

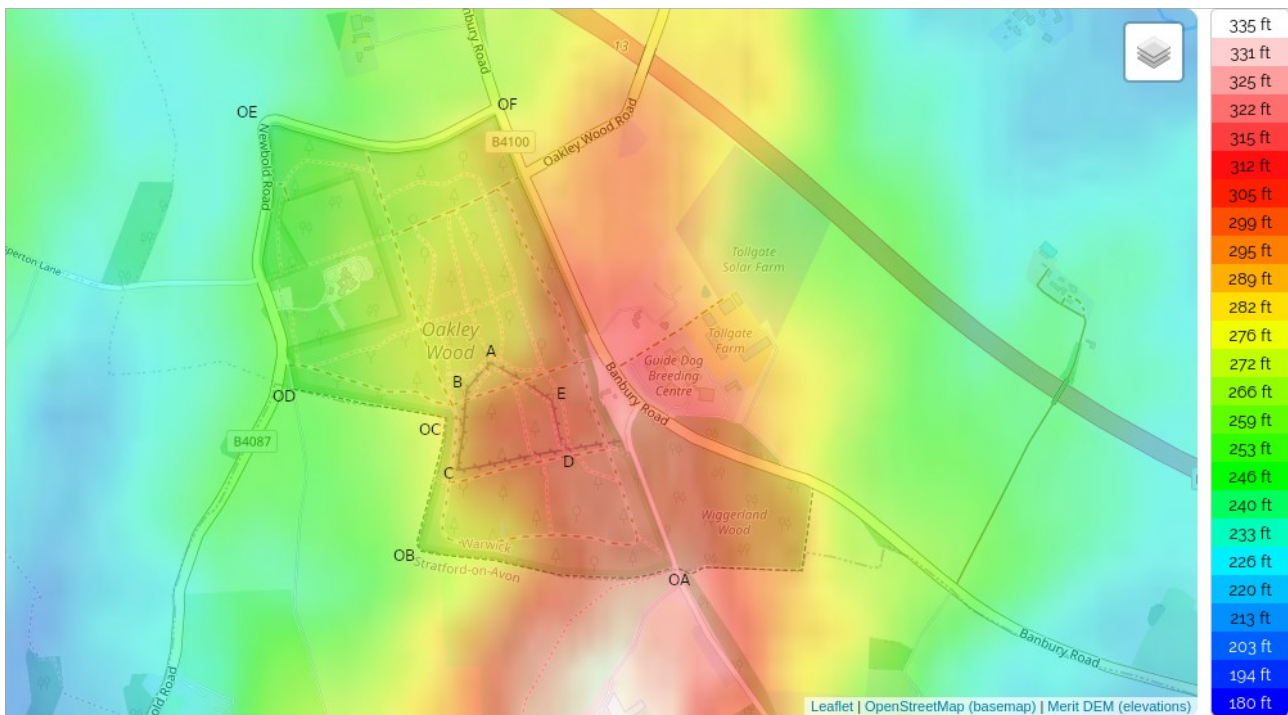
Survey of Oakley Wood Camp

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Terrain



The elevation map above (<https://en-gb.topographic-map.com/maps/sihq/West-Midlands/>) shows that the camp is on raised ground extending from a N-S ridge, and overlooking the valley to the W.

The elevations (in ft.) from this interactive map of the camp reference apex points are: A 286, B 283, C 285, D 309, E 306. Intermediate points within the camp show it to be mostly level at just above 300ft, sloping downward towards the N, W and SW.

The ground level inside and outside of the camp appears to be the same; that is, the level within the camp has not been raised or lowered.

The elevations for the outer earthworks reference points are: OA 318, OB 261, OC 280, OD 248, OE 238, OF 275. The ground slopes generally towards SW and NW. On an old map there is a pond shown at OE.

Survey overview

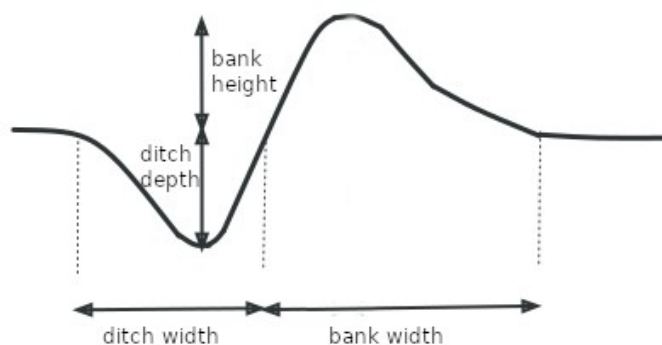
The ditch surrounding the inner earthworks (the “camp”) is generally c. 1 – 1.5m deep and the bank c. 1 – 1.5m high, with an average height from ditch bottom to bank top of c. 2 – 2.5m. The overall width of ditch plus bank is typically c. 12m. The northern sections are the best defined and most imposing. The southern and eastern sections are the least well preserved and in places non-existent. No evidence of any internal quarry ditch was found. The main E-W path that passes through the northern part is the only obvious entrance(s) into the camp. Other possible entrances have been noted – some of these correspond to vanished paths that are shown on an 1875 map of the wood (Victoria County History, vol 1, Warwickshire, Doubleday H A & Page W (eds) 1904, p396).

The outer earthworks closely follow the boundary of the wood to the west and north. On the east side they run 20-40m inside the boundary of the B4100 as far as the Moreton Morrell Road where they then run closer to the road to end at the SE corner. On the south side of the wood there is minimal evidence of earthworks. Those in the northern half of the wood, that is, north of the crematorium entrance on the west, and north of the properties at the B4100/ Moreton Morrell Road junction on the east, are comparable in size to those of the camp itself. South of these points the earthworks are lesser. In the earthworks on both sides of the NW corner there is an inner ditch.

