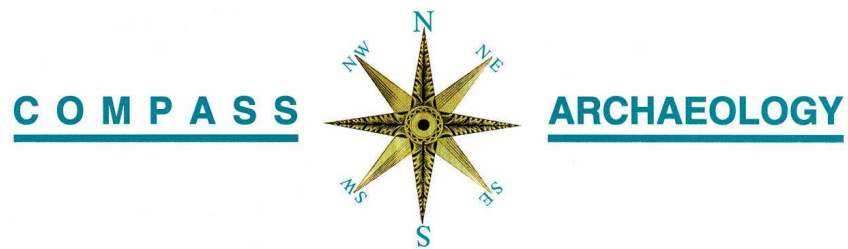


**An underground structure in Petersham Playground
Richmond Park,
London Borough of Richmond-Upon-Thames**

A Level 2 Historic Building Survey



September 2012

An underground structure in Petersham Playground
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London Borough of Richmond-Upon-Thames

A Level 2 Historic Building Survey

NGR: TQ18227 73229
Site Code: PSP12

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September 2012

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Abstract

Between the 23rd and 24th of August 2012 Compass Archaeology conducted a Level 2 Historic Building Survey on an underground structure exposed during renovation works on the Petersham Playground site, in Richmond Park in the London Borough of Richmond.

The structure was built of red and yellowed brick mainly bonded with a soft sandy-clay like material and consisted of a four walled chamber aligned NE-SW, covered by a large arched ceiling from the SW end with a smaller transverse arch crossing the structure at the NE end. In the centre of the NE wall face a low and narrow doorway provided access to the chamber from another room, which was solidly backfilled with brick and clay rubble. The internal dimensions of the structure were 2.5m long, (NE-SW), by 1.82m wide at the SW end, narrowing to 1.32m at the NE end. As well as tapering in plan the structure also expanded three-dimensionally; the NW and SE walls had battered sides at a higher level so widened from 1.32m at the base to 2.12m at the top, immediately below the transverse arch. As a result the structure had a noticeably odd trapezoid shape and must have been constructed as such for a reason. Perhaps as a later addition to existing structures it was simply built to fit.

It is known, from documentary, cartographic and illustrative sources that this part of Richmond Park was once occupied by a large mansion house, (known alternatively as 'New Park' and 'Petersham Lodge'), from at least c1690, following the rebuild of the original lodge that predated the Park's foundation c1637. The main house was extended with the addition of two side wings and a grand scheme of formally laid parterre gardens and terraced parkland. The property was occupied by Rangers of the Park including the 1st and 2nd Earls of Rochester, until 1721 when the main house was destroyed by fire. It was rebuilt in 1733/34 by William Stanhope, later Lord Harrington, and renamed 'Harrington's Retreat'. The house passed through several new owners until 1835 when the house was purchased by the newly created Commissioner of Woods and Forests. The house and its grounds were demolished and the land reverted to become part of the wider park again.

Study of aerial photography shows that large areas of the former property are visible as parch marks in the grass, most notably the large carriage drive. Judging from the level of preservation of the discovered chamber, it is more than likely that the whole footprint of the House and even some of its gardens survive just beneath the surface of this corner of Petersham Park.

Although its exact function remains elusive it is believed that the underground structure is probably associated with the cellars of one of the ancillary wings on the west side of the mid-18th century Lodge.

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1 INTRODUCTION

1.1 This document forms the summary of a Level 2 Historic Building survey conducted on a brick-built structure discovered during renovation works in Petersham Playground, Petersham Park, Richmond Park, in the London Borough of Richmond-upon-Thames.

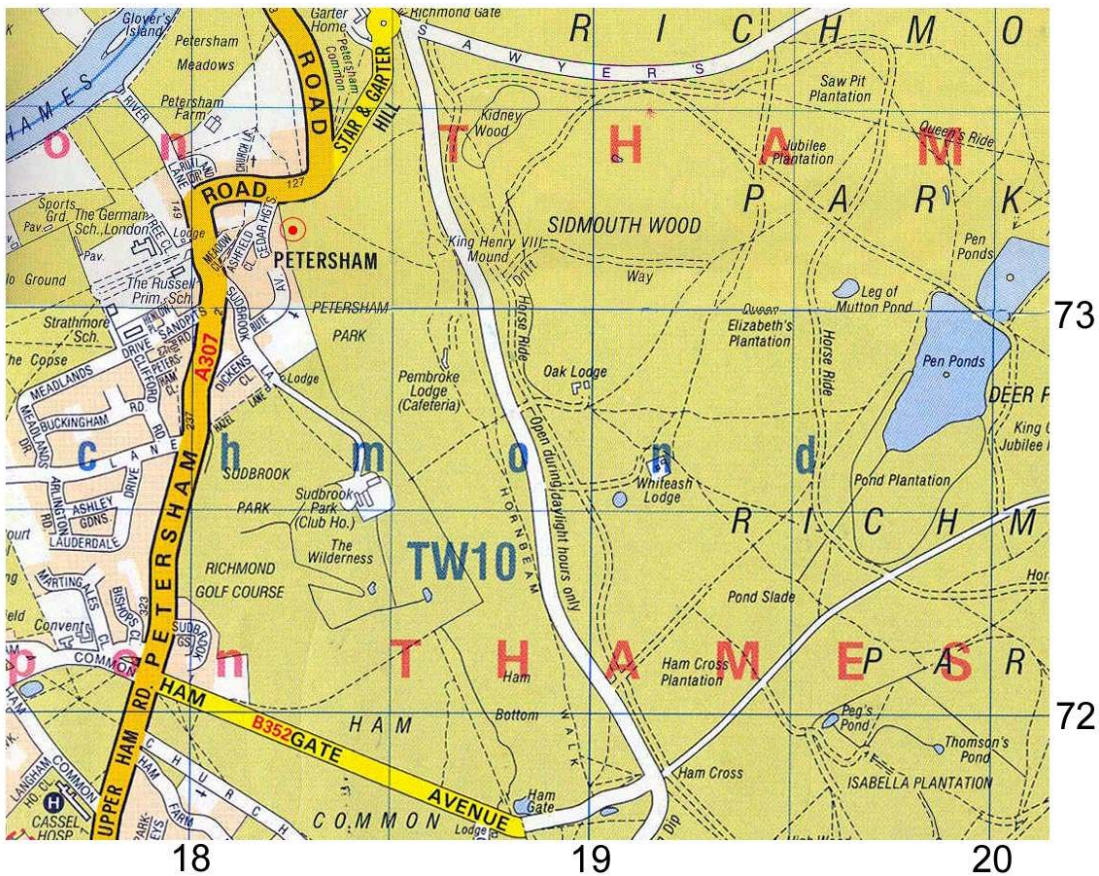


Fig.1: A-Z location map of the structure highlighted as a red dot

1.2 The survey was commissioned by The Royal Parks after recommendation from Diane Abrams of English Heritage in her capacity as Archaeological Advisor for the London Borough of Richmond.

1.3 The fieldwork was undertaken on the 23rd and 24th of August 2012 and the structure subsequently backfilled with a geotextile lining and pea shingle as the exposed structure was of considerable depth and was deemed a Health and Safety risk.

1.4 Compass would like to acknowledge the co-operation of the Royal Parks, especially Simon Richards, (Park Manager), and Adam Curtis, (Assistant Park Manager), for their assistance gaining access to the structure, and Edward Strickland (Project Sponsor for the Royal Parks), for commissioning the building survey.

Compass would also like to acknowledge the Surrey Archaeological Society and the staff of the Richmond Local Studies Collection for their aid with historical research.

2 SITE LOCATION & TOPOGRAPHY

- 2.1** The structure is located towards the northern end of Petersham playground, within Petersham Park, itself located in the westernmost corner of Richmond Park in the London Borough of Richmond-upon-Thames.
- 2.2** Richmond Park is on the list of designated parks of historic interest and is in an Archaeological Priority Area. It is an area of Special Scientific Interest, a National Nature Reserve, and forms part of the Richmond Park Conservation Area.
- 2.3** The area immediately surrounding the structure to the north, south, east and west is almost completely flat. To the east of the path alongside the playground, (leading to Petersham Gate), the ground rises significantly towards the Kidney and Sidmouth Wood from 7.0mOD to c 54.76mOD.

3 ARCHAEOLOGICAL AND HISTORIC BACKGROUND

- 3.1** Richmond Park is the largest Royal Park in London covering an area of 2,500 acres and has changed little over the centuries. Little archaeological investigation has taken place in the Park, primarily because the area has not been heavily developed in recent years. This in turn means that any buried archaeology could also have been preserved in a better state than otherwise.
- 3.2** The Park itself was probably open pasture throughout its early history including the medieval period, with only scattered dwellings, due to its location on the periphery of the town. The known royal connections with the Park date from Edward I (1272-1307), when the area was known as the Manor of Sheen. The name was changed to Richmond during Henry VII's reign.

In 1625 Charles I brought his court to Richmond Palace to escape the plague in London and turned it into a park for hunting red and fallow deer. He realised that Richmond gave him the best opportunities for hunting near London. There were also small farms and common land where local people had a right to graze cattle or collect timber. Charles ignored all these claims on the land and in 1637 created a hunting park. He introduced around 2,000 deer, and to make sure they didn't stray he built a brick wall eight miles long, which is Listed and elements of it still stand today. Local people were furious about the King's action. He was forced to pay compensation to some landowners; including £4,000 for 265 acres of land belonging to the Manor of Petersham¹. He eventually had to restore the right of people to walk in the park and collect firewood by installing a ladder in the wall.

¹ Fletcher-Jones, P, (1972) Richmond Park: Portrait of a Royal Playground, pg.8

3.3 One of the original keepers of ‘New Park’, as Richmond Park was known until at least the end of the 19th century, Lodowick Carlile was housed in a property which once stood in the vicinity of Petersham Playground and which was bought from one Gregory Cole in 1637². The Lodge was passed down from keeper to keeper until 1686 when the lodge and surrounding land were sold to Lawrence Hyde, 1st Earl of Rochester who had been appointed as Ranger, (or general overseer), of the park.

The 1st Earl ordered the old lodges demolished and had himself built a grand mansion by Matthew Banckes between 1692-1693 for £2,621. The mansion was designed by Robert Hooke to designs similar to another of his creations, Ramsbury Manor in Wiltshire³. The original designs for the house at Petersham still survive and are shown as fig.2 below. Confusingly this mansion was also referred to as ‘New Park’ or even ‘Petersham Lodge’. A wonderful engraving by Johannes Kip for the book *Britannia Illustrata*, (1702), depicts the grandeur of the house and its extensive formal gardens. They appear to have been partly terraced into the slopes of what became Sidmouth Wood, up to and including King Henry’s Mound. No sign of these gardens remain in the present landscape. Kip also shows the original house has been added to with rather elaborate side wings enclosing a large tree-ringed carriage drive, (see fig.3).

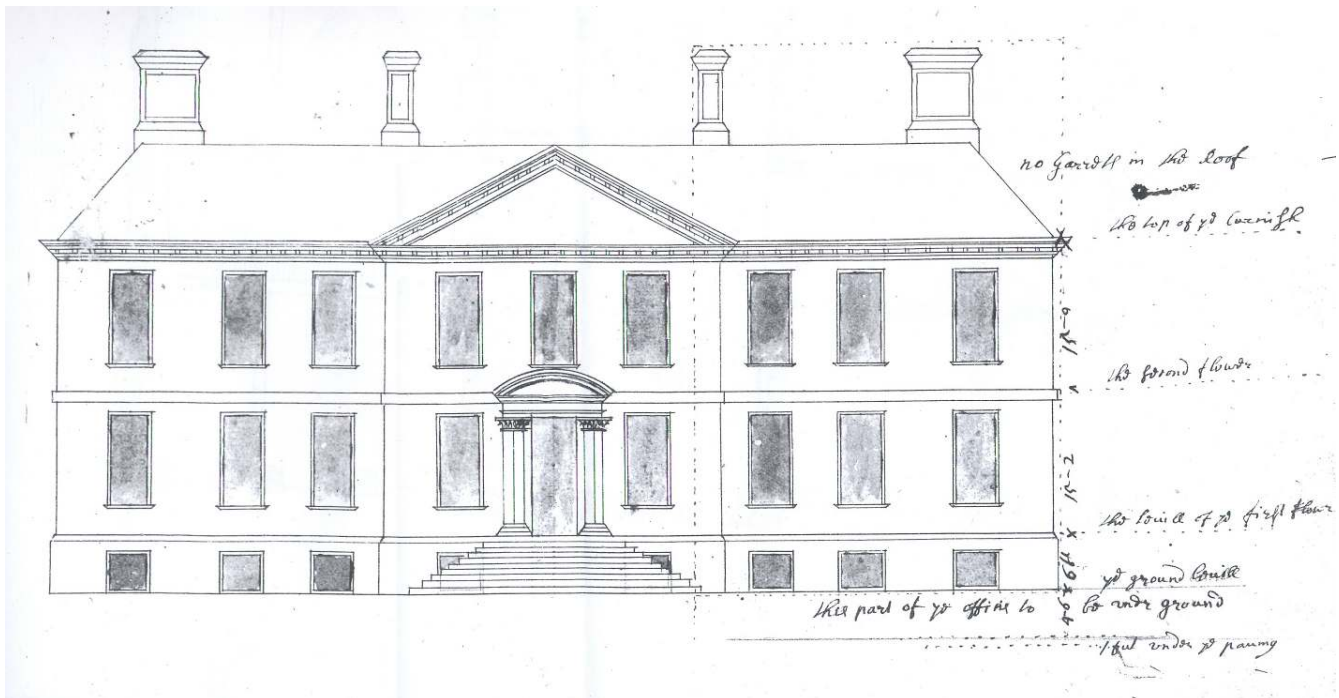


Fig.2: Front elevation of the house designed by Robert Hooke for the 1st Earl of Rochester in 1692. Note the comment on the upper right of the design “no garrets in the roof”. This was one of the differences between Rochester’s house and that of Ramsbury Manor in Wiltshire.

