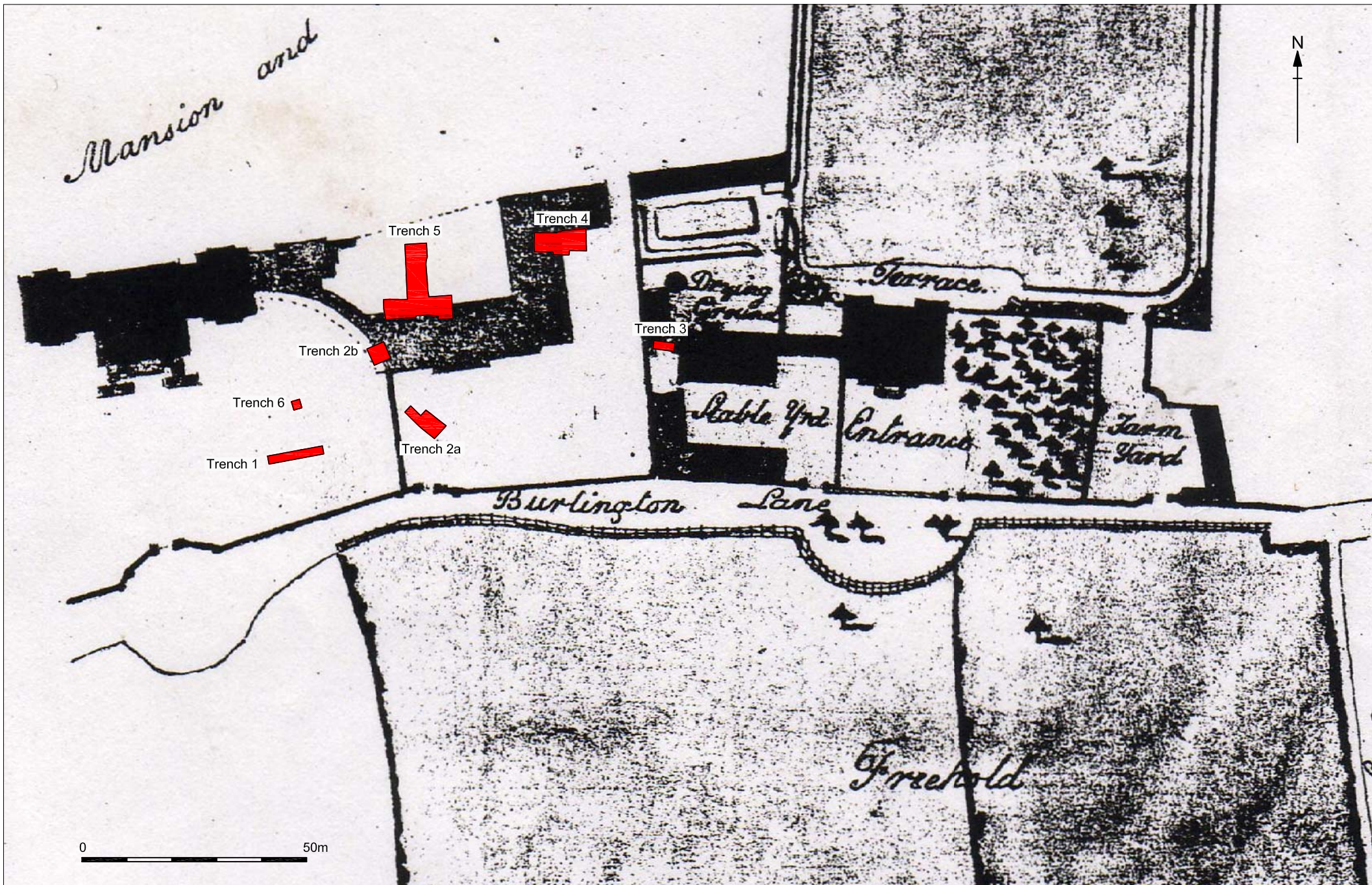


Figure 13: Location of evaluation trenches super-imposed on a survey of Moreton Hall and Chiswick dating from 1812