There are two obvious links between the inner and outer earthworks, to the west and the east, but indications in the LiDAR imagery allowed other previously unsuspected earthworks to be investigated that extend from all but one of the apexes of the camp: one from the north apex extends to the crematorium grounds, one from the NE apex runs SE and across the B4100, and a third runs from the SW apex to the SW corner of the wood. At least two other ditches were detected connected to the outer earthworks only.

Measurements

To avoid any uncertainty, these are the dimensions that the measurements referred to:



Measurements are given in tables. If included in the text, these abbreviations are used: bh (bank height), bw (bank width), dd (ditch depth), dw (ditch width).

LiDAR image



The LiDAR image shows the camp and other earthwork features in Oakley Wood. A zoomable version of this image is available at <https://houseprices.io/lab/lidar/map?ref=SP3071259287>.

The LiDAR image is not dated, but using historic knowledge of paths in the wood and features in nearby Leamington Spa this map is estimated to be about 15-20 years old i.e. around the turn of the millennium.

The diagonal line across the bottom right corner of the image appears to be an artefact and doesn't correspond to any real feature on the ground. It looks like the image has been created from two sets of data captured at different times, the upper part in the winter and the lower during the summer when there was more tree foliage.

Inner earthworks (the “camp”)

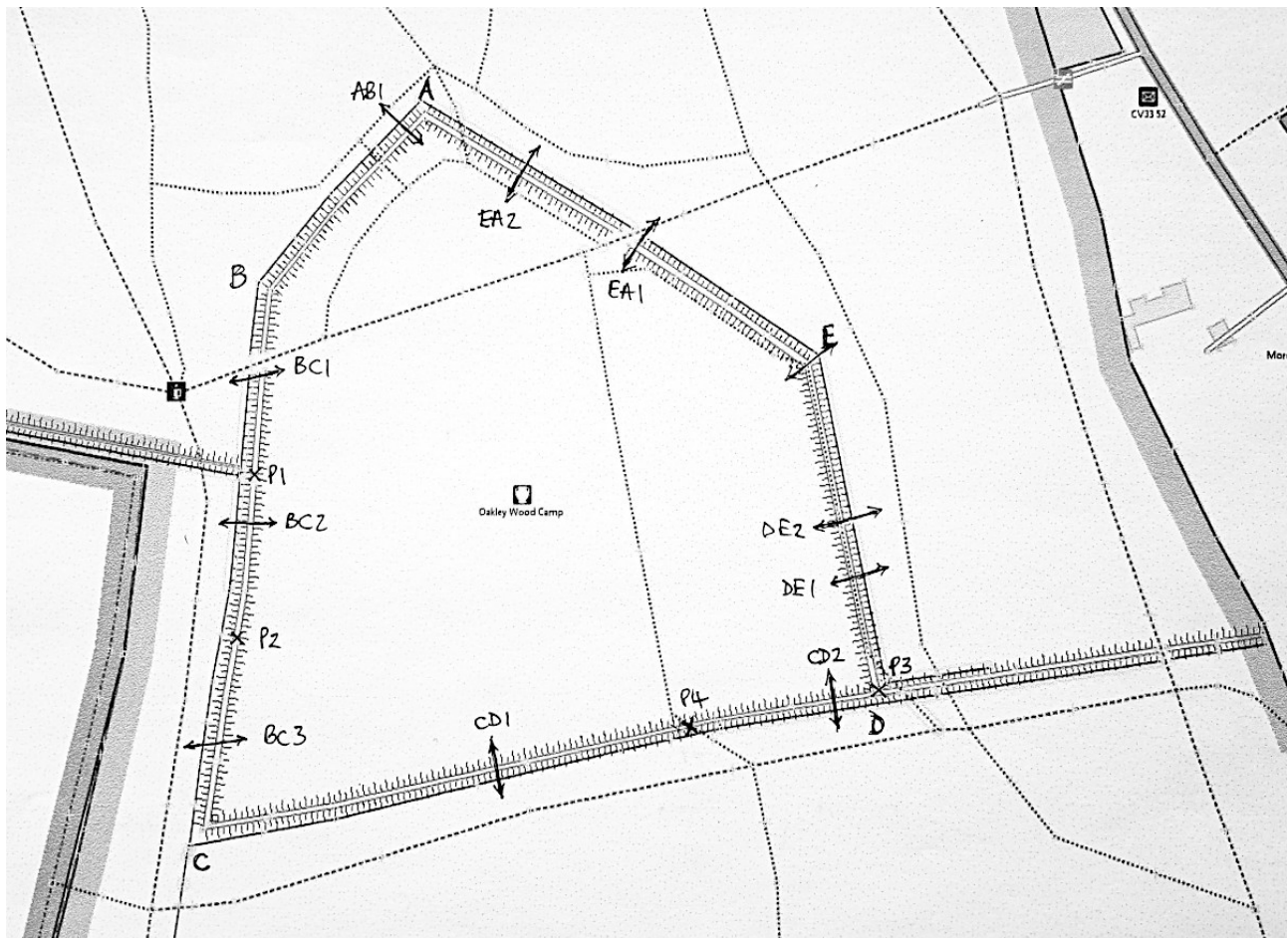


Figure 1: Inner earthworks - reference

This diagram shows the camp apex markers, measurement locations and other points identified in the survey and referenced in this document.

The area of the camp bounded by the embankments is 3.8 ha. (JOSM Measurement plug-in)

Detailed observations

Section A-B

The best preserved and most easily visible of the camp. It runs c. 85m with a gentle downward slope from A to B, so the ditch around point B is flooded during wet weather and often forms a pond. The bank at A begins with a substantial mound c. 1m higher than the rest (photo C1).

