

**5 SPOUT HILL, ADDINGTON VILLAGE, CROYDON CR0 5AN**

**LONDON BOROUGH OF CROYDON**

**ARCHAEOLOGICAL OBSERVATION & RECORDING**

March 2006

**COMPASS**



**ARCHAEOLOGY**



5 SPOUT HILL, ADDINGTON VILLAGE, CROYDON CR0 5AN

LONDON BOROUGH OF CROYDON

ARCHAEOLOGICAL OBSERVATION AND RECORDING

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Project 342

## ***Abstract***

*Archaeological observation and recording took place in February-March 2006 on the site of a residential extension in Addington Village, South Croydon. This work was carried out as part of the Local Authority planning process (Ref. 05/03928/P), and in response to recommendations made by the Greater London Archaeology Advisory Service of English Heritage.*

*The site lies on the north side of the historic village and about from the medieval Church. Previous archaeological work has produced a range of 11<sup>th</sup> to 13<sup>th</sup> century material, and there is also some potential for prehistoric and Roman remains. Historic maps show that the site previously lay within the Kitchen Garden of Addington Palace, and that by the 1830s there was probably a large glasshouse in this area.*

*Most of the extension was to be supported on piles, and in these areas only superficial ground reduction (<300mm) took place. Deeper excavation was carried out to the north for a proposed strip foundation, and to the south for a new inspection chamber.*

*Excavation revealed some 0.6m to 1.0m of recent made ground, almost certainly contemporary with construction of the present house. There was some evidence for previous 20<sup>th</sup> century activity in the form of a small concrete block path, probably associated with cultivation.*

*The northernmost trench revealed two lines of brick foundations, clearly related to the glasshouse that is shown on historic maps and which was probably built between 1810 and 1835. The main east-west foundation was supported on brick arches c 1.5m wide, with an adjacent surface that was reduced over 1.4m below contemporary ground level. This construction is probably associated with heating of the glasshouse, probably employing a system of boilers and flues. An 18<sup>th</sup> century illustration shows a similar arrangement of foundation arches supporting a principal wall with built-in flues.*

*No earlier remains or artefacts were found, and the natural ground surface was not exposed.*

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## 1. Introduction

- 1.1 A small-scale programme of archaeological observation and recording took place to the rear 5 Spout Hill, Addington Village (Fig 1: site centred at National Grid Reference TQ 37148 64075).

The work was required as part of the planning process for construction of a single and two-storey extension to the existing house (LB of Croydon Planning Ref. 05/03928/P, Condition 1).

- 1.2 It was considered that the site had potential for archaeological remains, particularly in relation to the Saxon/medieval origins of the Village. There was also some potential for prehistoric finds, and for features relating to documented 18<sup>th</sup> century and later land use.
- 1.3 English Heritage advised that archaeological observation and recording should take place during groundworks for the extension, as a condition of the planning consent.

## 2. Acknowledgements

The archaeological work was commissioned by the householder, Mr Abbas Dato. Further assistance was given by Mr Peter Panesar of Jaim Building Services Ltd.

The archaeological measures were proposed by Mark Stevenson (English Heritage Greater London Archaeology Advisory Service) on behalf of the LB of Croydon.

Background material was provided by the RHS Library, Wisley, and advice on the brick dates given by Terry Smith of MoLSS.

## 3. Site location and history

- 3.1 The site is located on a southeast-facing slope at approximately +81.5m OD, on the northern side of Addington Village. The site itself lies within a rectangular plot with dimensions of about 18m by 40m in plan.

The British Geological Survey (*Sheet 270*, 1998) indicates that the site overlies a natural ground surface of Upper Chalk, with a band of Thanet Sand just to the north.

- 3.2 There are a number of references to prehistoric activity in the area, including chance finds of flint artefacts but also *in situ* features of Late Bronze/Early Iron Age date (Bell *et al* 2001, 230-37, 247). There have also been some finds of Roman material, including occasional building material (*eg*, Thornhill 1975, 503).

There is some archaeological evidence for early medieval activity in Addington, mainly of 11<sup>th</sup> century date (*eg*, Bell *et al* 231-50). Later finds relate to 12<sup>th</sup> and 13<sup>th</sup> century land use and occupation (*ibid*; Thornhill 1975, 506-12; Thornhill & Savage 1979, 263-4). Parts of the parish church of St Mary are dated to the late eleventh/twelfth century (SMR Ref. 222827), and although not mentioned in the Domesday Survey of 1086 the structure may stand on an earlier foundation.

Examination of historic maps reveals that the site area previously formed part of the Kitchen Garden of Addington Palace. Early land use is unknown, although the estate is mentioned in Domesday (Weinreb & Hibbert 1983, 4) and the medieval manor house of Addington Place stood a short distance to the northwest (Warren 1984, 58-60). Surveys

carried out by Rocque *c* 1762 and Driver in 1802 place the site in an open plot, with more intensive cultivation just to the west.

Subsequent drawings show large glasshouse covering much of the northern part of the present site, aligned east-west and measuring approximately 21m by 6m in plan. This arrangement is clearly shown on Ordnance Survey maps between *c* 1868 and 1935, and indicated on the Addington Tithe map of 1837. By 1955 the glasshouse has disappeared, and the area again appears as open ground.