² Fletcher-Jones, P, (1972) pg.12

³ de Salis, N, (1982), *New Park – Richmond’s Forgotten House*

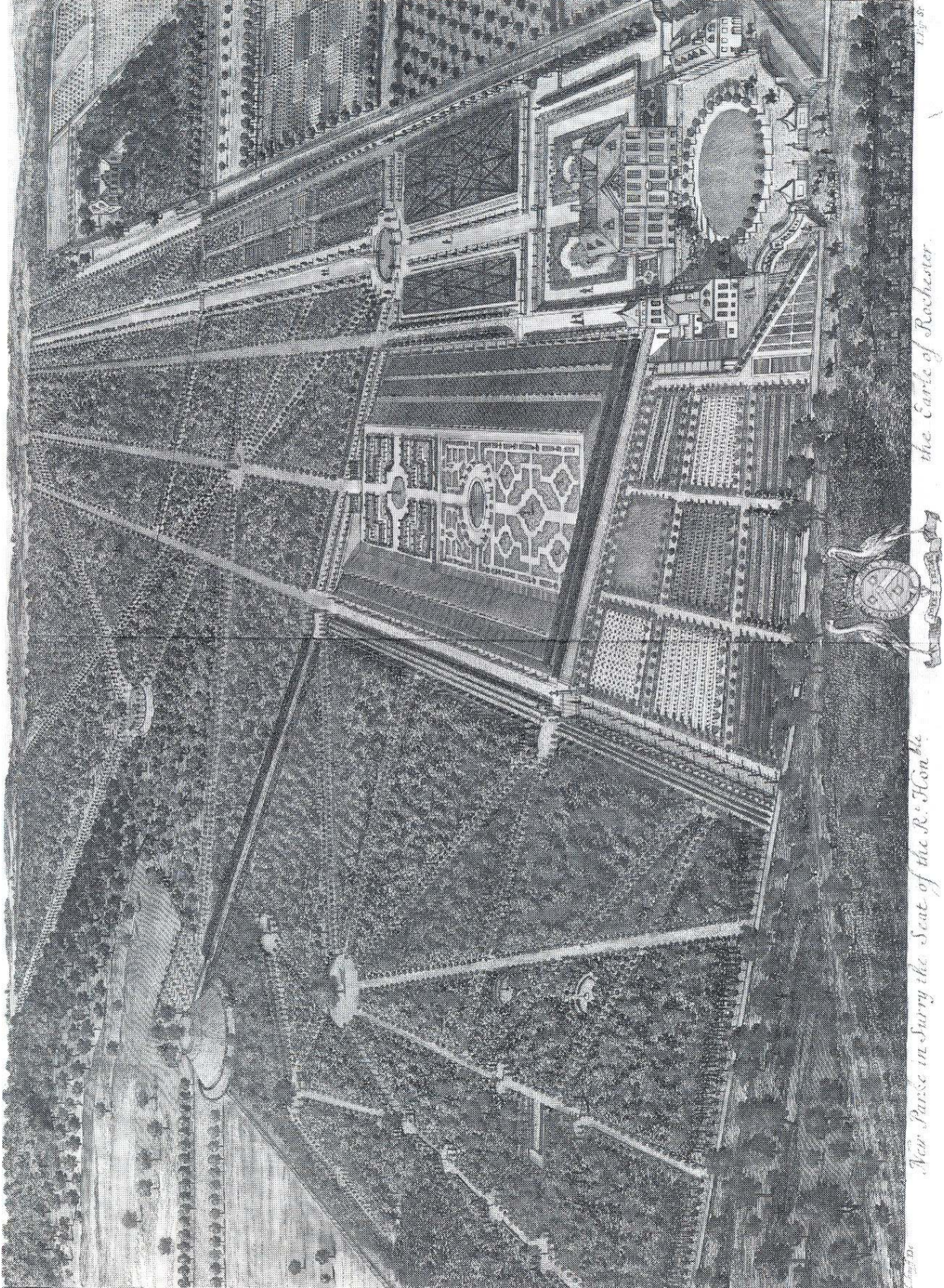


Fig.3: Johannes Kip's depiction of Petersham Lodge dated c 1702.

Note that the garrets left off of the original design have now been added, as well as the impressive side wings. Much of the carriage drive is still visible today as parch marks in the grass during dry spells. King Henry's mound is situated in the top left of the formal gardens. The main house was destroyed by fire in 1721 under the ownership of the 2nd Earl of Rochester.

the Earl of Rochester.

Seat of the R. Hon. the Viscountess of Torrington.

In 1711 Lawrence Hyde died and the title of earl as well as Ranger passed to his son and heir Henry Hyde. Henry held the property until 1721 when the house burnt to the ground. Daniel Defoe saw this as particularly tragic as it housed the library of the Earl of Clarendon who had sold his extensive collection of books to his cousin Rochester around 1687. Defoe described the loss as “a loss irreparable, and not sufficiently regretted by all lovers of learning”.

The grounds remained in a derelict state until the land was sold to William Stanhope, later Lord Harrington, in 1733/4. He commissioned Lord Burlington to design a new property to be built on the site and this became known as ‘Harrington’s Retreat’. James Thomson refers to this property in a poem describing, “the pendant woods that nodding hang o’er Harrington’s retreat”. Upon being raised to the peerage as Viscount Petersham in 1740 Stanhope added two new wings to the main house to reflect his new status. It is this property that is depicted in Rocque’s survey of 1746, (fig.4).

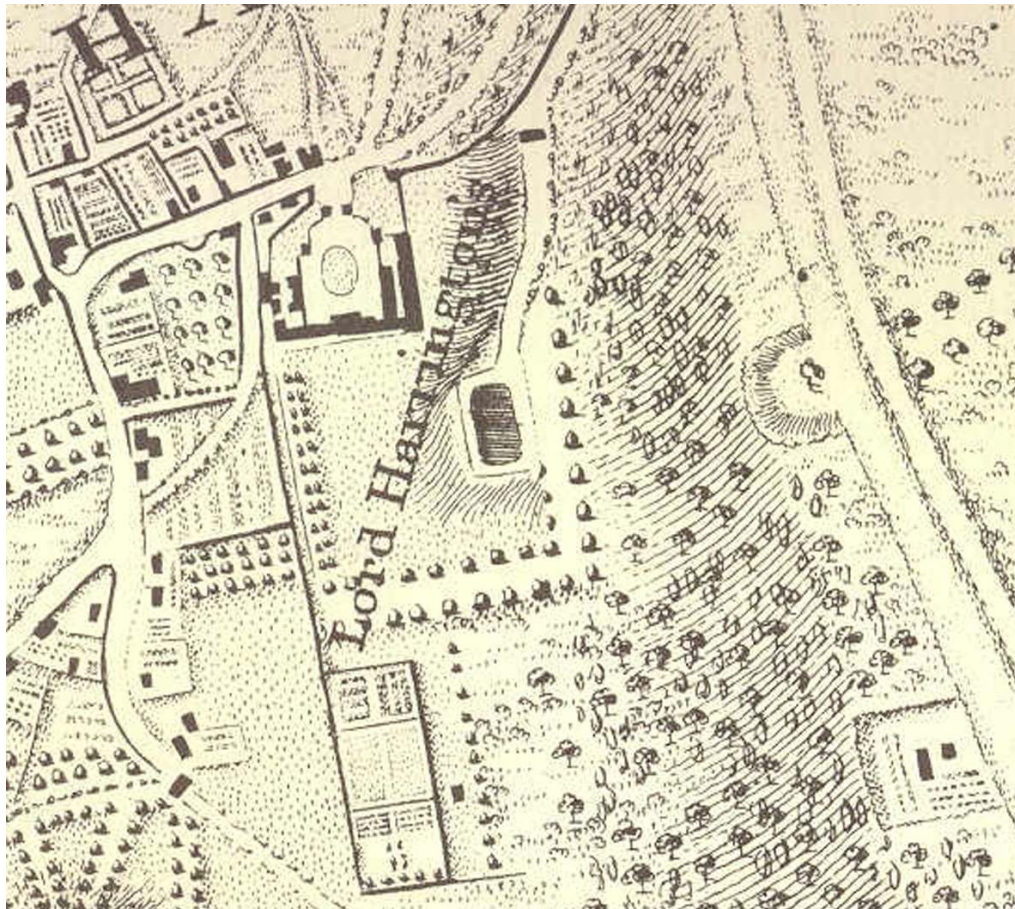


Fig.4: Extract from John Rocque’s Survey of London c1746 depicting Lord Harrington’s house and grounds. Though it may be a somewhat distorted view in terms of scale, the overall layout appears to conform to other illustrations and the parch marks visible in dry weather. The boundary wall to the left of the house appears to represent the existing boundary wall still surviving on the eastern side of the playground. The avenue of trees behind the west wing leads to the walled kitchen gardens

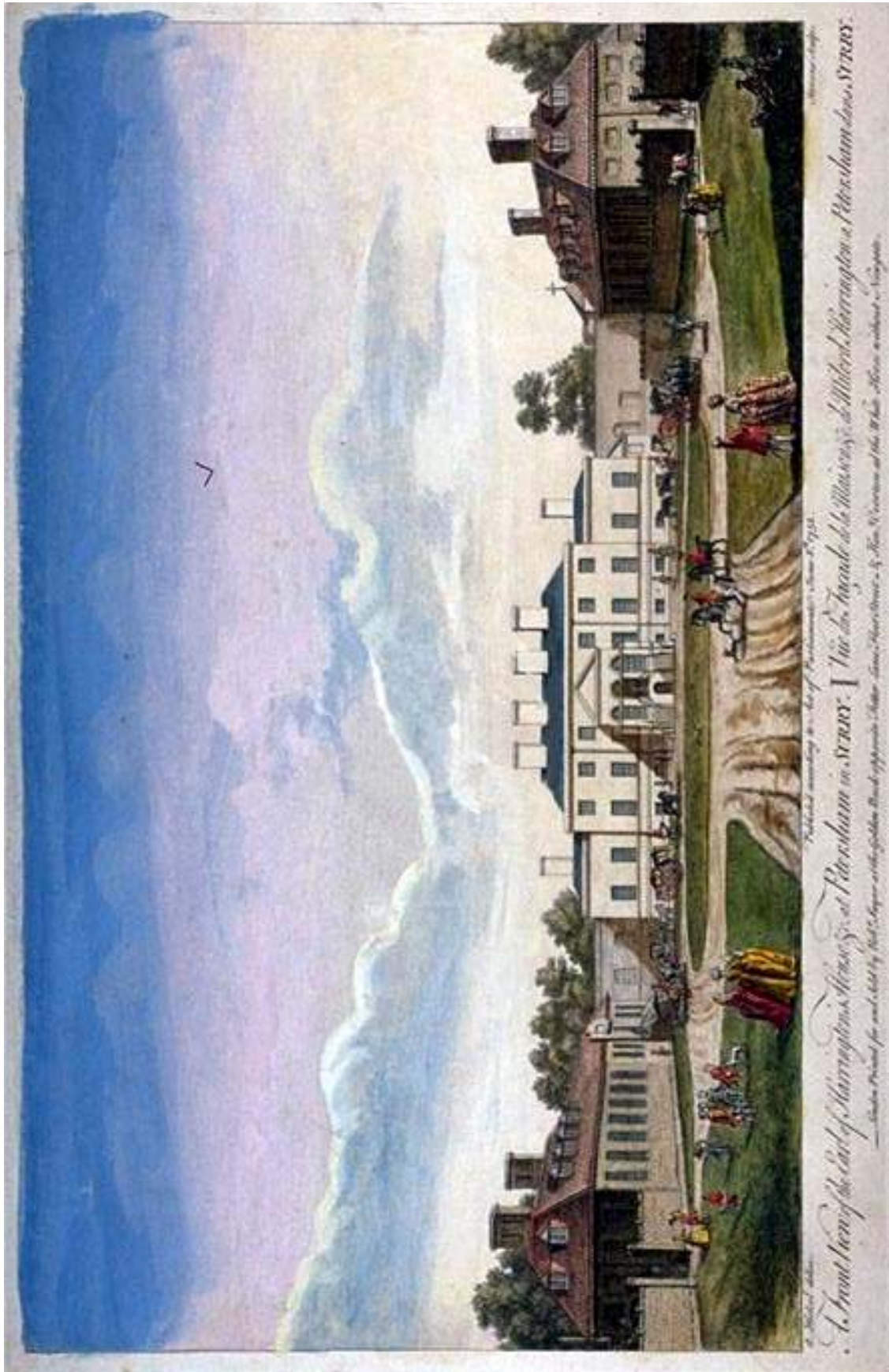


Fig.5: An illustration of 'Harrington's Retreat' by Augustine Heckel, dated 1752. It appears very similar, if somewhat smaller perhaps, to that of the Earl of Rochester's. The main house, newly rebuilt is shown stuccoed white whilst the older wings are in plainer brown brick