The ditch and bank are mostly clear of undergrowth (photo C2). A path runs alongside the outside of the ditch for the whole of its length so it is easy to inspect this section.

Section B-C

The earthworks run roughly S for c. 200m in this section and are mostly overgrown with bramble, bracken and small to medium sized trees, especially towards the southern end. At apex B the

counterscarp bank is breached by a shallow slope which is used by animals for access to the water that collects in the ditch. The scarp bank is unbroken, so this is not a likely entrance into the camp.

A major path runs ENE-WSW through the earthworks c. 30m S of apex B. Where the path passes through the earthworks the bank is levelled and the ditch filled in (there is a brick culvert, suggesting that this is not likely to be an original entrance).

At c. 30m S of this path there is a junction (point P1) with another ditch & bank that run W along the boundary of the wood and form part of the outer earthworks (see Figure 2).

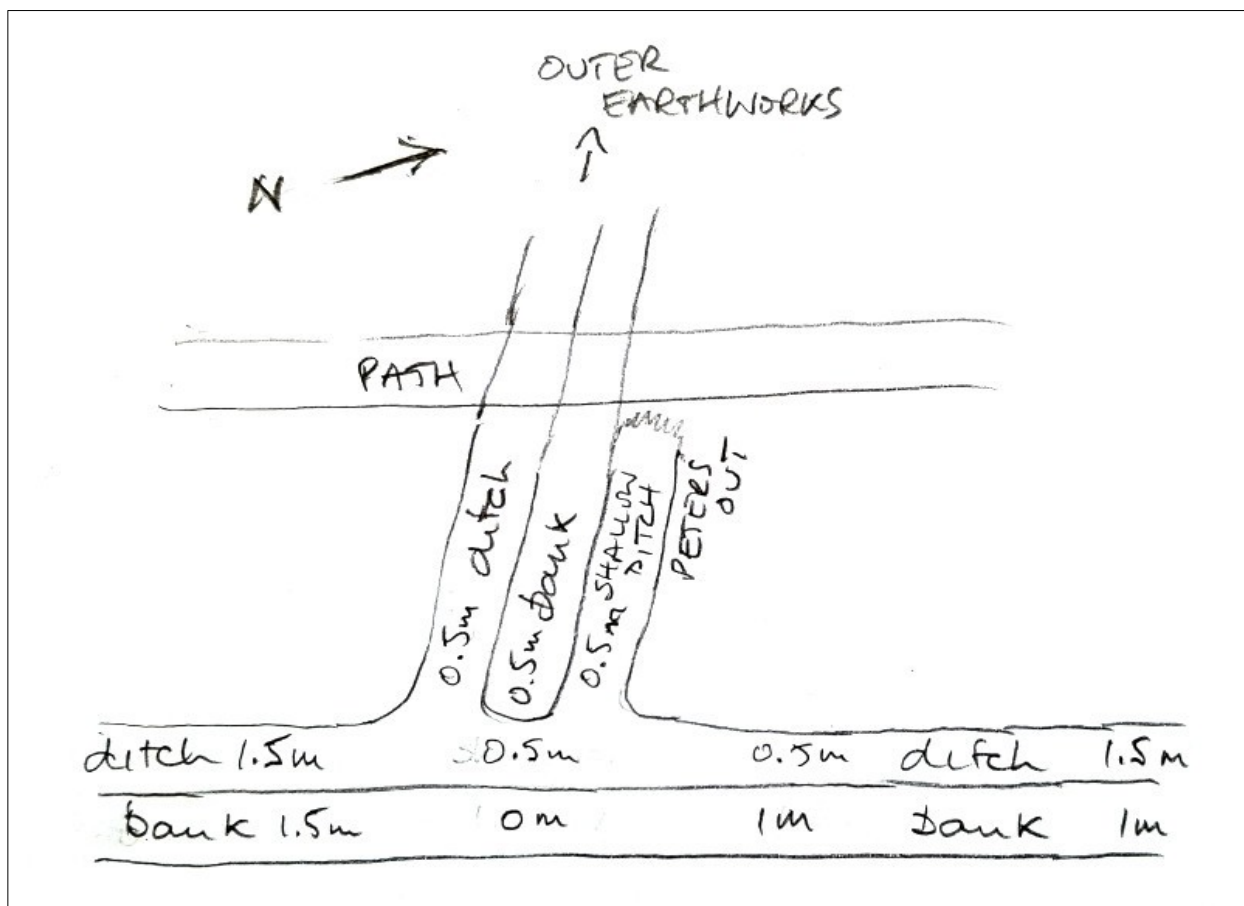


Figure 2: Junction at P1

Further S on this section there is a path along part of the bank. Although not as well preserved, the earthworks in this section are similar in dimensions to the section A-B. At point P2 there is a shallow break in the bank that could be an opening (photo C3) with the suggestion of a mound to the N (photo C4) although the depth of the ditch in front is unchanged. From this point the ground slopes gently down to the apex at C and is the reason that the ditch is often flooded there.

At apex C there is a corner mound, although smaller than those at A and D. A shallow (c. 0.5m) ditch continues the line of the B-C ditch for c. 40m until it appears to peter out. It is crossed by the E-W path that parallels the C-D section. There is no bank.

Section C-D

This section is heavily overgrown and difficult to inspect. It is the longest section, and runs c. 250m roughly ENE-WSW noticeably uphill for the first c. 150m and then levels out. Again, the profile of the earthworks that are visible appears similar to that in the previous sections but not as well preserved and the bank is more irregular in height.

