

AN ARCHAEOLOGICAL ASSESSMENT OF A GARDEN STRUCTURE AT LANGTON HOUSE, MILNTHORPE LANE, WINCHESTER, HAMPSHIRE

By CHRISTOPHER K CURRIE

ABSTRACT

Survey of a garden structure formerly in the grounds of Milnthorpe House, Winchester, has shown that the feature is a mid nineteenth-century water storage tank, not an icehouse, as previously thought.

INTRODUCTION

As a preliminary to the restoration of a garden structure in the garden of Langton House, archaeological investigation was carried out. The house is a modern residence, built c. 1980, off Milnthorpe Lane, in the south-west suburbs of Winchester (Fig 1). The structure under consideration is situated on what appear to be artificial terraces cut into a north facing slope at NGR SU 4694 2901. At the time of the excavations, these were much overgrown with self-seeded birch and sycamore scrub, although there was evidence of earlier cover consisting mainly of beech and yew.

The structure was first noticed in 1986, when it was partially recorded by the Winchester City Archaeology Office (Morris 1987). It was interpreted as a possible ice house, but after examination by Monica Ellis, the author of *Ice and Icehouses through the ages with a gazetteer for Hampshire* (1982), this was questioned. It was not the intention of the current study to dispute Morris' findings, and at the beginning of the survey it was assumed that the building was probably an icehouse or cold store, as originally postulated. It was only after excavation that it became clear that further research was required.

HISTORICAL BACKGROUND

The structure and its adjacent terraces were once part of the grounds of Milnthorpe House. This was a mid-nineteenth century suburban building in the Gothic style, with grounds covering up to 20 acres. The estate was largely broken up after 1932, and the former grounds sold off in a series of plots for development.

Little is known about the early history of this estate. A late Sale Particular of 1950 is the only known written source for the estate's origins. Here, it is claimed that the house was constructed in 1856, and was later owned by the Earl of Airlie. The grounds were much reduced by this time, being given as four and a half and five and a half acres on different pages of this document. A cedar tree is mentioned that was planted by Prince Christian Victor to commemorate the 'Jubilee' of Queen Victoria (HRO 98M86/46). This tree survives to the east of Milnthorpe House, bearing a date stamp '1897'.

An examination of pictorial and cartographic evidence seems to confirm that the house had been erected between 1845 and 1859. At the former date, the Tithe Map for St. Faith's Parish shows only farmland in the vicinity of the house. In 1859 B B Woodward's *General History of Hampshire* was published containing a print of a view of Winchester from St Giles' Hill. On the far side of the town, on the approximate site of Milnthorpe, a gabled shape can just be made out that could possibly be the house itself (HRO Top. Winch. 2/8). A more detailed examination of this evidence can be found in Currie (1993).

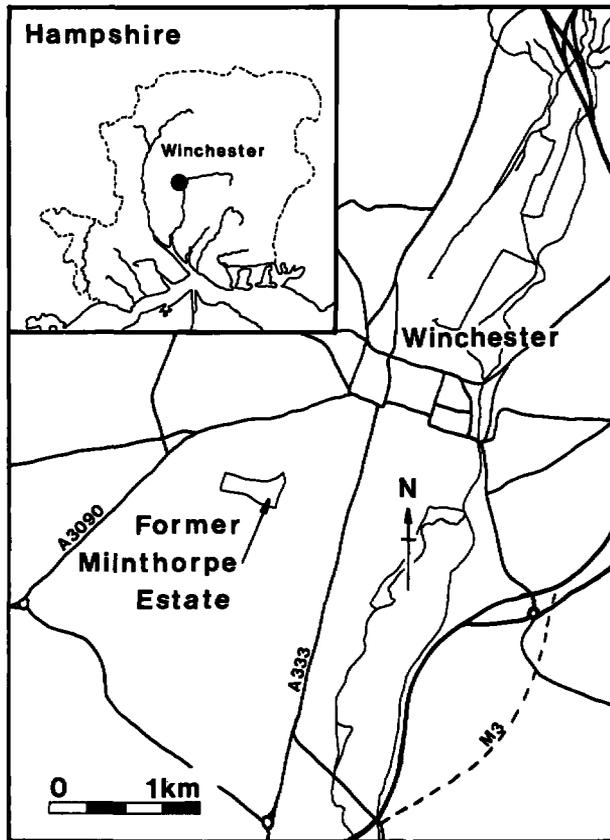


Fig 1. Location map

The earliest 6" Ordnance Survey plan, dated 1869, shows the house and grounds on the then undeveloped edge of Winchester to the south of the Diocesan Training College (now King Alfred's College). There appears to have been a stable block, or similar outbuildings on the site of modern Langton House. In the far south-west corner of the garden a 'well house' is noted. Morris took this to mark the site of the garden structure here under discussion, but considered it to be a 'mis-identification' (Morris 1987, 258-60).