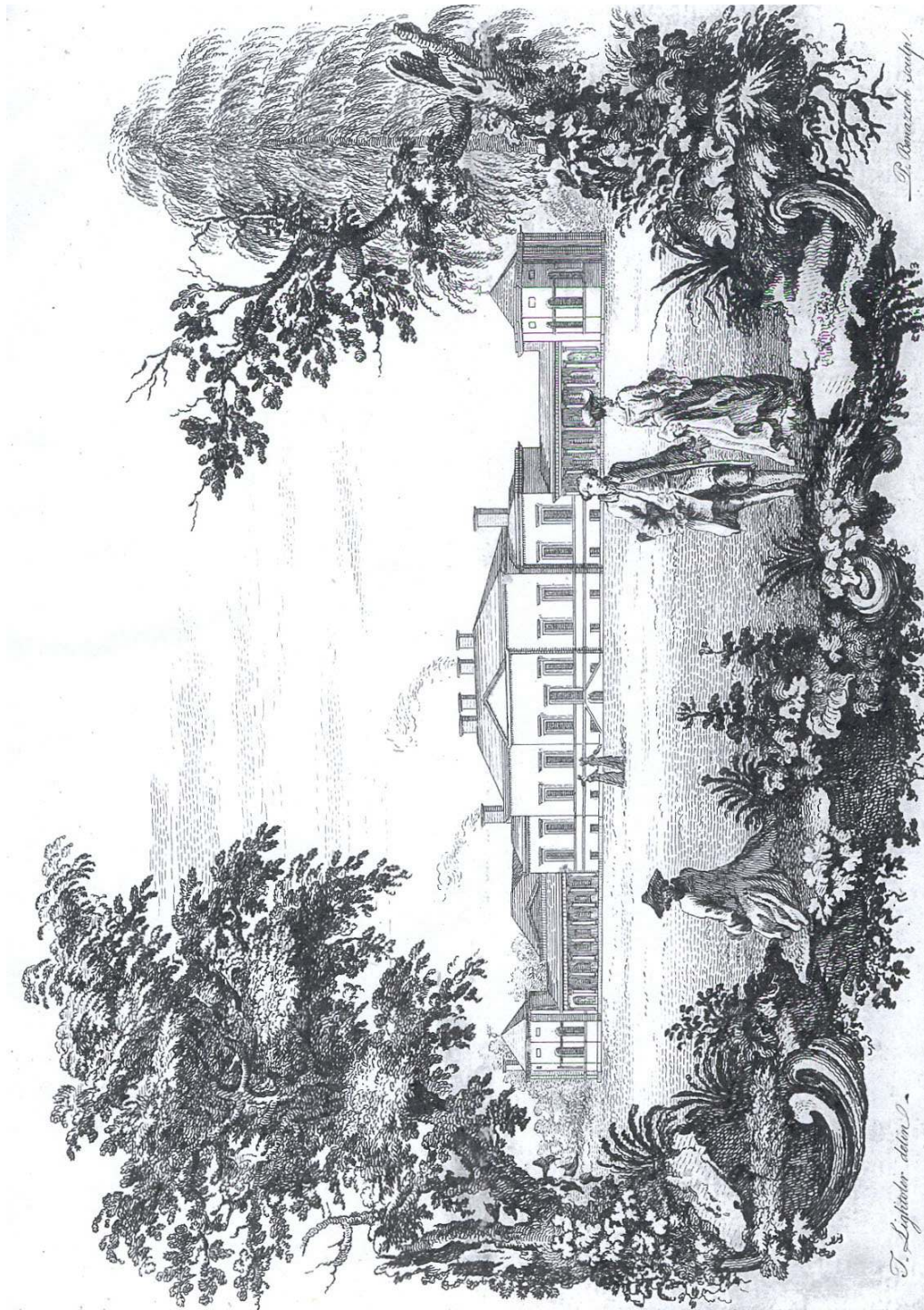


Fig.6: Print of the Earl of Harrington's house from the rear gardens showing the colonnades either side of the main house and polygonal rooms at either end of the perpendicular wings, dated to the mid 18th century

The 2nd Earl sold his property to Lord Camelford in 1783 and further alterations were made to the house. His tenure was brief and the property was sold to the future William IV, the Duke of Clarence, in 1790 and the property was for a brief period referred to as Clarence House.

The final owner of the house was Lord Huntingtower who died in 1833 and the house was returned to the Commissioners of Woods and Forests who quickly demolished the house and gardens two years later, reincorporating the 59 acre estate back into the grounds of Richmond Park.

We are lucky that a copy of the plan appended to the conveyance of the property dated 18th March 1834 survives. This plan gives a much more detailed view of the main house and its side wings that largely agrees with the frontage shown on Heckel's engravings and the print of the rear of the property, (figs.5 and 6). The pavilion ended side wings are shown, as are the rear colonnades, and the large block to the west of the main house looks quite similar to that depicted on Rocque's survey of 1746. Although the arrangements of the side wings appear less symmetrical than that shown in Heckel's engraving, the conveyance drawing may in essence show the same buildings in a slightly altered state. It is known that Lord Camelford made alterations to the house and this may include work to the side wings. Most importantly is the range depicted along the estate boundary wall on the west of the site. The angle of this building corresponds with the alignment of the chamber discovered in Petersham Playground suggesting association. Interestingly Henry VIII's Mound is labelled 'Henry the 7th's Mount'. This would perhaps make more sense, as it was Henry VII, Duke of Richmond, who had rebuilt Richmond Palace and renamed the park 'Richemount' in 1501⁴.

⁴ Cloake, J, *Palaces and Parks of Richmond and Kew, Vol.I* pg.56

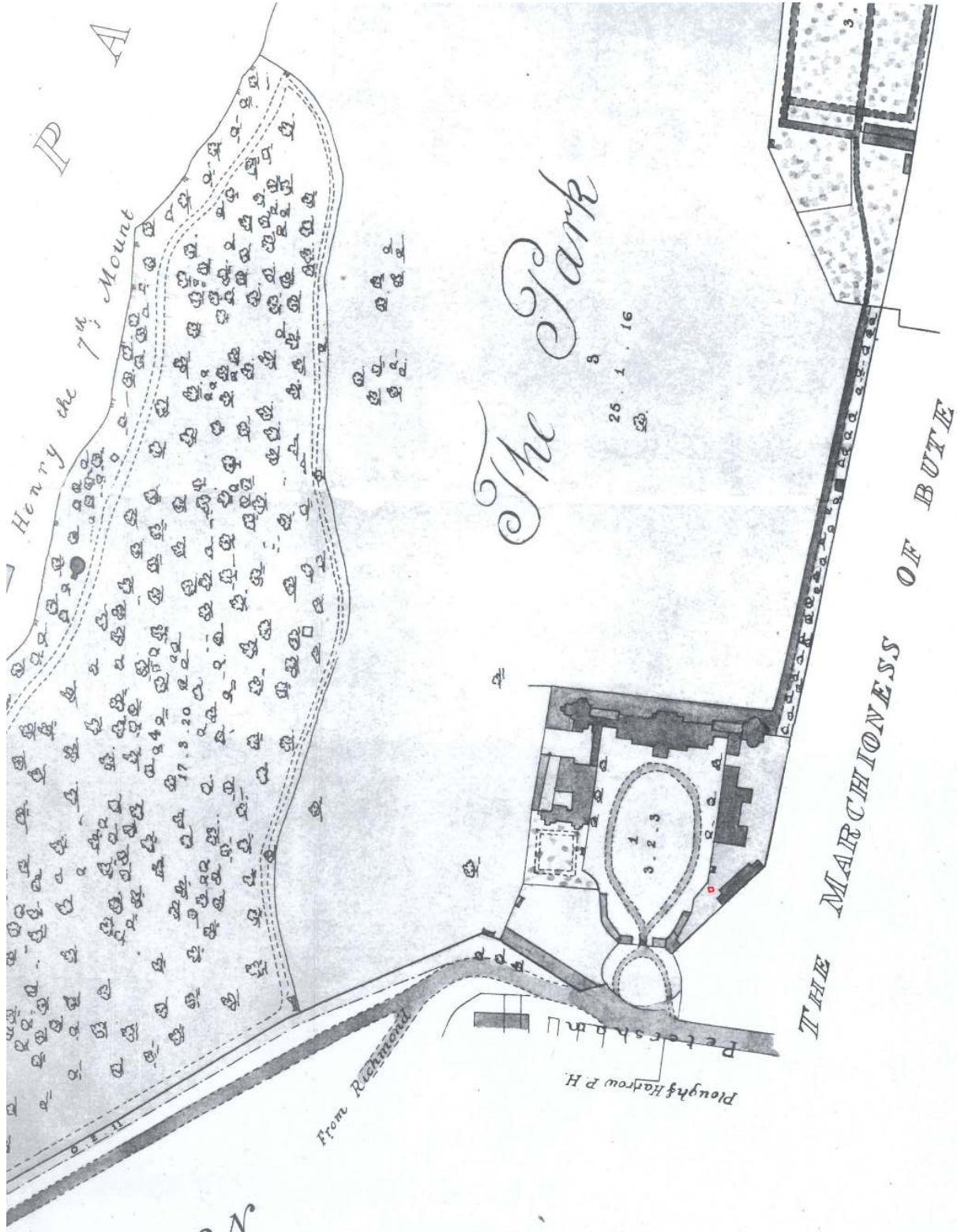


Fig.7: 1834 Conveyance plan of Petersham Lodge with the structure highlighted in red. Compare with fig.5 and 6

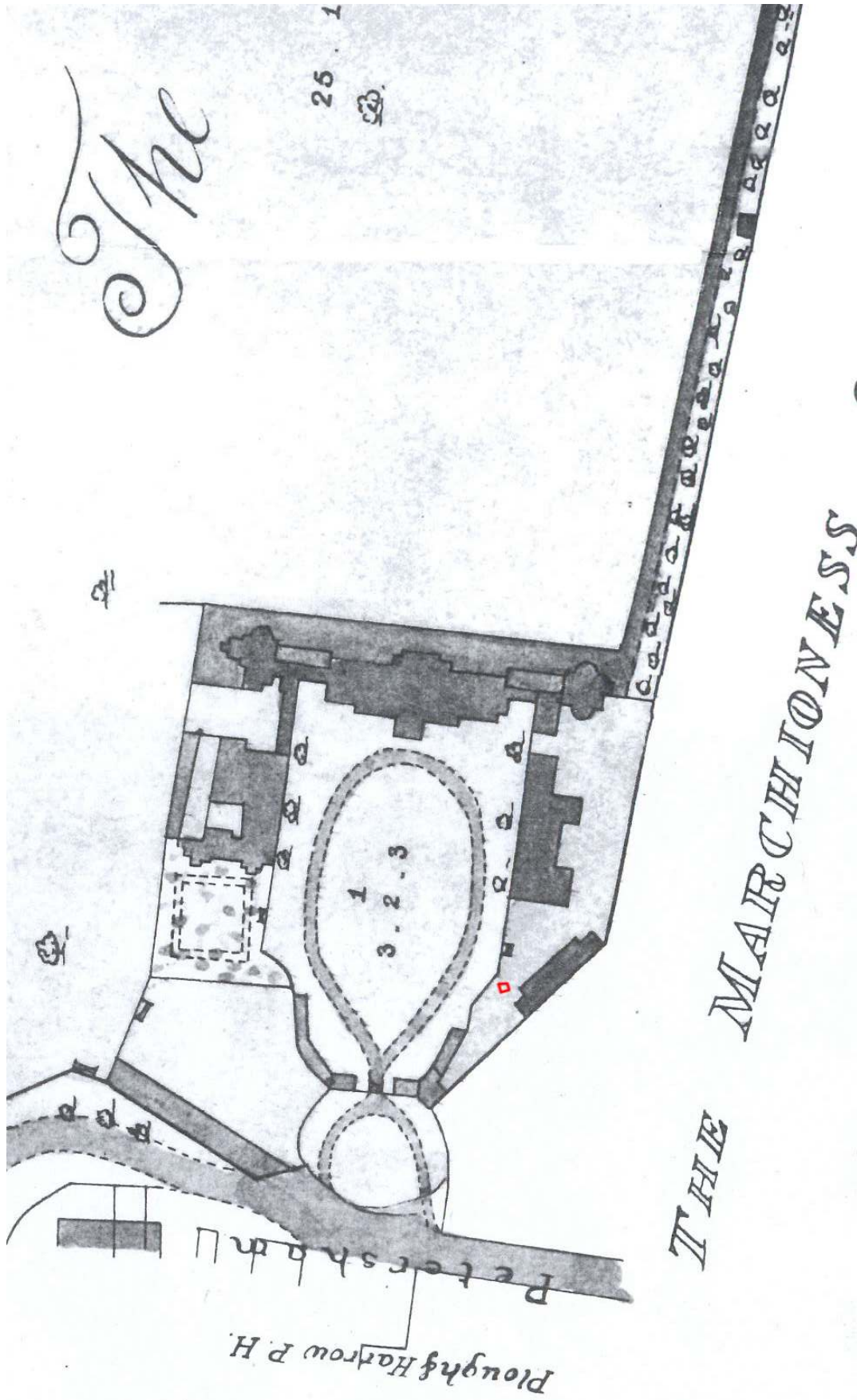


Fig 8: Extract from 1834 Conveyance plan showing the estate plot in detail. Although the structure as shown does not fit into the footprint of a building as depicted this may be a discrepancy between the comparative scales and accuracy of the conveyance plan and the 1863 OS map used as a base

The land adjacent to the former site of Harrington's Retreat continued to develop. Bute House, which had been home to the Marquis of Bute since the late 18th century, remained standing for a further 60 years, finally being demolished in 1895.

