



BERKSHIRE ARCHÆOLOGICAL SOCIETY

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Report of a geophysics survey at Hall Farm, Arborfield 2019

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Authors: **Andrew Hutt MCI(A) and Nigel Spencer**

Contact no: **0118 973 2882**

Summary:

Historical research has shown that the area around Aberleigh House and Hall Farm is probably the site of the medieval village of Arborfield. This is a report of a geophysics survey of four fields on Hall Farm. The survey revealed anomalies which may be evidence of the village.

Distribution:

Berkshire Archaeological Society Council

Alison McQuitty, Ann Griffin, Anne Harrison, Anne Helmore,
Andrew Hutt, Tim Lloyd, Catherine Petts, Gail Eaton,
Griselda Truscott Wickes, Julie Worsfold

Landowner: University of Reading

Farm manager: James Lamburn

Berkshire Archaeology: Fiona MacDonald

0. Document control

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0.2 Change control

This document is under the control of the authors.

0.3 Change history

Issue 01.02 was the first issue.

Issue 01.01 is the first draft.

0.4 Changes forecast

Changes will be made in response to comments by reviewers.

0.5 Acknowledgements

The survey team who collected the data for this project were Andrew Hutt, Nigel Spencer, Tim Lloyd and Anne Harrison. This report includes maps produced by Martin Labram using the BAS gazetteer and comments from all the above, thank you.

Hall Farm is owned by the University of Reading and the project gives thanks to James Lamburn the farm manager for allowing us to carry out the survey.

Thanks are due to Berkshire Archaeology for giving us access to the Historic Environment Records for Hall Farm.

1. This project

This is one of a series of projects arising from a collaboration between the Arborfield Local History Society (ALHS) and Nigel Spencer. The objective of these projects is to develop a better understanding of Arborfield House, Hall Farm and the Arborfield Mill.

This document records the results of a geophysics survey of four fields at Hall Farm in September and November 2019 at a time when the land was damp from precipitation.

2. Site location

Hall Farm lies on the banks of the River Loddon north west of the village of Arborfield at British National Grid Reference SU 750681

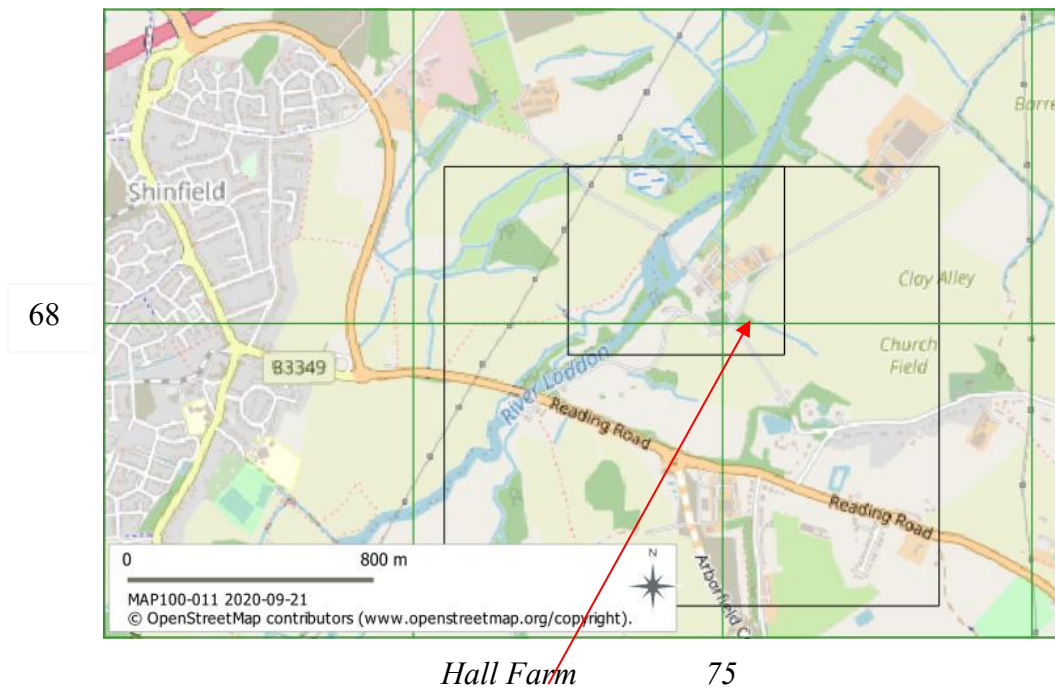


Figure 2.1: Location of the site (scale 1:25000)

The two rectangles position the maps shown in figures 4.1, 5.1 and 7.1

3. Geological and topographical background

The sedimentary bedrock geology is London Clay Formation - Clay, Silt and Sand. This is overlaid with Head - gravel, sand, silt and clay (British Geological Survey web site 2018).

4. Historical and archaeological background

The first names associated with this area are: 'Edburgefild' is recorded in c.1190, 'Erburgefild' is recorded in 1222, and 'Hereburgfeld' in 1230 (BA HER 01001.01.000 - MWK1308 taken from H R Joves' Registrum Sancti Omondi (1883-4)). The first mention of the name 'Arburfeld' appears in 1535 (Gelling 1973: 123).

The available historical information concerns Arborfield Manor and Arborfield Hall, Arborfield Mill and the derelict St Bartholomew's church.

4.1 Details from the Berkshire Archaeology Historic Environment record

The Berkshire Archaeology Historic Environment Record records a number of sites on Hall Farm where archaeological evidence has been found. This evidence includes crop marks found in aerial photographs produced by Gates (Gates 1973), artefacts dating from the Mesolithic, Neolithic and Bronze Ages found by the Loddon Valley field walking survey (Ford 1994-7) and the results of later work. The sites are shown in figure 4.1; the details are in table 4.1.