The plan concerned is not clear, and there appears to be at least two rectangular structures shown in the vicinity, one of them just beyond the boundary of Milnthorpe House, in the grounds of another large property, Kerrfield (HRO OS 6" plan sheet 41; 1869). No trace of this latter conjec-

tured structure can be found on the ground today. It is not certain which of the two possible structures is being referred to as the well house. This plan does appear to depict the lines of what are the present earthwork terraces cut into the side of the hill along the southern edge of the estate stretching from Milnthorpe House to the western end of its property.

A 50" map of 1882 shows a series of walks leading from the house westwards along clearly marked terraces (HRO OS 50" plan 41.13.22, 1882 ed.). Unfortunately, this large-scale survey of Winchester did not extend the full length of the property, and the western end of the estate containing the garden structure is not recorded. Ordnance Survey 25" plans for 1897, 1909 and 1932 cover the entire estate, but they give little detail.

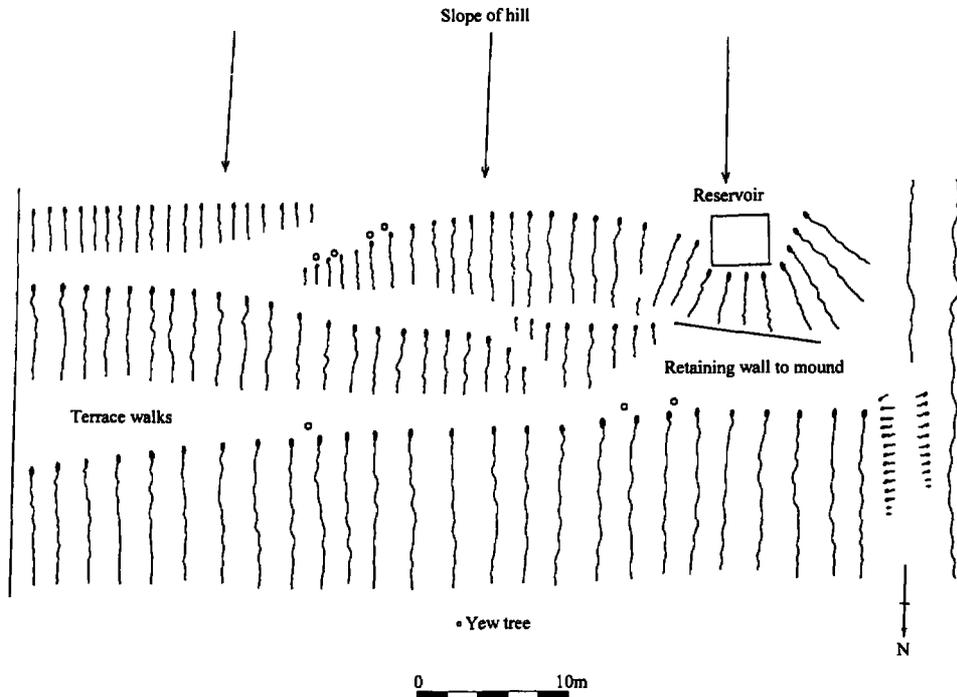


Fig 2. Survey of the earthworks in the garden of Langton House

All show the estate remaining intact (HRO OS 25" plan 41.13; dated 1897, 1909, 1932), with only minor alterations. Although the terraced area appears to be shown as such, the detail is considerably simplified, and the terraced walks are not shown, nor is the garden structure under discussion. After this last date the estate was gradually broken up. By 1950 only about five acres remained attached to the house, and further subdivision has continued until recent years.

Late nineteenth-century photographs held by Sir Bryan Thwaites show that the house itself was altered around this time by the conversion of what appears to be servants' quarters into a more substantial wing. This appears to have occurred between 1882 and 1897, as the southern part of the house has been altered between the OS maps of these dates. According to Sir Bryan's researches, the Eleventh Earl of Airlie occupied the property between 1889 and 1896 (Sir Bryan Thwaites pers. comm.), and it is possible the

alteration occurred during his time. It is curious to note that the present Earl has no record of his family having owned the property (private letter to Sir Bryan Thwaites), but he must be mistaken as there is much evidence in local papers to confirm the eleventh earl's residence in Winchester in the late nineteenth century (Sir Bryan Thwaites pers. comm.). Airlie appears to have sold the property to Charles Clowes and his wife, Irene.