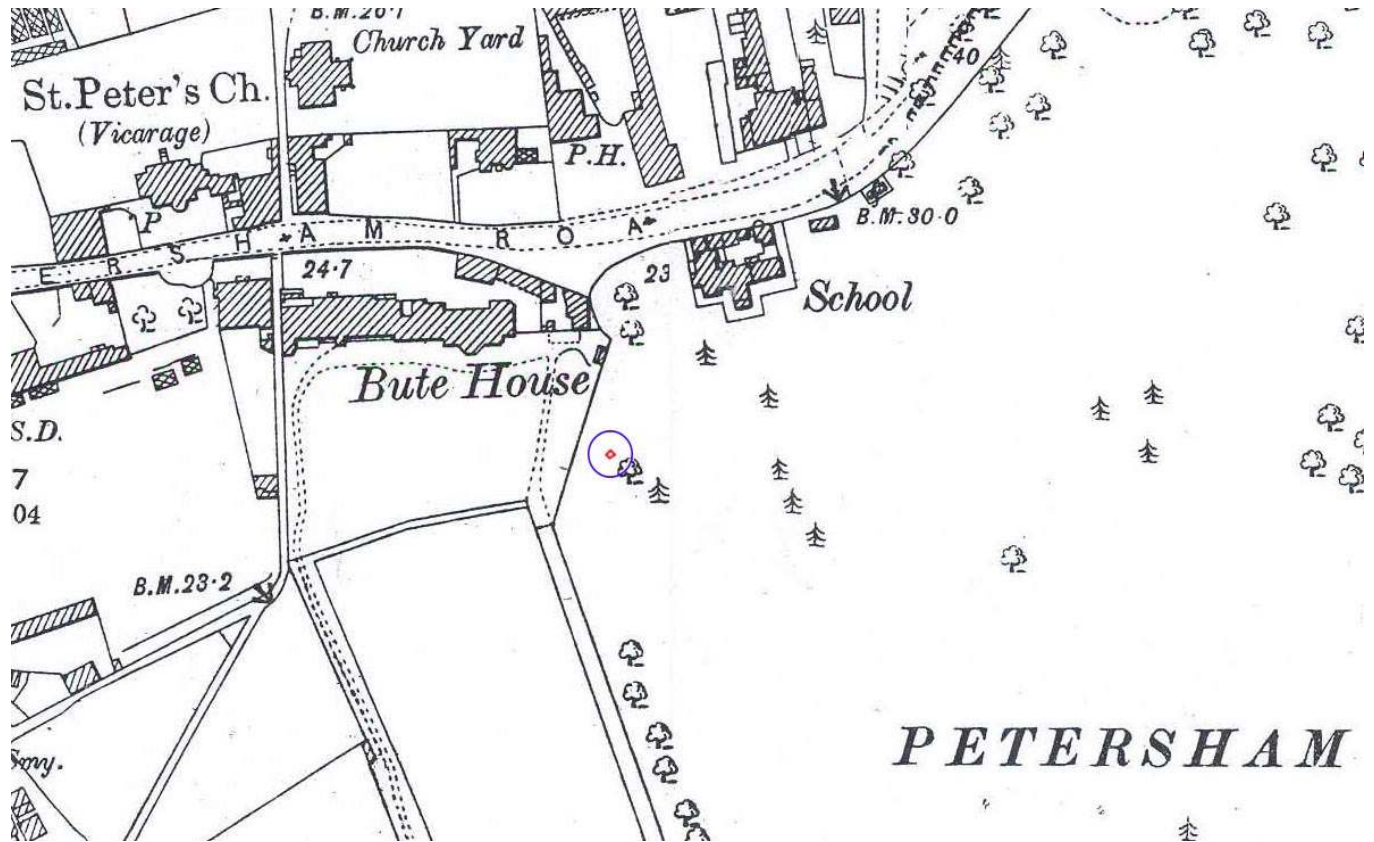


Fig.9: Extract from the 1893-94 OS Map showing Bute House at its widest extent just prior to its demolition. Bute House seems to have been derived from the two smaller structures depicted on Rocque's Survey to the left of the entrance to Petersham Lodge. The Lodge itself had been demolished nearly 60 years prior and the 'British School' built in its stead to the NE. The structure investigated in this report is shown in red, circled in blue

Lord John Russell built a new 'British School' to the north-east of the site of Petersham Lodge in 1852. This school remained a feature of the park until 1943 when it was destroyed by an errant bomb. The area has now reverted to form part of the extended wood on the lower slopes of the rise up towards Kidney Wood.

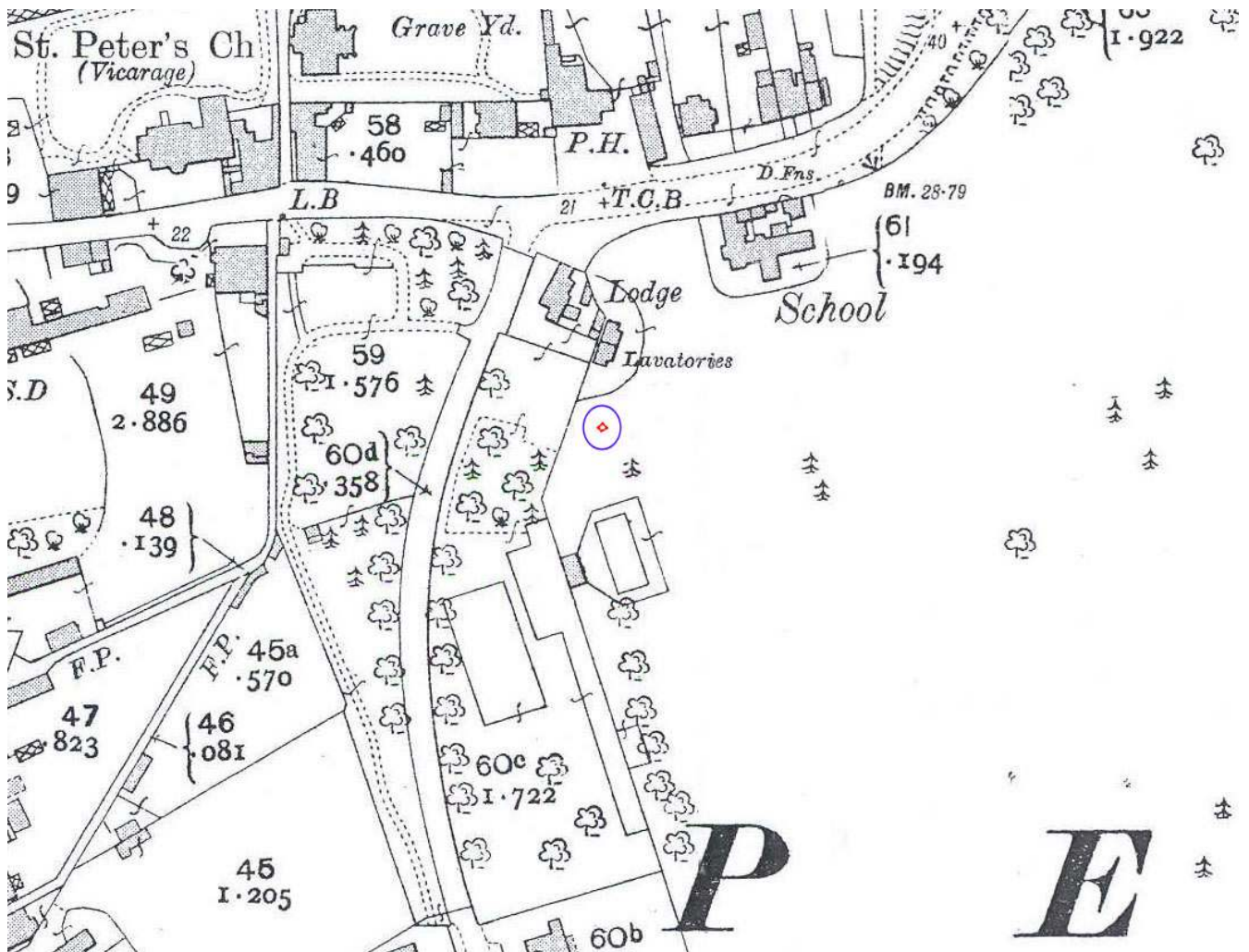
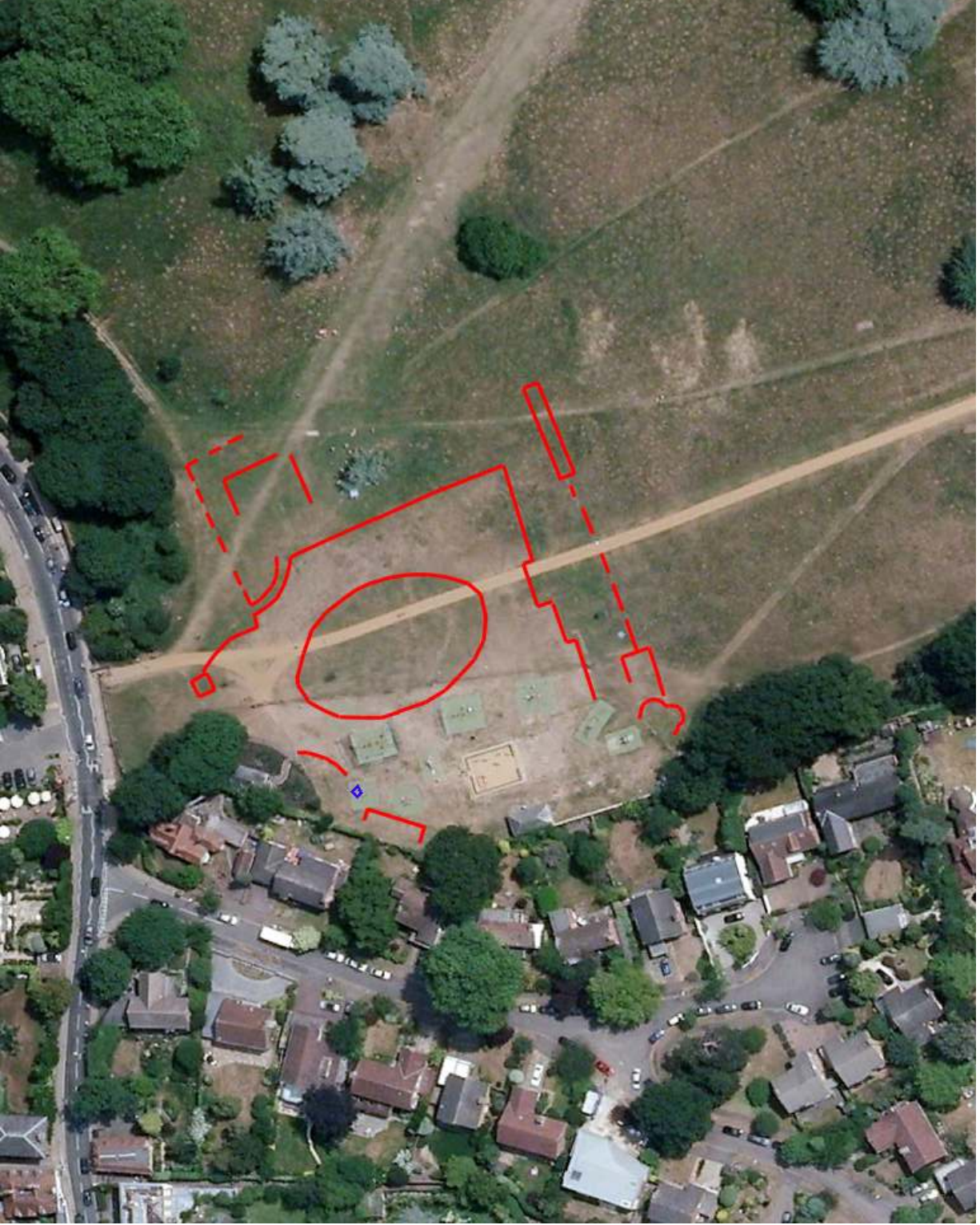


Fig.10: Extract from the 1933 OS map depicting the study area post demolition of Bute House. The Lavatories are still present on the modern site, but the School was bombed in 1943 and destroyed



Fig.11: An aerial image of Petersham playground, extracted from Google Earth, showing the extensive parch marks associated with Petersham Lodge

Fig. 12: Aerial view, extracted from Google Earth with the parch marks associated with Petersham Lodge highlighted in red. These include the carriage-drive, one of the gatehouses, the colonnaded rear wings, the western pavilion and front of the main house. The separate range to the west may be associated with the underground chamber. The chamber itself is highlighted in blue. Compare with fig. 8



4 THE HISTORIC BUILDING SURVEY

4.1 The underground structure was located in the NW corner of Petersham Playground. A photographic and drawn record of the structure was compiled between the 23rd and 24th of August 2012. Ground conditions were dry and the structure was free from water, (though during previous wet weather the structure had filled with water to near ceiling height).