#### **4. Archaeological research questions**

The fieldwork presented an opportunity to address a number of research questions. These included:

- What evidence is here for past terracing and movement of deposits on the hillside?
- Is there any evidence for prehistoric or Roman activity, either *in situ* remains or residual finds?
- Is there any evidence for Saxon or medieval activity, and does this give an insight into the development of the Village?
- What evidence is there for post-medieval land use, and does this confirm the picture that is given by historic maps from the 17<sup>th</sup> century?

#### **5. Methodology**

**5.1** A short *Written Scheme of Investigation* (February 2006) was agreed prior to the fieldwork. The fieldwork was carried out in accordance with English Heritage guidelines (including *Standards and Practices in Archaeological Fieldwork*, 1998) and those of the Institute of Field Archaeologists (*Standard and Guidance for an archaeological watching brief*).

**5.2** The extension covered an area to the side and rear (south and west) of the existing house, with overall dimensions of *c* 8m by 14m. However, most of the footprint was to be piled and consequently in this area there was only superficial ground reduction (<300mm). Deeper excavation was carried out in the northern part of the site as a proposed strip foundation for a conservatory (Fig 2, Trenches 1 & 2), and in a smaller area to the south for a new inspection chamber adjacent to the line of an existing drain (Trench 3).

**5.3** The exposed deposits and features were recorded by scaled plan and section, supplemented by 35mm photography. Individual elements were described on the drawings but did not produce any significant finds and were therefore not separately contexted. Levels were derived from an OS spot height located on the Spout Hill, value 80.77m OD (Fig 1). The trench positions were located onto a 1:100 site plan by taped measurement: this was in turn related as a 'best fit' to the Ordnance Survey grid as derived from the 1:1250 plan.

The fieldwork records have been allocated the site code: SIV06 by the Museum of London Archaeological Archive: there were no retained finds. An ordered and indexed site archive will be compiled in line with the MoL *Guidelines* and will be deposited in the Museum of London Archive.



## 6. The archaeological fieldwork (Fig 2)

### 6.1 Trench 1 (Figs 3-6)

Trench 1 was excavated from a surface level of at least 82.15m OD, over a distance of some 3.6m east to west line but broken in the centre by a modern brick-lined inspection chamber. To the west of this excavation took place to a general depth of about 0.7m, and to the east to *c* 1.6m. The modern ground surface was slightly higher to the west where a dwarf brick wall embanked the lawn.

Both parts of the trench revealed brick remains, basically two sections of wall foundation at right angles to each other and forming a junction to the west. The east-west section was partly cut away and otherwise obscured by the modern inspection chamber, but the two parts clearly relate to a single structure.

**6.1.1** At the western end of the trench the north-south foundation included a block of oolitic limestone some 0.26m by 1.13m in plan and 0.13m thick. This represents the threshold for a doorway, and in the southwest corner there was a small rebate *c* 20mm to 30mm deep for one side of the doorframe. The top of the stone also establishes the contemporary ground surface at about 81.57m OD, and to the west this was continued in a compacted surface of dark silty soil. However, there was no recognisable surface to the east. Deposits here were excavated to a depth of 0.7m below the threshold and comprised a lighter and more mixed fill, comparable to that in the eastern part of the trench (see below 6.1.2).

The exposed western face of the wall adjacent to the stone threshold had a cement render some 8mm to 12mm thick. This finished about 60mm below the contemporary ground surface, although the brickwork clearly continued down.

The short adjoining section of east-west wall in the western part of Trench 1 appears to be a later rebuild or refacing. This is based on the nature of the brickwork and its junction with the north-south wall, and also the fact that it appeared to be founded at a shallower level no more than 0.53m below the threshold surface.

**6.1.2** The eastern part of Trench 1 revealed two brick arches below the continuous east-west brick foundation, spanning from a single brick base 0.47m wide. Not all of the arch construction survived or was visible, but it can be established that the height was some 0.47m, width approximately 1.5m, and wall thickness 0.22m. The bottom of the brick base was not exposed but was over 0.42m (6 courses) below the point from which the arches were sprung (<80.18m OD). Each arch included a double ring of brick headers, some 225mm wide, with up to six courses of brickwork surviving between the arches.

The bricks used in this construction were well fired, with a hard red porous fabric and measuring some 225mm by 110mm by 66mm. Those examined in detail contained a shallow concave frog in the upper surface, some 7.5mm deep and up to 75mm wide. It is unlikely that these bricks were manufactured before 1800, and most probably between this date and the 1830s (*pers comm* Terry Smith, MoLSS).

Although below contemporary ground level it is clear that the arches and support were constructed as part of an exposed building – not for example as simple relieving features in a foundation. Several points establish this: the brickwork was finished to a high standard, with adjacent material in the trench clearly forming a later deposit against the

face of the wall. Moreover, the eastern arch had been blocked by a brick wall, from a level just below the springing (*c* 80.5m OD). This blocking wall was therefore built over one level of fill and subsequently covered by further deposits.

The blocking wall was constructed of single-thickness brickwork (*c* 110mm), up to six courses high and (except at the base) set back some 100mm from the main wall face. A number of the individual bricks were limewashed and clearly reused. There was a void some 300mm to 110mm wide between this structure and the surrounding arch, presumably resulting from settlement through consolidation of the underlying fills.