ARCHAEOLOGICAL ASSESSMENT

Survey (Fig 2)

A survey of the earthwork terraces in the garden of Langton House was undertaken. These comprised roughly parallel terraces running along the north facing slope of a steep hillside. These were aligned almost exactly east-west, and were linked

by interconnecting paths. The distance between the eastern boundary fence of Langton House and the western end of the terraces is approximately 60 m. Although the terraces extend further eastwards towards Milnthorpe House, these are now in a number of different private ownerships, and survey was not attempted.

At the western end of the terraces stands a rectangular brick structure. This appears to have been originally built on a step cut into the hillside, and was subsequently partly buried beneath an earthen mound. The structure is 3.8 m by 3.2 m by 2.5 m high; only the top 0.7 m projected beyond the mound before the excavations were undertaken. At the base of the mound, on its north side, is a brick and flint retaining wall, 9.5 m long and up to 1.3 m high. A path running along the lowest terraces runs approximately parallel with the retaining wall, terminating a few metres further to the west.

The lowest terrace is at approximately 71 m AOD by the retaining wall of the mound. This is about 8 m above the level of the lower garden at the western end, and about 4 m at the eastern end. The slope of this terrace is up to 12 m in width, and at an incline of about 1:1.5. At the far west end a partially sunken path has been cut into the slope from the top of the terrace down into the lower garden. Three yew trees stand on the edge of the terrace at irregular intervals. These appear to have been part of deliberate planting, but it is not certain whether they represent the remnants of a more extensive planting.

About 8 m east of the eastern end of the retaining wall of the mound surrounding the brick structure, a well-worn path cuts across the second terrace up the slope before swinging back westwards towards the top of the mound, after meeting the third terrace. This winding path appears deliberately constructed to gain access to the top of the mound. Where it turns westwards four yew trees stand in a line on the terrace edge. It is possible that these once formed part of ornamental plantings lining the path. This path joins another path running along the top of the third terrace.

The third terrace terminates on the top of the mound containing the garden structure. Both the mound and the second and third terraces merge

into one another to a degree, although it is possible to detect the boundaries of the mound itself where it protrudes slightly from the edge of the third terrace. Between the western edge of the mound and the western boundary of the garden is a short stretch of hillside that has not been terraced. Although only about 8 m in length, comparison between the terraces and this untouched section indicates the amount of artificial landscaping that had been undertaken.

Structural analysis (Figs 3-5)

The sunken structure

Details of the excavations of the chalk rubble mound surrounding the structure can be found in the archive report, deposited with the Hampshire County Council Sites and Monuments Record (SMR), and the County Record Office.

The structure was found to be rectangular in plan, being 3.8 m east-west, 3.2 m north-south and 2.5 m high, although only 0.7 m protruded from the surrounding mound. It was made entirely of brick, with a concrete plaster render on the internal walls and the top of the surmounting north-facing pediment. The bricks were red in colour, measuring 0.22 m by 0.11 m by 0.07 m. If these were the same as used in the retaining wall, which seems likely, they had shallow frogs in their upper surfaces. The pediment type is that known as a Broken Pediment (Pevsner & Lloyd 1967, 798).

The bonding pattern of the brickwork, on all three sides examined, was a variation on English Bond, of alternate courses of headers and stretchers (Pevsner & Lloyd 1967, 783), and not Flemish Bond as recorded by Morris (1987, 260). The variation on standard English Bond is very slight, being the addition of a broken brick, 0.07 m wide, as the second brick in, from the east on the north face, and from the north on the east and west faces, to every course of headers.

The roof was made of a brick vault, with a slightly raised pediment on the north face. Only the upper surface of the pediment was rendered with concrete, on the vault itself the bricks are exposed on both the interior and exterior of the structure. Pipes emerged from the structure on the