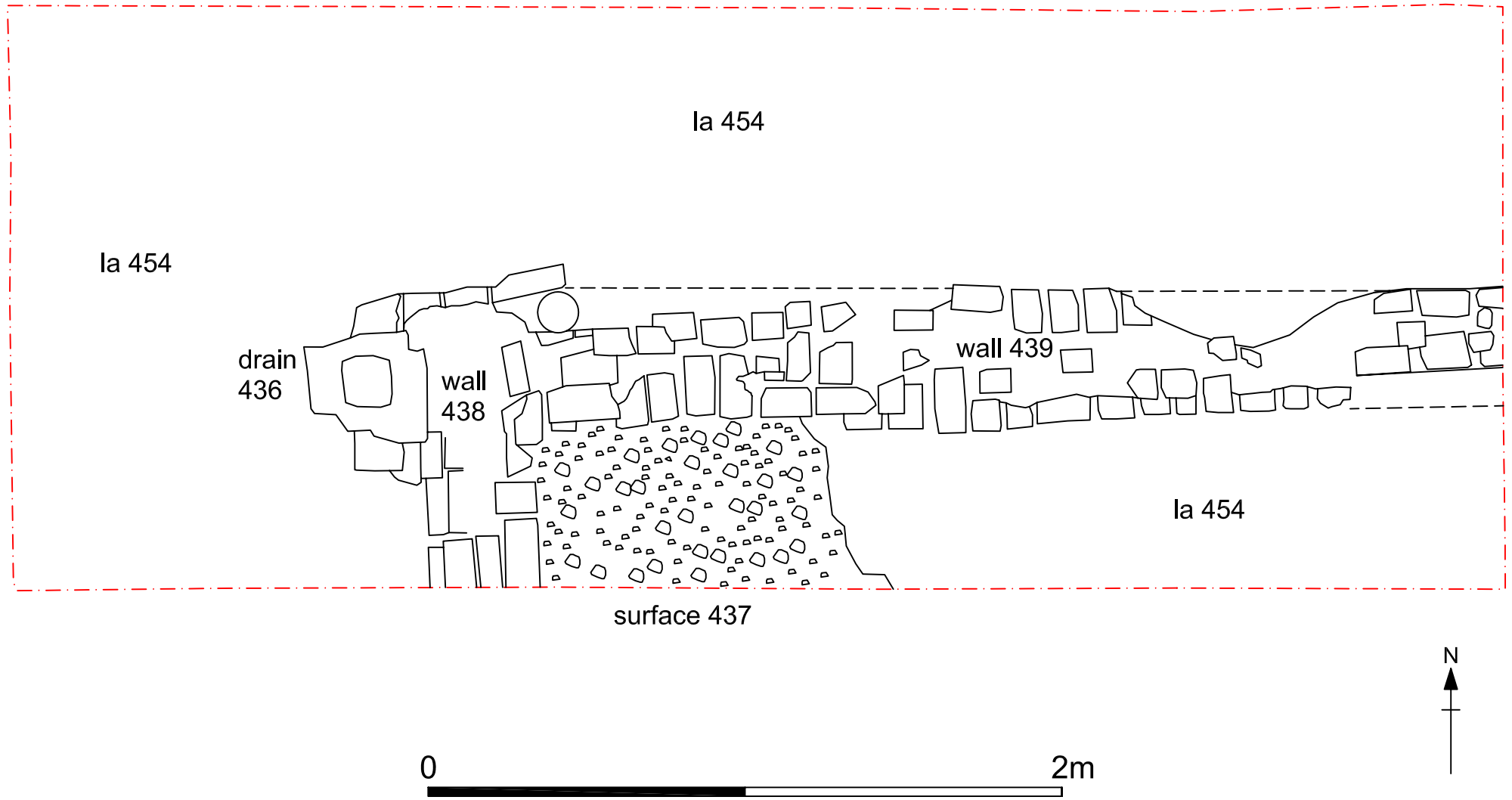


Figure 14: Plan showing the excavated features in Trench 3

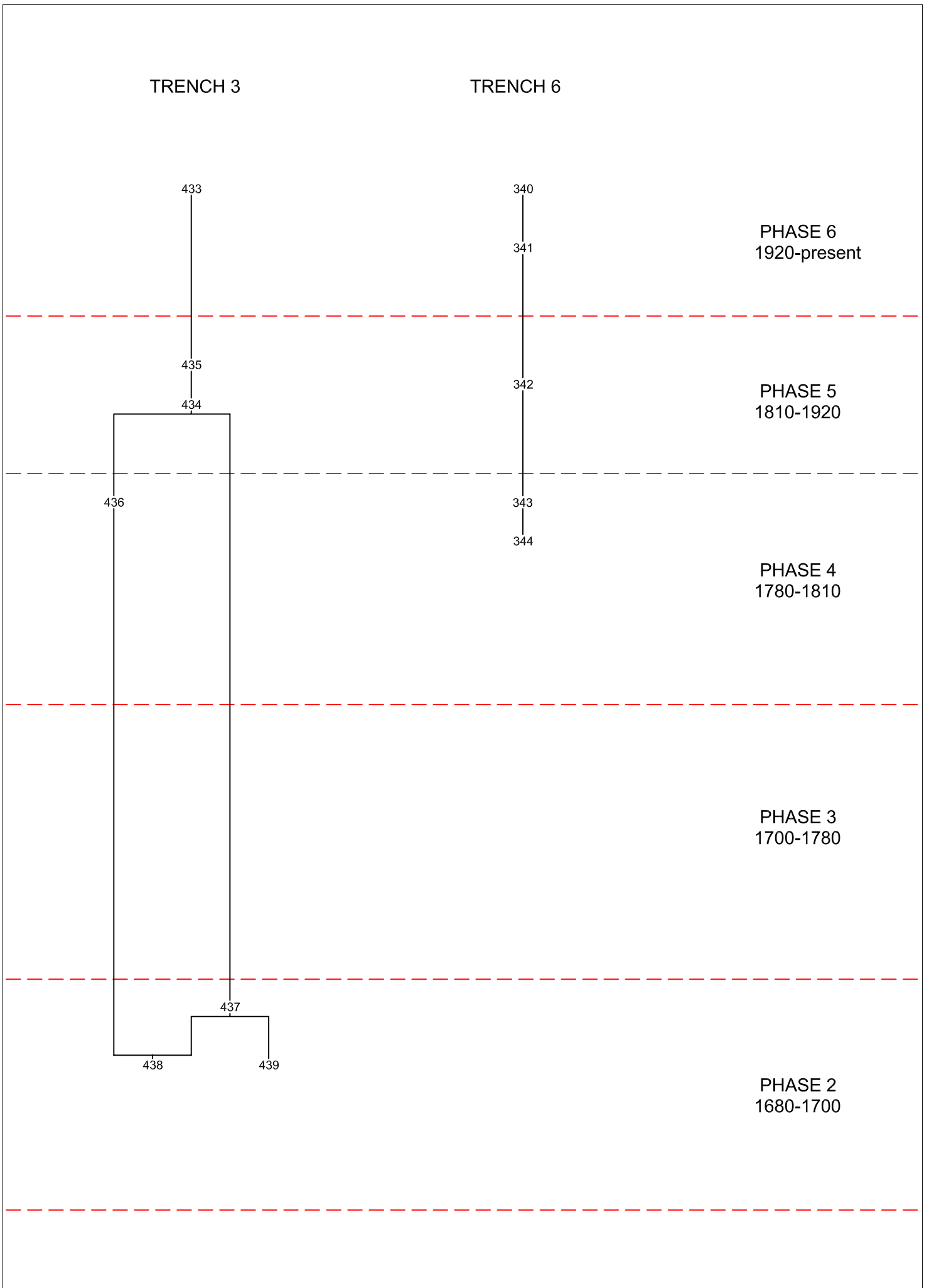


