

# **MARGERY WOOD EARTHWORK**

## **An archaeological survey**

**County: Surrey**

**Districts: Reigate and Banstead**

**Parishes: Kingswood**

**NGR: TQ 524546 152503**

**HER: 14960**

**Surveyed: Winter 2013/4**

**Directors: Jenny Newell & Judie English**

**Report: Jenny Newell**

**Report date: September 2021**

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## Margery Wood in relation to junction 8, M25

The Old Road

"With Margery Wood it reaches the 700-foot line, runs by what I fear was a private path through a newly-enclosed piece of property. *We remembered to spare the garden, but we permitted ourselves a trespass upon this outer hollow trench in the wood which marked our way.*

A magnificent bit of open ground, from which we saw below us the sandy hills, and beyond, the whole of the Weald, led us on to a point where the Old Road once again corresponds with a modern and usable, though unmetalled and very dirty lane. This is the lane which runs to the south of the park of Margery Hall. It skirts to the north of the property recently acquired by the War Office, and when it has passed the War Office boundary-stone it is carried across the high-road from Reigate to London by a suspension bridge, which must surely be the only example in Europe of so modern an invention serving to protect the record of so remote a past." Hilaire Belloc 1911

**INVESTIGATIONS IN TO THE SITE OF THE DITCH AND BANK IN MARGERY WOOD,  
KINGSWOOD, SURREY (TQ 2428 5252 to TQ 2464 5242)**

**Historical and archaeological background**

The Heritage Lottery funded a community project, run by Nigel Randall, investigating the Napoleonic Fort on Colley Hill. Surrey Archaeological Society was asked to survey the bank and ditch feature in Margery Wood, for which there was no funding. Margery Wood is situated just north of Junction 8 of the M25 and to the west. It is an ancient woodland that has been recorded on maps for 1874 and in the SRO Kingswood Tithe map of 1844 (SHC 863/1/1). Within the wood there is a long ditch and bank feature, running west to east, approximately 400 metres long. The development of the M25 in 1982 split the wood. The National Trust, which owns the wood, were compensated with the grounds of Merrywood, to the west, a compulsory purchase.

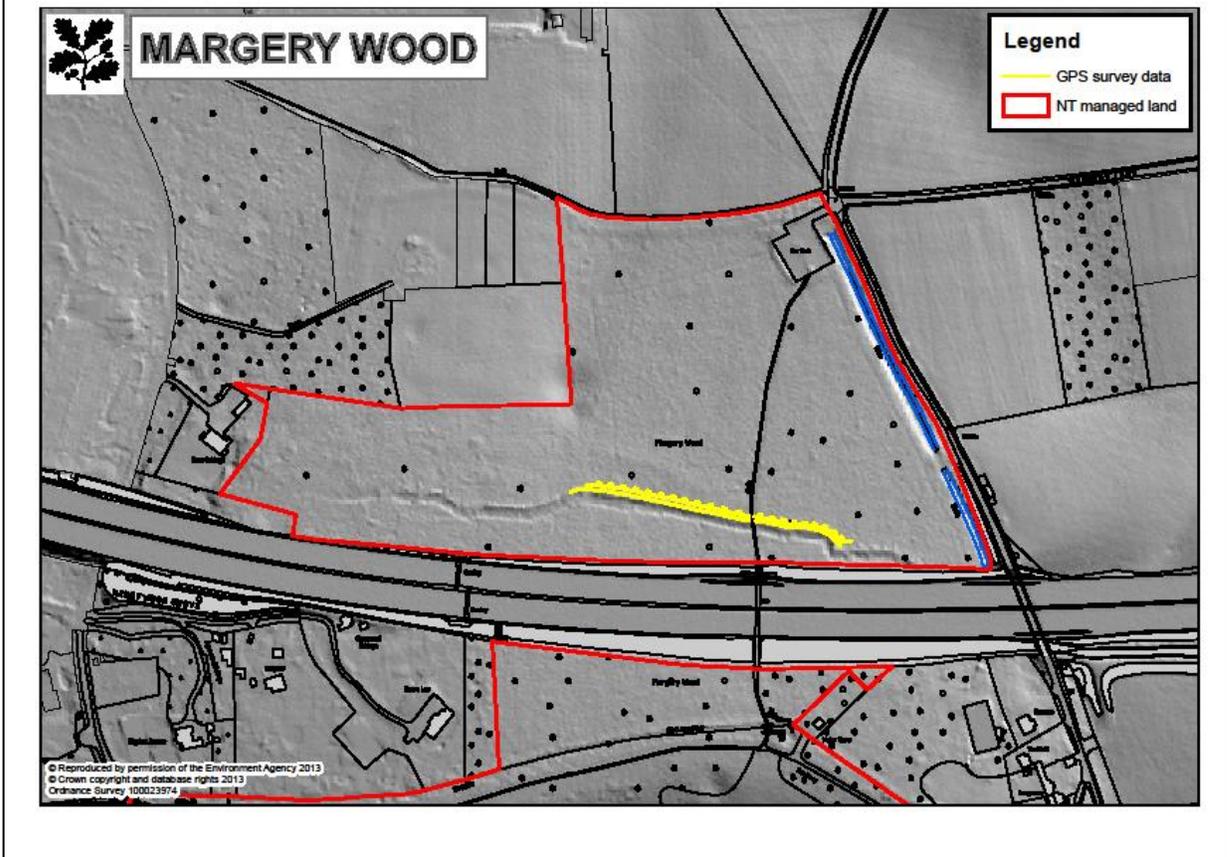
Speculation as to the age and use of the enhanced earthwork led us to survey its length, with the permission of the National Trust.