There is a path crossing at P4 which has worn away the bank and ditch walls (photo C5).

The section ends at D with a significant mound on the bank (reminiscent of the mound at A) where it meets the bank from the north (photo C6). This junction at apex D (point P3) is shown in Figure 3, and could suggest a possible narrow entrance from the ditch where the two banks do not quite meet. The ditch from the N takes a right angle left (eastwards) and runs inside the lowered embankment as an inner ditch for c. 30m - this is an estimate as it is completely overgrown and impossible to see, but does not extend as far as the N-S path that runs near the easternmost boundary of the wood.

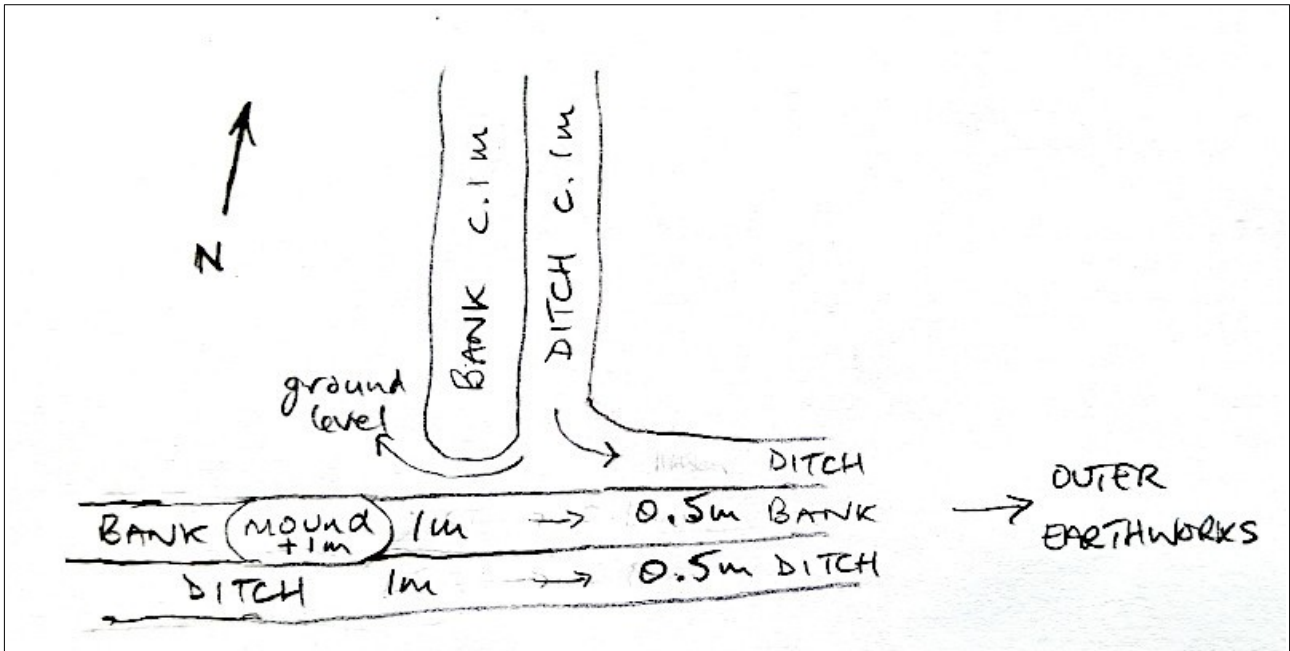


Figure 3: Junction at P3

The ditch and bank that continue ENE towards the boundary of the wood are less deep and high than those surrounding the camp. They terminate at a private garden where they join the outer earthworks that surround the wood.

Section D-E

This section runs for c. 115m roughly N. It has a dense conifer and bramble cover, and is not easily visible in the LiDAR image. The bank height is irregular – the path along its top may have contributed to this. The inside of the bank falls away gradually into the camp making its width difficult to determine, and the gradual slope of the ground towards the W adds to this uncertainty. There are ancient tree stumps along this bank, perhaps trees that were cut down when the conifers were planted after WW2.

At point DE2 the ditch appears filled in for a distance of c. 6m, although it could be caused by accumulated debris rather than deliberately filled in with earth. The bank also dips here so could suggest an entrance, although it could just be a coincidental irregularity of the bank.

Photo C7 shows how the earthworks viewed S from apex E have become overgrown and barely visible, compared with C8 which shows the same view in 2008 when they were virtually devoid of growth.

At apex E there is some evidence of a low bank c. 0.75m high that continues SE on the same line as the E-A embankment for a distance of at least c. 25m. There is no apparent ditch at this point, although some traces appear further on.

On further investigation, and with help from the LiDAR image, it's possible to follow traces of this bank and ditch towards the edge of the wood and beyond. It reappears cutting through the corner of the adjacent Wiggerland Wood (bh c. 0.5m bw c. 5m, dd c. 0.75m dw c. 3m) and is still visible for a short distance on the other side of the B4100.

