



Warbrook House, Eversley, Hampshire

Aerial Survey of the garden and parkland

Edward Carpenter



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2024

Warbrook House
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NGR: SU 77280 61731

Print: ISSN 2398-3841

Online: ISSN 2059-4453

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Summary

Warbrook House, Eversley, Hampshire is a Grade I listed early 18th-century Palladian villa that sits within a Grade II* Registered Park and Garden that is on the Heritage at Risk Register. The house, formal garden and wider formal landscape were designed and constructed by the architect John James (c1672-1746). His work was informed by his translation of d'Argenville's *The Theory and Practice of Gardening*. The book introduces the grand manner of garden design to England and presents the then relatively new technique of using a ha-ha. This aerial survey has identified low earthworks within the formal garden and across the wider park, most of which have only been seen in lidar. Some of these appear to be the remains of the original early 18th-century garden design and allow a tentative outline of James's original design to be suggested. The results of this survey will help in the creation of a sustainable management plan to remove Warbrook from the Heritage at Risk Register.

Contributors

Edward Carpenter carried out the aerial survey and wrote the report. Kay Richardson (Historic England Heritage at Risk Landscape Architect), Magnus Alexander (Historic England Senior Archaeological Investigator (Designed Landscapes) and Sally Evans (Historic England Aerial Survey Manager) provided comments on an earlier draft of this report.

Acknowledgements

Thanks to Historic England Archive staff for the supply of aerial photographs. Front cover image: 33637_024 18-MAY-2018 © Historic England Archive.

Archive location

Historic England Archive, The Engine House, Firefly Avenue, Swindon, SN2 2EH

Date of survey/research/investigation

The aerial survey and draft of the report was carried out between March and September 2022. The draft was revised for publication June 2024.

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Introduction

Warbrook House, Eversley, Hampshire is a Grade I listed early 18th-century Palladian villa that sits within a Grade II* Registered Park and Garden (RPG). The RPG is on the Heritage at Risk (HAR) Register and Historic England are supporting the owners of the house to understand and appreciate the significance of this asset. This is intended to create a sustainable management plan process and initiate work to remove it from the HAR register.

The house, formal garden and wider formal landscape were designed and constructed by the architect John James (c1672-1746). His work was informed by his translation of *The Theory and Practice of Gardening* published in 1712 from the original 1709 French edition by Antoine-Joseph Dezallier d'Argenville. The book introduces the grand manner of garden design to England and presents the then relatively new technique of using a ha-ha.

A greater understanding of the significance of the park and lost features will contribute to identifying options for repair of parkland architecture through Countryside Stewardship or make recommendations on future restoration of key features through National Lottery Heritage Fund (NLHF) bids after a parkland plan visioning process. These investigations will form part of the baseline information of a parkland plan funded by Natural England and our wider support for a HAR case.

This aerial survey was requested by Kay Richardson, Heritage at Risk Landscape Architect, London & South East Region in support of their work on Warbrook House after consultation with Magnus Alexander, Historic England Senior Archaeological Investigator (Designed Landscapes). This survey entailed the mapping and recording of all archaeological features identified in aerial photographs and lidar, but the project was focussed on the interpretation of the park and garden features associated with John James's original design. Sources used included Historic England's collection of aerial photographs, historic maps and most useful of all, the Environment Agency lidar at 1m resolution (a detailed methodology can be found in the Appendix). Underpinning the interpretation of these features was *The Theory and Practice of Gardening* in which the ideas and techniques of garden design were explained and illustrated, and which provided a template against which some of the features identified on the aerial sources could be compared.

Although Warbrook was included in a large area aerial survey (Young 2008), very little was identified within the registered park and garden, primarily because that project was solely reliant on aerial photographs. The present project, with its focus on the park and garden and access to lidar imagery, enabled a more detailed investigation into the formal landscape and this report presents the results of this work.

The project area is focused on the Grade II* Warbrook Registered Park and Garden (Fig 1). Warbrook House is situated at the southern end of Eversley village and above the floodplain of the River Blackwater (a tributary of the River Test) which is to the north. The bedrock geology is London Clay, the superficial geology is River Terrace Deposits – 2

sand and gravel (<https://mapapps.bgs.ac.uk/geologyofbritain/home.html>). Most of the park contains freely draining slightly acid loamy soils of low fertility while the very northern and eastern edges are loamy soils with naturally high groundwater, also of low fertility (UK Soil Observatory). The house and garden were built on heathland, and the present park extends over former heathland and parts of what was common land.

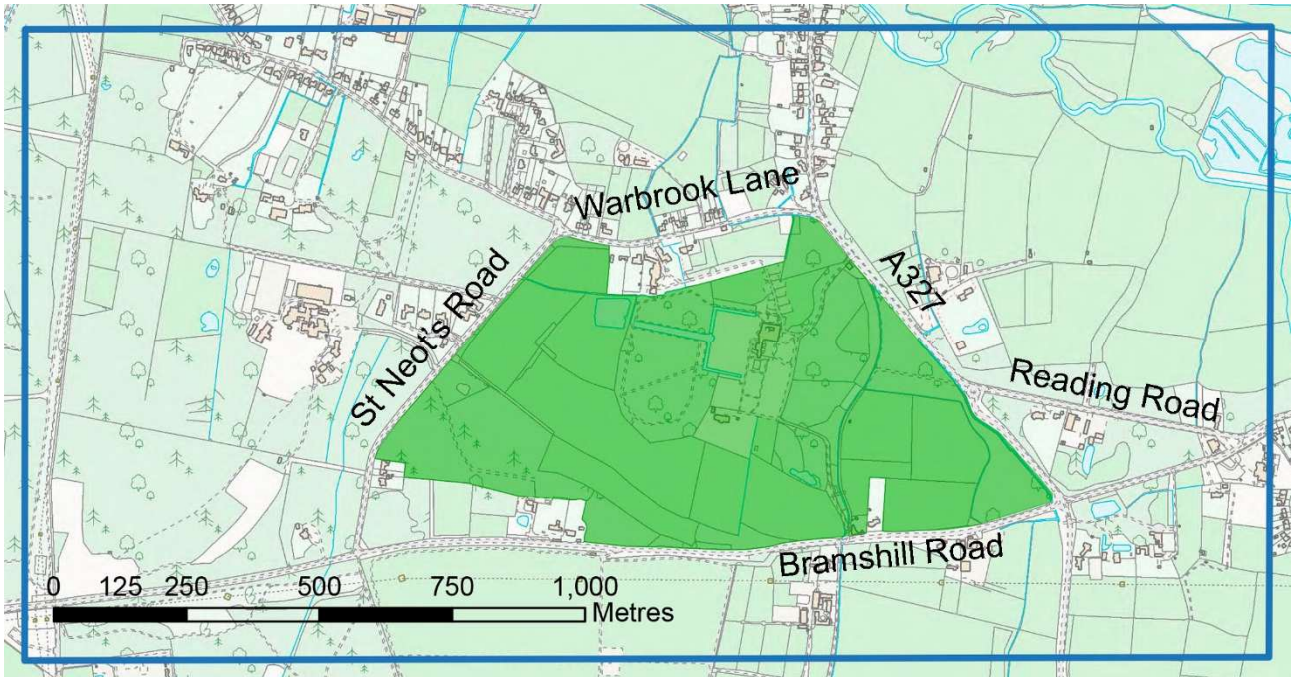


Figure 1: The project area showing the Registered Park and Garden shaded green and the names of the roads bordering the park. © Historic England; Base map Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100019088.

John James

John James was born in about 1672, probably in Hampshire where his father, the Rev John James was master of the Holy Ghost School at Basingstoke. James began his architectural career as a carpenter and worked for ten years for Matthew Bancks who was Master Carpenter to the Crown between 1683 and 1706 (Colvin 1978, 452). In 1698 James was unsuccessful in his application for the post of Clerk of the Works at Greenwich Hospital, but the committee were impressed with his abilities and in 1705 he was made Storekeeper and Assistant Clerk of the Works at Greenwich, a post he retained until 1718 when he became the Joint Clerk of Works with Nicolas Hawksmoor (ibid). Concurrently with his work at Greenwich, James was made Master Carpenter to St Pauls in 1711 and undertook architectural commissions; these included Appuldurcombe House, Isle of Wight and a house in Twickenham (later called Orleans House) for the politician James Johnson (ibid, 454). It was during his time at Greenwich and St Pauls that James worked on his translation of Antoine-Joseph Dezallier d'Argenville's book *La Théorie et la Pratique du Jardinage* (see below).

After publication, as well as receiving further architectural commissions James was made Assistant Surveyor to the Fabric at St Pauls Cathedral under Wren in 1715 (eventually to be made Surveyor to the Fabric at Wren's death in 1723), and in 1716 Surveyor to the Commissioner for Building Fifty New Churches under the Act of 1711. In January 1725 James was made Surveyor to the Dean and Chapter of Westminster (Colvin 1978, 452).

During this period James designed and built two houses for himself. The first was Park Hall, Crooms Hill, Greenwich (1717-19) which although completed, he never occupied, the second was a country residence, Warbrook House, Eversley, Hampshire built in 1724 (ibid, 454). James revised his text and published a second edition of *The Theory and Practice of Gardening* in 1728.

In the following decade he was elected master of the Carpenters' Company (1734) and in 1736 was made Surveyor to the Fabric of Westminster Abbey where he completed the west towers of the abbey in accordance with Hawksmoor's designs. (Colvin 1978, 452). His final work was on Welbeck Abbey, Nottinghamshire where he reconstructed the south wing and remodelled the west front (1742-6) (ibid, 454). John James died at Greenwich on 15th May 1746 and was buried at Eversley, Hampshire. The inscription on his monument reads 'The said John James built the house called Warbrooks in this parish anno 1724' (Anon 1939).

John James and the theory and practice of gardening

La Théorie et la Pratique du Jardinage was first published anonymously in Paris in 1709. It was written by Antoine-Joseph Dezallier d'Argenville (1680-1765) with assistance from Jean-Baptiste Alexandre Le Blond (1679-1719) who was also responsible for most of the illustrations. A second expanded French edition was published in 1713 and a third in 1722, in which Le Blond was credited as the author.

John James's English translation was published in 1712 as *The Theory and Practice of Gardening*. James considered himself to have had a good education in Latin, Italian and French (Colvin 1978, 451) but as this was the only book he is known to have translated, presumably he had an interest in garden design; something that may have been encouraged by his early architectural commissions on private houses. James undertook this translation with the support of James Johnson of Twickenham (for whom James had designed a house) and he was instrumental in getting many subscriptions from members of both houses of parliament. These made up some of the 243 subscribers to James's book. Other subscribers included the architect Nicholas Hawksmoor whom James had worked with at Greenwich, Sir Robert Worsley, 4th Baronet (for who James had designed Apuldurcombe House) as well as James Brydges (later Duke of Chandos) and Thomas Pitt, both of whom were to later commission James as an architect.

James's translation was dedicated to James Johnson and included an apology for a delay which had 'justly given offence to you, and many of the subscribers'. This was primarily due to a four-month hold up in the production of the engraved plates and 'divers other accidents'. Queen Anne granted James a licence as sole publisher of the work for a period of 14 years; this is included in the book and dated 22nd September 1712 (d'Argenville 1712).

The book was well regarded and referred to by the garden designer Stephen Switzer as the 'excellent book translated by Mr James' (Switzer 1718, 212) while the garden designer Batty Langley referred to it (and those works published by Switzer) as the best works dealing with the laying out of gardens (Langley 1728, iii).

James published a second edition of *The Theory and Practice of Gardening* in 1728 which was dedicated to Arthur Onslow esq, Speaker of the House of Commons (d'Argenville 1728). By that date the French third edition had been published and it is possible that, based on the naming of Le Blond as the author and the introductory comments referring to previous editions (plural), James used the French third edition for his English second edition. A third English edition was published in 1743.

In the first English edition James states that he 'Endeavoured faithfully to deliver the author's meaning' and that his intention was to produce a translation that was 'as plain, and intelligible, as possible'. Despite these different editions all being written in the first person, a superficial reading does not suggest that any of the significant observations in the main text are the words of John James, even in the second English edition published after he had completed work on his garden at Warbrook and had had first-hand experience of creating a garden. James's own writing (as opposed to his translation) appears to be limited to his introductory text in the 1712 edition and some explanations in the margins. For example, James adds two notes explaining the differences in measurement between France and Britain (the French foot was longer than the English foot) with a third explaining what a menagerie is (d'Argenville 1712, 23). Many of the notes in the margins are however from the French original.

The text was originally of 18 chapters split into two parts and this was expanded and divided into four parts in the second edition. In all editions part one deals with the theory of

garden design while the subsequent parts are concerned with the practical aspects of creating a garden. The theoretical aspects begin with what factors should be considered when choosing a plot of land to lay out a garden. All the gardens described and illustrated in the book follow a general set of rules. These include a list of features that should be included in a garden, (such as a parterre, a principle walk, groves etc) as well as guidance about where these features should be placed within the garden in relation to the house and to each other. Although the garden design plans reproduced are of different dimensions, in the 1712 edition they are all rectangular plots with the house positioned at one end (usually one of the narrow ends); two irregularly shaped garden plans were added to the second edition. There is a tension in the designs because within this regular framework there must be diversity. Part of this diversity stems from the arrangement of different features ‘always to oppose them one to the other’ (d’Argenville 1712, 20) and so avoid, for example, grouping all the parterres in one area and all the groves in another. In addition, each individual feature should be distinct, ‘if two groves are upon the side of a parterre, though their outward form and dimensions are equal, you should not, for that reason, repeat the same design in both, but make them different within’ (ibid).

A comparison between the features identified in the aerial survey with the garden plans and theory presented in *The Theory and Practice of Gardening* helps in the interpretation of Warbrook and allows a better understanding of James’s original design. However, many of the features identified in this survey are situated within the park to the east of the house and the book only deals with the design of the formal pleasure garden adjacent to a house (to the west in Warbrook’s case). It does not offer any detailed guidance of the layout of a surrounding park such as the disposition of woodland or the formal approach to the house and features beyond the rectangular formal garden are only touched upon in passing. Examples include the design for a garden of 50-60 acres for which a ‘great avenue’ is supposed to lead to the main entrance (ibid 1712, 23). The garden design of 25 acres ‘is supposed to be planted in the midst of a park, or country, where the lines of the walks are continued quite through the woods and fields’ (ibid, 25) and these are glimpsed at the edge of the illustration of this garden (ibid, plate 2). Two additional garden designs were added to the second edition and these both show the ends of formal approaches to the houses in the form of avenues of trees aligned on the walks within the garden (d’Argenville 1728, plate 5).

Choosing the land

The Theory and Practice of Gardening begins by outlining the factors to be considered when choosing where to build a house and lay out a garden. The first decision for James was what part of the country to build and his choice appears to have been influenced by his family and upbringing. James was born and brought up in Hampshire and although James began his architectural career in London his family remained in Hampshire. His father was vicar of Basingstoke (1697-1717) before being appointed rector of Stratfield Turgis which is about 8km east of Warbrook, and it seems likely that proximity to his family played a part in James’s choice of location for his country house.

As outlined in *The Theory and Practice of Gardening*, the exact location for a house and garden should be decided by a variety of factors: the suitability of its situation, the quality

of the soil, the access to water, the views offered, and the convenience of the location in terms of access by road or river (d'Argenville 1712, 7-14). Of these, the first three were considered most important (ibid, 14). Warbrook's location on level ground (but not on the valley bottom) was considered a desirable situation. A level garden had the advantage of being easier to walk around, cheaper to build and maintain as no terraces or steps would be needed and, as not on a slope, it would be less susceptible to damage from rain and floods. Warbrook has access to water via a brook and is close to the River Blackwater, which may have also been used for transport. The site is also close to the London Road (now the A30). Although available views from the garden are difficult to determine from the aerial sources, the aspiration was for 'a pleasing view from the end of a garden walk or terrace across a countryside of villages woods, rivers, hills and meadows' (ibid, 13). It is possible that Warbrook was provided with some of these and one feature that was visible from Warbrook was the open space of the common immediately to the east of the site of James's new house (see below).

Although Warbrook answers most of the requirements outlined in the book, it is located on poor, freely draining soil of low fertility when purchased by James. It is surprising that the quality of the soil, a fundamental requirement for a good garden, was the one requirement compromised on. The book makes clear that it 'will not suffice to have found an exposition healthful, turned to the south, and possessed of all those advantages I have already mentioned, if it be not accompanied with a good body of earth, and a soil fertile in itself: For without this, 'tis to be feared, all that is planted will, in a while, droop and die away' (ibid 10). The specific advice to those who intend to build a new house and garden on a new site is to judge the quality of the soil by considering what covers the ground adjacent and 'if *heath*, thistles, and other weeds...you may judge the soil is bad' (my emphasis; ibid, 11).

Although the advice is to avoid certain areas, it is acknowledged that it is difficult to find a perfect plot: 'Happy are those that meet with all these several advantages in one spot!' (ibid, 14). The book also states that the skill of the garden designer/architect is to 'thoroughly understand, and consider the natural advantages and defects of the place; to make use of the one, and redress the other' (ibid, 15). Replacing soil or manuring are two practical solutions offered to improve soil quality, although this comes at 'great expense' (ibid 11) but was perhaps offset against the other advantages of this area that included the proximity to the common that was incorporated into James's larger design (see below).