Although the blocking wall was built from an intermediate level there was little sign of an associated surface, and deposits above and below this level were of a very similar mixed brown clayey sandy silt with some gravel/pebbles, ceramic building fragments and occasional chalk. At the level of the surviving top of the wall (*c* 81.3m OD) there was some change, with slightly lighter material containing some mortar and modern brick that presumably relates to clearance and a raising of the ground surface for the present house. This recent made ground was overlaid by a base for the existing patio and dwarf wall, and to the west by imported topsoil for the lawn.

## 6.2 Trench 2

Trench 2 was of similar dimensions to Trench 1 but only dug to a maximum depth of about 1.15m (*c* 81.0m OD), becoming shallower to the west. The exposed deposits consisted of made ground similar to that found within the upper part of Trench 1, although at the deepest part of the trench a darker and more silty deposit with scattered brick fragments was observed.

There was no sign in the made ground of a cut for the modern drain that is known to run north-south from the inspection chamber in Trench 1 to that immediately east of Trench 3. This clearly indicates that deposition was contemporary with construction of the present house (*c* 1970s), the drain run being dug and backfilled beforehand. A number of brick fragments comparable to those used in the house were also noted within the deposit.

As in Trench 1 the made ground was overlaid by a base for the existing patio, and to the west by a slightly deeper deposit of imported topsoil for the lawn.

## 6.3 Trench 3 (*Fig 7*)

This comprised a small pit, *c* 0.9m by 1.25m in plan and 0.85 m deep, cut from the existing lawn surface at about 82.12m OD.

At the base of excavation was what appeared a small path running across the western end of the trench. This was made up of broken and complete concrete-type blocks, set into the contemporary ground surface. Where complete the blocks measured 450mm by 215mm by 102mm thick, and were embossed on one side with the name *LIGNACITE*. The Lignacite Company was established in 1947 and in this particular product finely graded wood particles are used as an aggregate to create a dense but lightweight fabric.

The ground underlying and to the east of the path was made up of a fairly firm grey-brown clayey silt with frequent pebbles/gravel and chalk flecks. The material sealed by the path was slightly darker and more solid, with less finely broken chalk, although both areas contained occasional small fragments of ceramic brick or tile.

Overlying the block path and adjacent surface were two layers of made ground, both approximately 0.4m thick and both probably contemporary with construction of the present house. The lower comprised a mid brown clayey sandy silt with frequent chalk, pebbles and ceramic building material: the upper layer was basically an imported topsoil, darker and with fewer inclusions.

## 7. Assessment of the results

### 7.1 Research questions

The archaeological evaluation has provided an opportunity to address the site-specific questions that were defined in section 4. above. The responses are outlined below:

- *What evidence is here for past terracing and movement of deposits on the hillside?*

The excavation removed substantial deposits of made ground, some 0.6m to 1.0m deep and probably dating to the construction of the present house (c 1970s). Below this level previous (19<sup>th</sup> to mid 20<sup>th</sup> century) surfaces were exposed and indicated a gentle slope across the site from north to south (c 300mm).

These deposits were not excavated and there is no evidence for earlier landscaping or levelling, other than the excavation that had evidently taken place to create a reduced level either side of the brick arches in Trench 1.

The natural ground surface was not exposed at any point.

- *Is there any evidence for prehistoric or Roman activity, either in situ remains or residual finds?*

There was no evidence for any prehistoric or Roman activity, nor were any residual artefacts recovered.

- *Is there any evidence for Saxon or medieval activity, and does this give an insight into the development of the Village?*

There was no evidence for any Saxon or medieval activity.

- *What evidence is there for post-medieval land use, and does this confirm the picture that is given by historic maps from the 18<sup>th</sup> century?*

The evidence for post-medieval activity related mainly to an earlier 19<sup>th</sup> century brick structure with associated land surface and reduced internal surface in Trench 1, plus a probable continuation of the reduced surface (inferred from the depth of made ground) in Trench 2. There was a much later (post-1947) path and adjacent surface in Trench 3. All three areas were overlaid by recent made ground that can fairly conclusively be dated to the construction of the present house (c 1970s).

The brick construction clearly relates to the large glasshouse that is shown on various plans between 1868 and 1935, and probably as early as 1837 (see 3.2 above & Figs 9 & 10 below). Trench 1 can be located at the northwest corner of this structure, taking in the main east-west wall and part of a small adjoining structure which is indicated in several of the contemporary drawings.

The features in Trench 3 may well relate to small-scale cultivation of the land (eg, allotments), within the area that is shown as open land in the 1950s and prior to the existing housing development.

## **7.2 The glasshouse remains**

**7.2.1** This structure is most likely to date to *c* 1810-1835, based on three pieces of evidence:

- The frogged brickwork, which is unlikely to be pre-1800 and probably not later than 1840.
- Driver's Survey of Addington Park does not show any building here in 1802, but the glasshouse is apparently indicated on the Tithe map of 1837 (Fig 9).
- The Addington estate was sold in 1802, transferred by inheritance in 1805 and sold again in 1808 to the Archbishop of Canterbury. Successive archbishops retained the Palace until 1898, and quite likely that this period initiated building works. A further possibility is the early 1830s, when Archbishop Howley began a programme of works for "improving the Mansion at Addington".