Subsequent to this we were given permission for a small excavation to determine the method of construction, and date.

No dating evidence being found permission was granted to metal detect in October 2014. This also proved fruitless.

These three archaeological methods, together with documentary research, have been used to determine as much as possible about this enigmatic feature.

This Lidar survey of the area, provided to us by the National Trust, shows the bank and ditch feature. It runs east west, almost parallel to the M25, and to the north. The further extent of the ditch can be seen together with two causeways to the west. To the east the ditch bends south and is overlaid by the motorway. there is no evidence of the feature to the south of the motorway.



## The Site Survey

The earthwork was surveyed using tape and compass (Bowden 1999, 62-67), in two sections. A surfaced path from the car park connects with a pedestrian bridge over the M25.

The previous community project had provided us with T.B.M. grid references, taken by Mercedes Planas of Souterrain Archaeological Services, which gave us a starting point.

The first survey was from the path to the east, where the ditch meets the motorway.

The second was from the path to the west where the ditch faded into the cultivated parkland of Merrywood.

The linear earthwork extends in total for approximately 400 metres, east to west and runs parallel to the M25, on the northern side. Consisting of a wide shallow ditch with a bank to the northern side which is enhanced with abutments about 2 metres square, placed mainly to the north, outer side of the bank every 5 metres for all except the western portion. The results of the survey are shown in figure 10 and the letters below refer to that figure.

Starting at a point on the path which intersects the feature, and provides access to Colley Hill (A), we plotted the eastern section. This travelled straight for 60m with six abutments before turning south where a bigger bay had been constructed 10m wide (B). A causeway placed immediately east of this turn (C) is probably not contemporary with the earthwork and has been formed by using material from the breach in the bank to infill the ditch. On top of the bank terminal is a small pit (D); it is not possible to say whether or not this is contemporary with construction of the earthwork complex. Turning again to the east the bank merged into the cut made for the M 25 whilst possibly again turning southwards (E). A further six abutments had been constructed to the north of this portion of the bank; two apparent abutments on the south side of the bank may have been intended as part of the military construction, or perhaps simply represent areas left because of the large oaks on them which would have required felling.

Through the centre of the ditch there were a number of moss covered mounds (F) which, when investigated, turned out to be the remains of felled trees, presumably felled at the time of construction.

Attempts were made to investigate the southern side of the motorway to see if the feature had continued. Access was gained to private land, with the help of the National Trust ranger Marc Russell, but no further traces of the feature could be found due to extreme disturbance.

Again using the path as our starting point we surveyed the western side. Two slight scarps between the earthwork and the fence bounding the M25 (G) may represent field boundaries of unknown date.

The military earthwork was similar to the eastern side, with abutments at regular intervals. After 150 metres the ditch and bank became less distinct. Causeways crossing the ditch were revealed at 130, 210, 260, 280 and 310m west of the path. These presumably represent access routes across the bank and ditch complex but their dating is unclear. The abutments became less frequent and ceased as the ditch narrowed at 110 metres east of the path (H). Further west it dwindled into shallow feature as it entered what had been the formal garden of Merrywood. Here we discovered the base of a block built structure which had probably been a greenhouse (I).