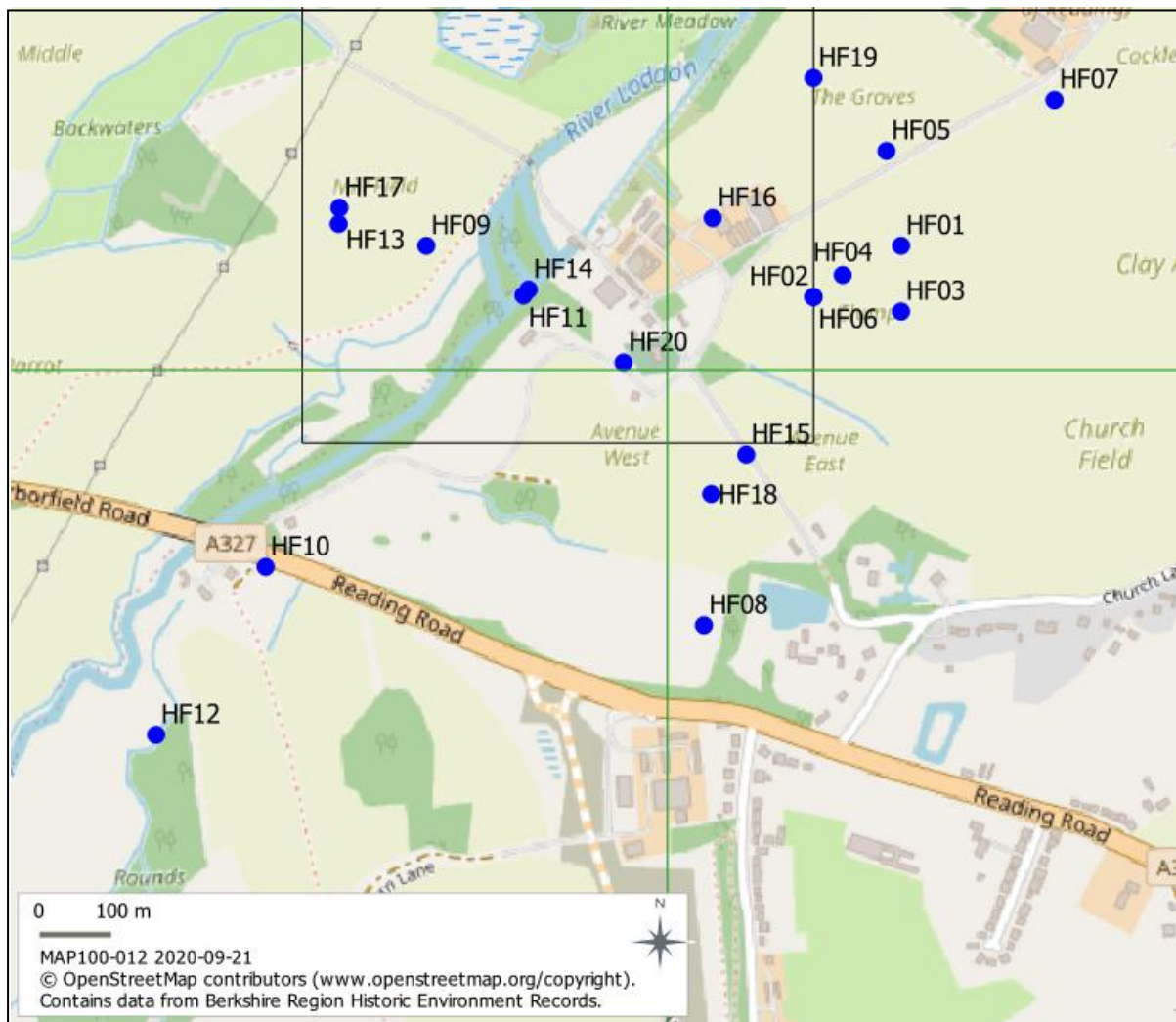


Figure 4.1 Sites recorded in the Berkshire Archaeology Historic Environment Record
The rectangle positions the maps shown in figures 5.1 and 7.1 (scale 1: 10000)

Map depiction code	Monument summary	Berkshire Archaeology HER identifier
HF01	Cropmarks showing enclosures, ditches and possibly huts	00749.01.000 - MWK1135
HF02	Cropmarks showing a field system which is not aligned to earlier/later systems and a scatter of pits	00749.01.100 - MWK1136; 00749.01.500 - MWK1140
HF03	Cropmarks showing track or drain with "L" shaped bend	00749.01.200 - MWK1137
HF04	Cropmarks showing trackway, field boundaries and possible huts	00749.01.300 - MWK1138
HF05	Cropmarks showing enclosures	00749.01.400 - MWK1139
HF06	Scatter of pits visible on Gates' aerial photographs.	00749.01.500 - MWK1140
HF07	Cropmarks showing enclosures	00749.05.000 - MWK1151
HF09	Bronze Age hut circle	01092.00.000 - MWK1847
HF11	Arborfield Mill	03972.00.000 - MWK5366
HF12	Mesolithic to Iron Age flints found by Loddon Valley survey	06083.00.000 - MWK6763
HF13	Mesolithic flints found by Loddon Valley Survey	06165.00.000 - MWK6811
HF14	Neolithic polished stone axe found at Parkside Cottage	00714.00.000 - MWK8571
HF15	Road from Arborfield to Shinfield shown on a 1756 estate map	WK15638 - MWK15638
HF16	A large pit or quarry or maybe old archaeological excavation found by TVAS in 2002	WK15665 - MWK15665
HF17	Cropmarks showing linear features, ditches and a possible trackway/road – may be a settlement	06584.00.000 - MWK15685
HF18	Cropmarks showing former road from Arborfield Hall to Arborfield	MRM18428
HF19	Cropmarks showing square enclosure and ditches	MRM18429
HF20	Cropmarks showing rectangular building	MRM18430
HF20	Shifted medieval village, round St Bartholomew's Church	01001.00.000 – MWK1307 01001.00.000 – MWK1308
HF20	St Bartholomew's Church	01001002.000 – MWK1309