**7.2.2** The presence of the brick arches below the contemporary surface and the reduction of the adjacent ground by at least 1.4m almost certainly relates to the heating of the glasshouse. There are a number of possibilities, with partially underground heating systems that included boilers directly heating flues, or providing steam or hot water (Hix 1996, 50-55). An alternative system allowed for a hot-bed overlying an underground chamber that could be filled with horse manure (van den Muijzenberg 1980, 173).

However, a possible direct parallel for the arches and reduced levels appears in drawings of the 1760s for a heated glasshouse at Kew (*ibid* 109; Chambers 1763). In this example the house was to be built from just over 1m below ground level with boilers or 'fireplaces' feeding a series of flues below the finished floor and built into the rear wall. A section of the rear wall shows part of this construction and also a series of supporting arches of very similar dimensions to those recorded at Addington (Figure 8).

## **8. Conclusion**

The archaeological fieldwork recorded a number of deposits and features relating to land use since the 19<sup>th</sup> century. These included a substantial build-up of ground for the present development, plus evidence for previous activity and probable cultivation.

The most significant remains related to a large heated glasshouse, constructed on the Addington Palace estate around 1810-1830. Map evidence indicates that the building was over 21m in length and 6m wide, with an adjoining building to the north that may have contained boilers. The remains included brick foundations for both buildings, plus below-ground arches that are probably part of the substructure associated with the heating operation.

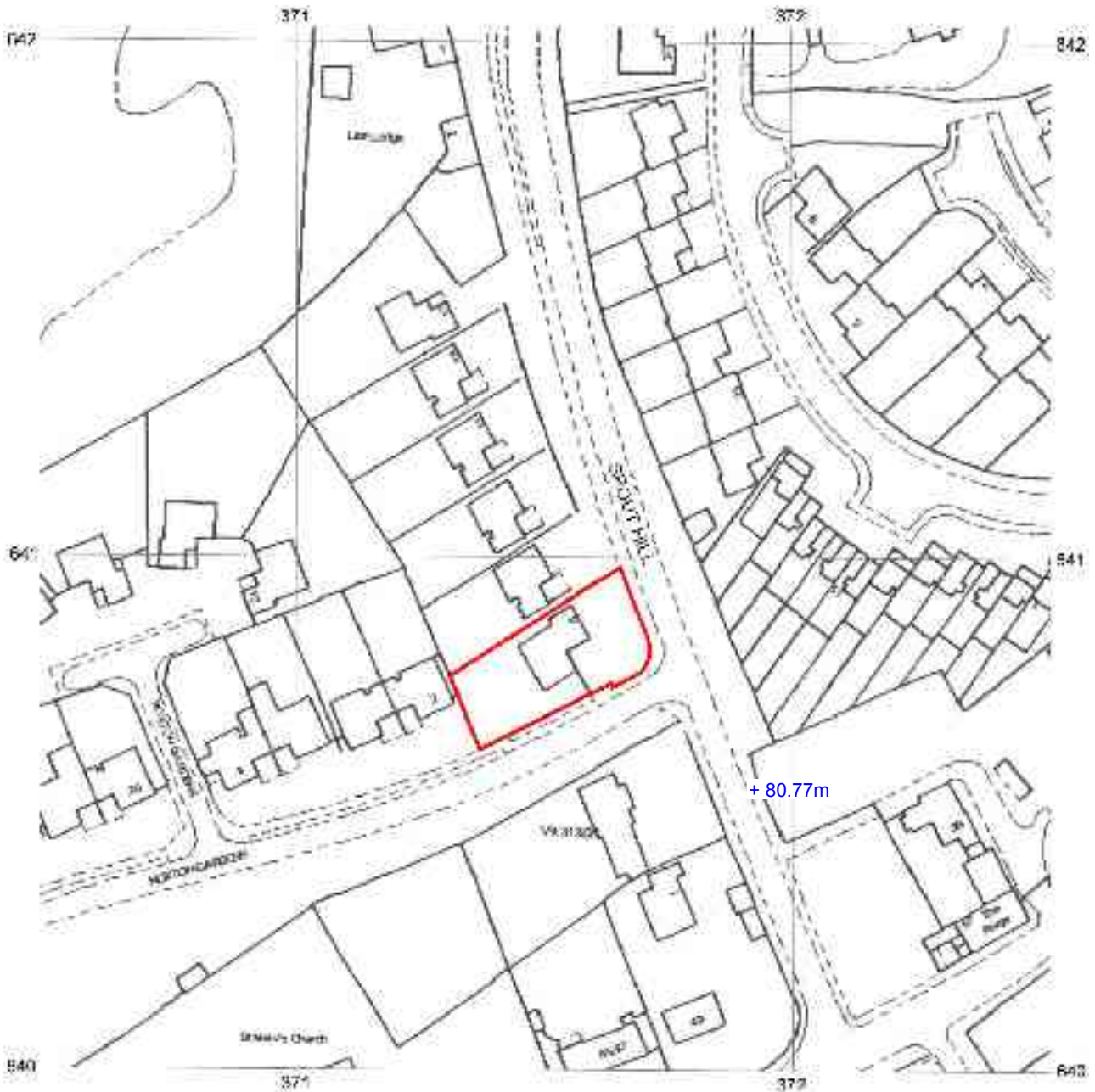


Fig 1 Site location in relation to the Ordnance Survey 1:1250 map

*Reproduced from the 2002 map with the permission of the Ordnance Survey on behalf of The Controller of HMSO ©Crown Copyright. Compass Archaeology Ltd, London SE1 1RQ, licence no. AL 100031317*