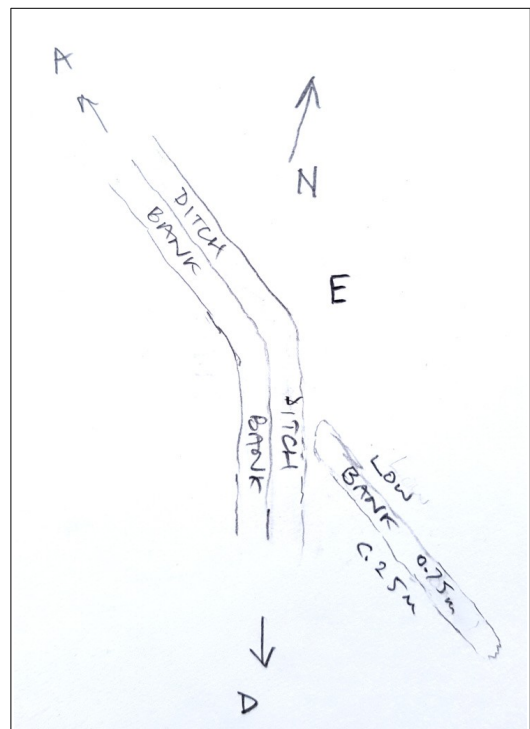
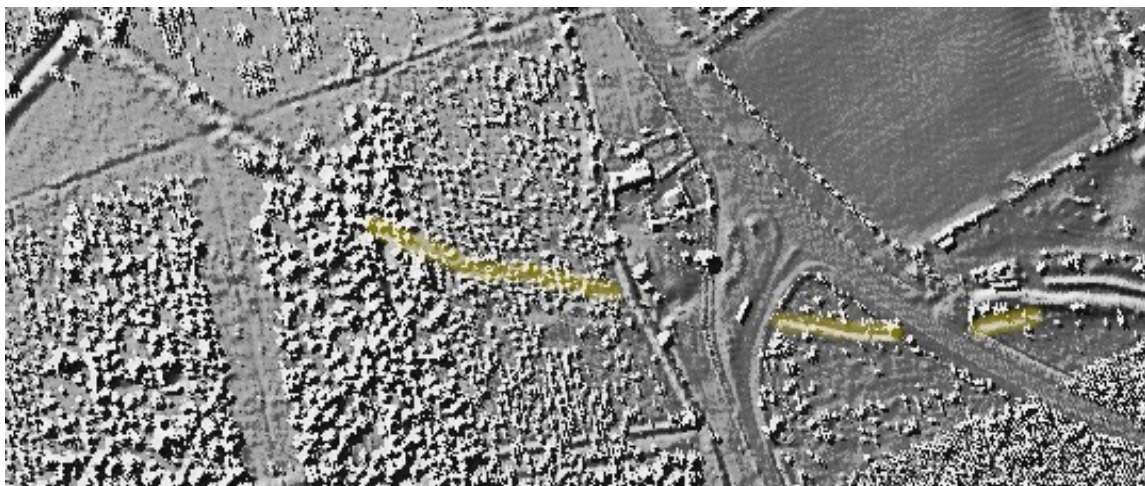


Figure 4: Bank leading from apex E



Section E-A

This section runs for c. 170m NW and has the most impressive dimensions of the camp. The E-W path that cuts through the B-C section also crosses this section, with both embankment and ditch similarly levelled. The ditch is wide along the whole length, and deepest where the path crosses it, with a overall bank height on the S side (ditch bottom to bank top) of at least 3m. Photo C9 shows the ditch looking S toward apex A

A well-used path passes through the earthworks at apex A, which has worn down the bank and the ditch walls (photos C10, C11).

Measurements

Location	Ditch depth	Ditch width	Bank height	Bank width	Comments
AB1	1.5m	5.5m	1.5m	7m	
BC1	c. 2m	not measured	c. 1.5m	not measured	difficult - overgrown
BC2	c. 1.5m	4.5m	c. 1m	5.5m	
BC3	c. 1.5m	c. 5m	c. 1.5m	c. 7m	
CD1	1m	5.5m	1m	-	no definite boundary
CD2	1m	5.5m	1m	4m	
DE1	1m	5.5m	0.5m	c. 7m	
DE2	0m	-	0m	-	filled in?
E	1m	7m	1m	-	no definite boundary
EA1	2m	7m	1m	-	no definite boundary
EA2	1m	7m	1m	-	no definite boundary

Some measurements were assisted with a measuring device (thus not marked c.), but with the difficulty of determining where the ditch starts and where the bank ends even these cannot be considered particularly accurate.

Possible entrances

There are no obvious entrances to the earthworks other than the main E-W path that passes through the northern sections at BC1 and EA1. These are *possible* other openings:

1. At apex A: path to the right (E) of the mound
2. At P1: where outer earthworks join ditch becomes shallow and bank levelled – this corresponds precisely to a path in the 1875 map of the wood mentioned previously.
3. At P2: opening with mound on left (N), ditch unaffected
4. At P3: where outer earthworks join
5. At P4: path crosses section of low bank and shallow ditch
6. At DE2: dip in bank and ditch at least partially filled in - – this also corresponds well to a path in the 1875 map of the wood.

Photographs

These photographs are referenced. The camera direction of each photo is given in brackets.

- C1: the mound at A with the bank on the left leading toward B (NW)
- C2: ditch A-B from apex A (SW)
- C3: break in bank at P2 (E)
- C4: possible mound to the left of P2 (NE)
- C5: path at P4 (N)
- C6: mound at P3 (N)
- C7: at apex E looking along the ditch toward D (S)
- C8: roughly the same view as previous but taken in 2008, and shows how visible the earthworks were before they became overgrown (S)
- C9: ditch from EA1 towards A. The tree in the centre is growing from the middle of the ditch (NW)
- C10: the end of the E-A section with the mound at A and the path to its right (N)
- C11: at apex A looking along the ditch toward E (SE)