### **Excavation**

The decision was made to open the castellation immediately to the east of the north south path. After inspection many of the others suffered ingress by rabbits and were heavily burrowed. We also wanted a clear line north/ south across the feature, which was difficult due to tree growth. The selected area was also near to one of the TBM's we were lucky to be provided with by Souterrain Services

A trench was opened in a north south direction immediately to the east of the path. At 1 metre wide it encompassed the natural wood, the northerly abutment, the bank, the ditch and the south bank for 13 metres. The east-facing section is shown as figure 11.

The top layer (100) was found to be 5cms deep consisting of leaf litter and other humic material. Below this was a thin layer of humic soil (101) which, across the ditch, directly overlay yellowish / orange clay (104) – since the site is on chalk (Lewes Nodular, Seaford and Newhaven Formations) bearing a superficial deposit of Clay-with-Flints with clay was considered to represent undisturbed ‘natural’. It was noted that the ditch fill was very shallow, across the whole width, suggesting it had been dug or cleared relatively recently.

The castellation was shown to have been disturbed and two tree stumps and an animal burrow can be seen in section (figure 11). The bulk of the feature comprised greyish clay (106) probably derived from construction of the ditch – the darker colour suggests that a deeper topsoil had existed at the time and became incorporated with the clay. Over this was a layer of cleaner orange clay (105) which closely resembled ‘natural’ clay as exposed in the ditch bottom and may well have come from the lower levels of the ditch during its construction.

To the south of the ditch a slight bank was only partially excavated. Beneath the leaf mould and topsoil lay a shallow lens of orange clay, again probably upthrow from the ditch construction.

### Detection

6 shotgun cartridge ends		
6 coins	First half of 20C	
1 sprocket		
3 bolt type fittings in close proximity	Possibly electrical	
1 dome headed tack		
4 items of packaging		
1 ring, 1 ring pull, 1 small rod		
2 pieces of engineered fittings	Metal strips on compound base	
Zip, zip pull		

With additional permission from the National Trust the eastern side of the ditch and bank was detected by Mairi Sargent. The area from the path up to and including the bank turn was covered. There was a surprisingly little number of finds, especially buttons, suggesting the site had been cleared illegally in the past. The table below describes the finds which offer little in terms of dating evidence or military identification.

At the turn to the east a large inspection hatch was disclosed which has not been opened to date. It is possible this was connected with an early water supply, pumped to Margery Hall from the foot of Reigate Hill.

Since our excavation the Wealden Caving Society have excavated a pump house at the base of the hill.

### **Conclusions**

The conclusion is that in its latest incarnation the bank and ditch is a military earthwork, there is very little dating evidence but the style suggests that it dates to a period pre WWI. The bays between the abutments would have provided shelter for infantrymen using either muskets, in use until the mid-19<sup>th</sup> century, or the rifles which replaced them, and protected them from cross fire. Defensive earthworks necessarily evolved to counter advances in offensive artillery. Introduction of the rifled barrel in the mid-19<sup>th</sup> century gave greater accuracy and replacement of gunpowder by cordite later in the century more penetrative power. In addition development of explosive shells, in use in Germany by 1902 and America by 1906 (Brown 1998, 151-163) encouraged the use of deep but narrow trenches to reduce the target area and damage by shrapnel. The same style of defence was used from the late 19<sup>th</sup> century until post WW1.

At the east of the feature the earthwork turns south and the distance between the abutments is wider. It is possible that this may have been a gun emplacement covering a line of fire due west and to the south of any riflemen based in the bays. The mounds in the ditch appear to be tree stumps which could have been felled to improve the line of fire.

It is always difficult to provide exact dating for military earthworks given the possibility that any veterans involved in training troops would have been more au fait with styles of trench from earlier conflicts. There are also problems in determining whether a given set of earthworks were constructed for 'real' strategic or training purposes.

The North Downs and the greensand ridge have long been used as a stop line protecting London the rest of the country from an invasion via short Channel crossing, but practice earthworks also abound. The London Defence Scheme of the 1890s envisaged as a series of permanent positions, the London Mobilisation Centres, which could be joined by trenches in the event of an emergency arising, was built to counter a perceived fear of French invasion. This line ran from Guildford to North Weald in Essex, and Reigate Fort (built 1898), some 1.2km to the south-east, was one of the Mobilisation Centres. Reigate Fort was deemed obsolete by 1906 but the line was re-used in World War I with the western portion coming to an end at Buckland rather than Guildford. If it is part of a national strategy the trench system surveyed here probably dates to one of these two uses of the line. However, the morphology is very similar to a trench system being surveyed in Old Park Woods, Caterham which, since the main portion runs north / south, is unlikely to form part of a defensive line for London (English *et al* 2021). Tactically, the trench system in Margery Wood is well positioned. This whole piece of military engineering would have provided a killing field for any enemy cresting the North Downs from the south. Troops hidden behind the bank would have been invisible until the last moment.