The costs involved also determine how large a house and garden could be constructed and, just as importantly, maintained. The book warns against too large a garden which will cost more to make and maintain, 'It is better, therefore, to be content with a reasonable spot of ground, well cultivated, than to be ambitious of having parks of such extent, that three quarters of them ordinarily neglected' (ibid, 16) The different garden plans reproduced in the book range from a design for a garden of six acres to one of 50 or 60 acres but the author makes the point that the example of a garden of 25 acres when compared to that of 50 or 60 acres while nothing near so large is 'in its kind not so much inferior to the other' (ibid 25).

Restraint is also advised with respect to the size of the house and associated buildings, 'which generally swallows up half the expense, there is no necessity that it should be so

large and so magnificent' (ibid 17). The house should be in proportion to the extent of the garden as it would be as disagreeable 'to see a magnificent building in a little garden, as a small box in a garden of vast extent' (ibid). However, of the two it is suggested that it would be better to have a smaller house and large garden because a country house 'ought to differ from one in town where the extent of buildings is more necessary than that of gardens, on account of being the more usual place of dwelling...the country we court chiefly, to have our gardens in it more spacious and magnificent' (ibid).

The exact size of James's original garden is not known but the evidence (discussed below) suggests that it was in the region of 8-9 acres. For this plot of land James designed and built a house which has been described as a smaller country house and a prime example of a small Palladian villa or 'box'. (Warbrook House Eversley Park and Garden list entry 1000249).

Garden survey results

This section looks at the evidence around the house and garden as distinct from the wider parkland.

The house

Warbrook House sits on the principal axis of the design which is orientated east-south-east to west-north-west, the corresponding axis being south-south-west to north-north-east. However, for simplicity the cardinal points will be used in this report as far as possible. The house is centrally located at the eastern end of the garden and the original building was constructed on an earthen platform (Fig 2). It has symmetrical east and west elevations of three windows, an attic, and semi-basement. Two later wings were added, but these are not set on a platform. A long range was added to the north in 1936 which joined with an existing stable block and formed part of an open courtyard (since built over). For more information about the building see the listing record 1260096. What may be the stable block is depicted on the 1837 tithe map along with several other possible farm buildings to the north and south of the house. No buildings survive to the south and a formal sunken garden was constructed there in the 1930s. Partly due to these later developments, is not known from aerial sources what garden design was originally laid out to the north and south of the house.



Figure 2: Warbrook House viewed from the east in 2018. 33637_023 18-MAY-2018 © Historic England Archive.

The lawn

The main lawn is located on the western side of the house and is enclosed by an ornamental canal on the remaining three sides (see below). The lawn measures about 107m north to south and about 75m east to west. This area appears to be lawn on the 1837 tithe map (where it is described as 'House etc) and on the 1871 and subsequent Ordnance Survey editions. The 19th-century maps do show a few isolated trees within the lawn and some trees are still present along the southern side and towards the north-east corner.

The slight earthworks in the form of two raised St Andrew's crosses are visible in the lidar imagery, one to the north, the other to the south (Fig 3). Each cross occupies an area approximately 50m by 35m leaving a gap between them of around 25m, within which no features have been identified in the aerial sources. The inner arms of each cross facing this gap are flanked by a second lower earthwork.

These two crosses are also seen as cropmarks in some aerial photographs, along with the cropmarks of a possible path, which runs north to south across the garden, about 20m to the west of the house and connects to the cropmarks of both raised crosses. Between the house and this possible path are fragmented and indistinct cropmarks which may represent additional paths of uncertain date oriented on the principal axis of the garden.

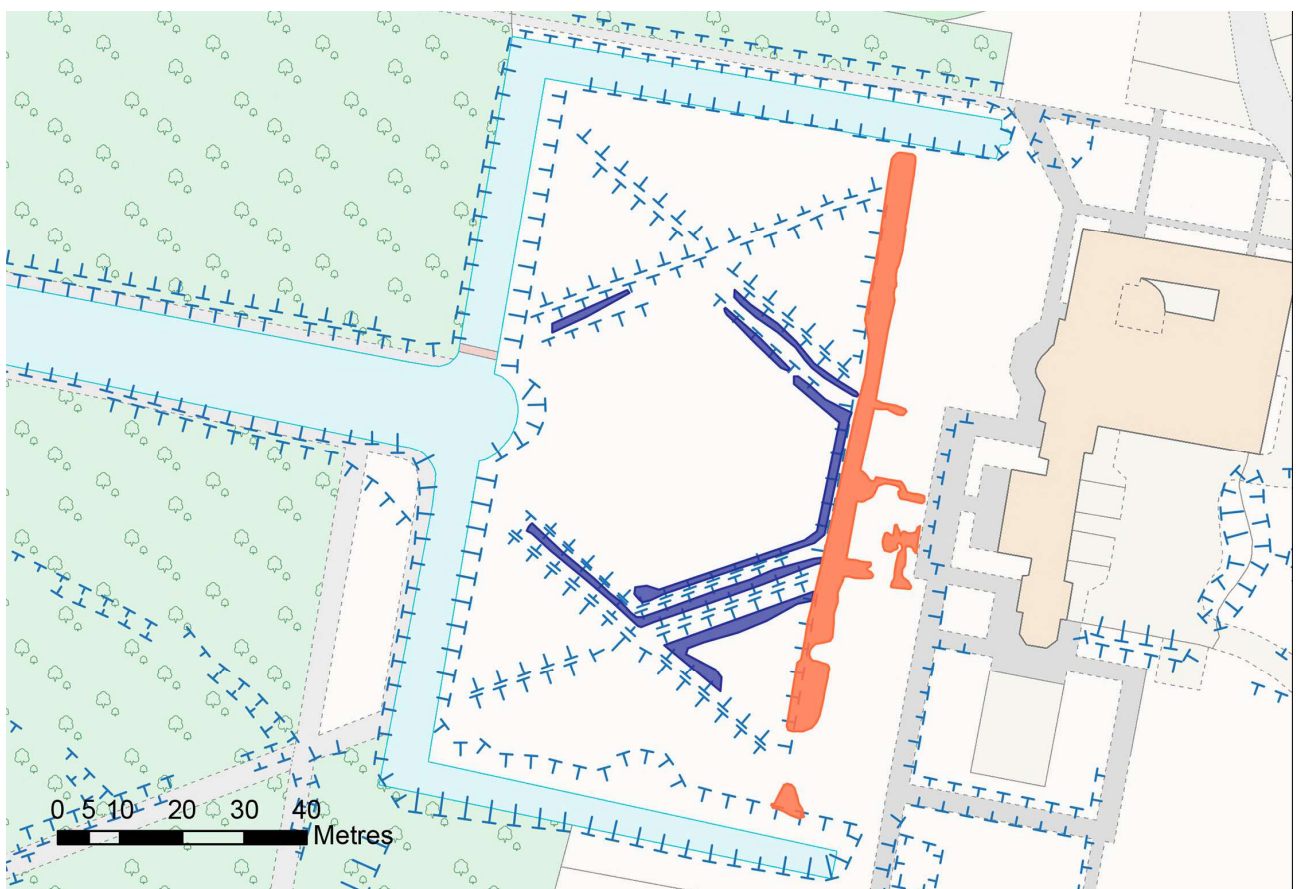


Figure 3: The slight earthworks of two St Andrew's crosses to the west of the house. These can also be seen as cropmarks on aerial photographs. Other possible paths are shown in red. © Historic England; Base map Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100019088.

Ornamental canal

Warbrook has a large water feature in the form of an ornamental canal made up of four interconnected arms and this is first depicted on the 1837 tithe map (Fig 4). The main canal

is located along the principal axis of the garden and is about 13m wide and 155m long. At its eastern end it joins a second perpendicular canal that measures about 122m long and 6m wide. Connected to this are two further canals extending east, one from the northern end and another from the southern end. These were about 95m long and extended to points in-line with the western façade of the house. The main canal divides the woodland at the western end of the garden in two. The cross canal separates these woods from the lawn and the side arms flank the lawn on the northern and southern sides. The tithe map also depicts what appears to be a separate rectangular pond to the north of the cross canal. No evidence of this was seen in the aerial sources and it is only depicted on the tithe map. The pond is not aligned on the axes of the garden design and so may not have been part of the original design.

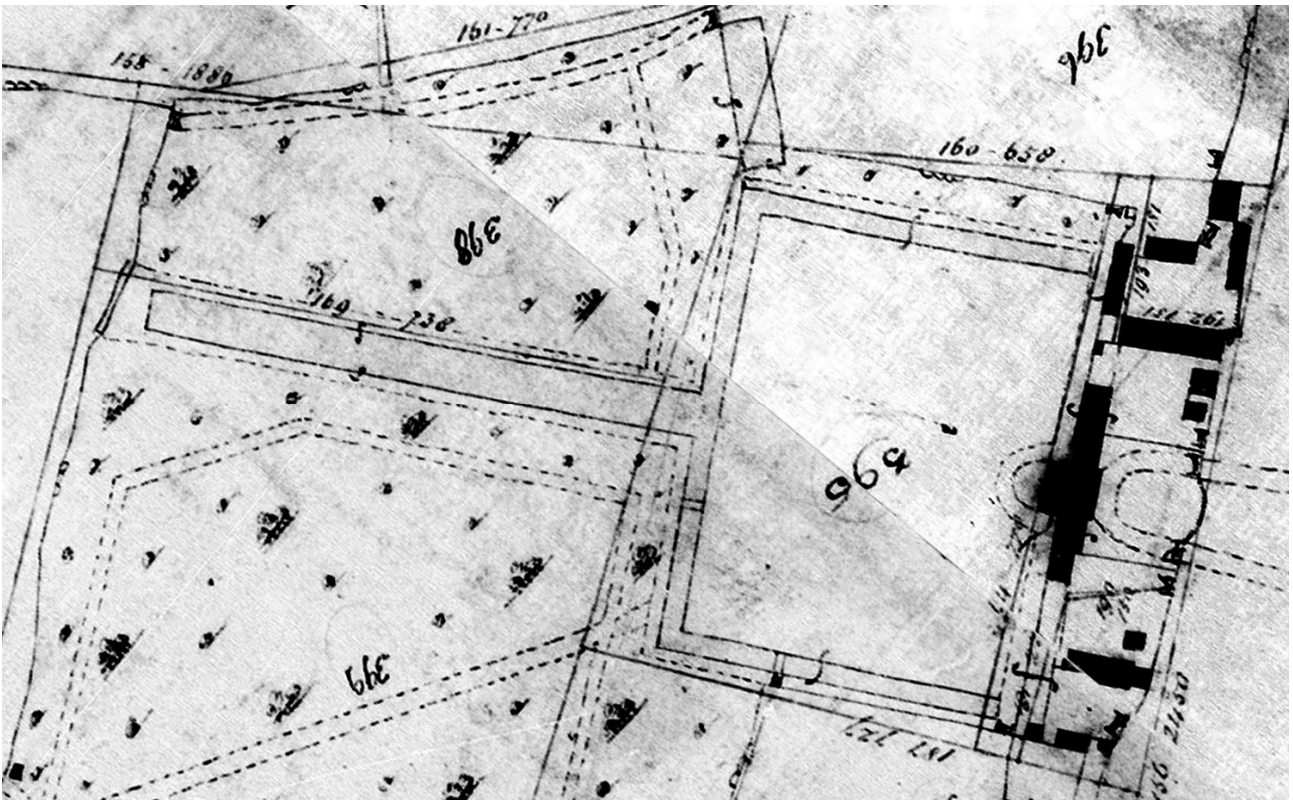


Figure 4: The ornamental canal depicted on the 1837 tithe map. 31-09 © The National Archive.

By the second half of the 19th century the ornamental canal had been significantly altered and the 1876 Ordnance Survey map shows the northern canal, part of the cross canal and part of the southern canal had been filled in. These changes better connected the lawn to the wider garden, although the belt of trees to the north was retained (but slightly shortened) and still provided a barrier (Fig 5). By 1930 these changes had been largely reversed (Fig 6). The cross canal was reinstated as were the northern and southern canals, although these do not extend as far east as they once did. The northern canal now measures about 80m with a decorative curved eastern end. The southern canal still has a square end but is now only about 75m long. A curved end was also added to eastern end of the main canal (Fig 7).

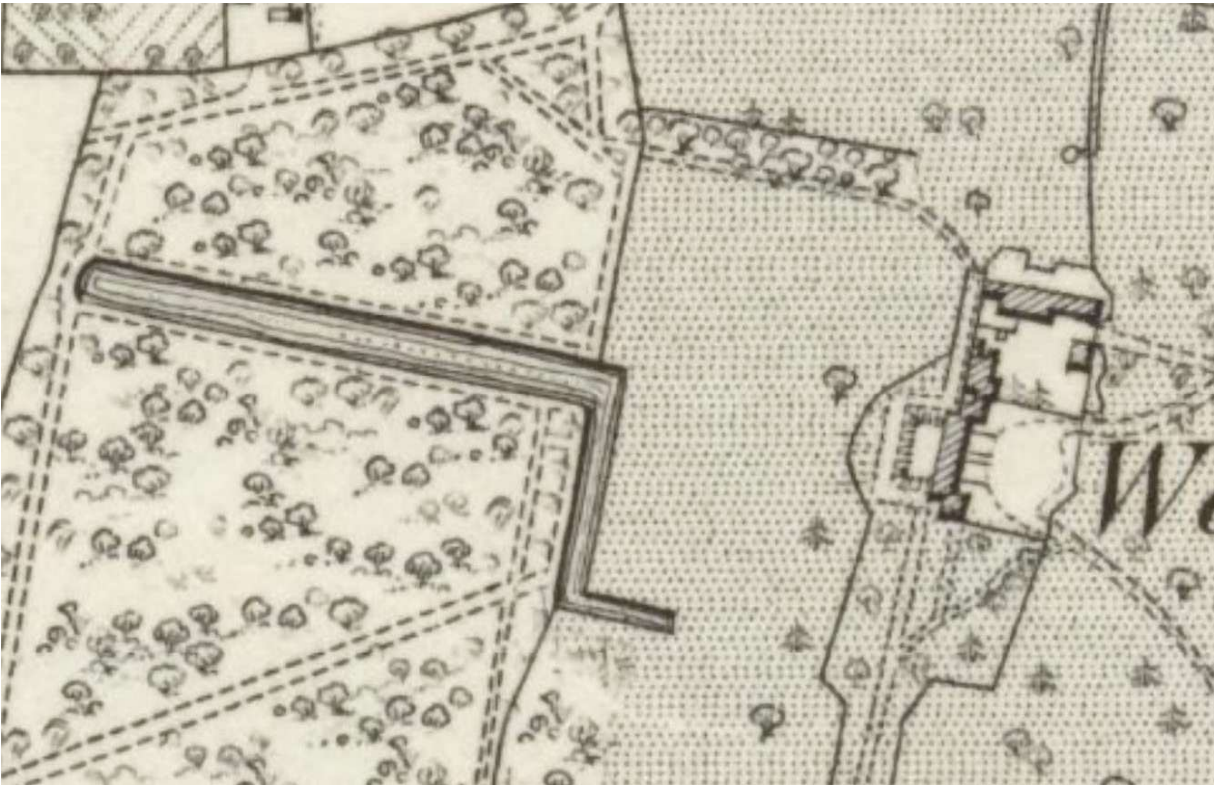


Figure 5: The truncated ornamental canal shown on the 1876 6-inch Ordnance Survey map. Reproduced with the permission of the National Library of Scotland.

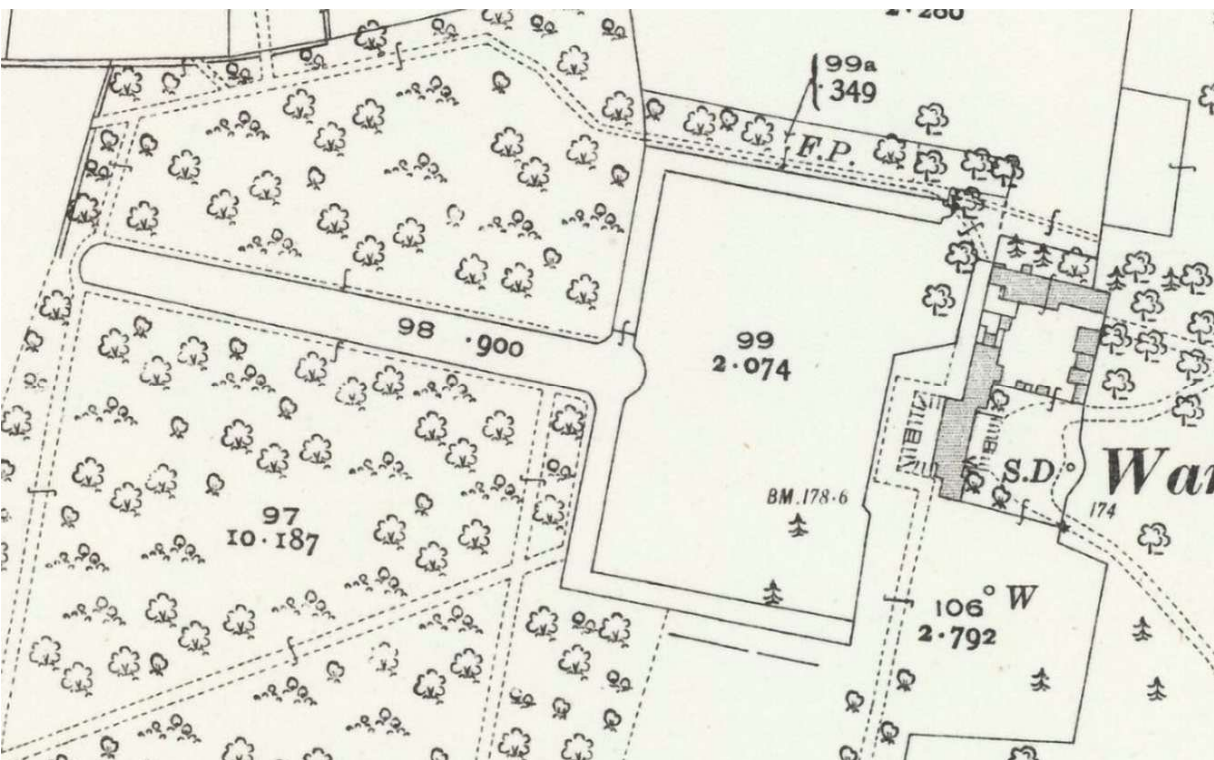


Figure 6: The reinstated canals shown on the 1932 25-inch Ordnance Survey map. Reproduced with the permission of the National Library of Scotland.