Outer earthworks

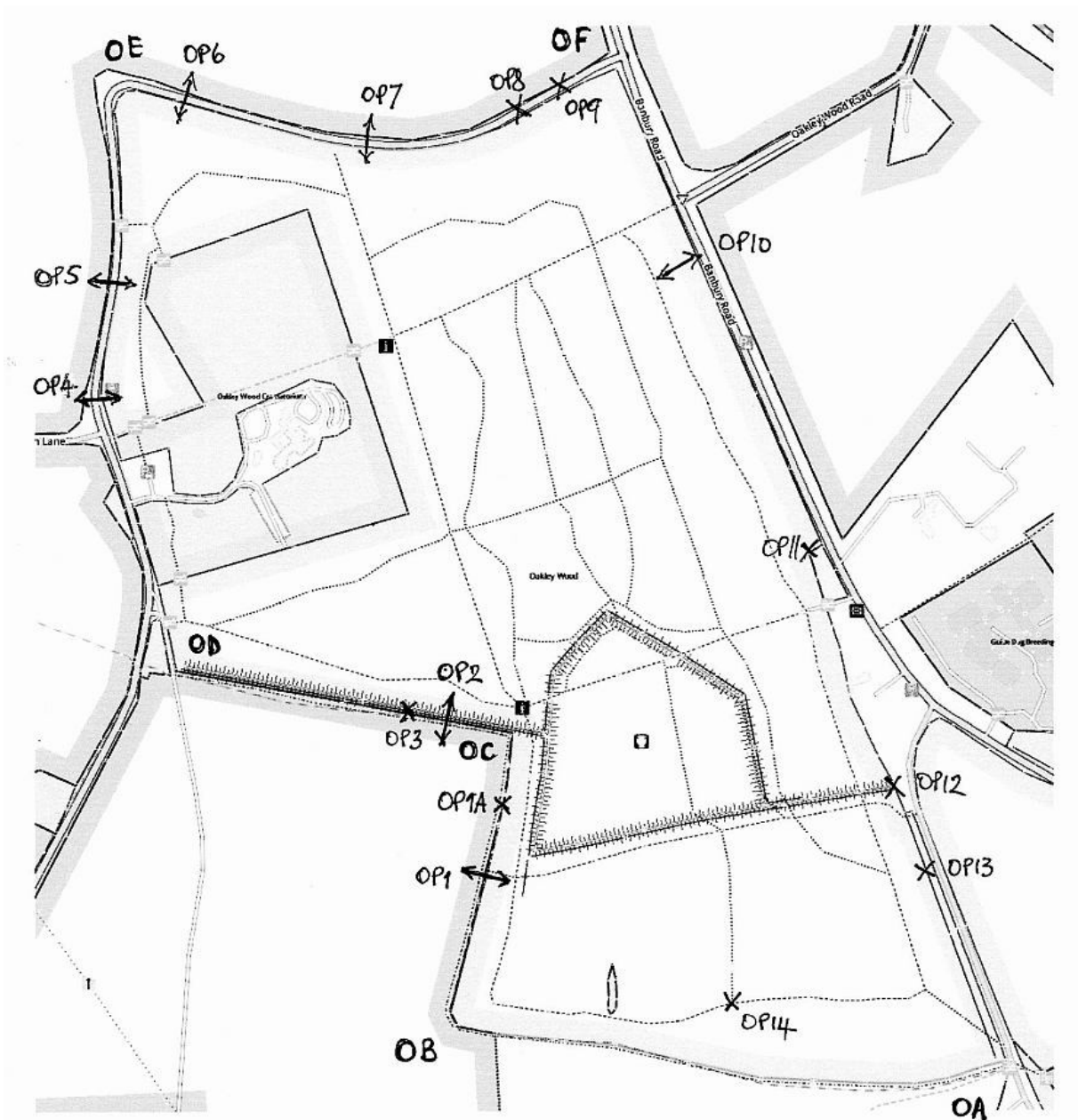


Figure 5: Outer earthworks - reference

Oakley Wood is approximately rectangular with a roughly square-shaped field cut out of the south-west corner. Earthworks that are clearly visible on the LiDAR image run along the boundary of the wood to the west and north, and c. 20-40m inside the eastern boundary formed by the B4100 Banbury Road to the Moreton Morrell Road junction. However, much of the southernmost boundary has none.

The earthworks take the same form as those of the camp: an outer ditch and inner embankment, with varying dimensions but generally similar to those of the camp. There are not only the obvious connections to the camp (points P1 & P3 described earlier) but also less obvious ones.

Detailed observations

Section OA-OB

A wide shallow ditch and low bank run W from point OA which gradually diminish to nothing after c. 200m. From that point there is little evidence of earthworks along the boundary until point OB.

Section OB-OC

At OB a distinct bank c. 0.75m, ditch c.0.75m leads N from the corner where there is also a suggestion of a bank meeting obliquely from due E (this is probably the same ditch that continues S from the inner earthworks apex C, see "Other earthworks"). Continuing N the earthworks soon lessen: dd c. 0.5m dw c. 2m bh c. 0.5m bw c. 2m. At path OP1 the ditch is filled in and bank flattened. From here to the corner at OC the ditch is fairly constant but unimpressive. The bank is variable, sometimes diminishing to almost nothing.

At OP1A (photo T1) there is a substantial tree growing on the bank. There are others along the length of the bank with a similar look of having once been laid or coppiced.

At corner OC ditch and bank are obliterated by path crossing into wood.

Section OC-OD

Section begins with more impressive earthworks than the previous section: dd c. 1m dw c. 3m bh c. 1.5m bw c. 7m. At OP2 diminishing dd c. 0.5m dw c. 3m bh c. 1m bw c. 7m. At OP3 (photo T2) large tree growing from bank. A number of other substantial oak trees grow along the bank, which appear to have at one time been part of a laid hedge. There is an inner ditch along this section, of similar dimensions to the outer one. It is largely overgrown, and would appear to be the continuation of the shallow inner ditch shown to "peter out" in Figure 2.