Table 4.1. Key to map depiction codes of the monuments shown in figure 4.1

4.2 Arborfield Manor and Arborfield Hall

The original Arborfield Manor house was built in the 13th century for the Bullock family who were prominent landowners from 1254 to 1589, occupying a manor house on this site (Ditchfield and Page 1923:200-203). The will of 1557, Thomas Bullock, then lord of the manor, shows it to be substantial, as his widow Agnes was to have the under-parlour, the chamber over it, 'Jak's chamber', two butteries next to the parlour and the dye-house as her kitchen. The exact location of location of this building is unknown.

This manor house was demolished and a new house built in a Jacobean style in 1603 by Edmund Standen. It featured five bays, a projecting porch and Dutch style gables. Outbuildings included stables and a laundry bearing a date stone of 1654 which is described in great detail in the later 19th century. By the 1820s or 1830s this building was suffering from neglect. The author Mary Russell Mitford (1787-1855), who knew the history of the mansion well and named it 'Aberleigh', described it as ruinous in her work *The Old house at Aberleigh* (Mitford 1830).

In 1832, the then owner, George Pelsant Dawson demolished the ruined house and built a neo-Tudor style the mansion he named Arborfield Hall. In 1842, this building was sold, unfinished, to Sir John Conroy. It was sold again in 1855, to Thomas Hargreaves who bought it as a wedding present for his son Thomas and his wife Sarah. Thomas again extended it and modelled the gardens leading down to the river and the millstream. Upon Thomas's death in 1891 his widow, Sarah, enlarged it.

In 1926 Guthrie Allsebrook, a local prominent water engineer, bought both the hall and mill. The outbuildings built in c. 1603 were demolished in 1927 (French and Firth 2000; ALHS website). A photograph of the laundry as it was being demolished was taken by Miss C Simonds and is on the ALHS website.

During WWII, in 1943, the Royal Air Force occupied the hall, and in 1944, it was occupied by an American field hospital unit before it went to France on D Day.

In 1949 the hall and land surrounding it was sold to Reading University, who in 1955 demolished Arborfield Hall and built a smaller property Aberleigh on the site (David Nash Ford, Royal Berkshire History 2013).

4.3 Arborfield mill

Little is documented about the mill except that in 1589 Thomas Bullock was involved in paying the debts of his grandson, and both the estate and mill were sold to Edmund Standen (Nashford Publishing 2013). The mill at this time was milling cereal crops.

The mill was producing paper from 1786 up to circa 1885, when a turbine for generating electricity was installed by Thomas Hargreaves for lighting the hall and farm.

A bore hole was sunk by the side of the mill in 1933, by Guthrie Allsebrook to supply the surrounding area with water. (Reading Mercury 22nd July 1933).

4.4 St Bartholomew's Church

The earliest reference to the church comes from an account of the Dean of Salisbury in 1220 when the wooden church is reported as being "ruinous" (French and Firth 2000). In 1256, it was replaced by a new chapel built of chalk and flint. In turn, in 1631, this was extended (AHLS website).

There is a brick extension to the church but there are no doorways leading to the rest of the building which suggests that it may represent the remains of a chapel built alongside the church in the early 19th century as the chapel to Arborfield Hall.

The old church was partially demolished in 1862. In 1863, a new St. Bartholomew's built in Church Lane, Arborfield was dedicated.

The remains are now a scheduled monument and in need to some restoration work. Historic England had a plan to do some of this work but more work is required (Berkshire Archaeology HER reference: 01001.02.000).

The rectors have been dated as far back as 1222 (Arborfield Local History Society: Churches Rectors).

4.5 Evidence from old maps

One of the earliest maps with evidence of Arborfield is Saxton's map of Berkshire dated to 1574 (Figure 4.2). This shows the village of Arborfield to be on land to the north of the River Loddon. This positioning is repeated on John Speed's maps dated 1610 and Rick Bloom's map dated 1671.



Figure 4.2. Saxton's Map of Berkshire dated 1574

Later maps show Arborfield south of the River Loddon along Church Lane. A typical example is Smith's map of Berkshire dated to 1801 (Figure 4.3) which shows Arborfield House. Church Lane and a road passing Arborfield House on an alignment which is similar to the modern farm track and footpath which crosses the River Loddon at Arborfield Mill.

The tithe map of Arborfield (Figure 4.4) shows buildings round Arborfield Mill. In particular, it shows buildings immediately to the north of the mill and building 24 just downstream of the mill.

The Ordnance Survey 1st edition map of our study area (1881-1887) (Figure 4.5) shows the extant single storey buildings alongside the track leading to Arborfield Mill and that the land to north east and east was being used as an orchard and open fields.