Figure 7: The ornamental canal looking west photographed in 2018. Traces of the St Andrew's crosses are also visible in the lawn. 33637_021 18-MAY-2018 © Historic England Archive.

The woodland



Figure 8: The wood seen from the south. 33637_002 18-MAY-2018. © Historic England Archive.

Almost 100m west of the house and beyond the canal running the width of the garden is an irregularly shaped area of woodland (Fig 8). The wood measures almost 300m north to south and around 150m east to west and is divided into two unequal parts by the main arm of the ornamental canal. Based on map evidence the outline of this block of woodland has changed little since 1806 (Ordnance Survey drawing – see methodology).

The density of vegetation in the wood means that the lidar results are poor in places. Features identified include the course of a diagonal walk, traces of other paths, and a jumble of earthworks at the western end, some of which may relate to the woodland boundary (Fig 9). Most of the paths seen as faint earthworks are depicted on the tithe map and by the Ordnance Survey.

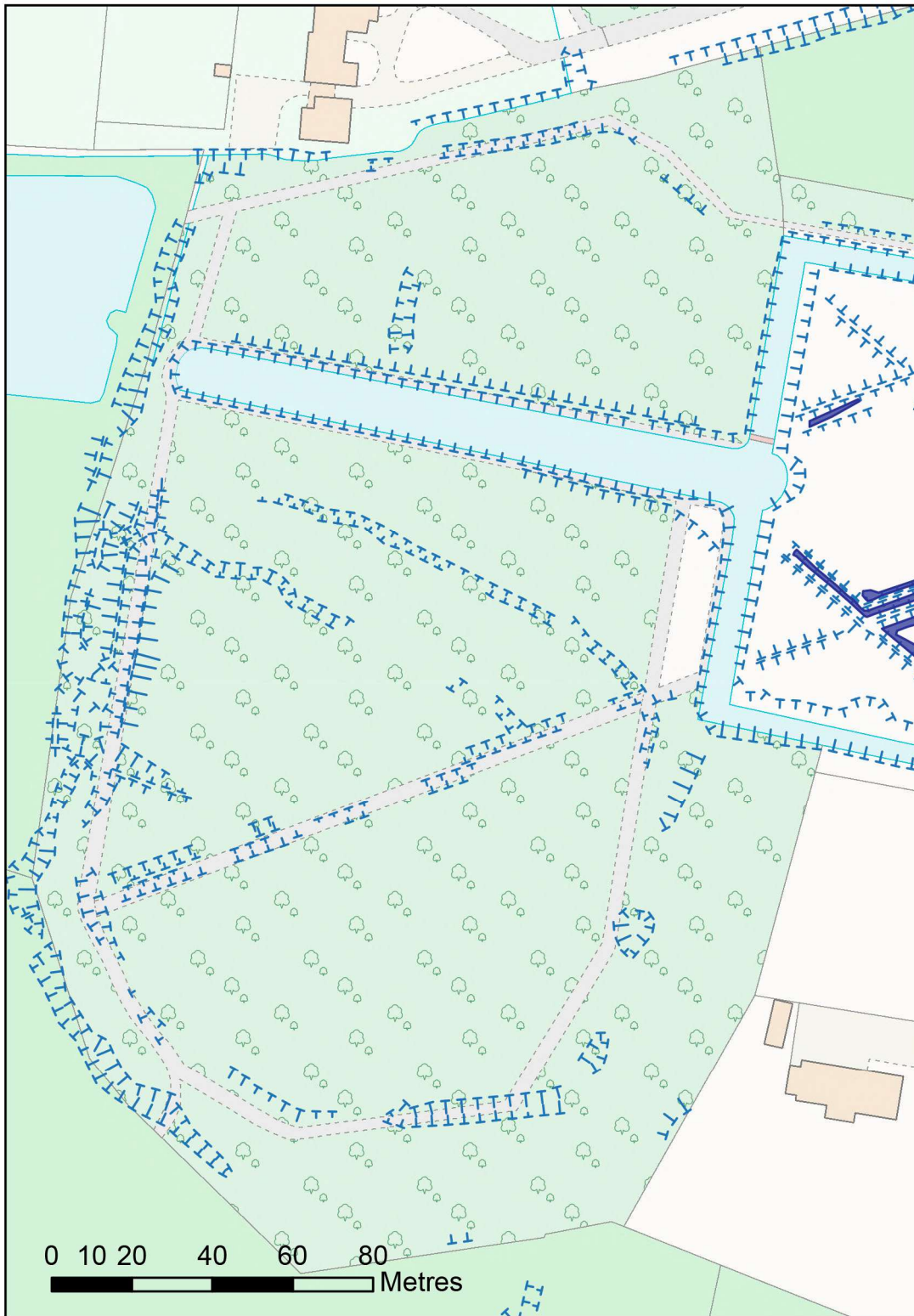


Figure 9: The earthwork remains mapped within the wood. © Historic England; Base map Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100019088.

Discussion

The 1712 edition of *The Theory and Practice of Gardening* presents a series of designs for gardens between six and 60 acres. These designs all follow essentially the same arrangement set within a rectangular boundary and divided into three unequal parts with a specific range of features placed within each. The first part of the garden includes the house, fore-court, and kitchen garden. The middle part includes parterres and groves, the final part features tall groves. There is a principle walk aligned along the main axis of the design and each section is separated from the next by a cross walk (Figs 10 and 11).

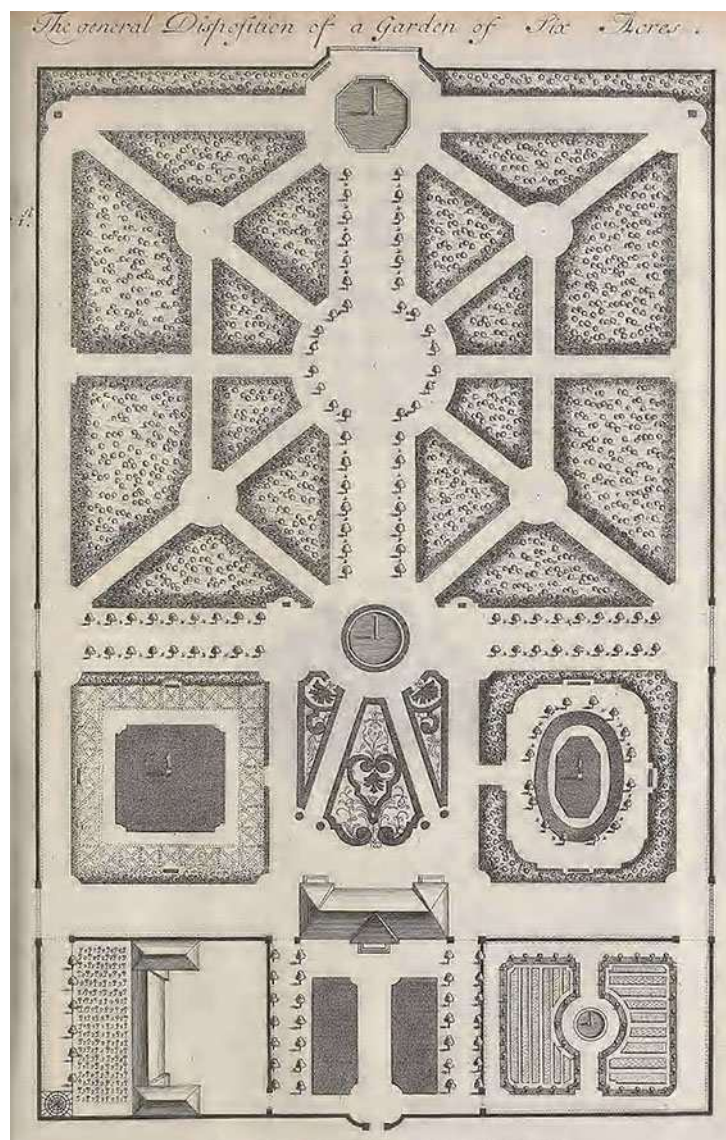


Figure 10: The design for a garden of six acres (d'Argenville 1712, plate 4 fig 1). Accessed from the Biodiversity Heritage Library.

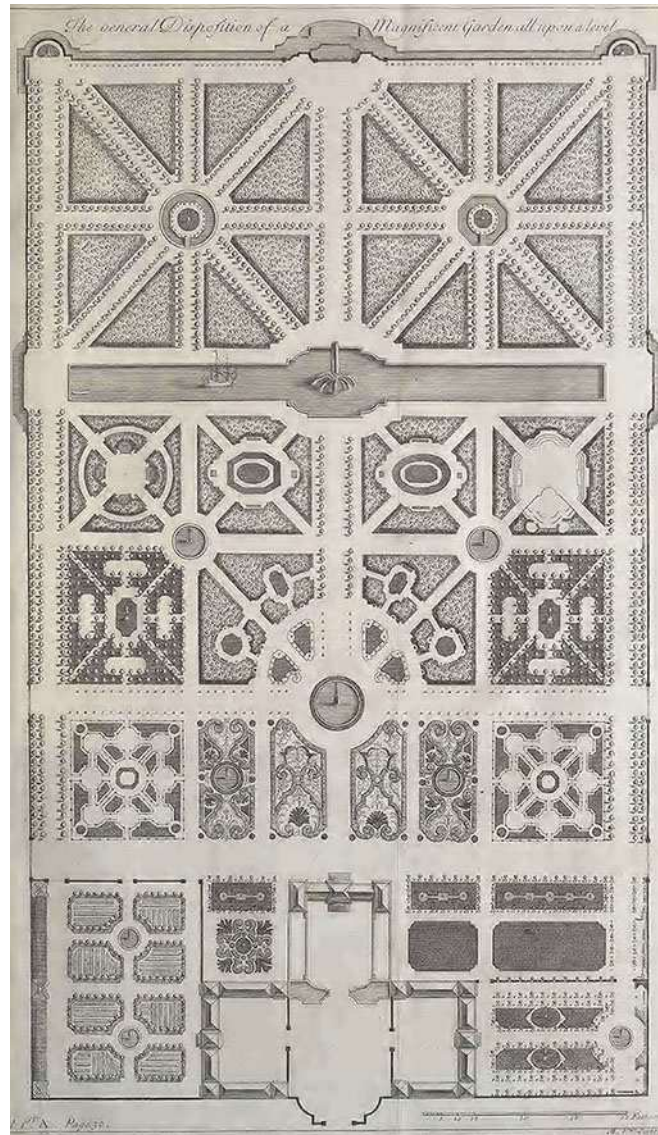


Figure 11: The design for a garden of 60 acres (d'Argenville 1712, plate 1). Accessed from the Biodiversity Heritage Library.

Although the individual garden features are smaller in the smallest gardens, the most noticeable difference between the designs for a small and for a large garden is the number of individual features included. The middle section of the plan (groves and parterres) has 14 features in a 60-acre garden compared to three in the six-acre garden.

The position of Warbrook house, its garden earthworks, and the ornamental canal suggest that the formal garden at Warbrook was in the region of 3.2-3.6 hectares (8-9 acres). The garden plan shown in plate 4 of *The Theory and Practice of Gardening* (Fig 10) is for a plot of a similar size to Warbrook and although there is no aerial evidence that the finer detail of this design was followed, it may offer a general impression of the original garden layout at Warbrook.

The first garden section – house, kitchen garden and forecourt

Warbrook house is centrally located within the first section of the garden. In the chapter concerning the tracing out of the garden design on the ground in *The Theory and Practice of Gardening* it was supposed that ‘the building and walls that enclose the ground to be complete and finished’ (ibid, 129). No evidence of the garden having been enclosed by a wall was observed in this survey although a reference to ‘high walls’ is made in the 1795 sale notice ([File:Sale notice for Warbrook House 1795.jpg - Wikimedia Commons](#)). The first rule in *The Theory and Practice of Gardening* concerned the house and states that it should always be raised up above the garden ‘of three steps at least’ for among other reasons, ‘from the head of these steps you have a general view of the garden, or of great part of it, which yields a most agreeable prospect’ (d’Argenville 1712, 17). The importance of a view of the wider landscape is not only indicated by the earthen platform upon which the house was built but also seen in the house’s design which includes a vaulted room that runs through the top of the house and offers views in both directions along the principal axis (Pevsner 1967, 216).

To the east of the house is a forecourt fronted by a curving ha-ha about 22m long. The land to the north and the south of the house and forecourt was where the kitchen garden, nursery and associated buildings were presumably located. Although the tithe map (1837) shows a large group of possible farm buildings and associated yards to the north and south of the house they were not necessarily part of James’s original scheme and may have been built as the Warbrook estate was extended over the course of the 18th and 19th centuries. By 1871 all the buildings to the south and most to the north had been demolished, presumably replaced by Warbrook Farm 200m to the north-west of the house and first shown on 1871 Ordnance Survey map.

The middle section – Paths, groves, and parterre

The St Andrew’s crosses formed by low earthworks seen in the middle section of the garden at Warbrook are likely to be the remains of groves, a feature that is ‘most noble and agreeable in a garden’ (ibid, 48), and that ‘are a great ornament to all other parts; so that one can never plant too many of them’ (ibid, 18). These small groves were considered essential near the house as they offered shade close to the building and they also ‘communicate a coolness to the apartments, which is very much courted in hot weather’ (ibid). These groves are not continuous blocks of woodland but a mixture of trees, sometimes planted in a quincunx pattern, cut by paths, and some with a central clearing. These clearings came in a variety of designs known as halls, cabinets etc. and may have been further embellished with fountains or statuary at their centre.

Although these earthworks match each other, it is assumed that they were planted in different patterns. As stated in the book, although ‘their outward form and dimensions are equal, you should not, for that reason, repeat the same design in both, but make them different within’ (ibid, 20). In some of the garden plans the groves are completely different, but there is one example where two groves both share a star pattern of walkways, but one is planted in a quincunx while the other is left open (Fig 12).

The garden designs for the area closest to the house show groves flanking centrally placed parterres which for smaller gardens meant a grove either side of a single parterre (Figs 12 and 13). The slight earthworks at Warbrook offer evidence that the garden there followed the pattern laid out in *The Theory and Practice of Gardening* and suggest that there was once a central parterre located within the now blank area of the lawn between the two St Andrew's crosses (Fig 3).

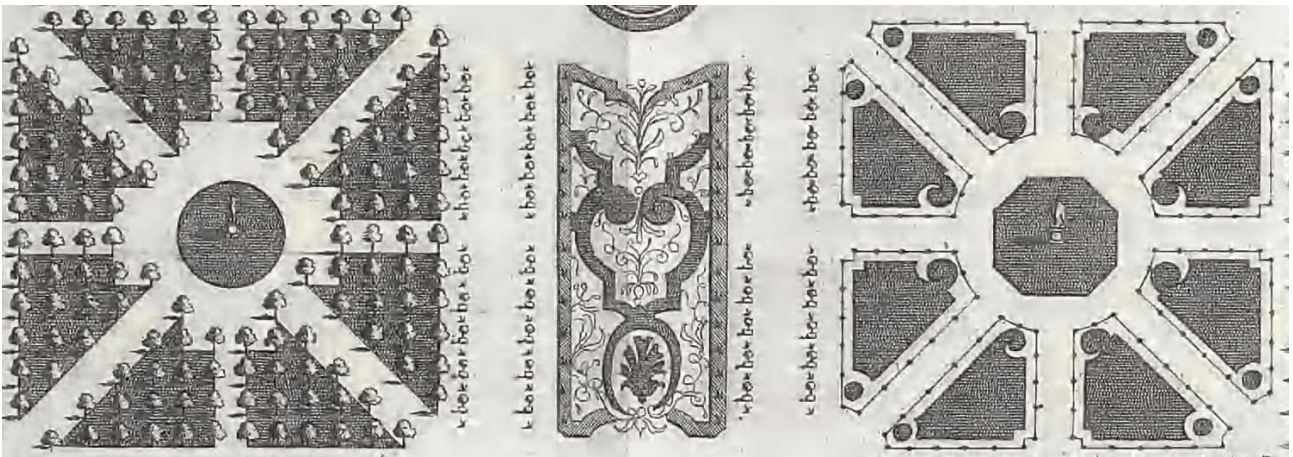


Figure 12: Designs for two groves based on almost identical outlines but distinguished by the planting. They are positioned either side of a central parterre. Detail of d'Argenville 1712, plate 4 fig 2. Accessed from the Biodiversity Heritage Library.