At OC, a ditch is apparent on the other side of the farm road, continuing in the same direction as OC-OD, as far as the B4087 Newbold Road.

Section OD-OE

Section begins: bh c. 1.5m. After gate bh reduces to c. 1m and then c. 0.5m. Nearing crematorium entrance ditch disappears before bank does. Bank stops abruptly at the crematorium entrance and starts again right after path opposite the Barford Road (presumably removed when the crematorium was constructed), but only a suggestion of a ditch until OP4: dd 0.5m dw 2m bh 1.5m bw 6m. From here to corner OE the ditch and bank are substantial. From OP5 a big oak tree (photo T4) and large ancient tree stump where earthworks swing away from road and then back again. Here: dd 1m dw 5m, bh 1m bw 6m. There is also the beginnings of an internal ditch.

At gate entrance there is a definite inner ditch d 1.5m w 4m. Entrance from gate is level across earthworks.

At corner OE impressive earthworks - outer ditch d 1.5m w 5m, bh 1m w 7m, inner ditch as before.

Section OE-OF

At OP6 outer ditch ends as bank nears road (presumably a victim of the road construction). Inner ditch continues, dd 0.5m dw 5m bh 0.75m bw 4m. At c. 150m further E a small entrance crosses levelled bank and ditch to meet main N-S path.

Approx. 40m further E at OP7 the inner ditch is joined by a ditch from the S (see “Other earthworks”) . The section continues with the bank constant at bh c. 1m bw c.7m and with the inner ditch of variable but mostly unimpressive size. At OP8 the inner ditch disappears and at OP9 the outer ditch reappears and continues to the corner OF.

Section OF-OA

The bank and outer ditch run S c. 30-40m inside the boundary of the wood and are substantial: dd c. 1m dw c. 4m bh c. 1m bw c. 8m. Approx. 100m S along this section the bank has been breached by heavy machinery involved in recent logging activity.

At Oakley Wood Road junction entrance, the main path cuts through the earthworks. At OP10 bh increases to c. 1.5m (photo O1). Distance from boundary gradually reduces to c. 20m; the dimensions of the earthworks remain fairly constant. At OP11 bank becomes boundary of private land, the ditch would have fallen within the private land and no longer exists.

At OP12 the extension from the inner earthworks (apex D) joins where the boundary bank is the edge of a private garden. There is a small mound here (photo O2). Where the private land ends the bank continues and ditch reappears. It runs c. 10m inside the road boundary eventually to OA.

At OP13 another ditch beginning at the road crosses the earthworks running NE-SW into the wood (see “Other earthworks”). A small pond is formed at the junction.

Measurements

Location	Ditch depth	Ditch width	Bank height	Bank width	Comments
OB	0.75m	-	0.75m	-	
OP1	0.5m	3m	0.5m	2m	
OC	1m	3m	1.5m	7m	
OP2	0.5m	3m	1m	7m	
OD	1.5m	-	-	-	
OP4	0.5m	2m	1.5m	6m	
OP5	1m	5m	1m	6m	
Road gate	1m	5m	1m	5m	Inner ditch d 1.5m w 4m
OE	1.5m	5m	1m	7m	Inner ditch d 1.5m w 4m
OP6	n/a	n/a	0.75m	4m	Inner ditch d 0.5m w 5m
OP7	n/a	n/a	1m	7m	Inner ditch disappearing N
OF	1m	4m	1m	8m	
OP10	1m	4m	1.5m	8m	
OP13	0.75m	3m	1m	5m	

All figures approximate. “-” indicates not measured/estimated.

Photographs

These photographs are referenced. The camera direction of each photo is given in brackets.

- O1: bank looking toward OA (SSE)
- O2: mound at junction OP12 (N)

Other earthworks

Other less obvious ditches and banks exist that are connected to the inner and outer earthworks, and their identification has been greatly helped by the LiDAR imagery.