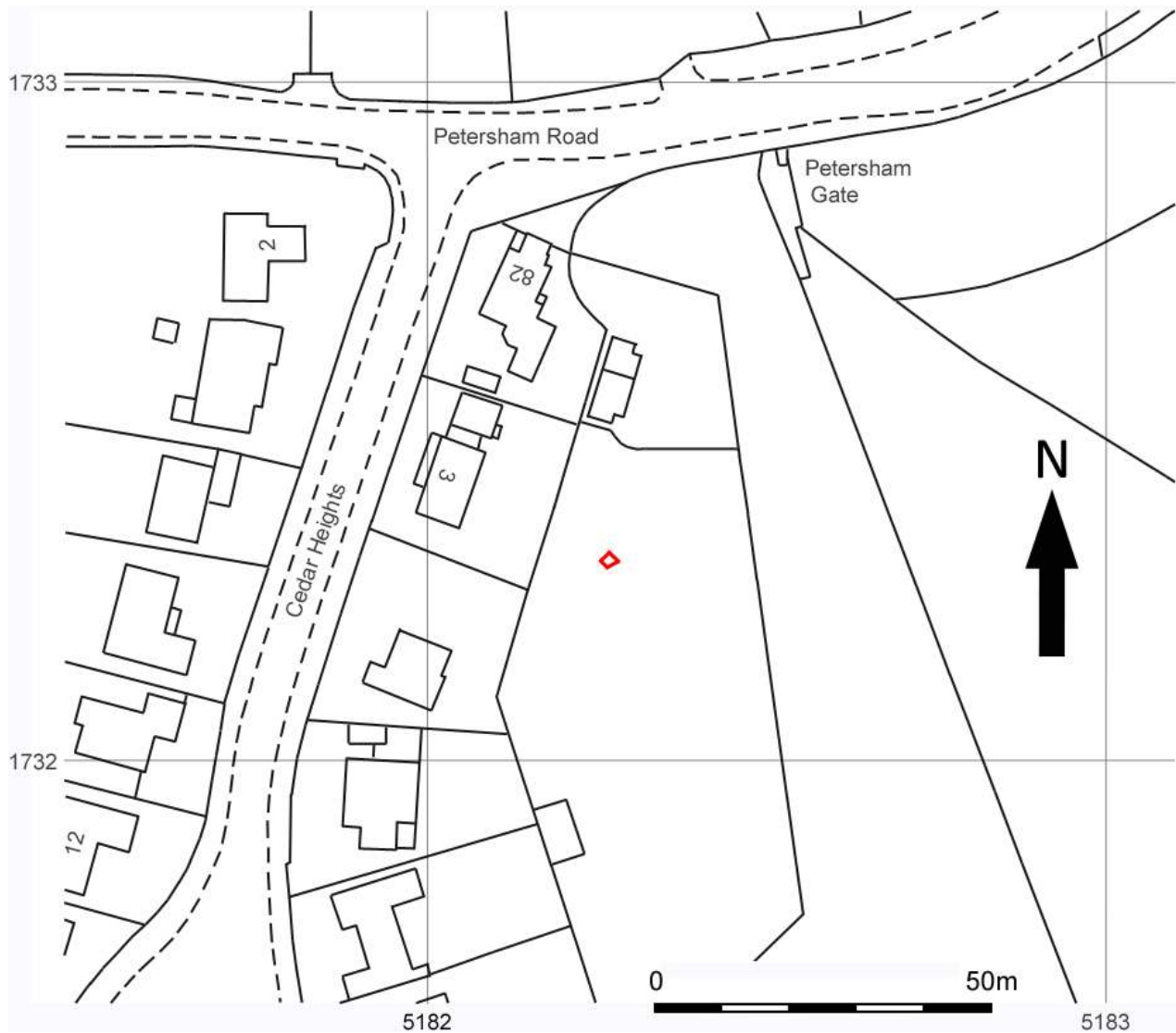


Fig.13: A location plan of the underground structure in relation to the modern OS map

The following text should be read in conjunction with figures 14-19 below which include a plan and relevant elevations of the structure.

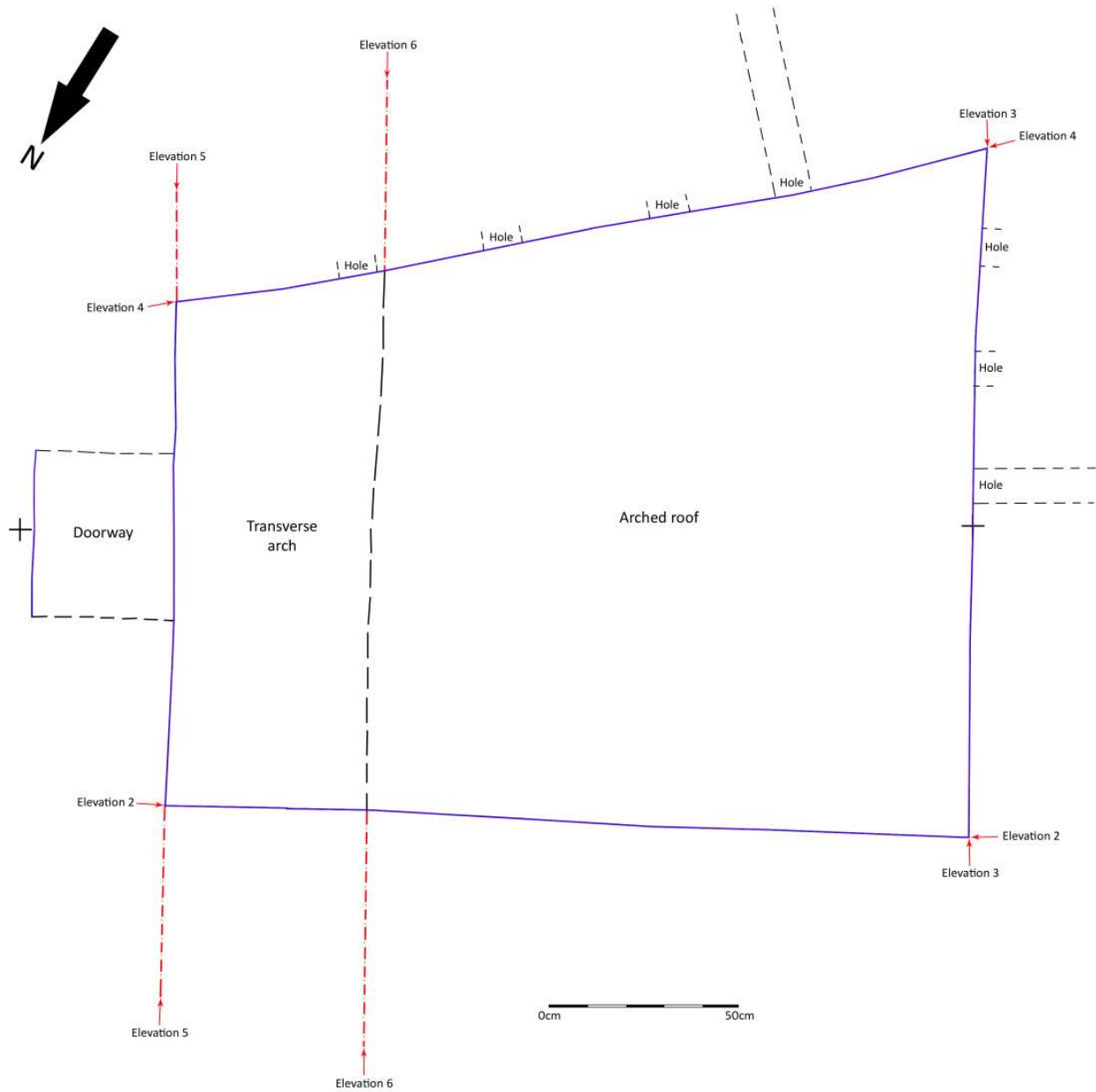


Fig.14: Plan 1 of the underground structure showing the trapezoid shape, extent of the arched ceiling, doorway in the NE face and drainage holes / slots