Figure 4.3. Arborfield, taken from Smith's map dated to 1801

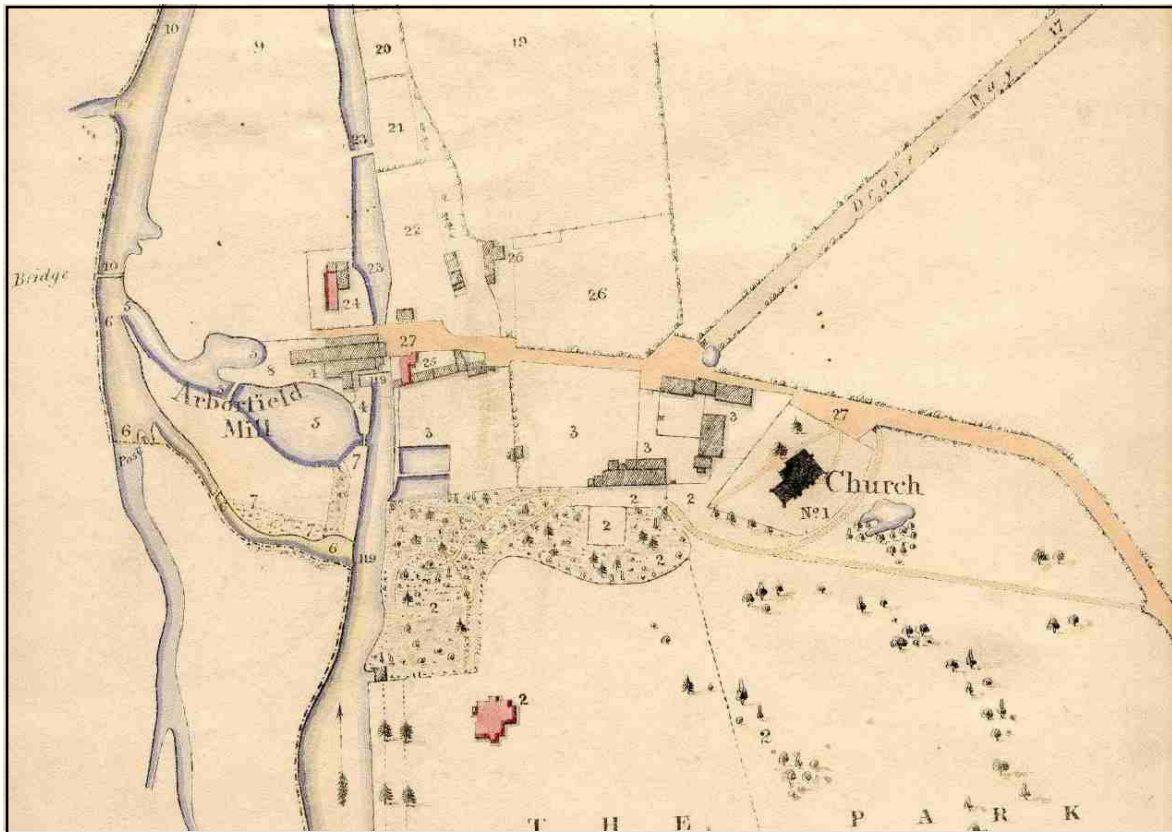


Figure 4.4. The Arborfield Tithe map (1839)