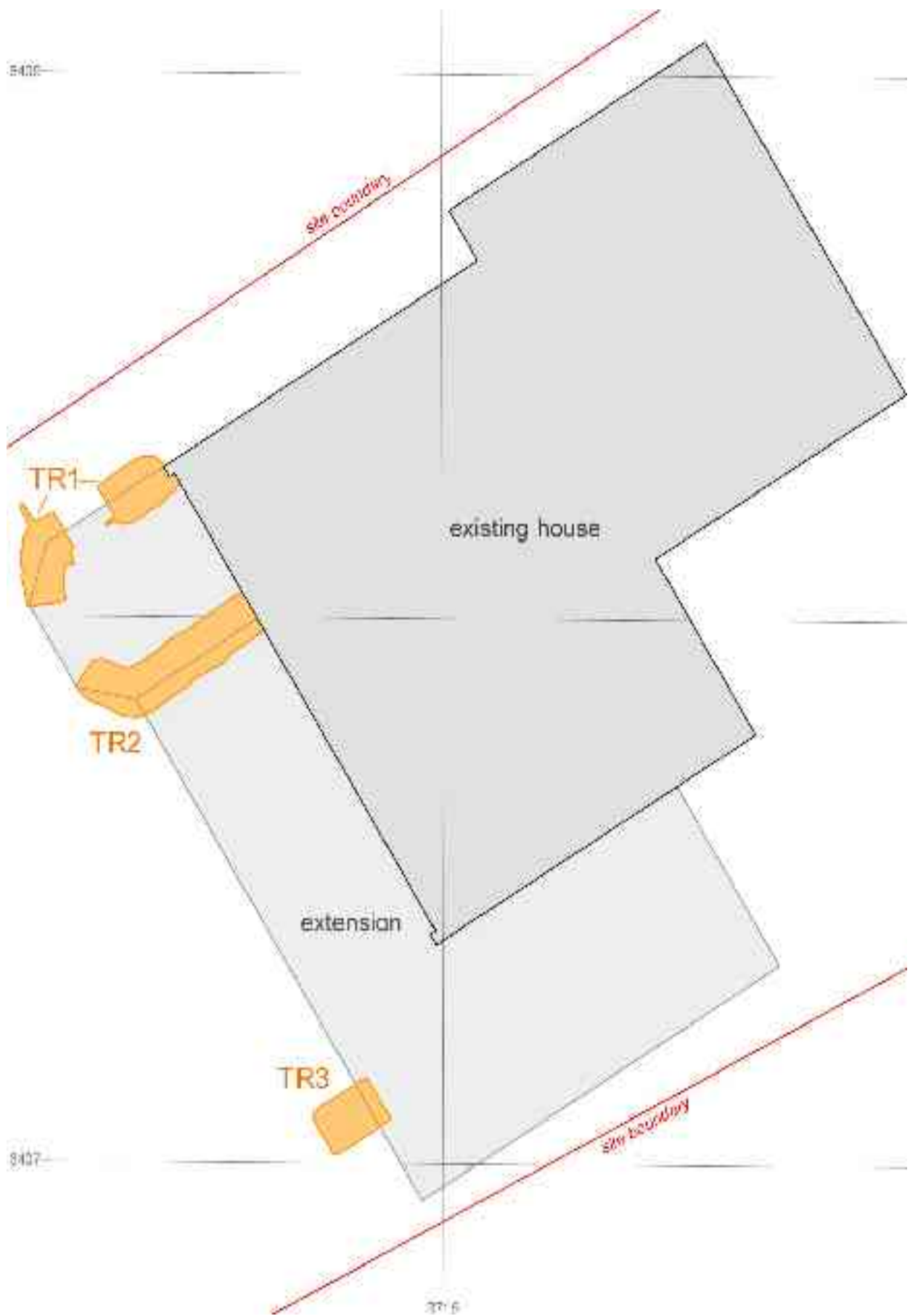


Fig 2 1:100 plan showing the outline of the existing property and new extension plus location of the archaeologically recorded trenches (TR1-3)

*Based on a drawing by Canopy Planning (Drg No. 05102/01 Rev.A) and related as a 'best fit' to the OS grid*