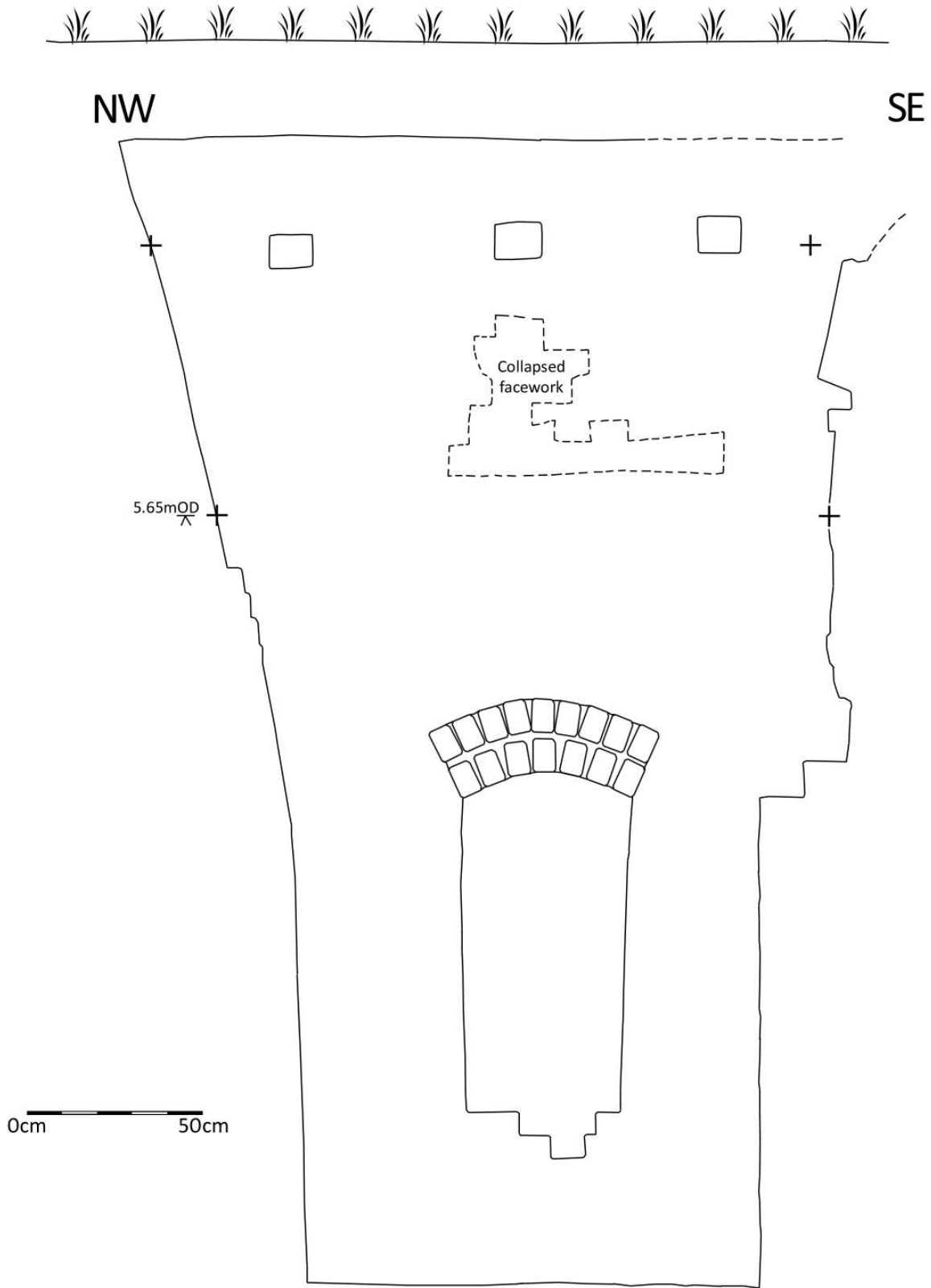


Fig.15: Elevation 5 North Eastern wall of structure

SW

NE

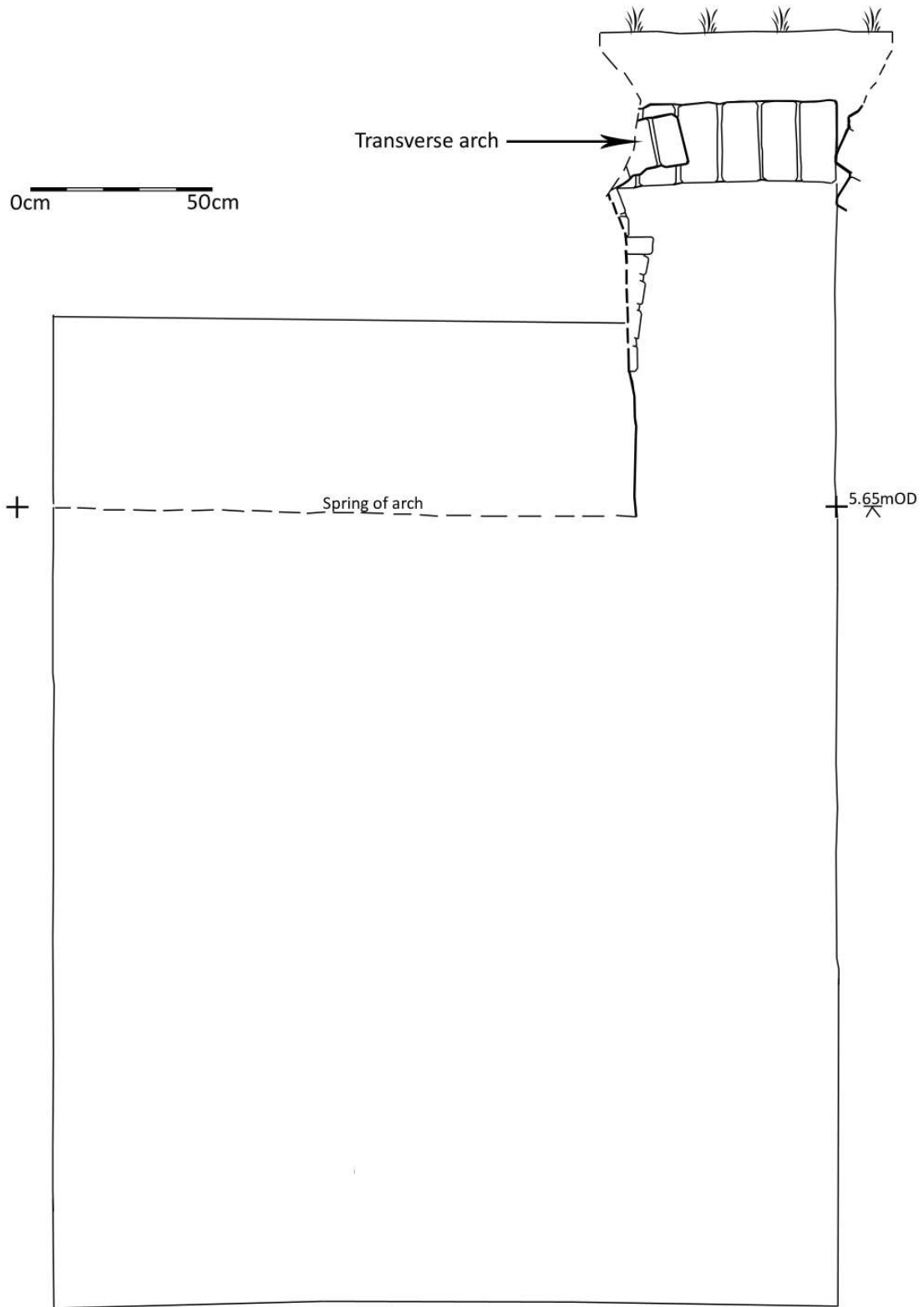


Fig.16: Elevation 2 North western wall of structure

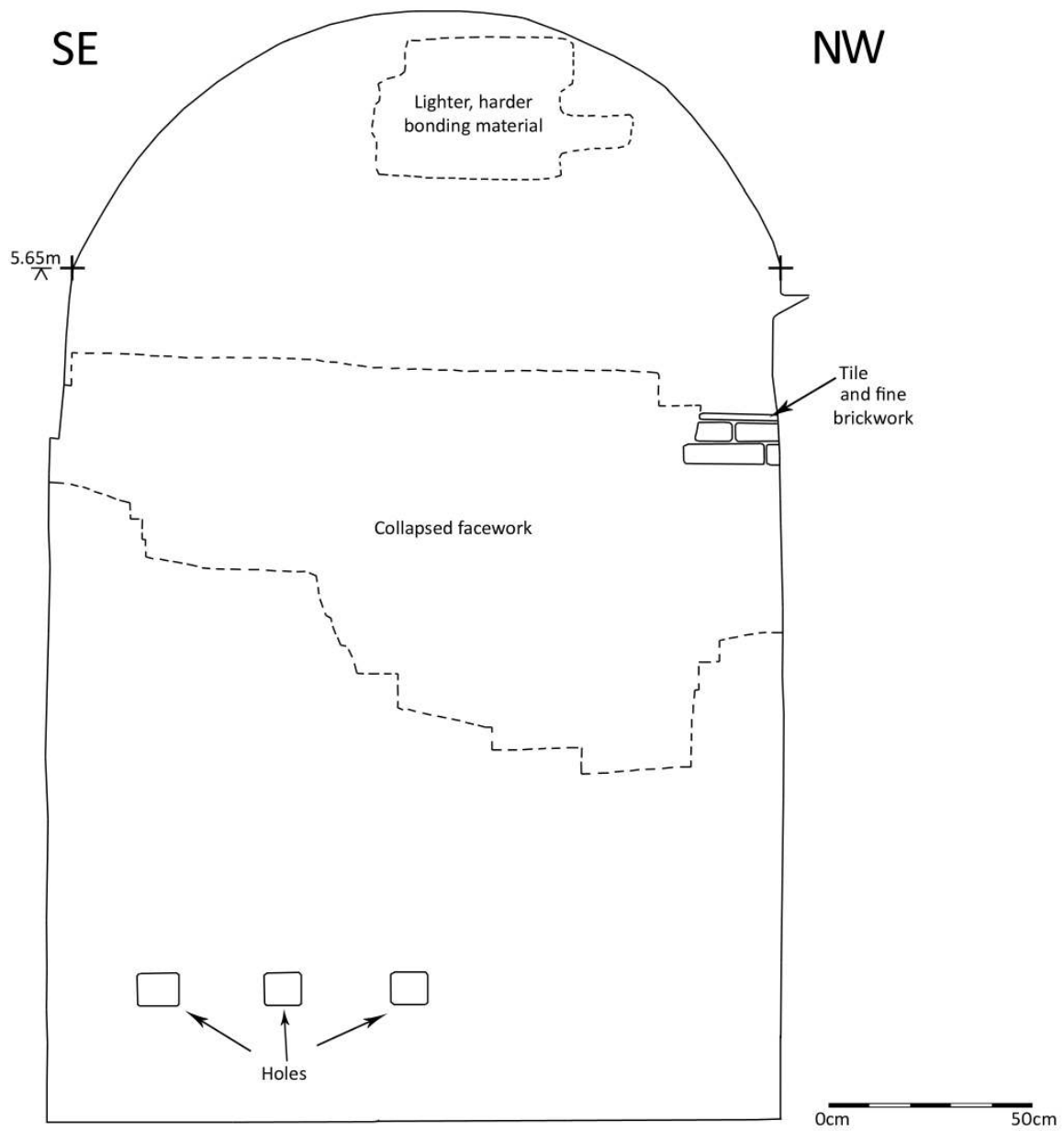


Fig.17: Elevation 3 South western wall of structure

NE

SW

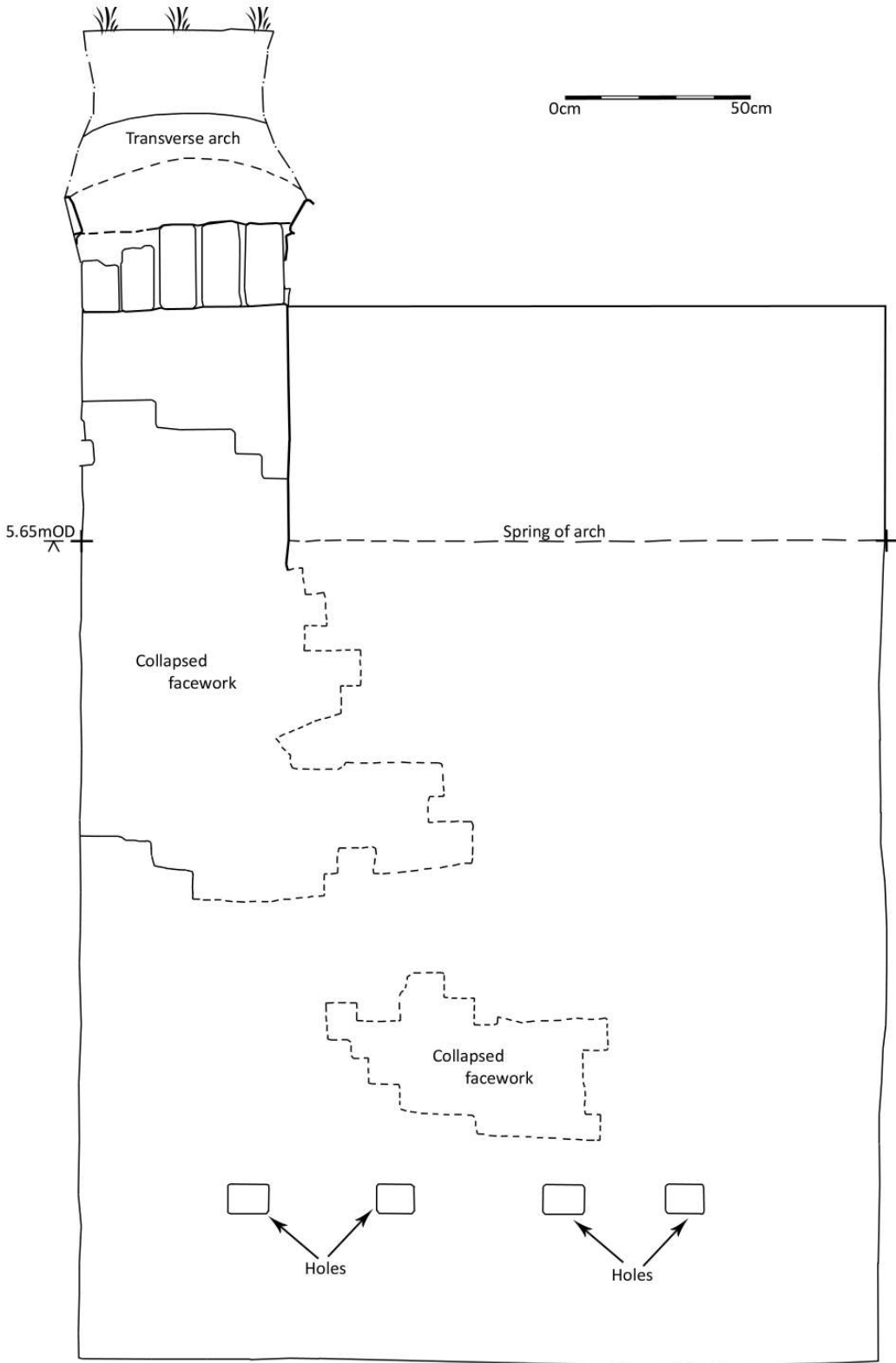


Fig.18: Elevation 4 South eastern wall of structure

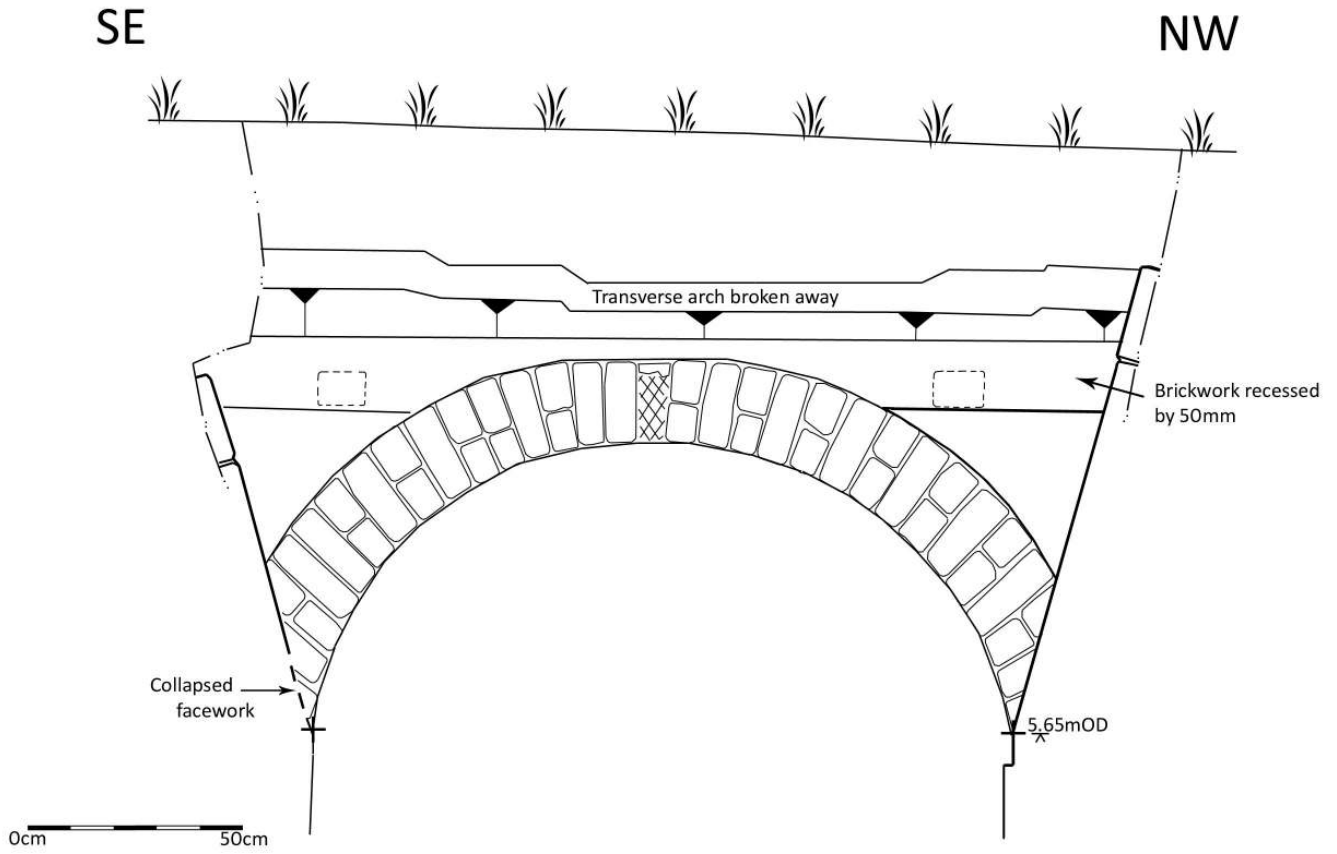


Fig.19: *Elevation 6 NE face of arched roof*

- 4.2** The structure was aligned approximately NE-SW with internal floor measurements of 2.1m in length and 1.82m wide at the SW end tapering to 1.32m at the NE end. This gave it a trapezoid shape, which is a non-conventional shape to say the least. It would appear to have no immediate advantage in terms of storage or furnishing and so may represent a practical approach to construction rather than original design. It may indicate that the structure was a later insertion confined within the limits of already existing buildings.
- 4.3** Before photography the structure was partially cleared of collapsed and backfilled material to expose the internal wall faces to floor level. In the event this entailed removing a further 1.1m depth of material, largely from the SE side of the structure. This meant that the floor to ceiling height of the structure was approximately 3.35m at the NW end and 2.75m at the SE end. The difference in height is accounted for by the different construction method of the roof either end of the chamber (more on which later).
- 4.4** The exposed 'floor' consisted of pale brown to yellow natural sandy silts exposed at approximately 3.45mOD. No evidence of any paving or laid floor surface was present but it would be strange for there not to have been one considering the underlying sands. It can be assumed that if a tile / flagged floor had been laid directly over the sand it would have proved relatively easy to remove prior to the abandonment of the building and so would have proved an enticing source of re-useable or saleable building material.
- 4.5** The main body of the structure was constructed from red or slightly yellowed bricks measuring between 220-240mm long, 100-110mm wide and 70-85mm thickness. Bonding material varied, but mainly took the form of a soft clay-sand like material, usually brown-yellow in colour, with some patches of whiter, harder lime mortar representing repair work and re-pointing in the upper courses of the rear of the structure. The same lime mortar was visible in the bonding of the vaulted roof and in the transverse arch at the NE end of the structure. The majority of bricks conformed to mid 17th to early 18th century fabric type 3032 and showed signs of over-firing and coarse inclusions within the clay fabric. There were the occasional exceptions where thinner, finely made bricks had been inserted to provide a crisper finish to the wall faces⁵. Roof tiles had also been used in order to plug gaps, or level out courses. The walls themselves were built directly over the natural sand deposits at approximately 3.45mOD and there was no sign of them having been built within foundation trenches or the like.

⁵ Pers.comm. Sue Pringle. For a more detailed note on the brick samples see Appendix I, pg.34

Interestingly the individual walls did not appear to be keyed into one another in any of the corners. The SW, (rear), wall was not keyed into either the SE, (right), or NW, (left), walls. Equally the NE, (front), wall was not keyed in to the NW wall and only partially towards the lower half of the SE wall. This would not at first inspection make for a very stable structure.



Fig.20: Detail of the W corner of the structure, (left side of frame), illustrating the fact that neither the SW or NW walls are keyed into one another. Facing W, (1m scale)



Fig.21: Oblique view of E corner of structure looking up towards the battered face of the SE wall. The arch of the vaulted roof is visible to the right and top of doorway visible to the bottom left of frame

In several instances collapse had occurred on the internal faces of the structure, this revealed the walls to have been constructed with a layer of more finely finished bricks on the internal faces with rougher coursework making up the majority of the build. This was most visible on the rear wall of the chamber where a large portion of the face work had ‘peeled off’ and collapsed into the room.



Fig.22: Collapsed face work on the rear wall of the structure. The scale, (1m), rests on surviving face work at the base and the top 40cm, the space in between has collapsed revealing less finely finished brickwork behind. Facing SW

- 4.5** Four brick courses, (290mm), up from the floor on the rear wall there were three square openings in the brickwork, roughly the same size as the head of a brick eg.100mm wide by 80mm high. The openings were evenly spaced from the southern corner of the structure 220mm apart, roughly a bricks length. The northern most of these openings was found to be at least 320mm deep, and surrounded by brickwork suggesting the opening extended through the thickness of the wall as a narrow shaft.