Figure 15: Stratigraphic matrix of the Trench 3 and Trench 6 contexts

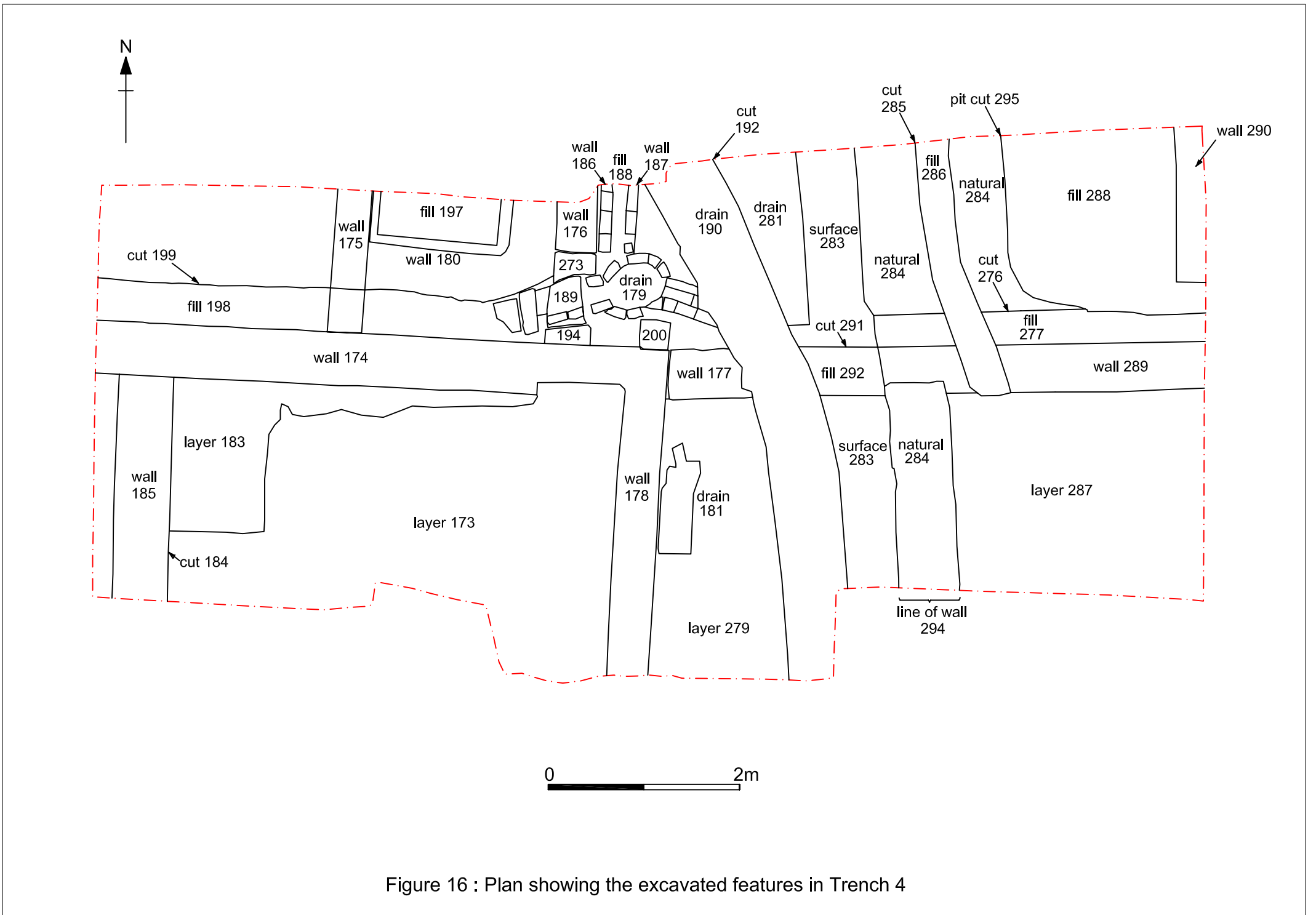