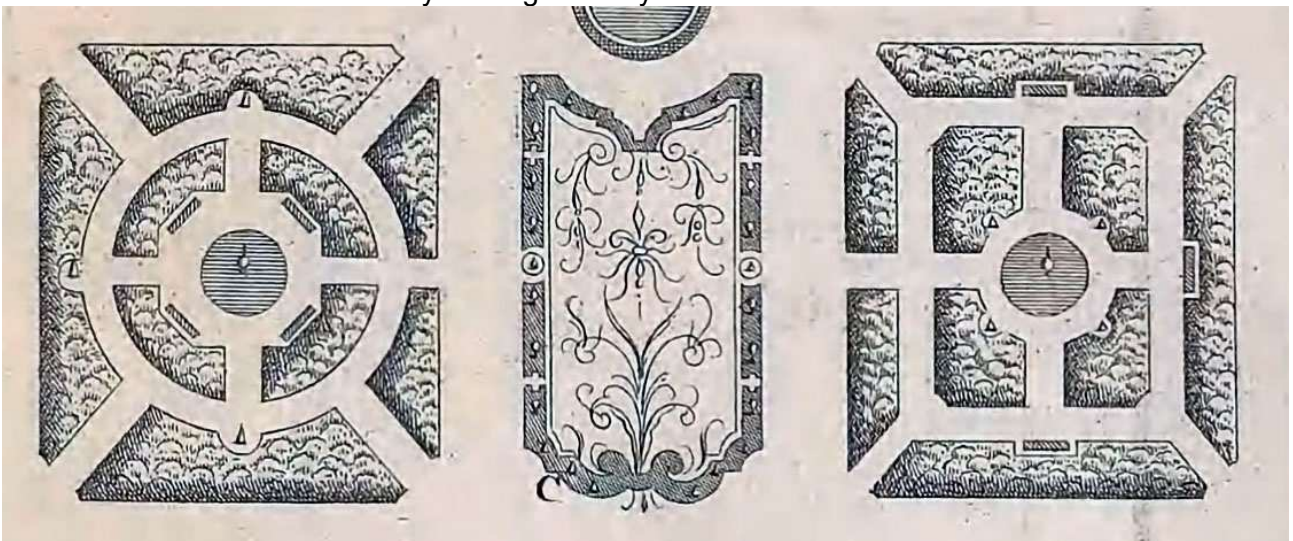


Figure 13: Design showing two contrasting groves either side of a central parterre. Detail of d'Argenville 1712, plate 1. Accessed from the Biodiversity Heritage Library.

A parterre was the most ornate and 'richest pieces of a garden' (ibid, 34) and 'the first thing that should present itself to sight' and always be placed close to the house 'on account of the opening it affords the building, as for the beauty and splendour wherewith it constantly entertains the eye, when seen from every window of the house' (ibid, 17). The

various designs of parterres create patterns reminiscent of foliage, sprigs, tendrils etc and these would be formed by box, flowerbeds or grass planted in the desired pattern. The ground between the planting could be covered with sand, brick dust, or 'smiths-dust' (waste from metalworking) which provided a contrast to the planting. The ephemeral nature of parterres may help explain why no features were identified from the available aerial sources. However, this does not necessarily mean that no subsurface evidence of a parterre survives. At Wrest Park (Bedfordshire) turf, and overburden were removed from the site of the parterre to reveal detail of the design including gravel paths and flowerbeds (Alexander et al 2013, 205). Elsewhere in Wrest Park geophysical survey identified possible paths and excavation showed these to be made of sand (Linford and Payne 2019; Cromwell and Alexander 2020).

The width of the parterre should be 'that of the whole extent of the body of the house, or somewhat more' (ibid, 34). The original width of Warbrook House (the present central block) is 13m and a 13m wide parterre would fit into the space between the two groves leaving space for a c.6m wide path on either side. These paths separated the parterre from the groves but also formed part of the main walk of the garden that was aligned along the principal axis. The maximum length of the parterre would have been about 50m as it is assumed it did not exceed the length of the flanking groves.

The third section – Tall groves

In most of the plans the third section of a garden was given over to a wooded area of tall groves (Figs 14 and 15). They were generally arranged in pairs either side of the principal walk and although more densely planted than the groves nearer the house, they too were not continuous woodland but were subdivided with paths and included decorative clearings of different designs including cabinets, cloisters, halls, and bowling greens, which is a feature with a bowl-shaped depression at its centre, not a green for playing bowls on (d'Argenville 1712, 61). These clearings were sometimes embellished with statues or fountains.

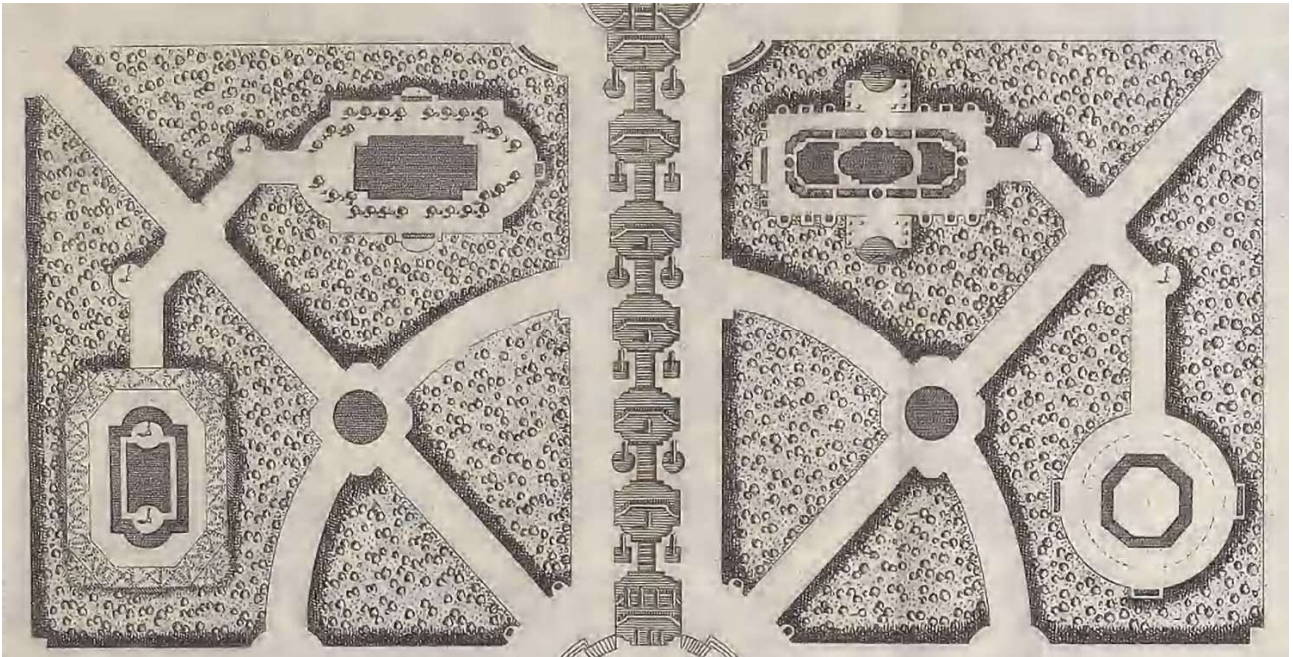


Figure 14: A design for tall groves in a 25-acre garden either side of a cascade. Detail of d'Argenville 1712, plate 2).

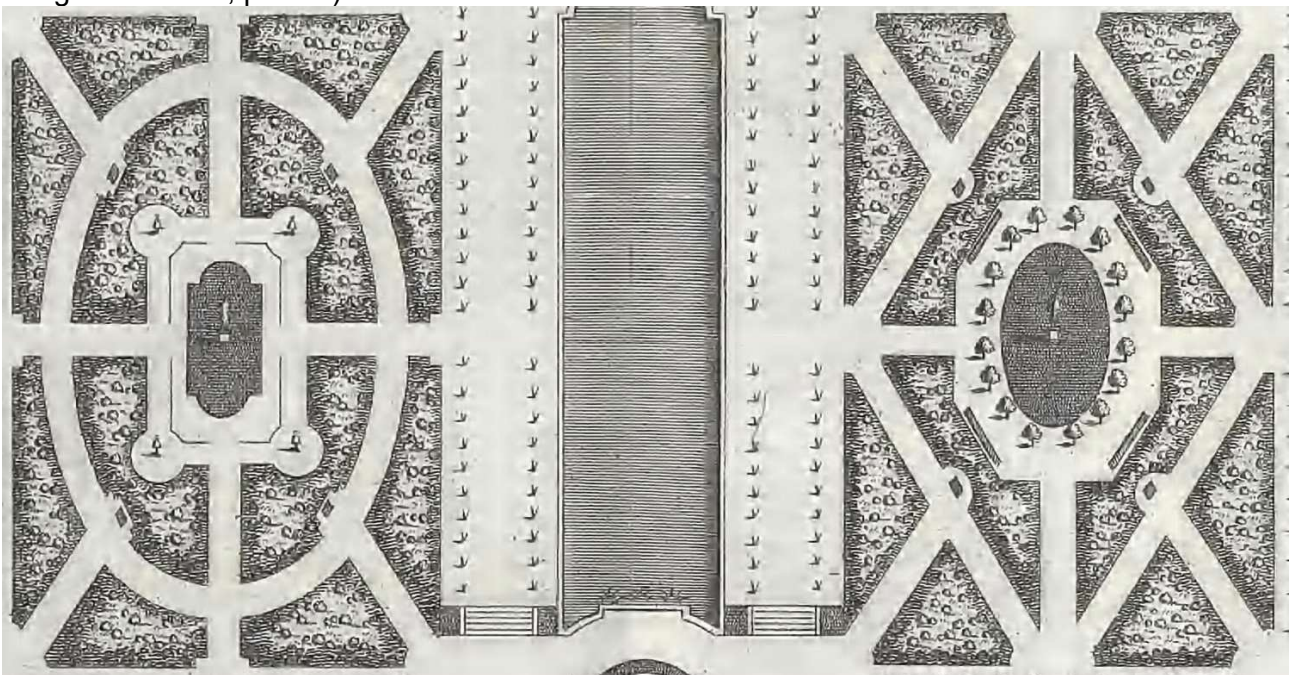


Figure 15: Designs for tall groves in a 12-acre garden either side of an ornamental canal. Detail of d'Argenville 1712, plate 4 fig 2. Accessed from the Biodiversity Heritage Library.

In the garden designs in *The Theory and Practice of Gardening* the outline of the tall groves is regular and generally matched the width of the groves that flanked the parterre. Assuming James closely followed the advice given then it would be expected that his original tall groves were two rectangles measuring up to 140m by 35m (Fig 16). If the original

groves were rectangular, then the present woodland represents a later enlargement of this original planting. No features have been identified within the groves that are reminiscent of the cabinets, clearings, halls etc, but these decorative clearings were largely formed by planting schemes and perhaps unlikely to leave evidence identifiable in lidar. As with the parterres, there may be subsurface survival.

One surviving feature seen in the lidar and shown on the maps is of a diagonal path in the present southern side of the wood. This is aligned on the north-east to south-west arm of the southern St Andrew's cross. Although there are examples of paths beyond the bounds of the garden aligned on features within the garden, none show this in relation to diagonal paths within groves. More significantly, if the southern tall grove was c.140m by 35m then this diagonal feature would largely fall outside its bounds. This may suggest that much of the large block of woodland to the south and its diagonal path are later features added to the original design. Alternatively, this part of the wood may have been contemporary, although beyond the bounds of the formal garden, and incorporated into the design by the aligned walks.

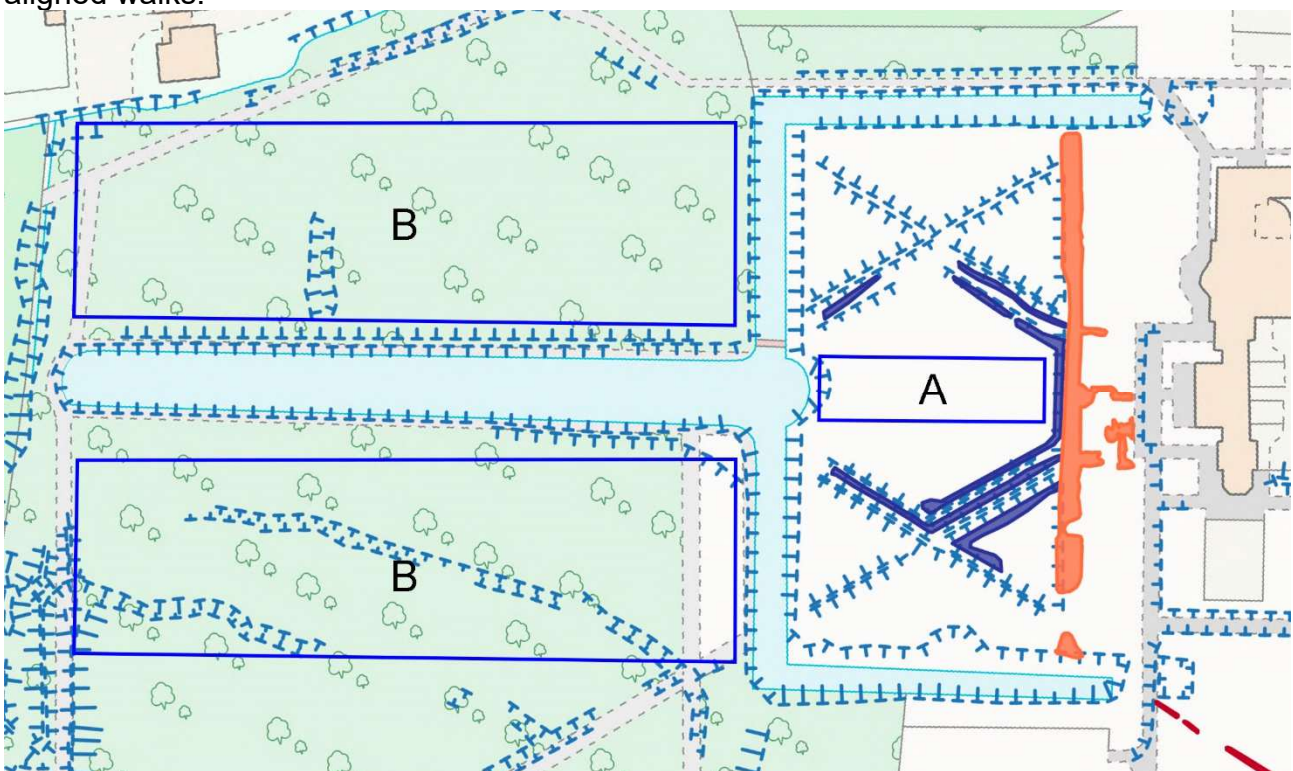


Figure 16: The blue rectangle 'A' marks the suggested location of a parterre. The two rectangles 'B' outline the possible shape, size, and location of the original tall groves. © Historic England; Base map Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100019088.

Walks

'Walks in gardens, like streets in a town, serve to communicate between place and place...they make one of the principal beauties of gardens' (d'Argenville 1712, 41). The principal walk of a garden formed the main axis and was crossed by smaller walks at right

angles at various points along the length of the garden. These walks connected to a narrower walk that followed the boundary of the garden and these all connected with the various walks that led through groves and parterres (see examples in Figs 10 and 11). The walks would have been made up with gravel, sand, or grass and edged with yews or small shrubs or by hedges and tall trees (ibid, 40). Double walks - 'the most esteemed' (ibid, 41) - had four rows of planting creating a central route flanked by two narrower paths. A well-designed garden was intended to invite the curiosity of the visitor and encouraged continual exploration. The walks were aligned on different garden features, but hedges were also used to 'stop the sight in many places, that the extent of the garden be not discovered at one view' (ibid 46). Elsewhere planting may be thinner or lower and 'in walking, gives you the advantage of the prospect, and a sight of persons that are in the other walks' (ibid 50).

Positive evidence of walks at Warbrook is limited to the raised crosses of the groves and the associated cropmarks (which are presumed to be the remains of walks) and walks are also mentioned in the 1795 sale notice ([File:Sale notice for Warbrook House 1795.jpg - Wikimedia Commons](#)).

The principal walk at Warbrook would have been aligned on the house and extended the length of the garden running either side of the possible parterre and of the main arm of the ornamental canal. The first crosswalk would have been located immediately to the west of the house separating it from the parterre and the groves marked by the St Andrew's crosses. The garden designs in *The Theory and Practice of Gardening* suggest there would have been a second crosswalk in the vicinity of the cross canal and a narrow walk around the outer edge of the garden.

In most of the designs in the book, although the walks end at the garden boundary the view is continued via an opening in the wall or hedge. These openings 'extend the view and so show the country to advantage'. The openings were either fitted with a grille or left open to the level of the walk with a ditch at the foot of them. These were known as Claire-voie or Ah Ah (ibid 28), a feature we now know as a ha-ha. The ah-ah (or ha-ha) 'surprises the eye upon coming near it and makes one cry Ah! Ah! From when it takes its name. This sort of opening is on some occasion to be preferred for that it does not shut up the prospect as the bars of a grille do' (ibid 77). Two of the garden designs in the book include the ha-ha. An opening at the end of the principal axis is described in the text as an 'Ah, Ah, with a dry ditch at the foot of it' (d'Argenville 1712, 28; plate3). The same garden has a ditch along one of its narrow ends, but this is not described as a ha-ha and may have been the result of the creation of the adjoining terrace located at the lowest part of a garden design laid out on sloping ground. In the other example, although not named, the cross walk immediately in front of the house is 'terminated by ditches, for the advantage of the prospect' (ibid, 30). There is no separate section in the book describing the ha-ha, and it is instead included in the section on grilles (ibid, 77).