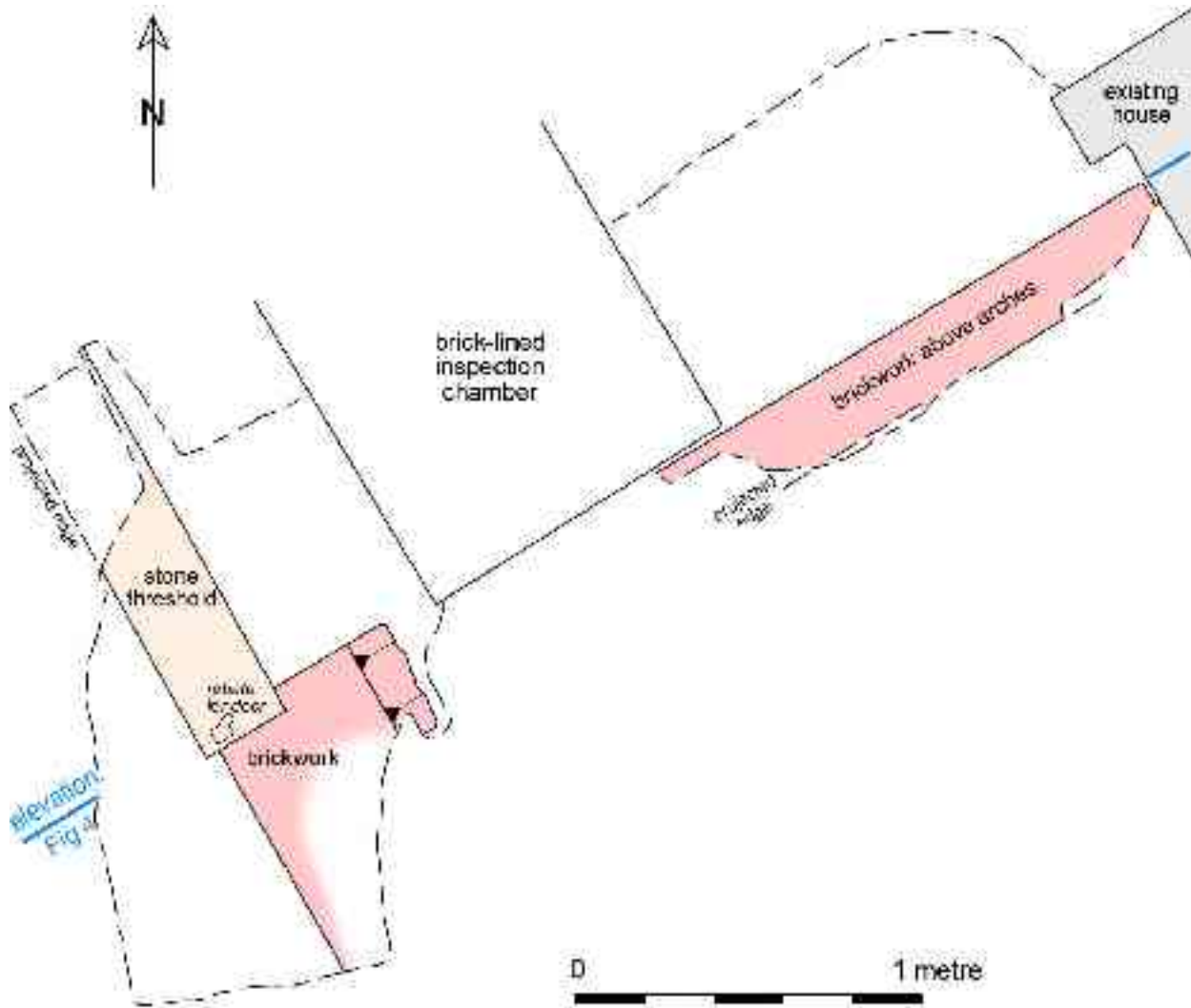


Fig 3 1:20 plan of Trench 1 showing the brick wall foundations and stone threshold for a doorway at the northwest corner of the main building, plus location of the drawn elevation (Figure 4)