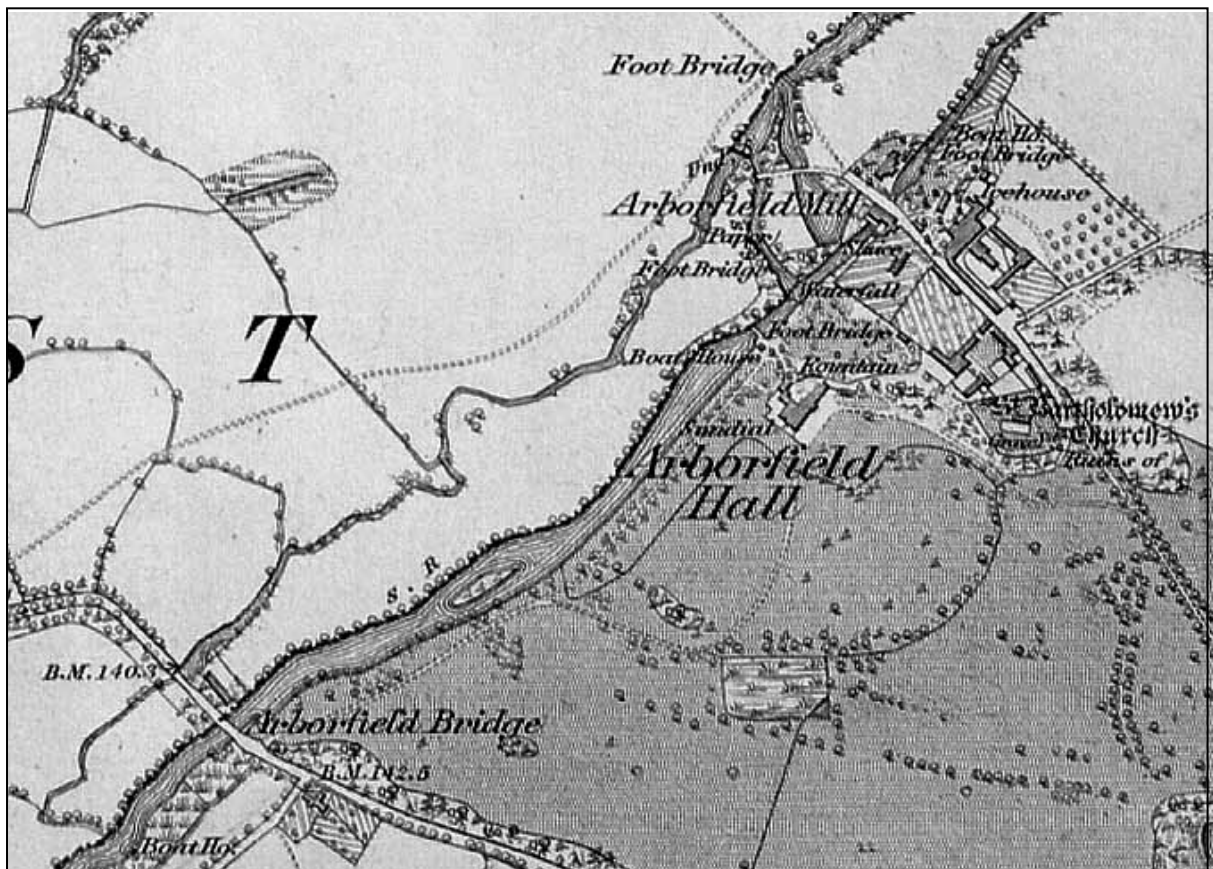


Figure 4.5. Ordnance Survey 1st edition map of our study area (1881-1887)
(BFHS & BRO 2004)

4.6 Recent archaeological fieldwork

In 2017, the Berkshire Archaeological Society carried out a geophysics survey of the grounds of Aberleigh and found a few anomalies which may relate to Arborfield Hall (Lloyd *et al.* 2018). More significantly, they analysed a number of aerial and terrestrial photographs showing the hall and were able to gain insights into the footprint of the Hall with respect to Aberleigh.

5. General and specific aims of the geophysics survey

The objective of this survey was to see if there is any evidence of a medieval village surrounding the old St Bartholomew's church or on the site to the north of the River Loddon shown on Saxton's map.

The project surveyed four areas: labelled A, B, C and E on figure 5.1. The project had hoped to survey area D just to the east of the walled garden to Arborfield House and which was likely to have been used during the 19th century but were not able to do so.



Figure 5.1. Areas of Hall Farm we would like to survey

6. Field methodology

This was a resistivity survey carried out in accordance with English Heritage and the Chartered Institute of Archaeology guidelines for geophysical surveys (David, Linford and Linford 2008; Gaffney, Gater and Ovenden 2002).

Data from the grid squares was collected using a Frobisher TAR-3 resistance meter. The survey results were processed using Snuffler, a software package developed by Sussex University (Sussex 2006). The survey grid and the gradiometer results were integrated using Adobe Illustrator and the anomalies plotted and interpreted. Each of the figures showing the results of the survey are presented at the scale of 1mm represents 1m.

7. The results

Figure 71. positions the results of the 4 resistivity survey results in the Hall Farm landscape. The sections which follow discuss the details of the anomalies found in the different areas.

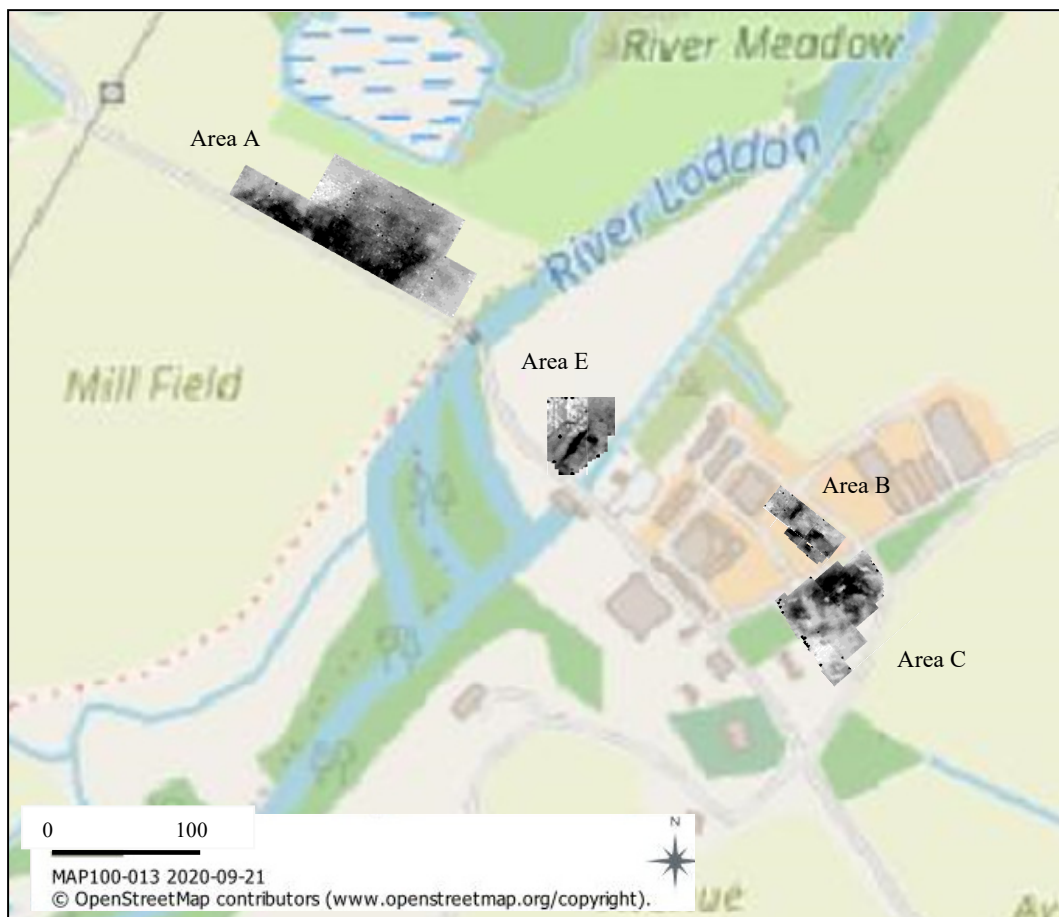


Figure 7.1. Overview of the resistivity survey results

7.1 Area A

Area A, in the field north of the River Loddon, is on raised ground. The site was chosen because it may be the site identified on Saxton's map. On the north and east side, it is bounded by ditches which drain the area.