It is not known if there were any openings at the end of the walks at Warbrook, but if there were two crosswalks there could have been up to four openings and possibly a fifth at the far end of the principal ornamental canal to extend the view beyond the garden along the axis of the main design.

Water

The importance of water to early 18th-century gardens is seen in *The Theory and Practice of Gardening* which devotes two chapters to the subject. This importance appears to have been translated into the ornamental canals at Warbrook which form a significant part of the garden design. However, the primary appeal of water was in the form of fountains or cascades. According to the book, flat water (canals, pools etc) is 'no great beauty in a garden because being always quiet, and in the same state, it does not animate a garden, as spouting water does, which seems to give it life' (ibid 202). The proximity of the canals to the house also seems to contradict advice given that fountains should not be placed too near the house because:

'in the summer, there rises off the water vapours so corrupt as may communicate a malignity to the air we breathe, which is very injurious to the health; besides that they strike a very great dampness to the walls of the building, enough to spoil the paintings and movables within, and incommode you in the night with the croakings of Frogs and toads etc' (ibid 203).

It was also stated that these were the reasons why moats were no longer built and ditches of castles 'now laid dry' (ibid).

None of the examples of ponds or canals in the book match the arrangement of water at Warbrook, although the component parts of Warbrook's design do have parallels with some of the garden designs. There are examples of a canal on the principal axis (ibid, plate 4, fig 2) and a canal along a cross walk (ibid, plate 1), while the two side canals along part of the northern and southern boundaries of Warbrook garden could be interpreted as a variation of the canal closing off the narrow end of a garden (ibid, plate 2).

Even with fountains, this design creates a relatively large area of flat water which was not the desired objective of water in a garden. Most significant of all, the present design of ponds would have completely cut off the house, parterre, and groves from the rest of the garden. One of the fundamental purposes of the designs was to create a garden through which people would move, each new feature revealed as people make their way through the garden along the network of walks. The ornamental canal at its maximum extent was almost moat-like in its plan and makes this impossible. These difficulties are shown in the tithe map where two footbridges are depicted, one leading west, the other south, and even more clearly in the later 19th century when parts of the pond were filled in to link the present lawn to the gardens to the south and the woods to the west.

Based on the designs in the book, it is possible that the present ornamental canal in its entirety was not part of James's original design. The most likely original element is the wide canal aligned on the principal axis of the garden (a similar feature is illustrated in d'Argenville, 1712 plate 4 fig 2). This body of water is approximately 13m wide which matches the width of Warbrook House and so ties into James's scheme. Flanking paths may have continued beyond the eastern end of the pond along the principal axis past the groves towards the house or even passed either side of the original house to link (perhaps only visually through grilles) with the main approach to the house from the east.

Confusingly, the cross canal at Warbrook occupies the approximate location where a cross walk, circular pond and fountain would be expected. The examples of ornamental canals are flanked on all sides by walks to allow progress through the garden. There does not appear to be space for a walk along the eastern side of the cross canal, where the earthworks of the two groves run right to the edge, or at either end where it connects to the two side canals.

These features suggest a later modification to the design and if the cross canal was an entirely later feature, it may explain the absence of a circular pond at the end of the parterre which was usual (d'Argenville 1712, 19) and seen in many of the designs including those that also had a canal beyond on the principal axis (d'Argenville 1712, plate 4, fig 2). If these were later changes, they may be part of a phase of modernisation and improvement referred to in the 1795 sale notice ([File:Sale notice for Warbrook House 1795.jpg - Wikimedia Commons](#)).

Wider landscape survey results

This section looks at the evidence of the wider landscape at Warbrook.

The principal axis

The line of James's principal axis can be seen in the landscape for over 2km, although there is a 250m long area west of the garden where no features can be seen (Fig 17). To the east, it is defined by a driveway leading to the house (see below). To the west of the house and garden is a 500m long track across Bramshill Common, although this was not marked on any maps older than 1871. It was presumably not part of James's original design, but perhaps created when the area was enclosed in the 19th century and eventually provided access to houses built on the common in the later 19th century.



Figure 17: The principal axis A-B. The line to the west of the park (left) is thought to have been created in the 19th century. © Historic England; Base map Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100019088.

The driveway



Figure 18: The approach to the house from the east. Both the drive (foreground) and the main canal (background) are on the principal axis of the design. 33637_007 18-MAY-2018. © Historic England Archive.

The original driveway approached the house from the east along the principal axis of the park (Fig 18). The early 19th-century maps suggest that the drive may have originally been about 900m long starting at a junction with the present Reading Road (1806 Ordnance Survey drawing; 1837 tithe map), although the eastern 550m or so of this approach is now overlain by the Reading Road (B3272) (Fig 19).

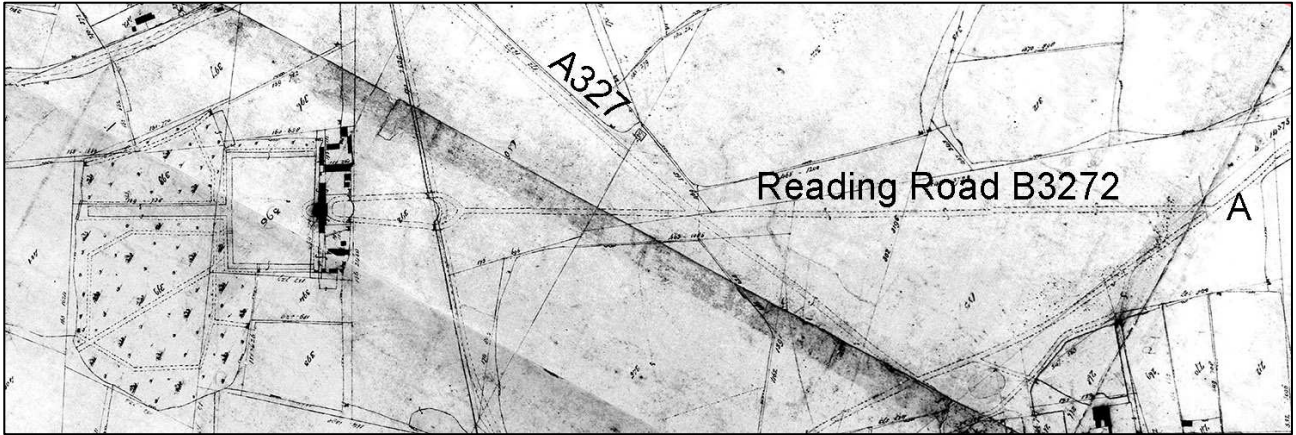


Figure 19: The approach to Warbrook shown on the 1837 tithe map appears to have started at 'A' (right). The eastern end of this is now overlain by the Reading Road as far as the junction with the A327. 31-09 © The National Archive.

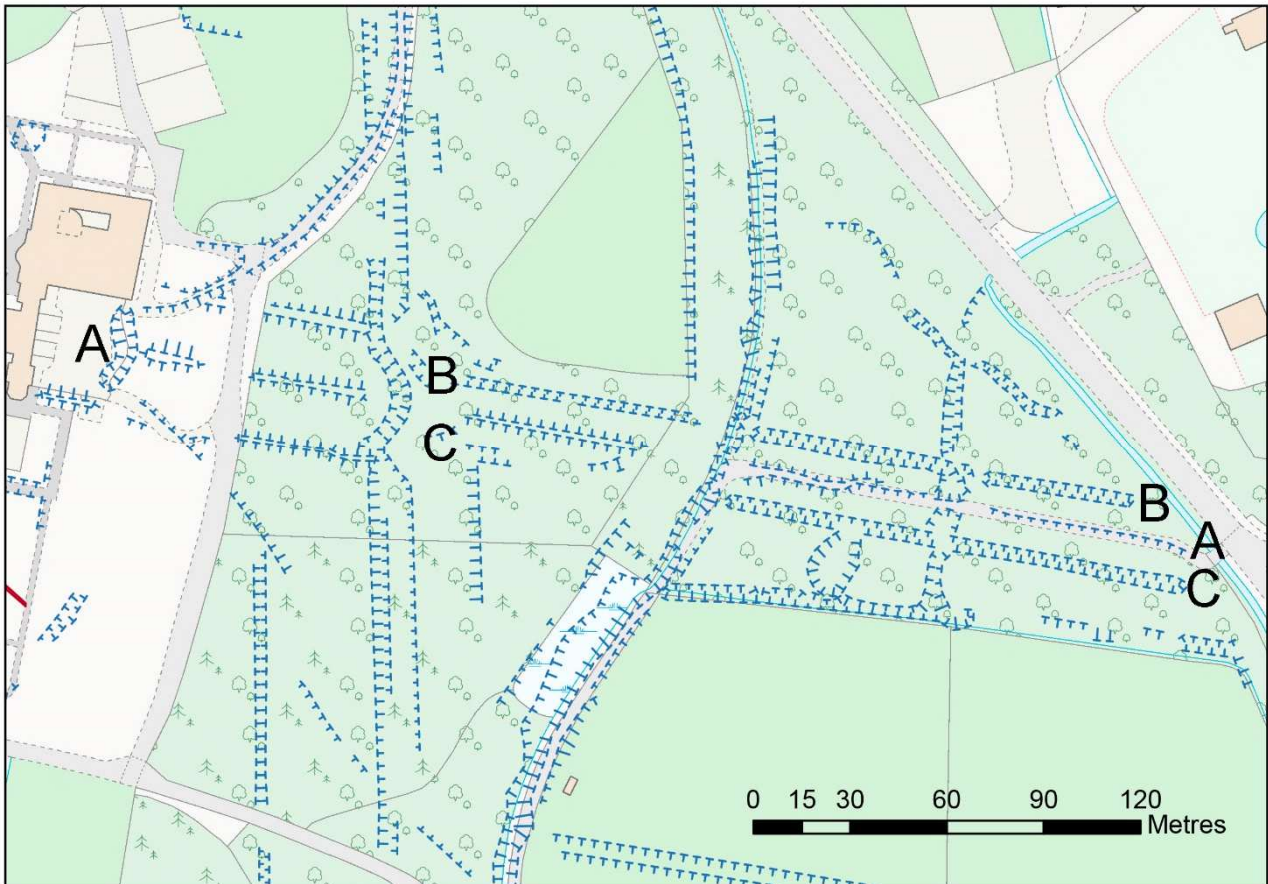


Figure 20: Earthworks mapped to east of the house. 'A-A' indicate the line of the drive, although some of the earthworks on the right may be associated with the later path. 'B-B' and 'C-C' indicate the remains of the ditches that flanked the drive. © Historic England; Base map Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100019088.

The driveway earthworks consist of a low fragmented bank about 5m wide, this is centrally placed between two parallel ditches set about 18m apart that may have defined an avenue of trees (Fig 20). These earthworks are fragmentary and cut in places by 18th and 20th-century tracks, drives and other features (which run roughly north to south) including the eastern boundary earthwork that passes about 100m to the east of the house (see below). The flanking ditches do not continue to the west of this, but the central driveway appears to have continued up to the curving ha-ha that fronts the forecourt to Warbrook House and is flanked by two parallel banks about 30m apart (Fig 21). If extended westwards, they would pass either side of James's original house, although interpretation here is difficult as these earthworks are slight. If they did extend either side of the house, they may have linked with the garden's principle walk on the opposite side. The route may have been blocked by grilles close to the house, like the arrangement shown in one of the garden designs, but it would have visually connected these two parts of the design's principal axis (Fig 22).

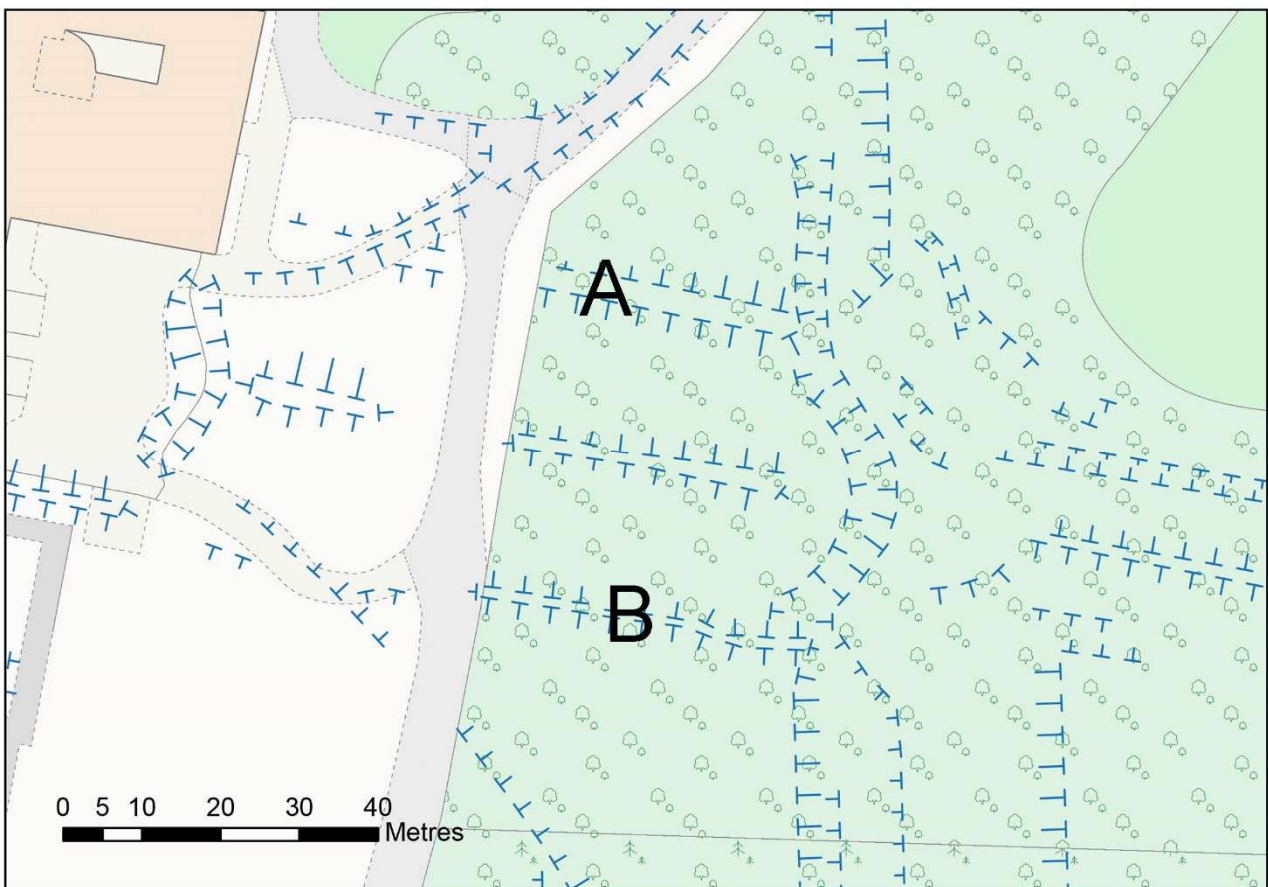


Figure 21: A detail of Figure 20. 'A' and 'B' mark the two low banks that may have linked to the formal garden design. © Historic England; Base map Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100019088.

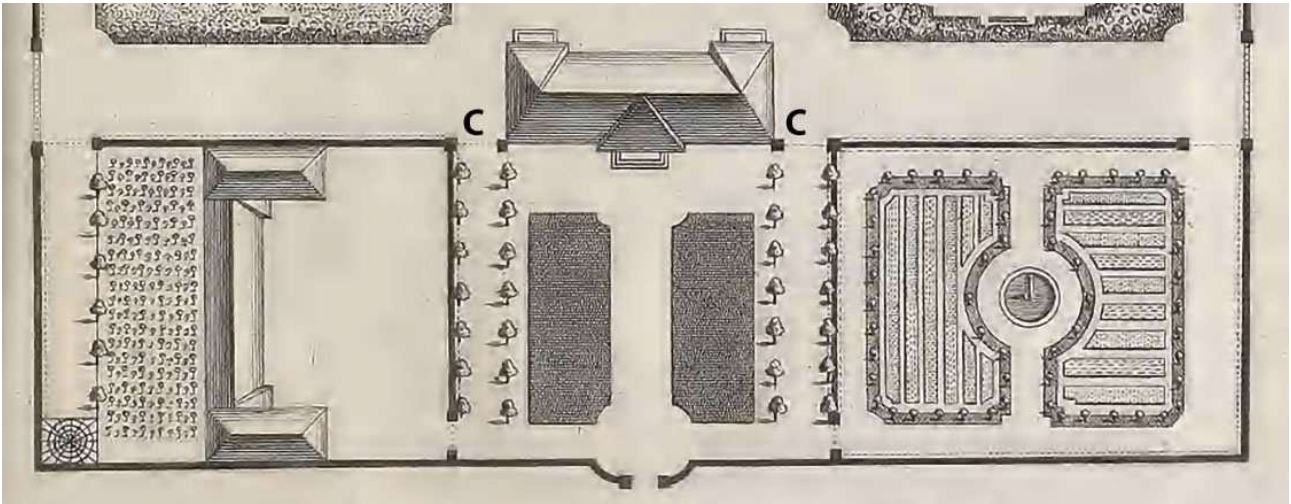


Figure 22: A garden plan showing two grilles ('C') either side of the house that separate the garden from the outer court but preserve the view between the two Detail of d'Argenville 1712, plate 1. Accessed from the Biodiversity Heritage Library.