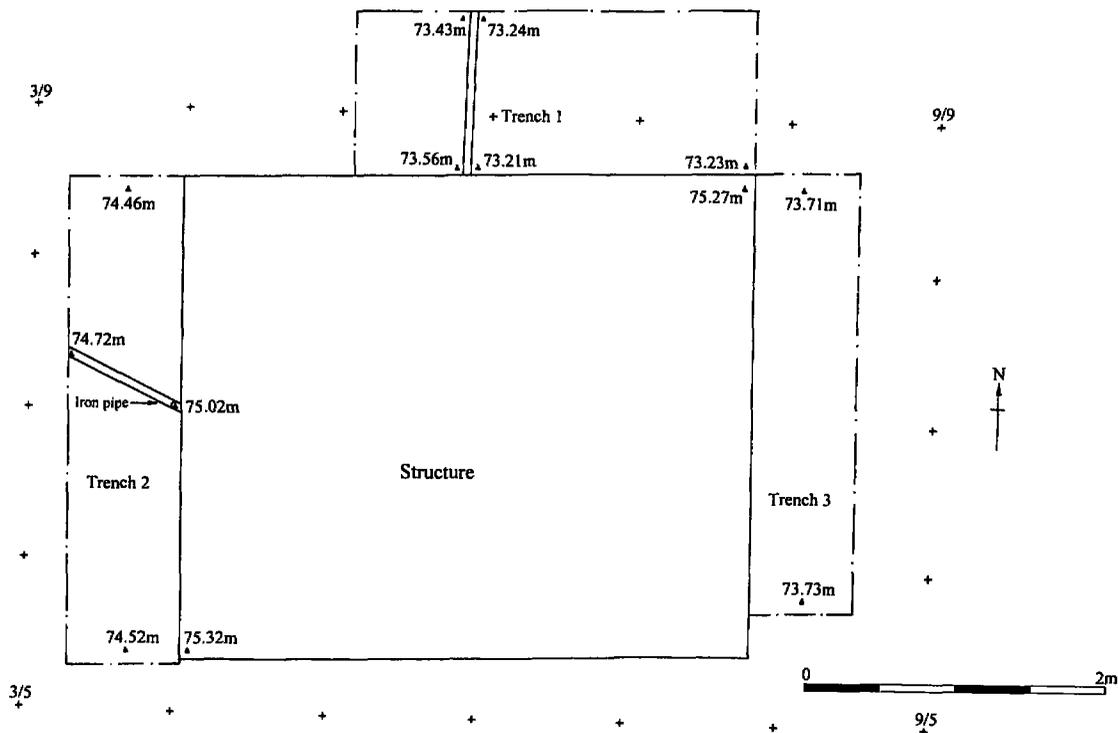


Fig 3. Plan of the garden structure

west and north sides (see below). On the north face an iron bar, 1.53 m by 0.05 m, is bolted against the brickwork by two iron bolts. Internally these appear to be connected to two iron rods crossing the upper part of the structure. Morris suggested that these might be used for hanging game (1987, 260), but it is now thought that they may have acted as a form of reinforcement against pressure on the structure from the earth around it.

The structure is entered by a circular hole, 0.45 m across, at the apex of the vault. This makes access for an adult male difficult, and so it is probable that this was not used on a regular basis. Internally, there are low brick divisions, up to 0.35 m high surmounted by heavy perforated slates up to 0.02 m thick, and capable of supporting the weight of an adult. The perforations are spaced regularly at 0.05 m intervals, and are up to 0.01 m across. On the top of these slates there had been a layer of coarse flint chippings, but this had been

removed by Mr Chapman in 1986. From the amounts found scattered around outside the structure, it can be estimated that this had been of a reasonable thickness, between 0.05 and 0.1 m. The internal walls were all rendered by a concrete-type plaster.

The retaining wall (Fig 6)

The retaining wall supports the earth and rubble mound on its north side. Work here was restricted to clearance and recording. Excavations were not carried out to discover the nature of the wall's foundations, nor to determine the thickness of the wall. On initial inspection, it was noted that the east end of the wall had collapsed. This was recorded in its collapsed state before clearing the rubble away to allow the full recording of the wall underneath.

The wall appears to have been square-ended at the east end, as bricks were revealed on clearance of rubble at the same height as the top of the rest