A survey grid was laid out along the fence alongside the track along the western edge of the field. The results of the survey are shown in Figure 7.2.

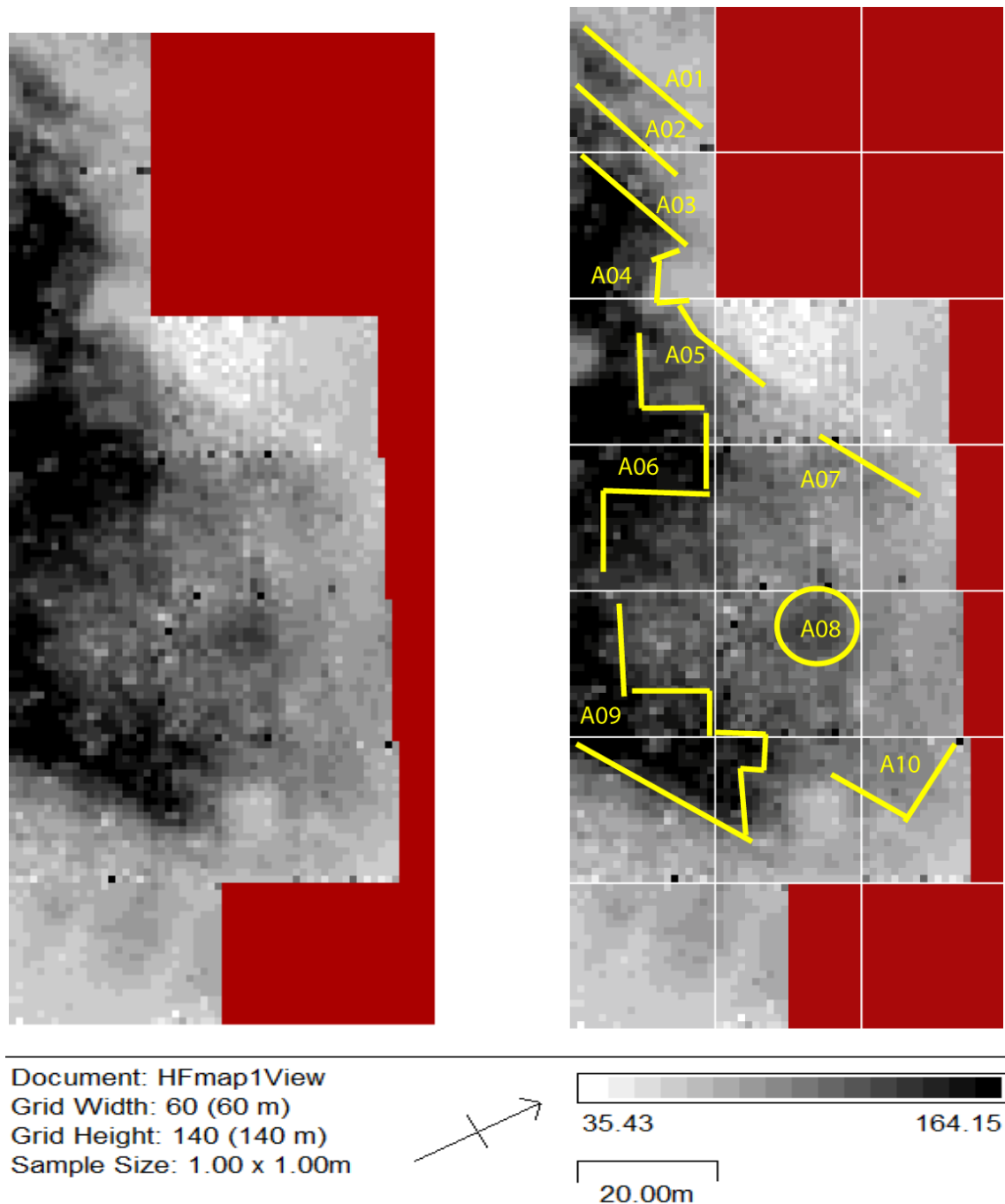


Figure 7.2. Hall Farm Area A resistivity survey results

Left: raw data, right: survey grid and annotations on the raw data

These results show some 10 main anomalies which probably represent the remains of a row of buildings or a large house. These anomalies are:

- A01 and A02 are linear anomalies which are parallel to anomaly A03 which represents the edge of anomaly A04. They may represent the remains of walls of a trackway leading into this property
- A04 is a large high resistance anomaly with an almost rectangular plan. This may represent a building with fill of demolition debris
- A05 with a lower resistance than A04, is an almost rectangular anomaly, with a line of higher resistance material across the middle. This may represent the foundations of a structure
- A06 is an area of high resistance similar to A04, which may represent another building
- A07 is a large area bounded in the west by A06. In the south, A09 and A10 and has lower resistance than them. The lack of anomalies on the right-hand side of the plot suggests that it may represent the floor of a yard
- A08 is a circular anomaly in the middle of A07. This could represent the remains of a well in the middle of a yard
- A09 is an anomaly with a straight edge at the bottom of the plot and a series of rectangular anomalies along the right-hand edge. These probably represent buildings.