Figure 16 : Plan showing the excavated features in Trench 4

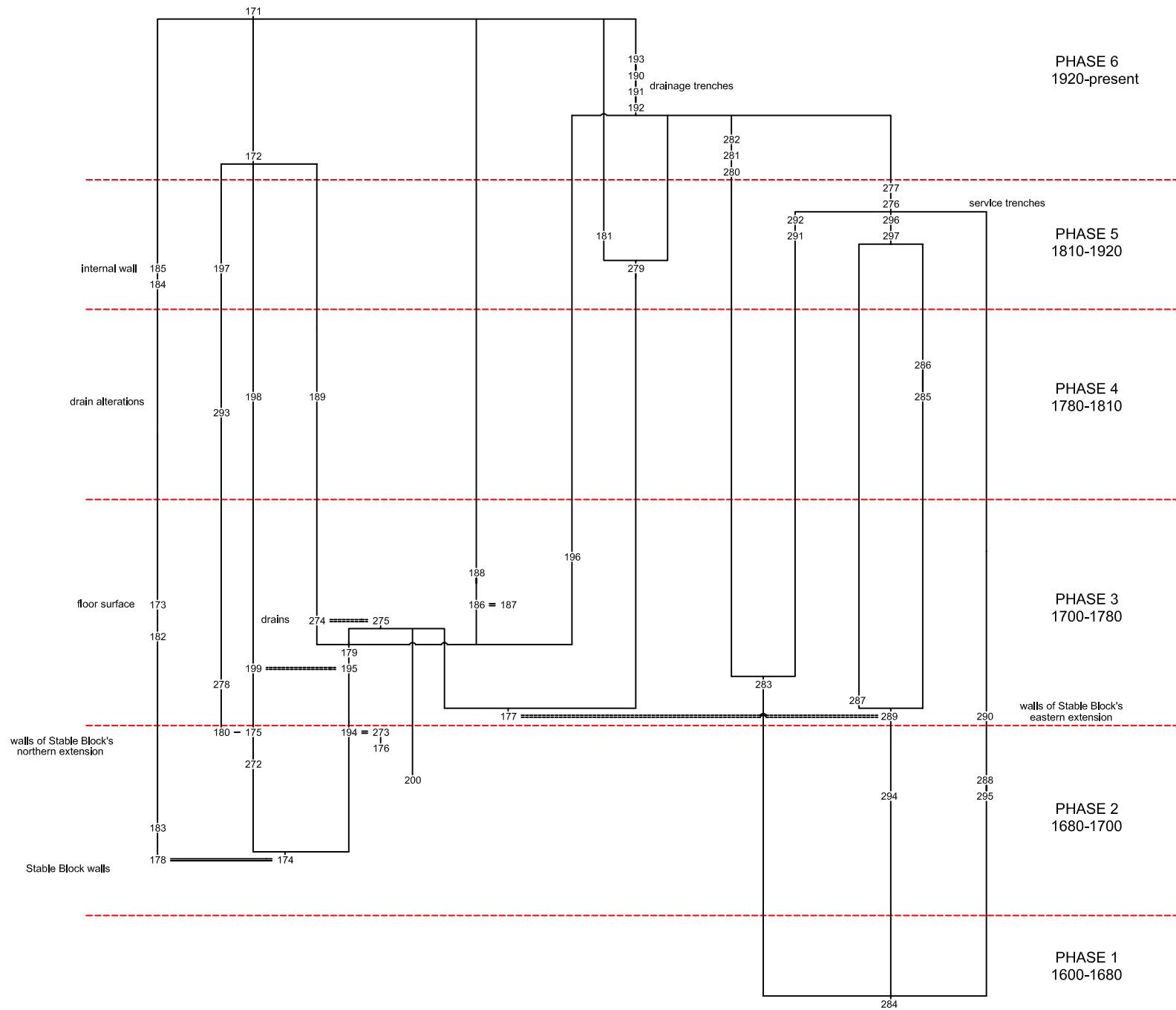