Although these earthworks appear to be parallel to each other, they may alternatively be the remains of the driveway as depicted on the tithe map which ends in an oval in front of the house (Fig 23).

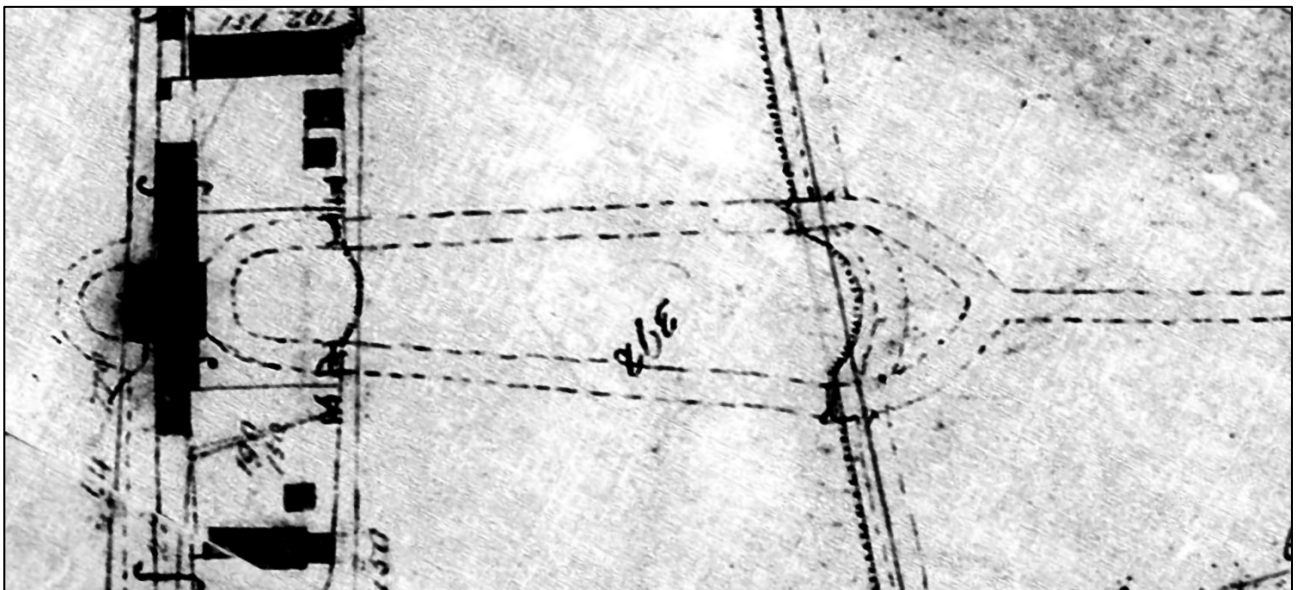


Figure 23: The 1837 tithe map shows the driveway divide to form an oval in front of Warbrook House. 31-09 © The National Archive.

Eastern boundary earthwork, a possible ha-ha?

About 100m to the east of the house is a very shallow earthwork of a ditch. This is aligned north to south, so is not perpendicular the main axis of James's design (south-south-west

to north-north-east) and so not parallel to the front of Warbrook House. The ditch is about 5m wide and although fragmentary it can be traced for about 500m and follows a straight line except opposite Warbrook House where it forms a near semi-circle (Fig 24). The earthwork is difficult to see and for most of its length is only about 20cm deep. Although it is clearer at its northern and southern ends it is still relatively shallow and the lidar has recorded depths there of no more than 40cm. The profile of this earthwork is uneven, and there is some evidence suggesting that the western side is steeper than the eastern side but because the earthwork is so shallow the differences in height are minimal and they are also not consistent along its entire length. The earthwork does not extend as far as the roads to the north or south.

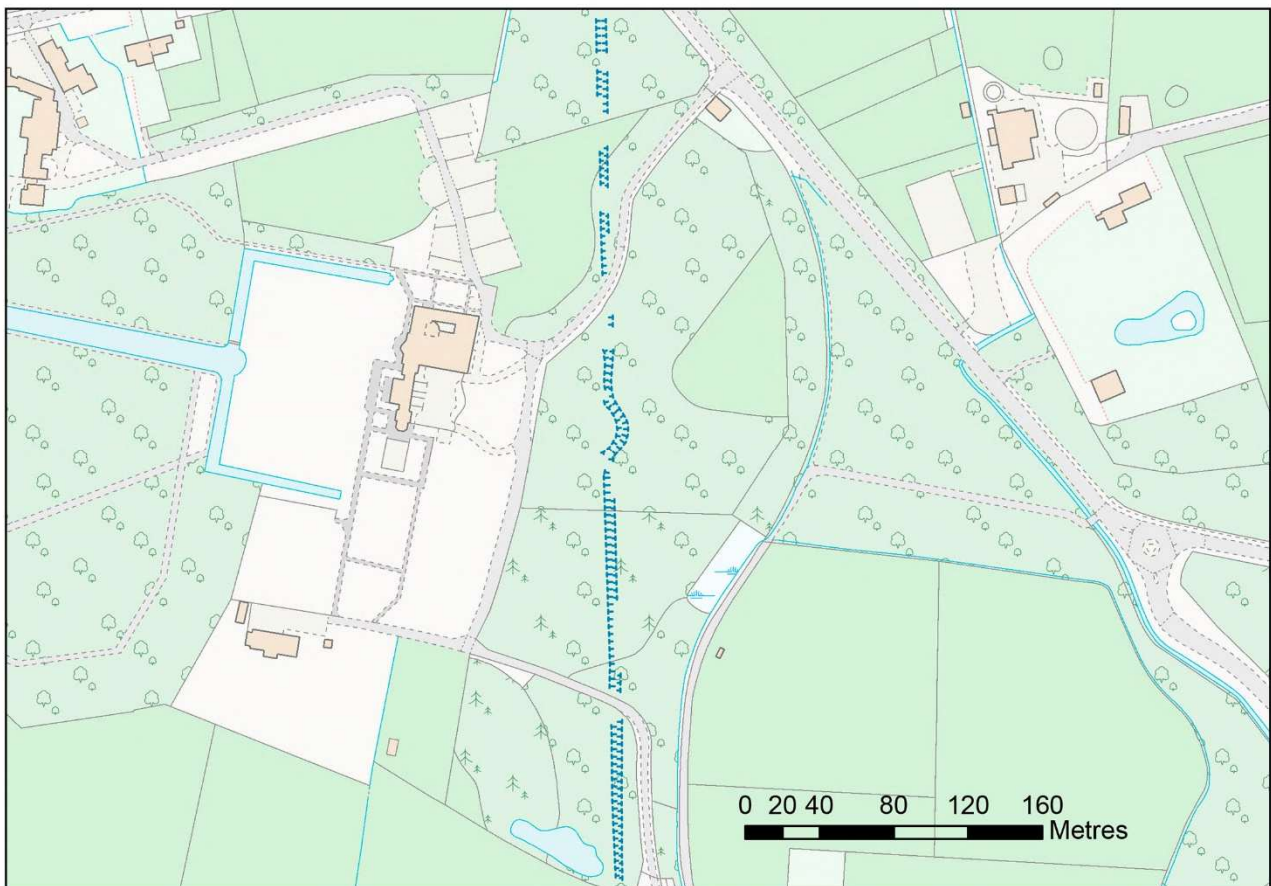


Figure 24: The mapped earthworks, possibly the remains of a ha-ha that once formed the eastern boundary to the property. © Historic England; Base map Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100019088.

This earthwork was possibly set out by James and although now within the park, it once formed the boundary between Warbrook House and the common. The area to the east of the earthwork was still listed as waste in the early 19th-century tithe apportionment and named 'Common in front of Warbrook House'.

The design of this earthwork of a long boundary with a semi-circular feature is like two early examples of the ha-ha in Britain. One of these is at Levens in Cumbria (Fig 25). Built by the French Gardener Guillaume Beaumont in 1694, it may be the earliest example of a ha-ha in Britain (Cowell 2009, 129). The other is at Stowe, Buckinghamshire, by Charles Bridgeman and constructed in the 1720s and forms part of the north-western side of the gardens at Stowe (Fig 26).

The similarity in design to the examples at Levens and Stow, suggests that it might be the remains of a ha-ha, although Stowe is bigger and both Stowe and Levens survive as substantial earthworks compared to those at Warbrook. They are also different to the examples of the ha-ha in *The Theory and Practice of Gardening* which were much smaller and used to end relatively narrow walks within the garden. A ha-ha at this location at Warbrook would have visually linked James's house and garden with the common to the east. There are also two examples in the second edition of the book where garden walks are ended with a ha-ha, but the line of the walk is continued with avenues of trees (d'Argenville 1728, plate I fig 2). However, it is not clear what the relationship was with the driveway which would have to had crossed the earthwork to reach the house. The surviving ha-ha in front of the forecourt at Warbrook may be later.

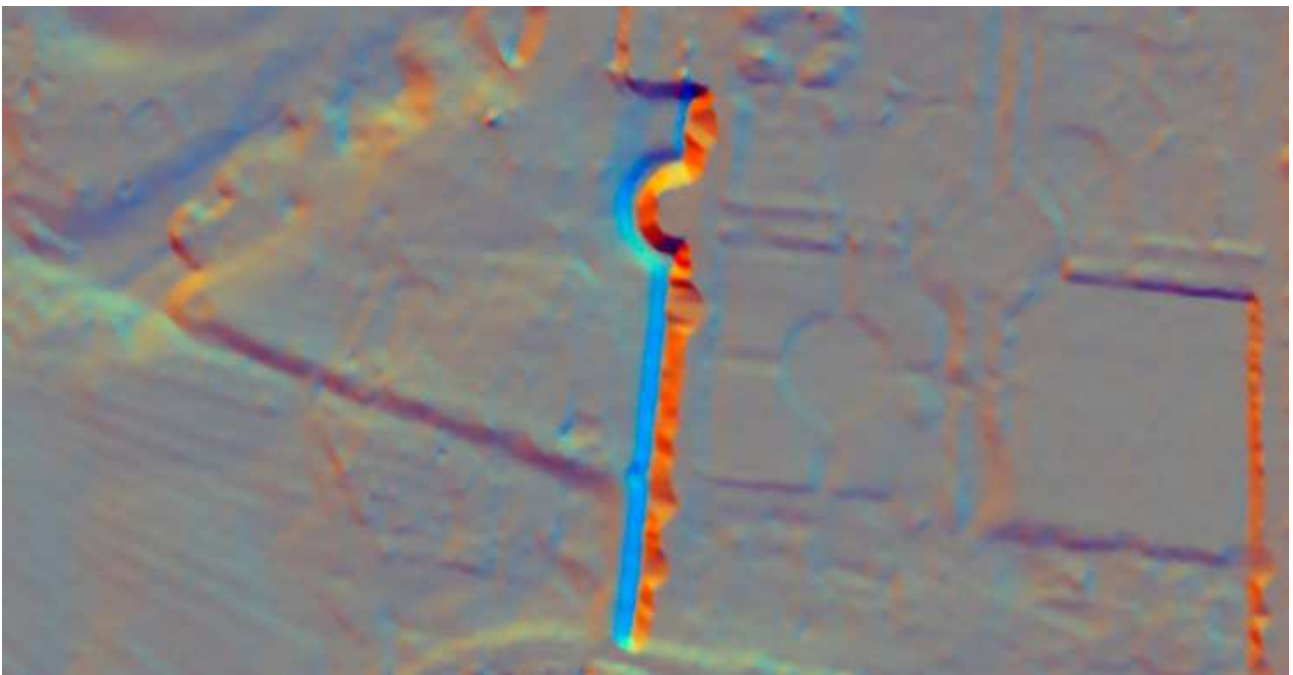


Figure 25: Lidar showing the earthworks at Leven's Hall of the late 17th century ha-ha. LIDAR DTM 2020 © Historic England. Source Environment Agency.

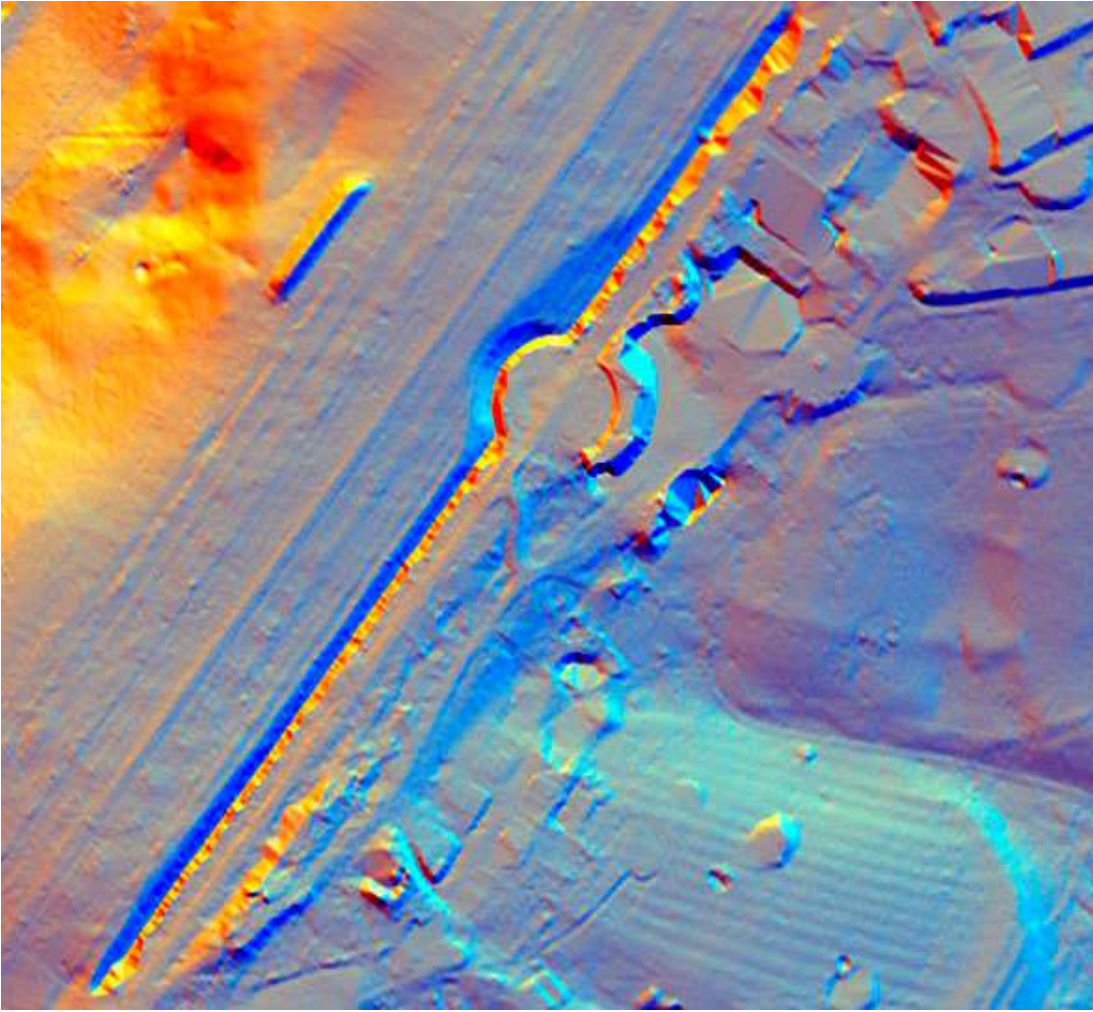


Figure 26: Lidar showing the earthworks at Stowe of the 18th century ha-ha. LIDAR DTM 2020 © Historic England. Source Environment Agency.

North to south drive

A north to south track, possibly a drive, is shown on 18th and 19th-century maps, most clearly on the 1837 tithe map. This route appears to have closely followed the line of the eastern boundary earthwork and so is also not perpendicular to the principal axis of James's design. Unlike the main approach there are no obvious earthwork remains of a raised drive or of flanking ditches. There are some fragmented west-facing scarps seen on the lidar which may be the remains of this drive, although they may be later as they coincide with a boundary line shown on the 1871 and 1899 Ordnance Survey maps. Some trees depicted on the 1871 Ordnance Survey map may represent the remains of an avenue along this route. It ran for just over 600m from Eversley in the north to Bramshill Road in the south. It is straight for most of its length, coinciding with the eastern boundary earthwork but as it is longer than the earthwork it deviates from this line at its northern and southern ends. At the northern end, the road is shown to curve to the west just before joining Warbrook Lane (Fig 27).



Figure 27: Detail of the tithe map showing the northern end of the north to south drive. The letter 'A' marks the point where the north to south drive curves west to join Warbrook Lane. 31-09 © National Archives.