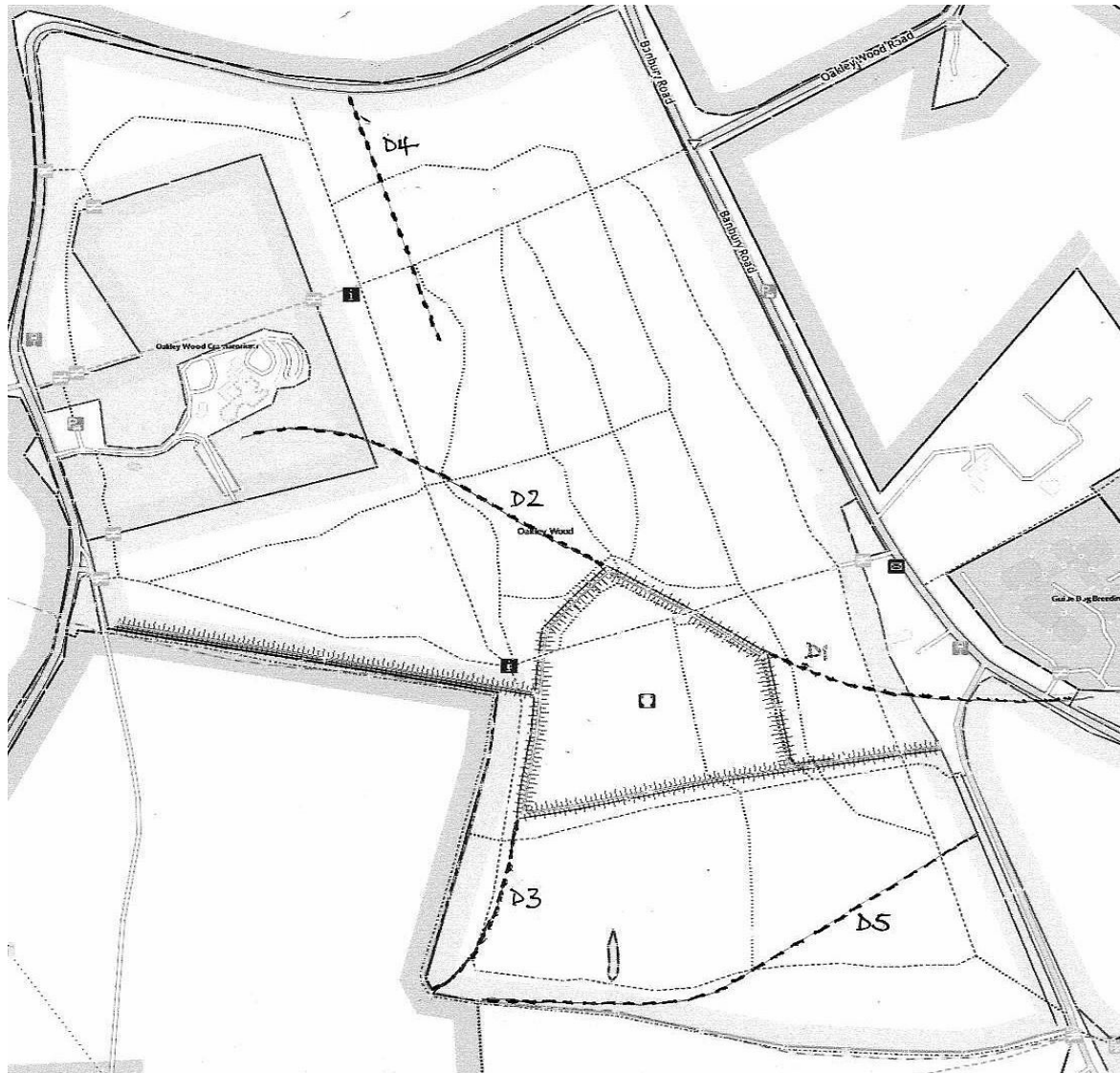


Figure 6: Other connected earthworks

Connected to the inner earthworks

Apart from the obvious connections to the outer earthworks at P1 and P3, the following exist:

- As previously described, there are the remnants of a ditch and possible bank leading from the NE apex (point E) in a SE direction (ref D1).
- The LiDAR image shows a faint line running NW from the north apex (point A) and curving into the Crematorium grounds. This is a ditch, detectable outside the Crematorium fence, with little evidence of a bank. It crosses the main path (visible only as a slight depression), becomes fairly prominent c. 50m further on with a definite bank on the SW side and is intermittently visible for

- c. 50m more when any further traces from here to the north apex have been obliterated by the recent logging operations (ref D2).
- The LiDAR image suggests that the ditch already identified leading S from the SW apex (point C) actually continues to the southern boundary. Further investigation shows this to be true although the ditch is poorly defined and difficult to follow due to being overgrown. It crosses the N-S path obliquely and continues to the wood boundary (ref D3).

Connected to the outer earthworks

Previously undescribed are:

- A straight N-S ditch runs S from OP7 c. 0.5m deep becoming more shallow c. 0.3m deep, crosses the main E-W Crematorium-B4100 path at the lowest point (of the path, suggesting a drainage ditch) and continues straight for an undetermined distance (ref D4).
- A ditch c. 1m deep c. 2m wide runs from OP13 in a SW direction into the wood. Because of the undergrowth it is difficult to follow, but there are various places where a ditch is visible running in apparently the same direction. One such place is crossing the path at OP14 running in a SW direction, and visible intermittently until it reaches the S boundary. It seems likely that these are all parts of one continuous ditch and are shown as such in the diagram (ref D5).

Trees

There are a lot of old trees, mostly oak, on the outer earthworks growing from the top of the embankment, in particular along the sections OB-OC and OC-OD, which according to maps forms the boundary between the Warwick and Stratford-on-Avon districts (along with OA-OB). Many are spread wide at the base and have multiple trunks, suggesting they were once part of laid or coppiced boundary hedges. Estimating the age of these trees is difficult, given that they have multiple trunks and if once coppiced then are even older than the visible growth suggests, but if possible it may be useful in dating the earthworks, or for providing an “at least” age.

Some examples are (location, description & girth, photo):

- On OB-OC bank at OP1A, three trunks each c.160cm, T1
- On OC-OD bank at OP3, main trunk 320cm with smaller side trunk c.75cm, T2a & b
- On OC-OD bank near OD, v large oak 2m x 1m (the hat gives an impression of size), T3
- On OD-OE counterscarp bank at OP5, oak, T4
- On OF-OA bank near OF, large ash, T5

Given that this is an ancient boundary apparently intact with perhaps original trees it may be worth independent investigation.

Species count

Hooper's Rule is an empirical rule that estimates the age of a hedge by counting the number of woody plant species (tree or shrub) in a 30m section, which can give a rough age in centuries.

A species count was performed for the sections OB-OC and OC-OD on the assumption they were once hedges.

For the section OB-OC the species total was 10 (oak, hazel, hawthorn, elder, holly, birch, ash, briar, blackthorn, crab apple), with the average for a 30m length of 5. The large trees on this section are a mixture of oak and ash.

The species count for the length of the section OC-OD was 6 (oak, hazel, hawthorn, elder, holly, aspen) with the average for a 30m length of 4. All the sizeable trees on this section are oak, and there may be some significance that ash trees are absent, whereas there are a number on the adjacent section OB-OC.

These figures suggest that the ancient hedge along OB-OC is older than the one along OC-OD, even though the trees on the latter are generally noticeably larger.

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