Figure 17: Stratigraphic matrix of Trench 4 contexts

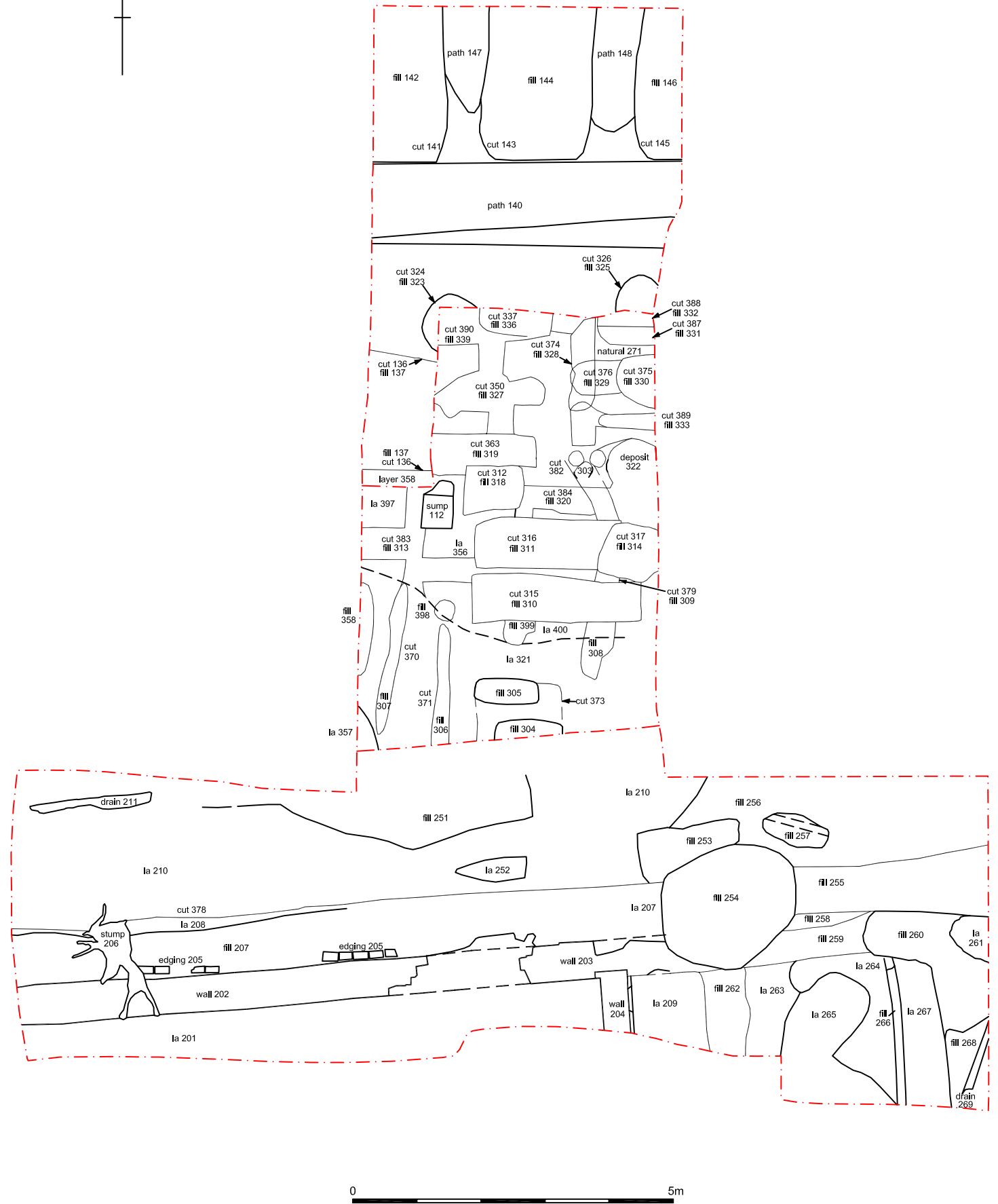
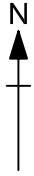


Figure 18: Plan showing the excavated features in Trench 5



Figure 19: John Rocque's view of Lady Burlington's Aviary Garden (1736)