The same form of openings were present in the SE wall, only they were five courses from the floor, (380mm), and were not so evenly spaced, equating to the equivalent of one and a half brick lengths apart. A total of four openings were observed in the SE wall. The opening closest to the southern corner of the structure was found to extend at least 500mm into the wall and was still

continuing. This would suggest that the wall was a considerable thickness; greater than 500mm.

The shafts were flat based, and did not appear to slope up or down which may have suggested use as drainage holes. Instead they may have served some form of air circulatory function or ventilation? But this seems unlikely due to the structure being below ground. The fact that similar openings were not observed in the front or NW walls would also argue against the holes having housed a series of overlapping floor joists.



Fig.23: Rear wall showing the three openings near the base of the chamber, the third is visible behind the bottom of the scale, (1m), and measured 320mm deep and continued back. The other two openings are visible to the left. Facing SW

- 4.6** In the front wall of the chamber there was an opening with a flat base and arched ceiling. The opening was 500mm above floor level and situated slightly right of centre in the wall face. The opening itself measured 900mm tall in the slightly tapering sides, rising to 970mm in the centre with the apex of the arched ceiling, and was 440mm wide at the base and 480mm wide at the top to accommodate the arch. The opening was 380mm deep at the base of the vertical walls and 500mm deep at the apex of the archway. The arch opened out into another chamber, which was solidly backfilled with demolition rubble and clay. Alongside numerous bricks within the rubble there was also a lens of window glass and lead framework giving the appearance of a whole window

having been cast into the backfill of the chamber. The floor level of this second chamber was at the same level as the base of the doorway. This meant that the chamber being surveyed was actually deeper than the adjoining room by up to half a metre and anyone accessing the chamber through the opening would have stepped down into it. Again there was no sign of *in situ* flooring though it is likely that a series of stone flags or similar material would have covered the whole area



Fig.24: Doorway in the NE wall leading to a second unexplored chamber. The remains of almost an entire crushed window are visible in the centre of the background within the rubble backfill of the chamber (1m scale)



Fig.25: Remains of the lead framework of the window found within the backfill of the unexplored cellar, some with glass still retained. Note the rounded joins in the framework in the top left pieces (scale 10cm)



Fig.26: Window glass from backfilled cellar. Note the impression of the lead framework on the edges of several pieces, and the diamond shape of the glass pieces suggesting diamond shaped latticework on the windows (scale 10cm)

- 4.7 The structure was almost completely enclosed by an arched vault extending from the rear wall, bonded using a cream coloured lime mortar, and terminating as an open fronted arch 520mm from the internal face of the front, (NE), wall. The arch was approximately 630mm high and sprung from the left and right wall faces at a height of 2.20m from floor level. As with the main walls the arched ceiling was not keyed into the wall at the rear of the structure. In fact the archway appeared to abut the rear wall with the brickwork of the rear wall extending beyond the curve of the arch, as if the arch abuts a squared off wall. As the archway follows the alignment of the left and right walls of the structure it too tapers inwards towards the NE end, which makes it of unusual construction and shape.



Fig.27: Photograph of the open-ended arched ceiling, taken from the rear wall of the chamber, facing NE. The far spring work of the transverse arch is just visible as a white line towards the top of the front wall. A hole has been crudely patched in the roof with metal slats and pan tiles. The hole does not appear deliberate and there is no sign of a structural feature having been removed. It may have been an earlier case of collapse, or accidental damage

4.8 The NE end of the chamber was presently open to the sky and provided access to the structure. However this had not always been the case as there were remains of a transverse arch, (aligned NW-SE at right angles to the main ceiling), visible in section at the SE end and in elements of surviving brickwork at the NW end. The brickwork visible was of red brick bonded with white lime mortar liberally applied. The full length of the original arch was only partly visible due to the heavy truncation, but the span was approximately 650mm. It is interesting that the spring of the arch begins *above* the apex of the arched roof of the main chamber. This could mean that the external face of the transverse arch may have been exposed at former ground level, with the rest of the chamber buried deeper.

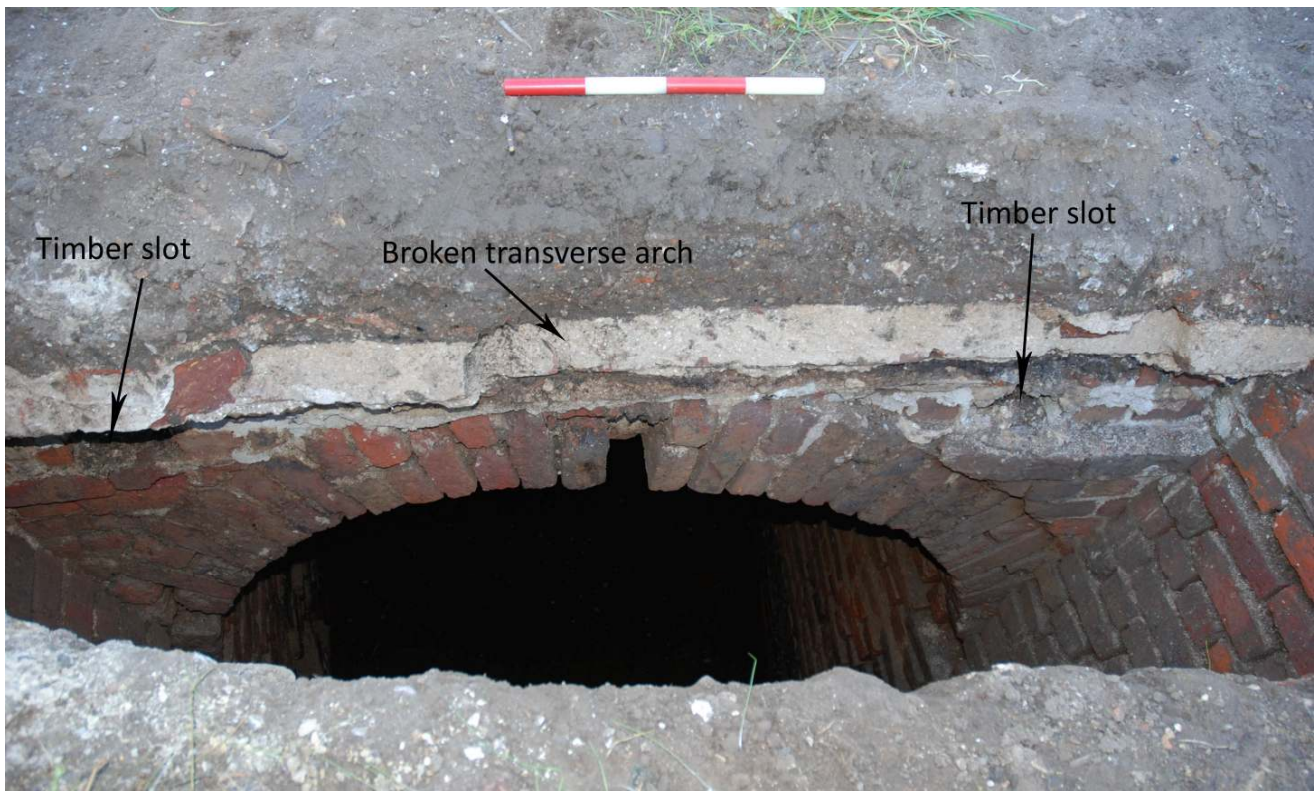


Fig.28: NE end of arched ceiling showing the construction / finish of the brickwork. The broken transverse arch is visible as the white line of mortar bonded brickwork. Facing SW, (40cm scale)