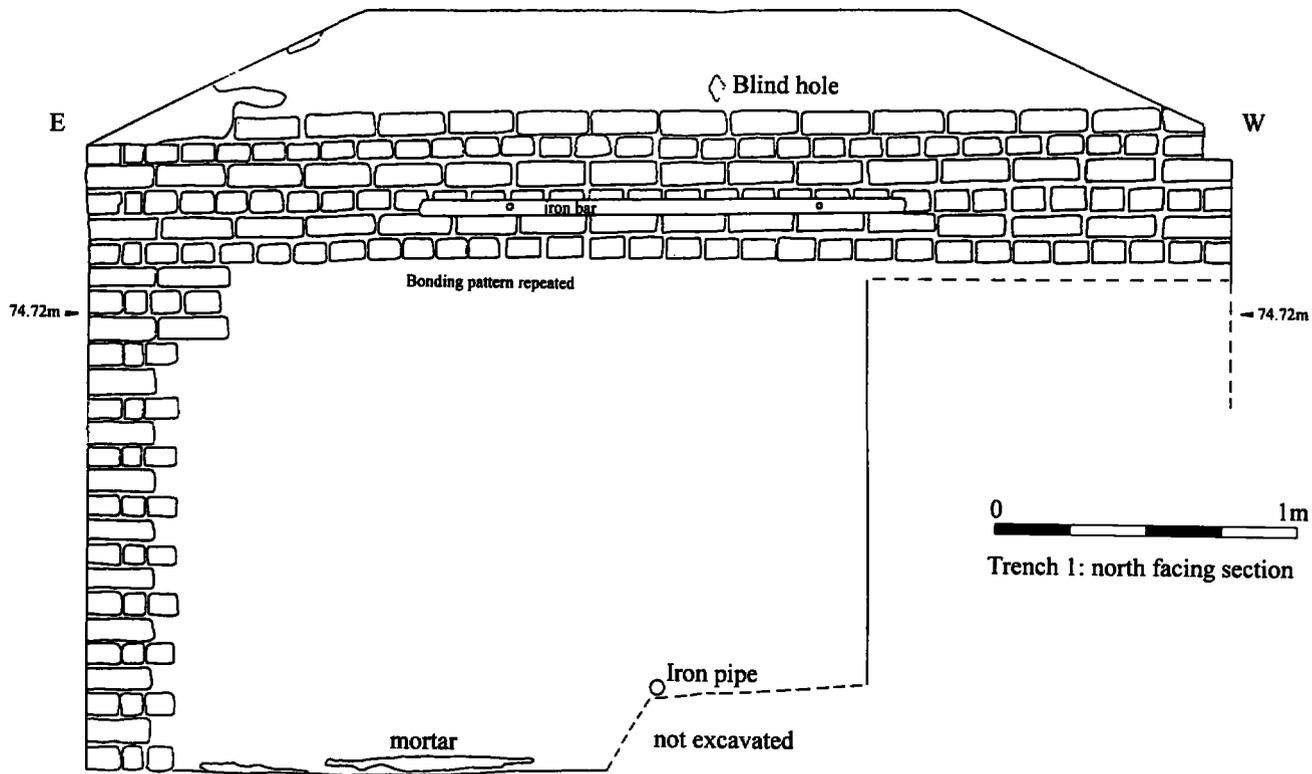


Fig 4. North-facing section

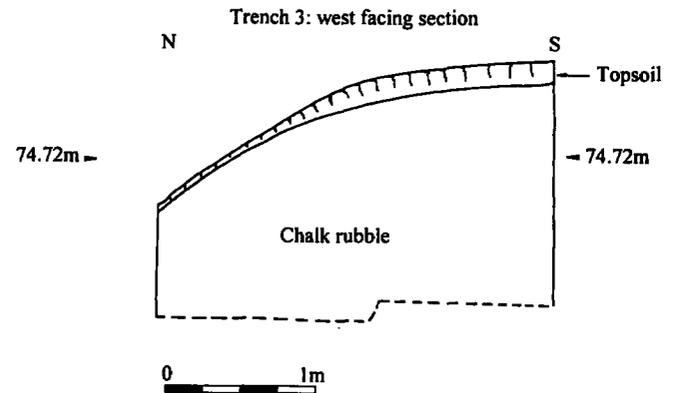