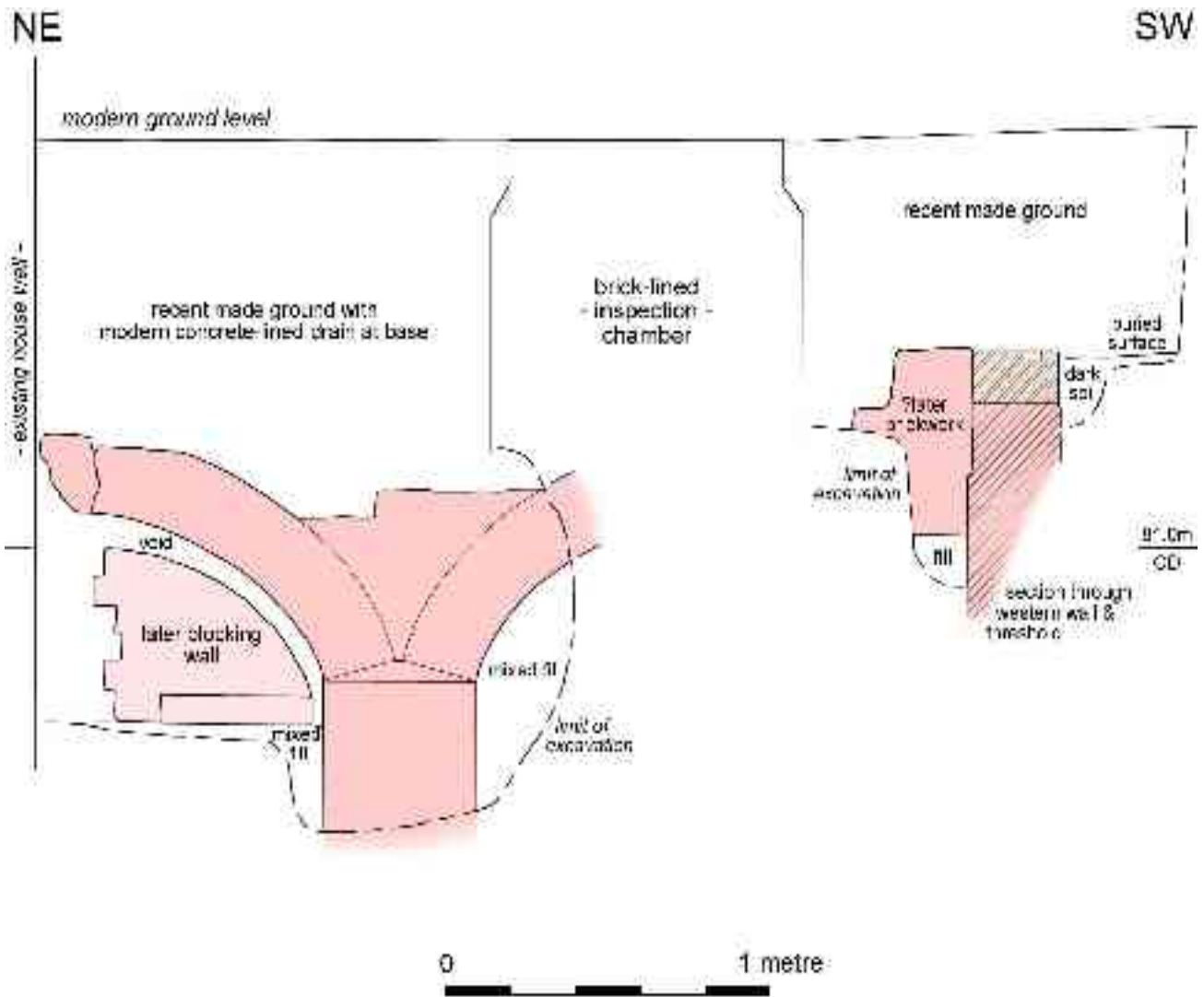


Fig 4 North-facing elevation across the two parts of Trench 1, showing the brick wall foundations, arches and overlying deposits (located on Figure 3)





Fig 5 Trench 1, eastern end: view of the blocked brick arch and supporting base as drawn in Figure 4 (0.2m scale)



Fig 6 Trench 1, western end: view of stone threshold and adjacent brickwork from northeast (0.2m scale)





Fig 7 Trench 3: concrete block path and overlying deposits, view looking southwest (0.2m scale)

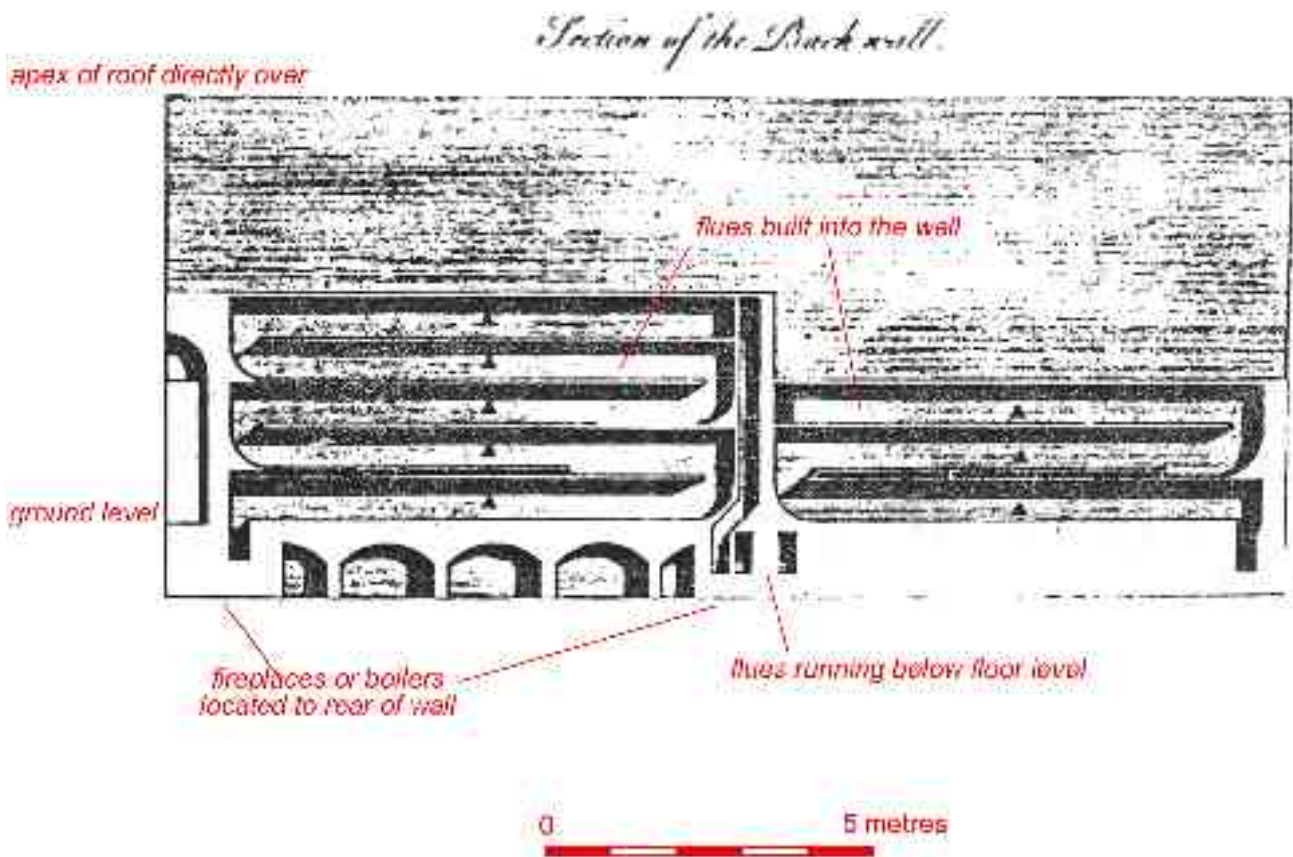


Fig 8 Longitudinal section through the back wall of a heated glasshouse constructed at Kew c 1761, with annotations added in red (Chambers 1763)