4.9 Almost immediately below the spring of the transverse arch, were a series of three timber holes in the upper courses of the NE wall with two opposing holes in the brickwork above the arched opening to the main chamber. These holes were 220-280mm below the top of the wall face and measured approximately 120-130mm wide and 90-100mm tall and were at least 60-100mm deep. Several of the slots had remnants or imprints of timbers still present within them. There were also surviving elements of timber beams aligned along the length of the transverse arch at the base of the springing brickwork. The spacing of the timber slots relatively evenly across the span between the walls may suggest that they supported some sort of wooden ceiling, perhaps including another access point incorporated into the construction of the transverse arch.



Fig.29: Photograph showing the timber slots on the NE wall face. Note that the central and right hand slot still contains elements of timber. Facing NE



Fig.30: *Remains of the transverse arch, which once covered the NE end of the structure. The main arched ceiling of the chamber is visible in the bottom right of the frame. Facing SE, (20cm scale. Note the shovel blade protruding from the section. Obviously the result of some previous episode of disturbance!)*

- 4.10** At the NE end of both side walls, between the end of the arched ceiling and the interior face of the NE wall, the walls had been battered to slope up and away from the main wall face. This has given the NE end of the structure an elongated and splayed profile and the sloping sides make it appear almost like a chute of some sort. Several theories can be put forward as to what purpose this may serve and these include: maximising light from above, similar to a light well or aiding with the loading of goods from above, (suggesting some form of overhead access within the arch as proposed in 4.9).

5 CONCLUSIONS

The building survey has proved useful in that it has provided a chance to examine a hitherto unexplored area of Richmond Park in terms of archaeology. It has also brought into the spotlight a previously untouched site of significant archaeological importance.

The structure itself can confidently be dated to the mid 18th century incarnation of Petersham Lodge using the date ranges provided by brick samples gathered from site and comparison with available cartographic and illustrative evidence. The chamber formed one room in a probable network of cellars, within the footprint of a range of buildings depicted in the 1834 Conveyance plan along the western boundary wall of the estate, (fig.8).

The odd shape of the chamber could indicate that it was a late addition to existing buildings and so had to be fitted in where space was available. The construction of the ceiling along two oppositely aligned axes, instead of a single continuous arch, suggests deliberate purpose. The transverse arch at the NE end of the structure and the splayed wall faces on the upper part of the side walls may hold the key to the function of the room, but its partial collapse makes the true nature of the structure elusive. The width of the transverse arch would make access to the structure from above prohibitive and so it would seem more unlikely that its role was for loading of goods or suchlike as in a Victorian coal cellar. The fact that the arch begins at a higher level than the main ceiling implies that it may have been visible or exposed at ground level in the past. It may be that the transverse arch housed glass windows or grilles and that the battered side-walls acted to channel light into the room below like a sort of light well. If this was the case it also suggests that at least the NE end of the structure was *outside* the footprint of any overlying buildings.

Based on the survival of the underground structure recorded in this building survey, and the parch marks visible in aerial photography, it is clear that substantial remains of Petersham Lodge remain buried close to the surface of this corner of Richmond Park. These include at least the western pavilion end of the main house, and the eastern colonnade on the rear of the east wing, as well as the footprint of the main house itself and the grand carriage drive. This is a wonderful discovery, and one that adds material evidence, and provides a physical link, to the history of Petersham and Richmond Park.

6 BIBLIOGRAPHY

- Beresford Chancellor, E, *History and Antiquities of Richmond*, (1894)
- Brown, M, *Richmond Park – The History of a Royal Deer Park*, (1985)
- Cloake, J, *Palaces and Parks of Richmond and Kew Vol.I: The Palaces of Shene and Richmond*, (1995)
- *Palaces and Parks of Richmond and Kew Vol.II: Richmond Lodge and Kew Palaces*, (1996)
- Cundall, H, *Bygone Richmond*, (1925)
- de Salis, Nicholas, *New Park – Richmond's forgotten House in Country Life* September 30th (1982)
- Dutton, S, 'Footnotes to Local History' in *Richmond and Twickenham Times*-16th October 1937
- Fletcher Jones, P, *Richmond Park – Portrait of a Royal Playground*, (1985)
- The Ham & Petersham Association, (written & compiled by V Fison), *The Matchless Vale. The Story of Ham & Petersham and their People*, (written & compiled by V Fison), (2009)
- Land use Consultants, *Richmond Park – Royal Parks Historical Survey* (1984)
- Lyson, D, *Environs of London Vol.1 part 3 Surrey 390-603 NEW-ROT*
- Malden, H.E, *Victoria County History: A History of the County of Surrey Vol.III: Parishes: Petersham* (1911)
- Pritchard, E, *Evelyn Pritchard's guide to the street names of Ham and Petersham* published by Richmond Local History Society (2005)
- Richmond and Twickenham Times – Article entitled *Romance of Petersham Lodge* (Saturday August 6th 1921)

Appendix I: Ceramic Building Material Analysis by Sue Pringle

Location of brick	Date of CBM / Context	Period	Fabric	Form	Count	Weight (g)	L	B	T	Condition	Comments
NE Wall	1650-1850	PM	3032	Brick	1	2099	225	104	65	M, V	Unfrogged
NW Wall	1450-1700	PM	3039	Brick	1	2130	220	95-98	c.62	M	Trace of lime mortar on base and one header. Unfrogged. Indented margins. Fairly sharp arrisses. Common calcium carbonate inclusions
SE Wall	1650-1850	PM	3032	Brick	1	2185	225	95	60	M, Rd	Unfrogged. Sharp arrisses; neatly made. Highly fired. Smooth version of fabric
SE Wall	1650-1850	PM	3032	Brick	1	2065	220	100	60		Unfrogged. Fairly fine version of fabric; scatter of white calcium carbonate inclusions
SW Wall	1600-1900	PM	3032	Brick	1	2205	222-235	95	c.67	M, V	Unfrogged. Narrow indented margin. Over-fired or burnt; vitrified and distorted. Fabric not examined, but probably late 3033 / early 3032. 17 th Century?
SW Wall	1700-1900	PM	3047	Brick	1	2043	217	109	c.46	M	White lime mortar. Unfrogged; sharp arrisses, neatly made with fine moulding sand

Key: M= Mortar; Rd= Reduced; V= Vitrified

Appendix II: OASIS data collection form

OASIS ID: *compassa1-133464*

Project details

Project name	Underground chamber in Petersham Playground, Richmond Park
Short description of the project	Between the 23rd and 24th of August 2012 Compass Archaeology conducted a Level 2 building survey on an underground structure exposed during renovation works on the Petersham Playground site, in Richmond Park in the London Borough of Richmond. The structure was built of red and yellowed brick mainly bonded with a soft sandy-clay like material and consisted of a four walled chamber aligned NE-SW, covered by a large arched ceiling at the SW end with a smaller transverse arch crossing the structure at the NE end. In the centre of the NE wall face a low and narrow doorway provided access to the chamber from another room, which was solidly backfilled with brick and clay rubble. The structure had a noticeably odd trapezoid shape. It is known from documentary, cartographic and illustrative sources that this part of Richmond Park was once occupied by a large mansion house known alternatively as 'New Park' and 'Petersham Lodge' from at least 1690. The main house had two additional side wings and a grand scheme of formally laid parterre gardens and terraced parkland. In 1721 the main house was destroyed by fire. It was rebuilt in 1733/34 by William Stanhope, later Lord Harrington, and renamed 'Harrington's Retreat'. The house passed through several new owners and reverted to 'Petersham Lodge'. In 1835 the house was purchased by the Commissioner of Woods and Forests. The house and its grounds were demolished and the land reverted to become part of the wider park again. Although its exact function remains elusive it is believed that the underground structure is probably associated with the cellars that would have formed part of the side wings of the mid-18th century Lodge.
Project dates	Start: 23-08-2012 End: 24-08-2012
Previous/future work	No / No
Any associated project reference codes	PSP12 - Sitecode
Type of project	Building Recording
Site status	Conservation Area
Site status	Area of Archaeological Importance (AAI)
Site status	English Heritage List of Parks and Gardens of Special Historic Interest
Current Land use	Other 14 - Recreational usage
Monument type	UNDERGROUND CHAMBER Post Medieval
Significant Finds	WINDOW GLASS Post Medieval

Methods & techniques "Measured Survey","Photographic Survey","Survey/Recording Of Fabric/Structure"

Prompt English heritage recommendations

Project location

Country England

Site location GREATER LONDON RICHMOND UPON THAMES RICHMOND AND KEW Petersham Playground, Richmond Park

Study area 9.00 Square metres

Site coordinates TQ 18227 73229 51 0 51 26 42 N 000 17 54 W Point

Height OD / Depth Min: 3.45m Max: 3.45m

Project creators

Name of Organisation Compass Archaeology

Project brief originator English Heritage/Department of Environment

Project design originator Compass Archaeology

Project director/manager Compass Archaeology

Project supervisor Geoff Potter

Type of sponsor/funding body The Royal Parks

Project archives

Physical Archive recipient Museum of London Archive

Physical Contents "Glass","Metal"

Digital Archive recipient Museum of London archive

Digital Contents "other"

Digital Media available "Images raster / digital photography","Text"

Paper Archive recipient	Museum of London Archive
Paper Contents	"other"
Paper Media available	"Correspondence", "Drawing", "Map", "Plan", "Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	An underground structure in Petersham Playground Richmond Park, London Borough of Richmond-Upon-Thames A Level 2 Historic Building Survey
Author(s)/Editor(s)	Aaronson, J
Date	2012
Issuer or publisher	Compass Archaeology
Place of issue or publication	5-7 Southwark Street, SE1 1RQ
Description	A short summary report including discussion of the historic / archaeological background of the immediate area, (including documentary, cartographic, and pictorial research); discussion of the various features of the structure; and discussion of its association with the property known as Petersham lodge. The report includes a photographic record and a measured plan along with drawn elevations of the structure.

Appendix III: London Archaeologist Summary

Site Address: Petersham Playground, Petersham Park, Richmond Park,
London Borough of Richmond
Project Type: Historic Building Survey (Level 2)
Dates of Fieldwork: 23rd-24th August 2012
Site Code: PSP12
Site Supervisor: Geoff Potter
NGR: TQ18227 73229
Funding body: The Royal Parks

Between the 23rd and 24th of August 2012 Compass Archaeology conducted a Level 2 building survey on an underground structure exposed during renovation works on the Petersham Playground site, in Richmond Park in the London Borough of Richmond.

The structure was built of red and yellowed brick bonded with a soft sandy-clay like material and consisted of a four walled trapezoid-shaped chamber aligned NE-SW, covered by a large arched ceiling at the SW end with a smaller transverse arch crossing the structure at the NE end. In the centre of the NE wall face a low and narrow doorway provided access to the chamber from another room, which was solidly backfilled with brick and clay rubble.

It is known from documentary, cartographic and illustrative sources that this part of Richmond Park was once occupied by a large mansion house known alternatively as 'New Park' and 'Petersham Lodge' from at least 1690. The main house was extended with the addition of two side wings and a grand scheme of formally laid parterre gardens and terraced parkland. The main house was destroyed by fire in 1721. It was rebuilt in 1733/34 by William Stanhope, later Lord Harrington, and renamed 'Harrington's Retreat'. The house passed through several new owners, until 1835 when the house was purchased by the newly created Commissioner of Woods and Forests. The house and its grounds were demolished and the land reverted to become part of the wider park again. It is believed that the underground structure is probably associated with the cellars beneath part of a separate side range of buildings associated with the mid-18th century lodge.