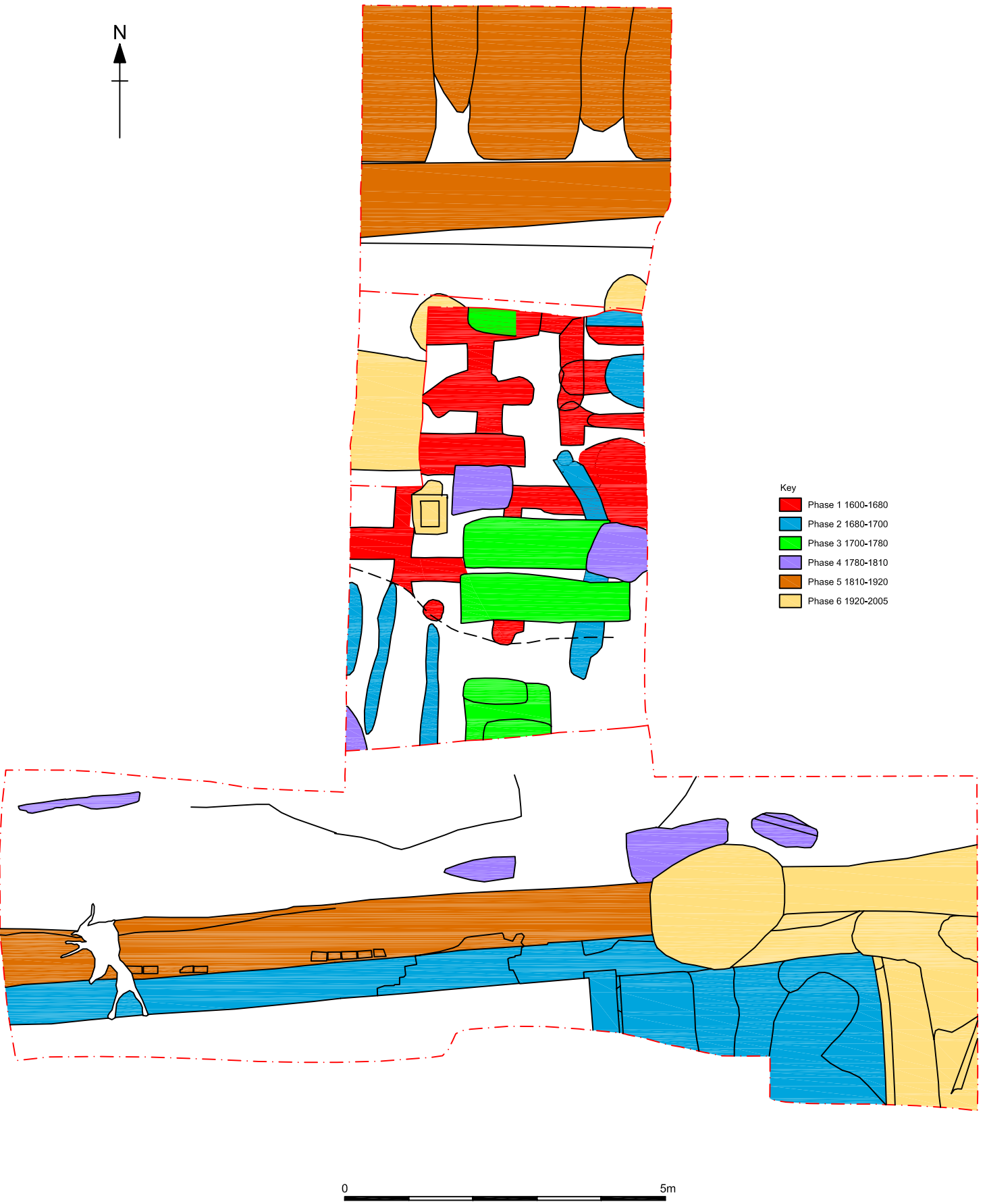
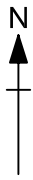