Overall these anomalies represent the remains of a substantial range of buildings some 100m long and 80m wide.

The history of this area (see section 4 above) mentions Arborfield Manor as being a large complex building. These anomalies are sufficient to suggest this they may represent the remains of this building.

7.2 Area B

Area B was in a small field with lots of lumps and bumps with some apple trees which Elaine Butler from Arborfield Historical Society measured and estimated that they were probably planted after 1945.

The area was surveyed with a resistivity meter. The trees and other debris left in this field made this a difficult area to survey (see appendix A for details). The results are shown in Figure 7.3.

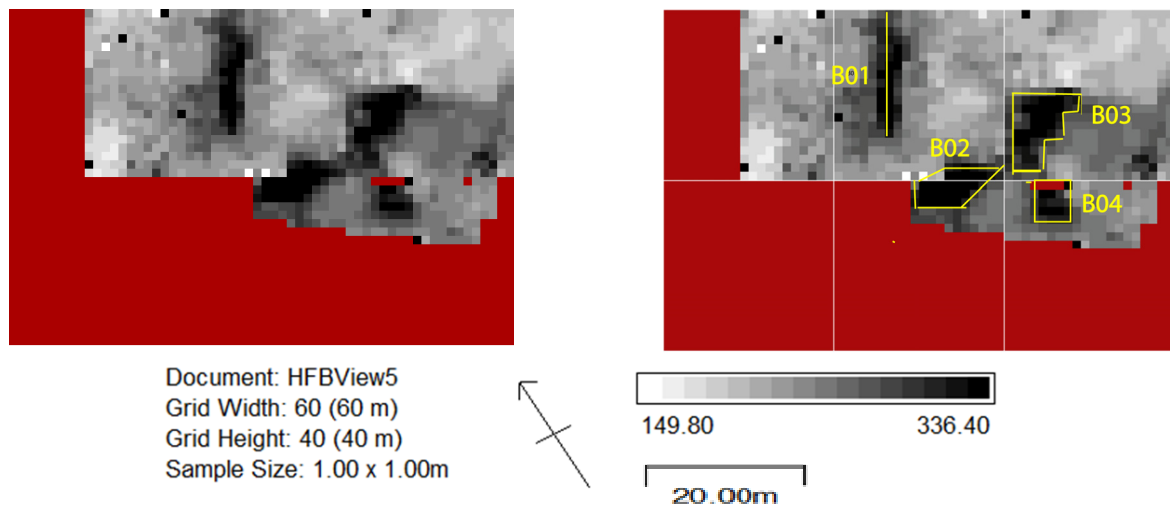


Figure 7.3. Hall Farm, Area B, resistivity survey results

Left: raw data, right: survey grid and annotations on the raw data

These results show 4 anomalies:

- B01 is a linear anomaly some 15m long and 1-3m wide. This width is difficult to estimate given that resistivity meter readings were taken at 1m intervals along a transect with 1m between transects. It probably represents the remains of a wall or a path
- B02 is a peculiar shaped anomaly put probably represents the remains of another linear structure similar to B01
- B03 is a rectangular structure with extras along the bottom edge positioned in front of two trees and agricultural remains represented by the areas we could not survey (see the red squares). The fact that these remains were only just under the ground surface (we hit them with the resistivity meter probes) suggests that this anomaly probably represents the remains of a modern structure such as a shed.
- B04 is behind the apple trees and again may represent the remains of a shed.

7.3 Area C

Area C was a field divided into two paddocks by a barbed wire fence which was used as the baseline for the survey. Figure 7.4 shows the results.