The excavation showed that the ditch and bank were contemporary, or the abutments added soon after the bank was formed.

The ditch is wide and shallow, with very little ditch fill, and probably dug to facilitate making the bank. Possibly widened when the abutments were added. The very thin layer of dark soil and decaying stump under the excavated castellation leads us to believe it was added shortly after the ditch and bank were formed, by cutting into the ditch on the south side.

We have found little evidence to suggest this was a track or hollow way, prior to its construction. The perceived difference between the eastern and western side of the earthwork leads us to conclude that the eastern side is definitely of a military nature. The western side however has few castellations and a meandering nature. It may be an unfinished military work but seems more likely that it originated as a bank and ditch feature of unknown date. Investigation in private grounds on the south side of the M25 opposite the eastern end of the military earthwork failed to establish how far it may have gone.

### **Acknowledgements**

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Many thanks to the surveyor Ken Waters, Judie English, Rose Hooker, Keith Winsler, John Jennings, and to Mairi Sargent for her metal detecting.

Thanks are also due to Andy Robertson who took time to visit the site, helping us with explanations of WW1 trenching.

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### **Distribution**

Robert Maxwell (National Trust), Marc Russell, (National Trust ranger), Nigel Randall, (SCAU), Surrey Archaeological Society, Andy Robertshaw and participants on request.



**Figure 10 View of ditch to the east**



**Figure 11 View of ditch to the west**



**Figure 12 Abutment with scale**



**Figure 13 Easterly bay, assumed machine gun post**



**Figure 14 Recording measurements on a chilly morning**



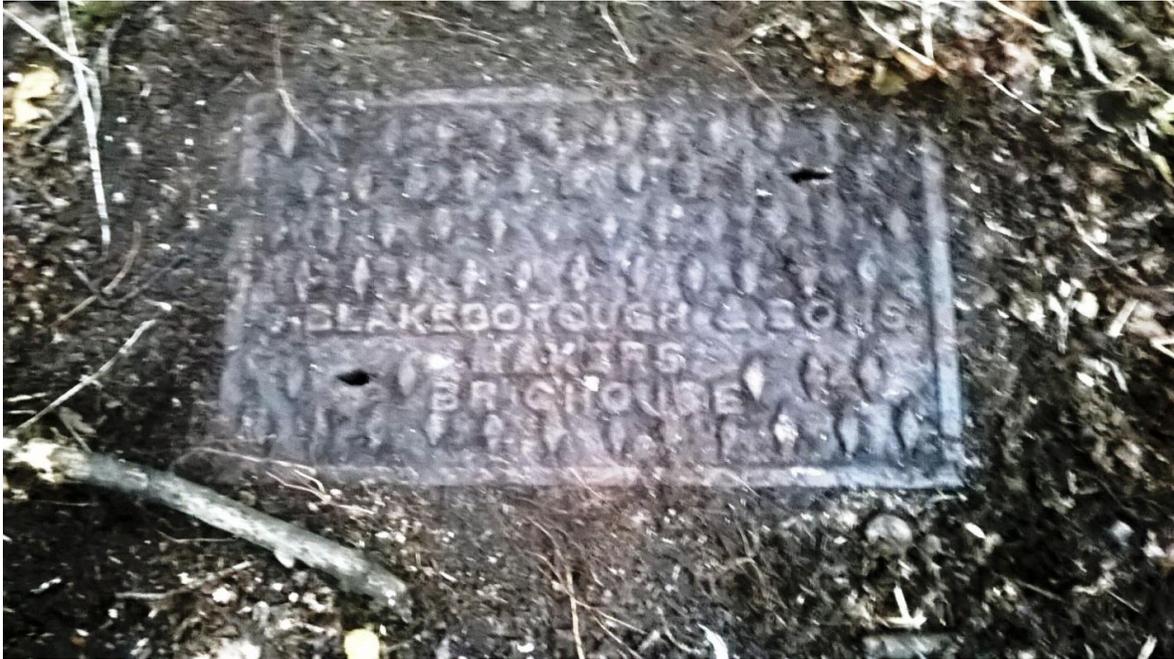
**Figure 15 Conjunction of bank and abutment**