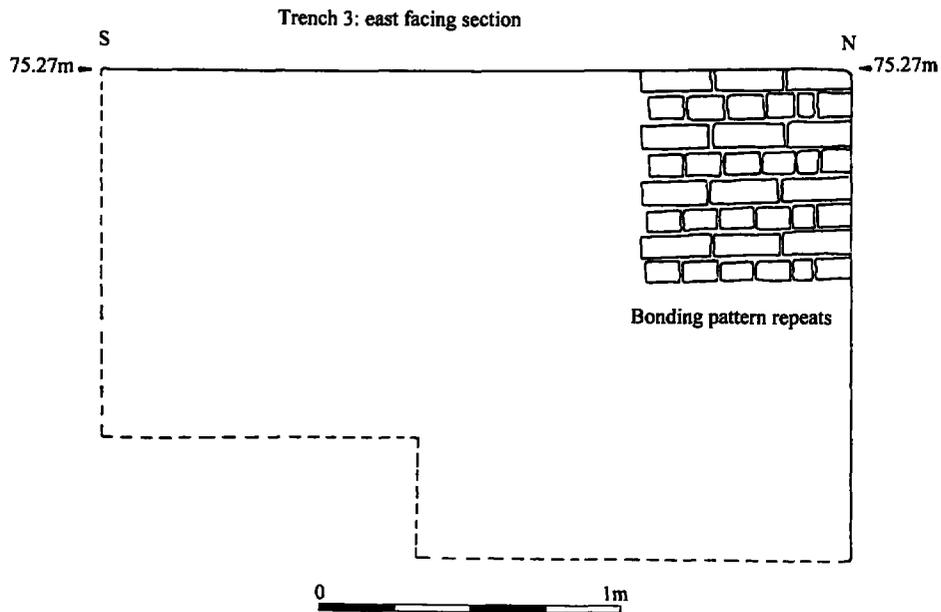
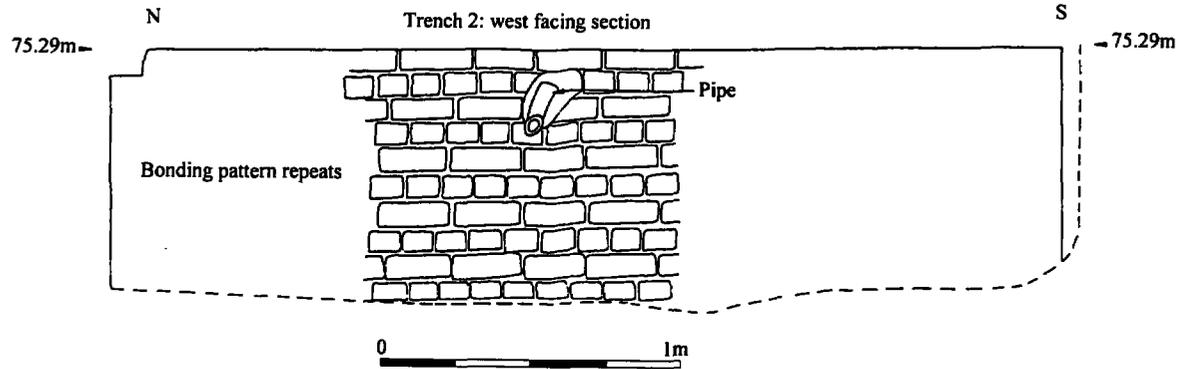