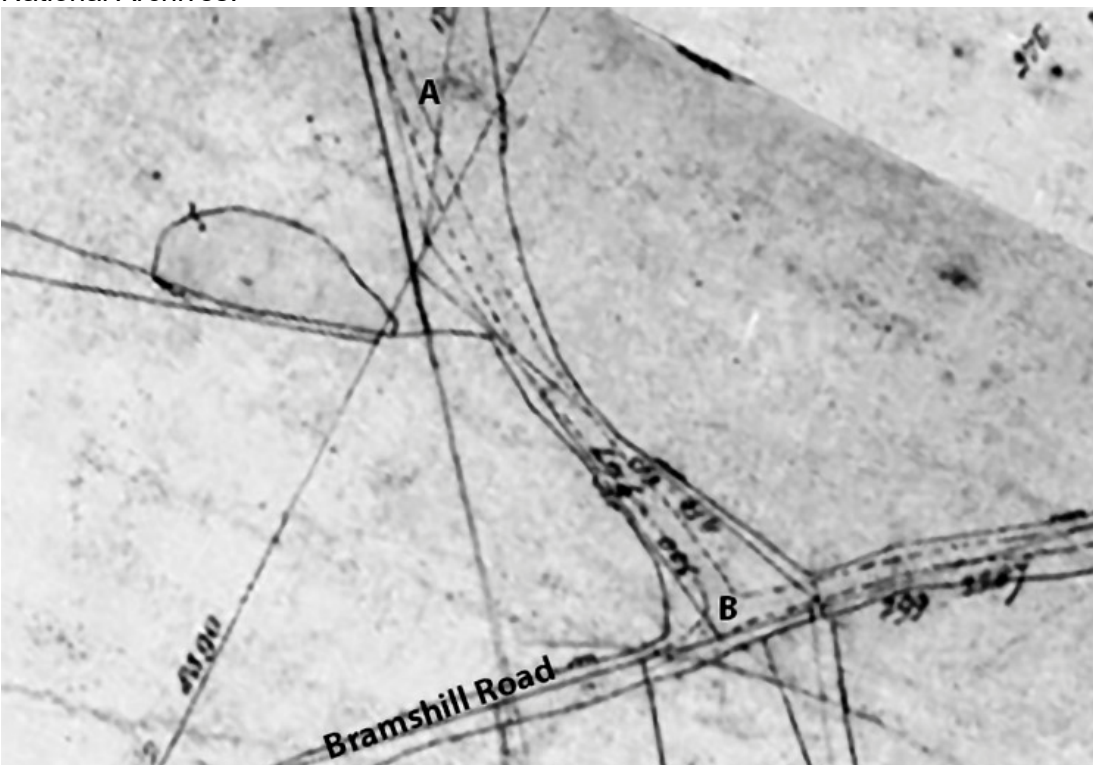


Figure 28: Detail of the tithe map showing the southern end of the north to south drive. The letter 'A' marks the point where the drive begins to curve away from its straight course to form the junction with Bramshill Road 'B'. 31-09 © National Archives.

At its southern end, the map shows the drive gently curving away from its straight alignment to head south-east for its final 150m where it met Bramshill Road (Fig 28). The approximate line of the southern end of the drive is preserved by the current access road to Warbrook House from The Lodge. This is also the point where the 19th-century curving track starts (created when the north to south drive was abandoned – see below). Fragmentary earthworks seen in lidar appear to define part of this junction on the north side of Bramshill Road and earthworks can also be seen within woodland on the southern side of the road (Fig 29). Together these form the remains of a crossroads, with the southern route once leading to Lyndridge. The crossroads are shown on the 1806, 1826 and 1837 maps. The southern route was subsequently moved to the west and first shown on its new course on the 1871 Ordnance Survey map.



Figure 29: The letter 'A' marks the point where the drive (not visible) began to curve south-eastwards to the former crossroads 'B'. The earthworks south of 'B' are the remains of the former lane to Lyndridge. © Historic England; LIDAR DTM 2020 © Historic England. Source Environment Agency.

This drive may have replaced an earlier north to south route across the common, realigned and formalised by James. The orientation of the drive and the curves to the route at its northern and southern ends suggests that James had to make some compromises to allow him to integrate his design with pre-existing features. Compromises such as this were condoned in the second edition of *The Theory and Practice of Gardening* which included two designs for gardens created on irregularly shaped plots of land. In one the house is placed

near one corner and the principal walk 'is thrown out of square, to give it the whole length of the ground, which in any other place must have been shorter' (d'Argenville 1728, 35).

Eastward expansion of park

By 1871 the area of parkland belonging to Warbrook appears to have been extended eastwards by up to 100m (Fig 30). This removed the boundary defined by the possible ha-ha and shortened the main driveway which now joined with a new curving track that followed the south-eastern boundary of the park to Bramshill Road. By 1876 the curving track had been extended northwards linking Bramshill Road to what is now the A327. This curving track appears to represent the realignment of the north to south track with the extension of the park. The approaches to the house across the park were then from the north-east and south.



Figure 30: The shaded area shows the extent of the park on 1876 Ordnance Survey map. A curving line followed by a track formed the new eastern boundary. Detail of the 1876 6-inch Ordnance Survey map. Reproduced with the permission of the National Library of Scotland.

Drainage

The park slopes gently from south to north. When originally laid out it may have been about 500m across (north to south) and the northern side of the park is about 5m lower than the southern side. The lawn to the west of the house measures just over 100m north to south and the northern end is around 50-60cm lower than the south. This can be compared with other areas where the drop is closer to 1m.

The highest part of the registered park is in the very south-west corner which sits just above the 60m contour. although this area was added to the park in the 19th century. Much of the area called Upper Park on the tithe map is thought to have been incorporated in the late 18th or early 19th century, and the south-eastern area of the present park may not have been created until the early 19th century-enclosure (Debois 1991).

Excluding these later additions, it is possible that when James first laid out the park the highest point was at the very south-eastern corner of his new property, an area called Lower Park. This small area somewhere in the region of 30m by 40m may have been the only area within the park to be above the 55m contour.

A pond partly occupies this point and the freely draining soils recorded there suggest it is artificial (Fig 31). It measures 65m by 25m, aligned approximately north-west to south-east along the field boundary with Upper Park field to the south and immediately alongside the eastern boundary earthwork. This pond may have been constructed to act as a reservoir to feed any water features. If so, it is not clear to what extent the incorporation of this area of high ground into the park determined the line followed by the ha-ha.

The pond appears to be fed from Warren Heath to the south with drains marked on the modern 1:25,000 Ordnance Survey map along the coombe from the heath down to Warbrook. Water from this source is now also fed along a ditch that follows the curving track created after the abandonment of the formal east to west drive, but possibly prior to this it fed into the pond.

The pond is shown on the tithe map, and although outlined on the 19th-century Ordnance Survey maps it was depicted as marsh with some trees suggesting it was no longer maintained at that time. The present pond as shown on the lidar covers a larger area than the body of water shown on the modern Ordnance Survey map. The pond is connected at its south-western corner with the field boundary ditch. This continues north-west but also connects to a ditch marked 'drain' on the modern map that heads north. There is also a shallow straight ditch seen on the lidar only that runs north from the pond, is cut by a recent roadway, and extends almost as far as the oval coach sweep.

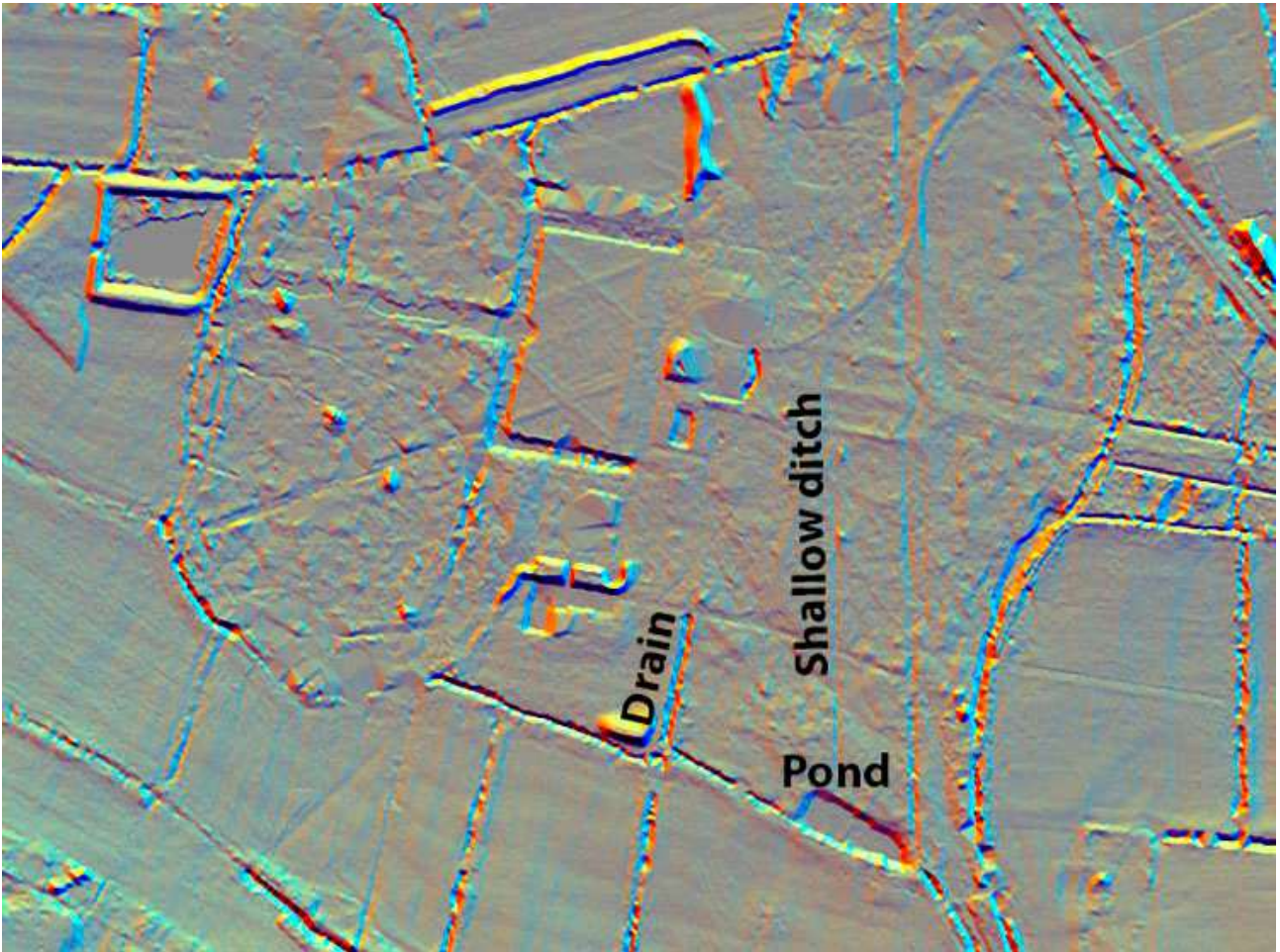


Figure 31: Lidar showing a pond at what may have been the highest point in the park as laid out by John James. © Historic England; LIDAR DTM 2020 © Historic England. Source Environment Agency.

John James and Warbrook

Warbrook House is located close to the former boundary between Bramshill Common and the fields within Eversley parish (Fig 32). The creation of a house and garden at Warbrook separated Bramshill Common from the common land to the east (Fig 33).

Despite being common land, from the medieval period the lord of the manor could enclose common under certain circumstances. This was codified in various statutes in the 13th century including the Statute of Westminster II, 1285 which allowed the lord to enclose common land provided sufficient pasture/common remained to which commoners had free access. (Shirley 1994, 90). The Cope family were lords of the manor at Bramshill from 1699 to 1935 and this presumably included Bramshill Common. The Cope family also owned land in Eversley in the early 19th century including Cart House Field (which now occupies the south-east corner of Warbrook park) that appears to have been carved out of the common.

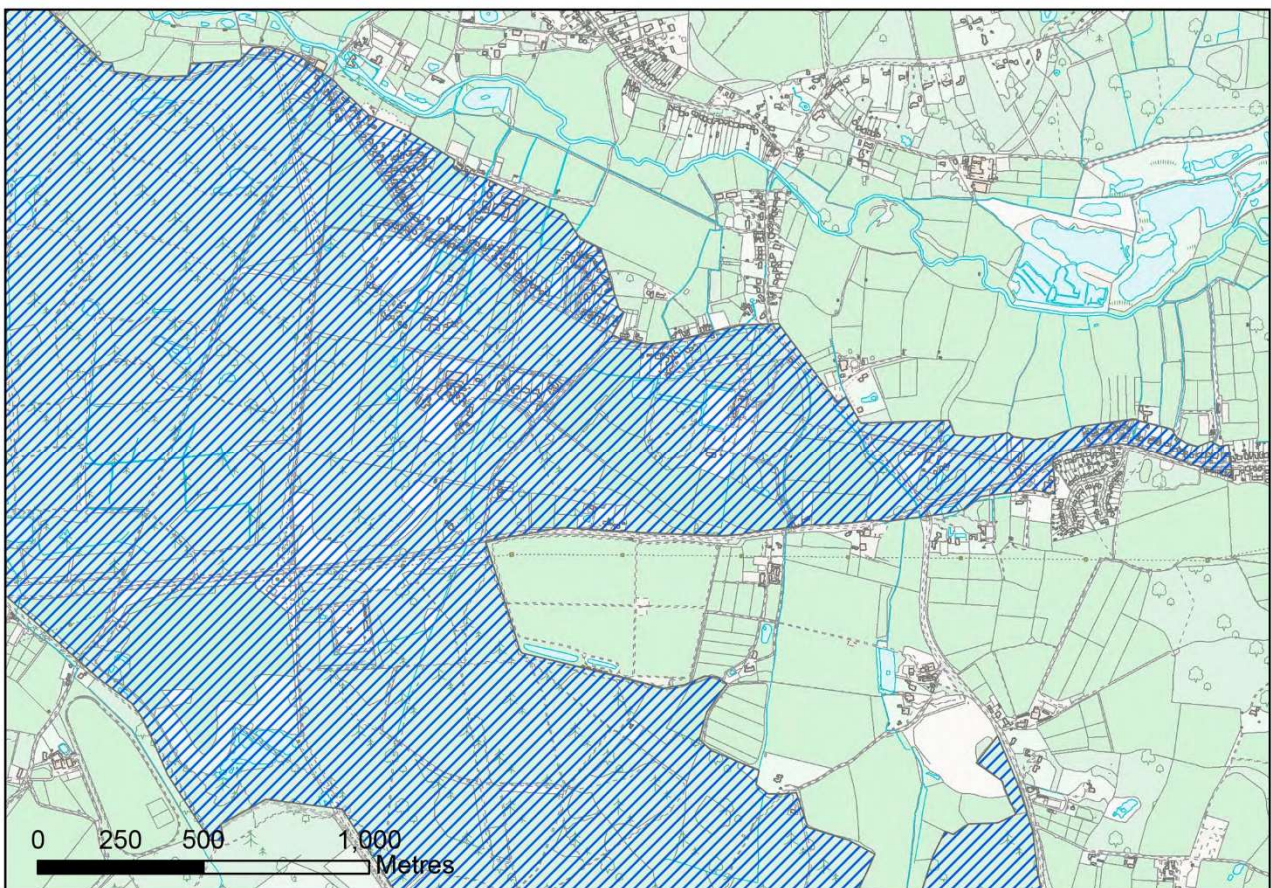


Figure 32: The possible extent of common land (shaded blue) and enclosed fields (unshaded) prior to the construction of Warbrook House. © Historic England; Base map Crown Copyright and database right 2022. All rights reserved. Ordnance Survey Licence number 100019088.

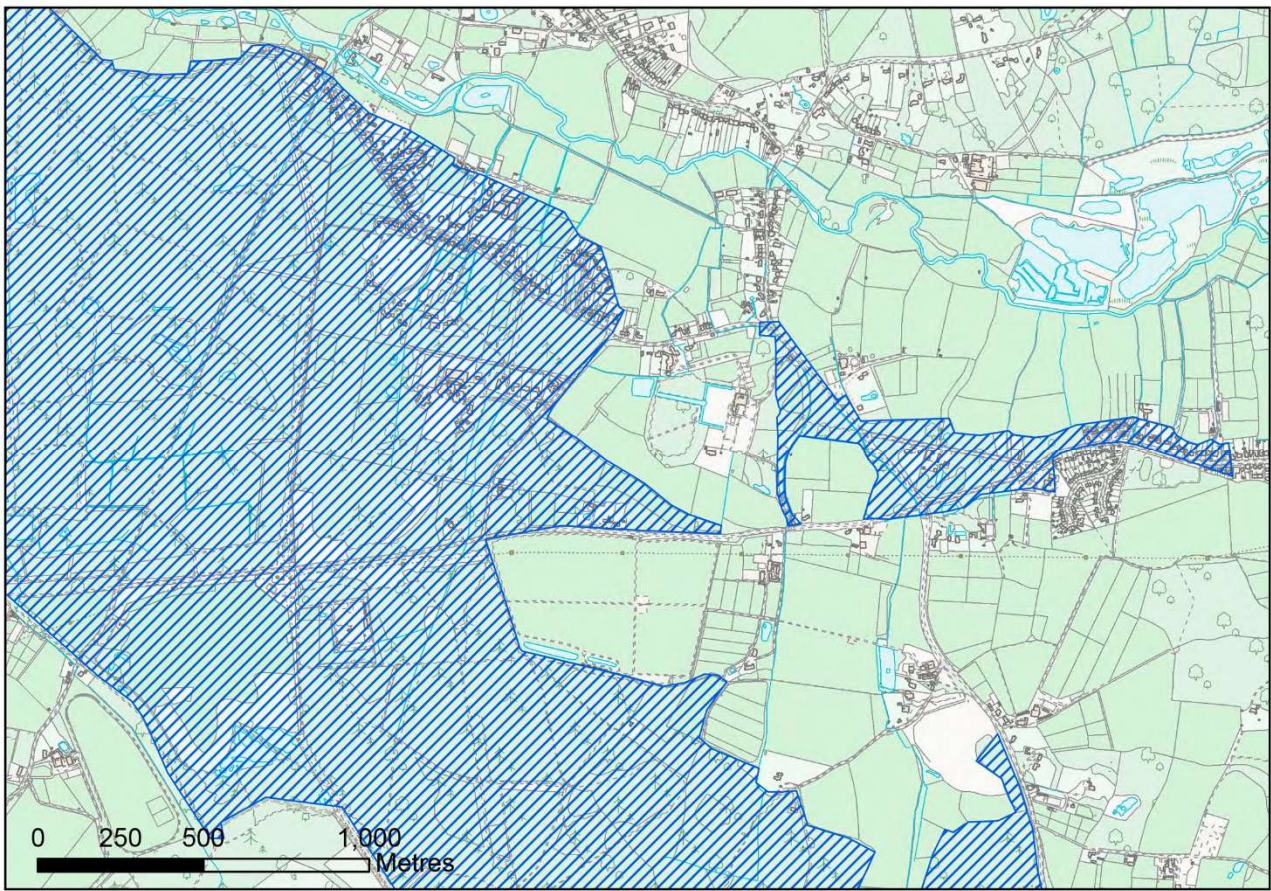


Figure 33: The construction of Warbrook House, near the centre, divided the common land in two. The approximate area of Bramshill Common on the left and common ground on the right (both shaded blue) based on the early 19th century tithe apportionment. © Historic England; Base map Crown Copyright and database right 2022. All rights reserved. Ordnance Survey Licence number 100019088.