**Figure 16** Base of abutment showing decayed tree and thin veil of dark deposit



**Figure 17** Opening the trench



**Figure 18 Services Manhole manufactured by Blakeborough and Sons, Brighouse, West Yorkshire**

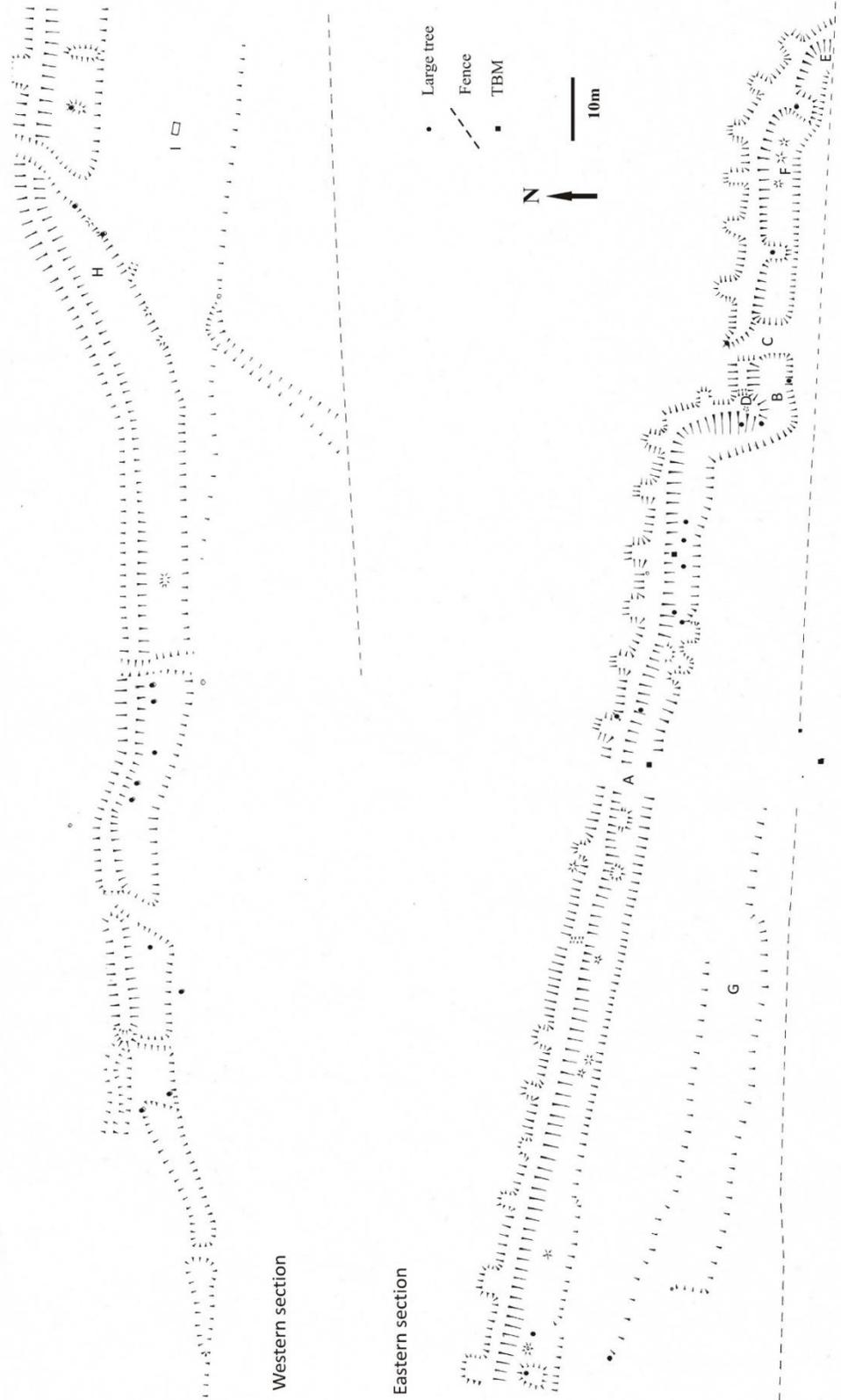


Figure 10 Analytical survey of earthworks in Margery Wood, Kingswood



Figure 11 Excavation of ditch and castellation at Margery Wood, Kingswood - east-facing section