Fig 9 Site outline in relation to the Addington Tithe map of 1837

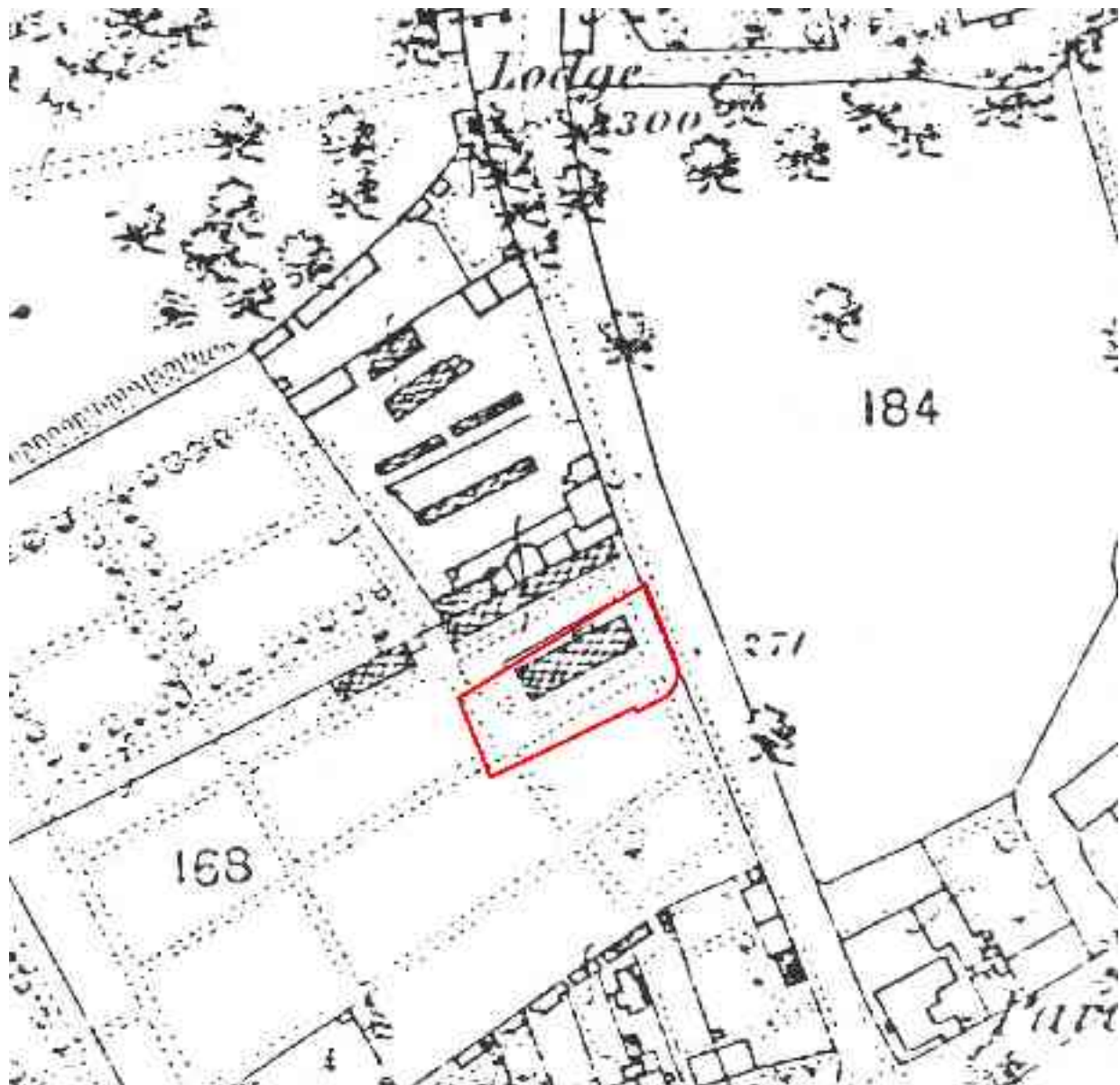


Fig 10 Site outline in relation to the OS 25-inch 1<sup>st</sup> Edition map of c1868

## Appendix II. London Archaeologist publication summary

**5 Spout Hill, Addington Village, Croydon CR0 5AN.** TQ 37148 64075. CA (Geoff Potter). Watching brief. March 2006. SIV06

### Summary

Excavation revealed substantial deposits of made ground associated with development of the site *c* 1970, plus some evidence for previous 20<sup>th</sup> century activity.

Two lines of brick foundation related to a large glasshouse that was constructed on the Addington Palace estate *c* 1810-30. Map evidence indicates that this building was over 21m in length and 6m wide, with an adjoining structure to the north that may have contained boilers. The excavated remains related to both areas, and included brick arches *c* 1.5m wide that are probably associated with heating of the glasshouse.

There were no earlier finds, and the natural ground surface was not exposed.

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