Figure 20: Plan showing the phased archaeology in Trench 5

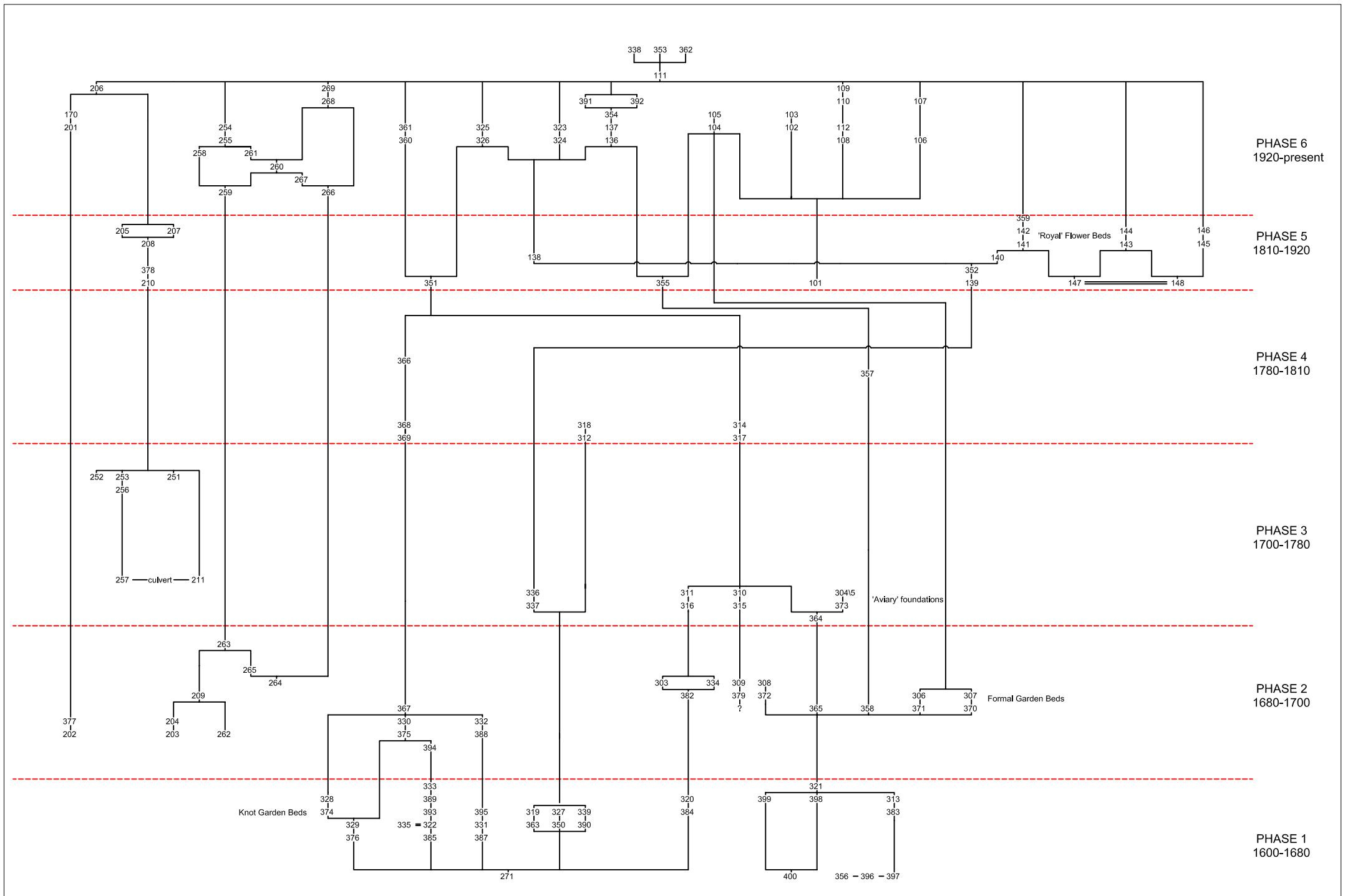


Figure 21: Stratigraphic matrix of Trench 5 contexts



Plate 1 View of excavated features in Trench 1, looking west (2m and 1m scales)



Plate 2 Photograph of the southern front of the Stable Block taken early in the 20th century



Plate 3 View of Trench 2A showing stable yard gravels, looking north (2 x 2m and 0.5m scales)



Plate 4 Detail of brick culvert in Trench 2A, looking west (0.5m scale)



Plate 5 View of Trench 2B showing the service cuts, looking west



Plate 6 View of Trench 2B showing the complexity of the intercutting archaeological features, looking west (1m and 0.5m scales)



Plate 7 View of Trench 2B showing the curved late 18th-century wall, looking north (2m scale)



Plate 8 View of Trench 2B showing the cut for a lead water pipe, looking west (1m and 0.5m scales)



Plate 9 View of Trench 2B showing the re-used moulded limestone slab with mason's marks, looking east (0.2m scale)



Plate 10 View showing the parch marks to the south of Trench 3, looking north-west (3x2m scales)



Plate 11 View of wall corner in Trench 3, looking west (2m and 1m scales)



Plate 12 View of Trench 4 showing the northern end of the Stable Block, looking west



Plate 13 View of Trench 4 looking north-east (2x2m and 1m scales)



Plate 14 View of circular brick sump and drains in Trench 4, looking south (1m and 0.5m scales)



Plate 15 View of the formal flower beds in the base of Trench 5, looking east (2m and 1m scales)



Plate 16: Photograph of obverse and reverse of the Nuremberg Token found in one of the Knot Garden beds



Plate 17 View of the rectangular mortar-rich features in the base of Trench 5, looking north (2x2m scales)



Plate 18 View of Trench 5 showing the northern wall of the Stable Block, looking east (2m scale)



Plate 19 View of the mortar-rich demolition rubble in Trench 6, looking west (0.5m scale)