Thomas Milne's map of Hampshire (c.1 mile to 1 inch) published 1791 may offer further evidence of the landscape in which Warbrook was built (Fig 34) and suggests an intermediate phase between those shown in Figures 32 and 33. Published over 40 years after John James had died, it is not a totally reliable source. The map shows a large green at Eversley (roughly the area referred to as 'Common in front of Warbrook House in the tithe and as 'common' in this report), however no large house or garden is shown at the location of Warbrook House. Confusingly Milne shows a large house on the northern edge of the green annotated 'Bishop Esq'. Nathaniel Bishop owned Warbrook 1792-1795 and possibly this is an incorrectly located representation of Warbrook House and if so, casts doubt on the accuracy of other features including the tracks shown crossing the green. Nevertheless, the map provides a depiction of an extensive green and its eastern and south-eastern sides are a reasonable match with the various boundaries shown or suggested on early 19th-century maps. Milne shows the western side of the green indented creating two 'arms' heading west. The north-western arm of the green is similar in shape and location with the two fields to the north of Warbrook House named on the tithe apportionment

'Rainbow' and 'Wallaces's Pightle' (Fig 35). If these two fields were originally part of the green in the 18th century it helps to understand the landscape into which the house and gardens were built.



Figure 34: A detail of Milne's 1791 map of Hampshire. Although Warbrook House had been built by his date and the grounds laid out, no building or garden is shown on the western side of the green. The letter 'A' marks the approximate location of Warbrook House. Accessed from [Old Hampshire Mapped and other Historic Resources](#) © Martin and Jean Norgate.

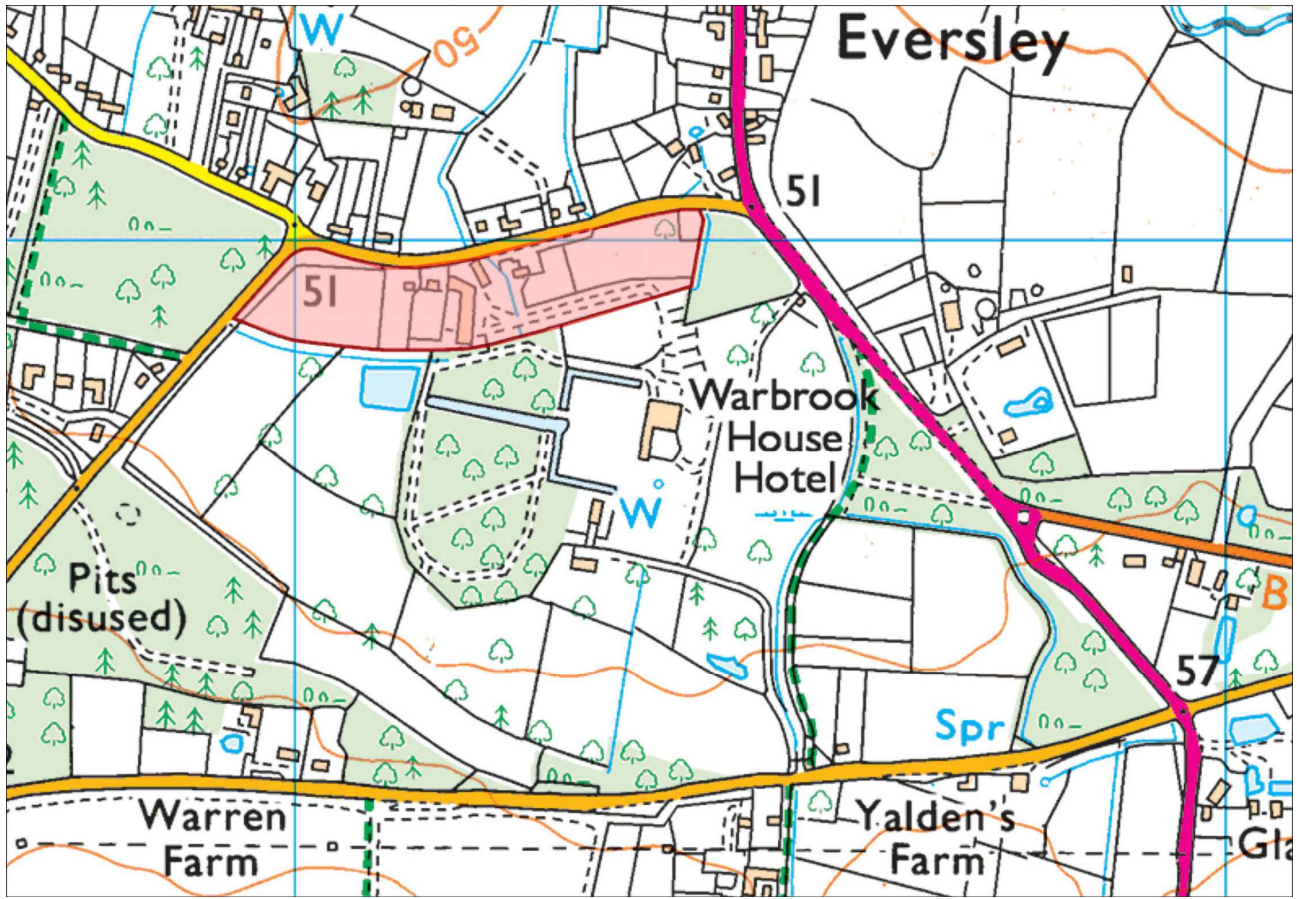


Figure 35: The location of the 19th-century fields named 'Rainbow' and Wallace's Pightle' are shaded pink and may represent the area of former green as shown in the 1791 map. © Historic England; Base map Crown Copyright and database right 2024. All rights reserved. Ordnance Survey Licence number 100019088.

The eastern boundary earthwork (possible ha-ha) defined the eastern extent of James's grounds, while the length of the earthwork may indicate the northern and southern extent of his property. That the earthwork does not reach the roads to the north (Warbrook Lane) and south (Bramshill Road) may confirm the depiction in Milne's map of the green once extending along both these roads. Together these features suggest an approximate area shown in Figure 36.

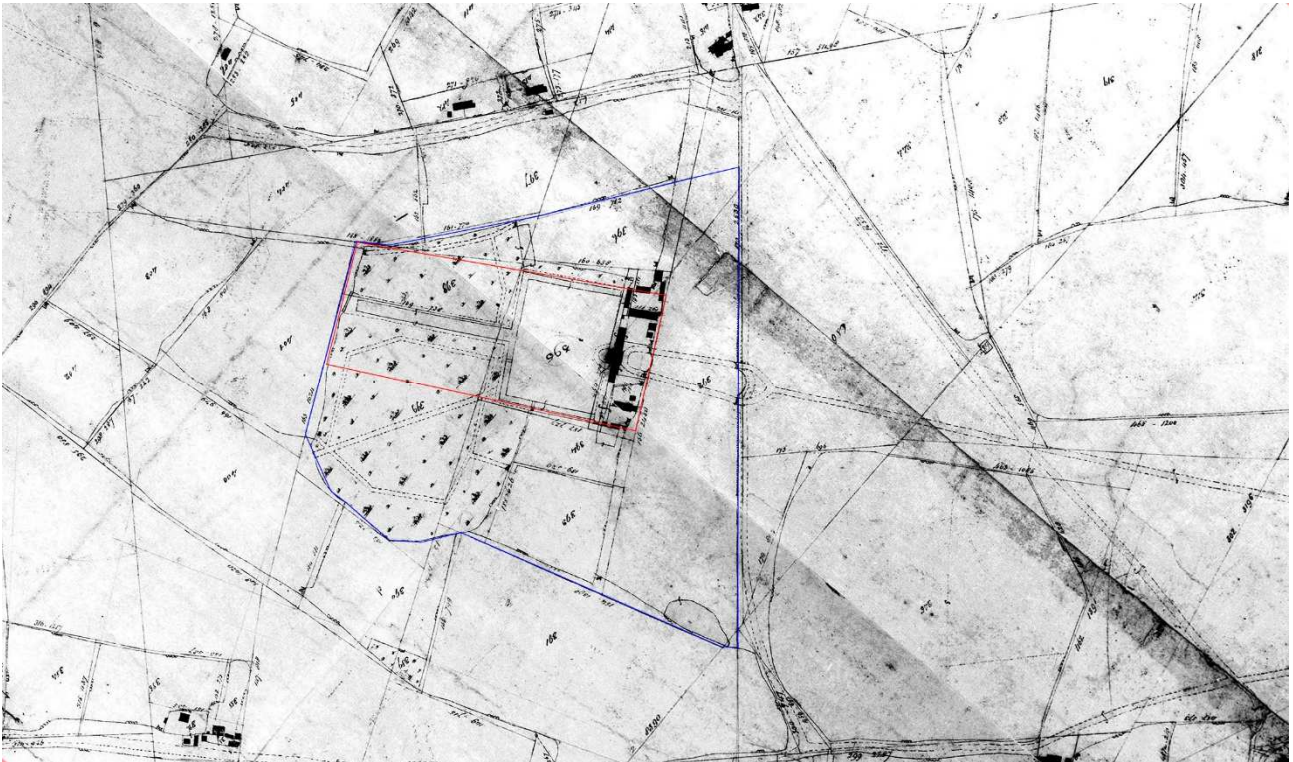


Figure 36: The possible extent of the land owned by James (shown in blue) within which is the possible extent of the rectangular plot of the garden (shown in red). 31-09 © National Archives.

Based on the location of the house, the ornamental canal and the remains of the groves, the size of the original garden has been estimated. The width of the original garden may have been around 130m, while the total length from the front of the forecourt to the end of the canal is 275m. This equates to 3.5 hectares or 8.8 acres. James may have also owned the wedge-shaped land between the house and the eastern boundary earthwork, (equating to Lower Park in tithe apportionment) an area of about 3.6-4 hectares. Although the exact area James owned is uncertain, the suggestion is he may have owned more land than the rectangular plot needed just for the house and garden, even if not as large as that tentatively suggested in Fig 36.

The purchase of land alongside common land provided an open landscape that James could visually incorporate into his property. If the eastern boundary earthwork was a ha-ha, then it allowed him to blur the division between his property and the common and so make his property appear more extensive. This was also achieved by the creation of a formal approach across the common and although it is not clear what the legality of this work was, it enabled the creation of a 900m long drive of which only the western 85m was on land that James owned. Whatever the exact boundaries were of the land James bought, the principal axis determined the location and orientation of the house and garden. It is possible that James located his garden as far north-west as possible within the larger plot of land to maximise the length of the avenue. Together these highlight the choices and decisions James made and provide a good example that:

'the great business of an architect or designer of gardens, when he contrives a handsome plan, with his utmost art and good economy to improve the natural advantages, and to redress the imperfections...with these precautions he should guide and restrain the impetuosity of his genius, never swerving from reason, but constantly submitting, and conforming himself to that which suits best with the natural situation of the place' (d'Argenville 1712, 15).

James died about 20 years after he laid out his garden and his original design may have been short-lived. The cost of maintaining a garden is referred to several times in *The Theory and Practice of Gardening* but also acknowledged are the changes that occur as the garden matures. For example, parterres 'are generally finer at their first planting, than afterwards; the box spreading and varying somewhat from the graceful contours of the design, the earth losing its level, and the grass sometimes not preserving its primitive beauty' (d'Argenville 1712, 35). Badly placed trees may need to be reduced in height or grubbed up (ibid, 18) and a garden design 'which looks handsome and of good proportion when it is first planted, in process of time becomes small and ridiculous, that one is obliged to alter it, or to destroy it entirely' (ibid 21).

Aerial survey discussion

Although some cropmarks at Warbrook were identified in aerial photographs, it is lidar that has proved invaluable in enabling the identification of numerous low earthworks within the formal garden and the wider park.

Within the lawn to the west of the house both St Andrew's crosses were mapped in detail from lidar with additional features seen as cropmarks mapped from aerial photographs. Their size and location suggest that James's design for Warbrook was inspired by d'Argenville's *The Theory and Practice of Gardening* and so provides a clue to what the overall design may have been, despite that lack of aerial survey evidence for parts of the garden.

This aerial survey has identified earthworks belonging the driveway to the east and although this was known from historic maps the lidar has added detail such as the existence of the flanking ditches. It has also provided a better plan of the arrangement of the drive immediately to the east of the forecourt where earthworks flanking the main drive were identified. While the drive aligned on the centre of the house, these flanking earthworks may have been aligned on paths within the garden to the west and suggests a coherent design across the whole site from formal garden to wider landscape. The old driveway earthworks also suggest there may have been some phasing and that its design was changed prior to its abandonment in the mid-19th century.

The lidar also revealed the remains of a boundary ditch or possible ha-ha to the east of the house. Although this feature formed part of the garden design, its orientation was dictated to by the property boundary between Warbrook and the adjoining common rather than the axis of the garden design.

The analysis of these features alongside historic maps and the garden designs in d'Argenville's book has provided a better understanding of John James's design and allowed some suggestions as to the original layout at Warbrook. It has highlighted areas, such as the site of the parterre, the network of paths around the garden and the possible ha-ha and its relationship to the drive, where further work could help improve our understanding of John James's design, how it relates to d'Argenville's work and how James adapted advice in *The Theory and Practice of Gardening* in the creation of his country house.

Appendix

Sources, scope, and methodology

For this project all vertical and oblique aerial photographs of Warbrook held in the Historic England Archive were assessed. These cover the period 1929 to 2018 and include recent aerial reconnaissance photographs taken by Historic England's Aerial Survey team. Orthorectified digital aerial photographs taken in 2013 and 2019 were supplied via the Aerial Photography for Great Britain (APGB) agreement. Environment Agency lidar at 1m resolution from a 2020 survey was downloaded from the DEFRA Survey Data Download website. This was processed using Relief Visualisation Toolbox 2.2.1 to produce 2D GeoTIFF images.

The 19th and 20th-century Ordnance Survey historic mapping and the 1837 tithe map were also consulted. This included the Ordnance Survey drawing 1806 2" to the mile: https://upload.wikimedia.org/wikipedia/commons/b/ba/Ordnance_Survey_Drawings_-_Odiham_%28OSD_125%29.jpg

Archaeological features from the Neolithic onwards may be visible on aerial sources but for this project no prehistoric or Roman remains were identified from the air. All the archaeological features visible on the lidar and aerial photographs are thought to date to the medieval and post medieval periods.

Photographic prints showing archaeological features were scanned and then rectified using the specialist Aerial 5.36 program. The rectification process involves matching features on a 1:2,500 Ordnance Survey digital map (the control) with the same features on the scanned aerial photograph to remove all height and tilt distortion. This gives an overall accuracy of plotted features of 2m or less to the true ground position. A digital terrain model (DTM) was incorporated into the calculation to improve accuracy by compensating for undulating terrain. The lidar and many of the digital vertical photographs were already georeferenced so could be imported directly into the mapping software.

Archaeological features were mapped from rectified photographs and lidar visualisations using the ArcMap GIS software. These features were mapped on different layers based on the original form of the feature (bank, ditch etc) irrespective of whether these were seen as earthworks or cropmarks. Most features were drawn using blue T hachures representing break of slope. Cropmark ditches are depicted shaded blue, banks shaded red and structure shaded orange. A monument polygon was drawn around features or groups of features corresponding to a single archaeological site or 'monument' and the monument number is attached to the mapped features.

Archaeological monuments are recorded to Historic England Data Standards as Historic England Research Records and where applicable, concorded with Hampshire Historic Environment Record (HER). These records can be accessed via the Heritage Gateway website (www.heritagegateway.org.uk).

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