Fig 5. West- and east-facing sections

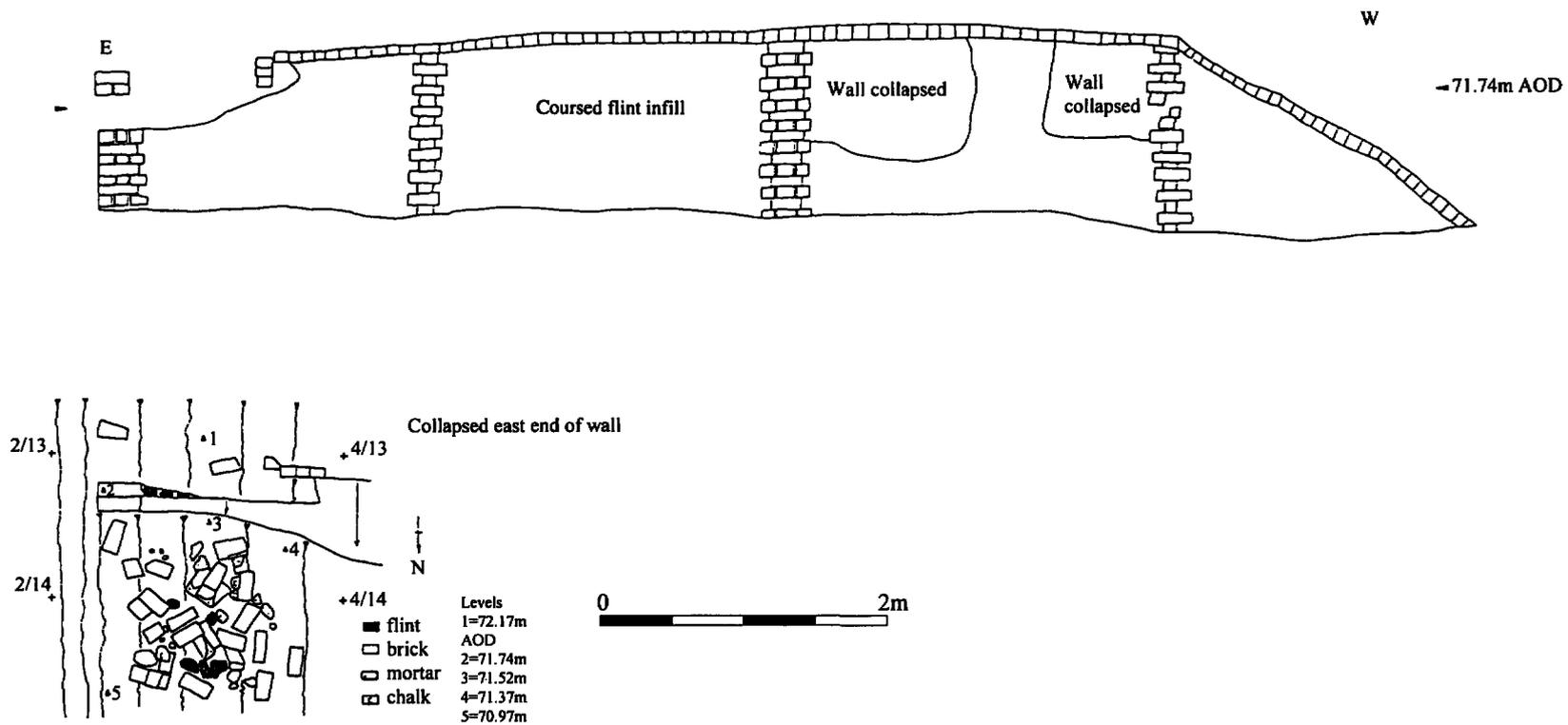


Fig 6. Elevation of the retaining wall, and plan of the collapsed east end of the wall

of the wall. This contradicts Morris' survey, which shows the east end of the wall stepped (1987, figure 2D, p. 259). However, Morris had possibly seen the feature in its undisturbed state, whereas this survey may have been undertaken after further collapse had removed evidence noted earlier. The wall was 9.5 m in length, with the west end sloping downwards for the last 2.1 m. Again this contradicts Morris' survey, which makes the wall nearly 11 m in length (1987, figure 2D, p. 259). This could be explained by the fact that the structure was heavily overgrown at the time of the earlier survey, thus making accurate measurement difficult (this problem was also encountered in the present survey in places).

The wall was built of knapped flint set into mortar, with brick quoining at the east end, and decorative brick pillars breaking up in the flintwork at 2.2 m, 4.75 m and 7.5 m from the east end. The top of the wall was capped by a course of brick headers. Between the second and third brick pillars the flintwork was badly eroded, and in need of urgent repair.

Although the symmetry of the wall's ends was irregular, and it was not built exactly parallel with the north face of the sunken structure, this did not appear to detract from the view of the overall feature from the north. The lack of symmetry could have been the result of carelessness by the builders, but the perceived whole from the north has a pleasing aspect, and it is possible that the setting on the hillside might have created the illusion of awkwardness if the feature had been constructed differently. The use of optical illusion to create the desired effect is well known in garden design, and this may have been the intention here.

DISCUSSION OF THE STRUCTURE

During his study of the structure Morris noted that, although well situated on a north-facing slope consistent with the shade required for the positioning of an icehouse, it was very different from traditional local icehouses, in that it lacked both an insulated entrance passage and an ice-well (1987, 260). A subsequent visit by Monica Ellis, an

authority on icehouses, led to the conclusion that this was not the purpose of the structure (Monica Ellis, pers. comm.). However, an alternative suggestion, also made by Morris (1987, 261), that it was a cold store or game larder, was also unsatisfactory on account of the extremely restricted access to the inside.

The discovery of iron pipes leading from both the base and the top of the structure has thrown new light on its function. The upper pipe may have been an overflow, and this suggests that the builders expected that water might, at least occasionally, rise to this level inside. This was only possible if the lower pipe was not a simple drain for the removal of melted water as thought by Morris (1987, 260), but a controllable exit that was usually closed. The existence of the upper pipe suggests that the structure was used to contain water, and that it was often filled up close to that level. Alternatively, it may have been used to pump water into the structure from a source as yet unknown.

This puts new emphasis on the depiction of a 'well house' on the 1869 Ordnance Survey plan discussed above. A 'well house' could cover a number of possible meanings, not necessarily connected with 'well' in the traditional sense of a shaft sunk in the ground for obtaining subterranean water. Historic definitions stretched to any source of water, particularly springs, which were often covered in the past, and called 'well-heads'. For example, holy 'wells' in the British Isles are often spring-heads rather than excavated shaft-type wells (Jones 1986).

The structure at Langton House has many similarities with small water-storage reservoirs seen elsewhere by the author. An abandoned example can be seen in the grounds of Dartington Hall, Devon (Currie 1991). These are similar to conduit houses, used for supplying drinking water from Roman times onwards.

Medieval examples can be found in Hampshire. There is a fourteenth century 'waterhouse' or conduit house that supplied water to the medieval town in Commercial Road opposite the Mayflower Theatre in Southampton (Davies 1988, 9-12). This was spring-fed, supplying a 'header' tank within the conduit house before being piped into the town. Another early example, dating to

the twelfth century, has been located at Offwell on the north side of Portsdown Hill. This supplied the Augustinian priory of Southwick with drinking water (Currie 1990, 58). Although referred to as a 'well', it was a covered spring, which fed a piped or covered water supply to prevent it being contaminated with pollutants.

Similar devices are described in nineteenth-century literature for the storage and supply of water for all manner of purposes. They are described by J C Loudon in *The Suburban Gardener and Villa Companion* (London, 1838), a book written with residences such as Milnthorpe House in mind. On the supply of water before piped water mains became common, Loudon says:

'Every dwelling-house requires a supply of water, and, when this cannot be obtained naturally by an overflowing spring, a river or a lake, recourse must be made to some artificial process . . . water . . . may be collected . . . and preserved in tanks and cisterns. Where water is not to be used for culinary purposes, but merely for cleaning . . . the cistern or tank in which it is contained may be kept above ground; but where it is desirable to keep water cool, the tank should be sunk so deep, as to be beyond the influence of the sun.' (1838, 741).

He then goes on to describe a tank for the storage and collection of rain water that bears much similarity with the structure at Langton House:

'The tank may be built in any convenient form, and arched or domed over the top, with a man-hole in the crown of the arch, or in the summit of the dome, having a stone lid to fit into the rebate in the masonry, in order to admit a man to descend by ladder to clean out the tank . . . The deeper such a reservoir is sunk in the ground, so much cooler will the water be kept . . . In whatever form the tank is built, all the masonry or brick-work connected with it should be laid in cement, and plastered with that material on the side next the water' (Loudon 1838, 65).

This description matches that of the structure under discussion so closely that the evidence for it being a small water storage reservoir is very strong. This is further supported by a description

of late nineteenth century water purification techniques that conforms to the internal features at the bottom of the tank. This is described as a 'slow sand filter', which comprised a layer of sand overlying coarse gravel, supported on perforated tiles (Singer *et al* 1958, v, 563). Although the sand layer was either not present, or had been removed subsequently, the coarse gravel layer overlying perforated slates in the bottom of the Langton structure suggests that the water was filtered through this as a means of purification prior to its being taken out of the tank via the lower pipe. It is possible that this pipe originally ended in a tap that would have been located in the vicinity of the retaining wall where a servant would have easy access via the terraced path leading from the house.

It is not possible at present to determine the exact source of the water contained in the tank. The chalk geology of the hillside would have made springs likely features anywhere along it. Such a spring, or even rain-water collected in a more mundane receptacle, could have been pumped into the tank for filtering, to make it fit for drinking. Simple inexpensive hydraulic ram pumps were available in Loudon's time (1838, 742), and they are described as useful aids to the water supplies he recommends. Both these pumps, and iron pipes, had come to be commonly used for supplying water from the mid-nineteenth century (Singer *et al* 1958, iv, 499).

The terraces themselves, and the ornamental nature of the retaining wall, indicate that the structure had been built in such a manner that it blended in with the designed landscape of the garden. This aspect was also noted by Morris (1987, 261). The brick pediment of the tank, and the decorative coursing in the retaining wall combine when viewed from the north to support this suggestion. It may be more than a coincidence that yews on the lower terrace, probably ornamental as they seem to be planted on the terrace edge, are set in such a way that the view of the structure, its mound and retaining wall are visible from the north. It is also noteworthy that the view from the top of the mound between two of the surviving yews makes a superb vista aligned directly on the tower of Winchester Cathedral.

CONCLUSIONS

The structure seems to be a water storage tank, constructed to produce cool, filtered water, possibly for drinking. As such, it is a rare intact example of an early, small-scale, domestic water purification system. These were probably rare before the later eighteenth century, and had been largely superseded by public water supplies in the later nineteenth and early twentieth centuries. Although relatively primitive, the system is a considerable advance on earlier systems of supply reliant on well-water. The system still retains many of the characteristics of twentieth-century water purification.

Such devices will be of great interest to students of the history of hydrology and water-supply. This particular example is also of note to garden historians as a fine example of how utilitarian

technology was incorporated into designed ornamental landscapes of the mid-nineteenth century.

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Author: C K Currie BA MPhil MIFM MIFA, 71 Upper Barn Copse, Fair Oak, Eastleigh, Hampshire SO50 8DB

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