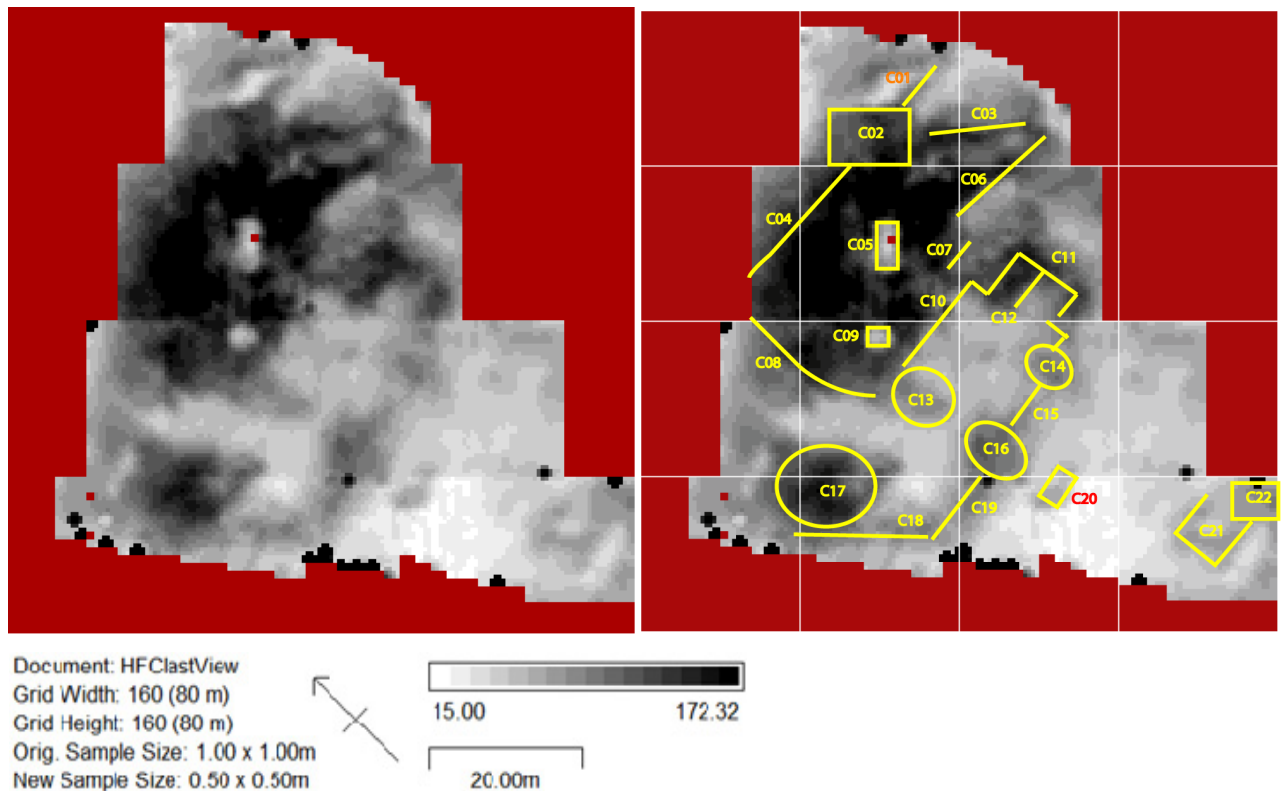


Figure 7.4. Hall Farm, Field C, resistivity survey results

Left: raw data, right: survey grid and annotations on the raw data

In these results, the dark black points along the bottom edge are high reading resulting from edge of the survey; probably represent readings from the field boundary and hence are not archaeologically significant.

There 22 anomalies shown in these results. They are:

- C01, C04, C06 and C09 may represent the outline of a building. The dark area round C05 may represent the interior
- C02 is a rectangular anomaly measuring c. 10m x 8m which probably represents a building
- C03 is a linear anomaly which is circa 12m long
- C05 and C09 are rectangular anomalies C05 is about 2m x 8m, while C09 is about 4m x 3m
- C10, C11, C15 and C19 may also represent the outline of a building.
- C12, C13, C14 and C16 may represent features in that building. However, is it recognised that C14 and C16 both reach outside the line of C15 and C19
- C17, C18, C19 and C20 may represent the remains of a stand-alone structures associated with this building

- C21 and C22 represent two structures. C21 is a “U” shaped structure about 5m wide. The visible part of C22 is rectangular about 4m x 5m

This evidence suggest we are looking at the remains of two buildings. They are probably not contemporary. Building C10, C11, C14 and C19 is probably the earlier of the two.

7.4 Area E

Area E was a field along the north bank of the river channel leading from Arborfield Mill. Figure 4.3 shows plot 24 with building in area E. The survey grid covered the south west corner of the field and footprint of the building.

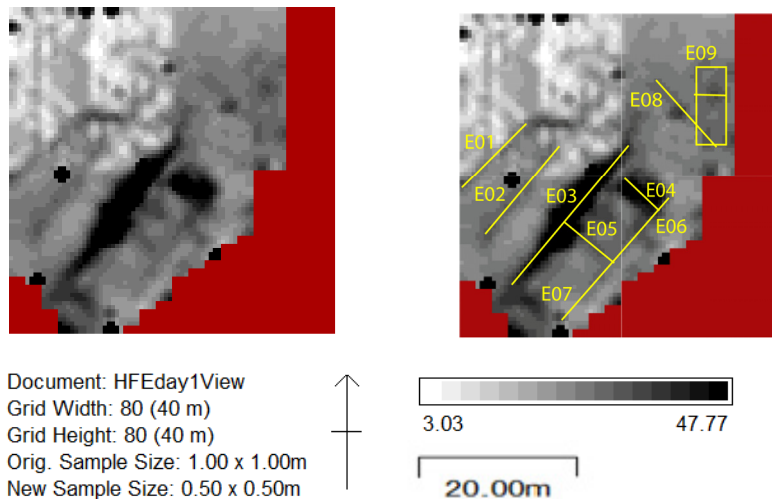


Figure 7.5. Hall Farm, Area E, resistivity survey results
Left: raw data, right: survey grid and annotations on the raw data

There are 9 anomalies shown in these results. They are:

- E01 and E02 are a pair of faint anomalies to the north east of the house
- E03, E04, E06 and E07 show the outer wall foundations of a building.
- E05 may be an internal wall foundation
- E08 is a faint anomaly and may represent a wall
- E09 is another faint anomaly which may represent the foundations of another building

All in all, this plot gives us an insight into the building on plot 24 of the Tithe Map (Figure 4.3).

8. Discussion

This survey has identified anomalies which probably report the remains of structures relating to the medieval village of Arborfield.

Saxton's map shows Arborfield as being on the north side of the River Loddon. The anomalies found in Area A show the remains of a range of buildings at roughly the same position.

The Arborfield tithe map of 1839 shows a building on the north bank of the River Loddon just downstream of Arborfield mill and the survey results confirms its position.

Amongst the farm buildings at Hall Farm the geophysics results from Areas B and C identify the remains of buildings. Those in Area B are aligned to the modern farm building. Those in Area C are on a west to east alignment, the same alignment as the church, which suggests they may represent the remains of medieval buildings.

9. What next?

The anomalies which have been interpreted as buildings in Area A continue under the adjacent track. Continuing the survey into the field on the south side of that track would give us a better understanding of their full extent.

In area C, the anomalies may represent the remains of medieval buildings. The best way forward here would be to excavate some small trenches to confirm that these anomalies represent walls and to gain some dating evidence.

Appendix A: the position of the survey grids

The survey grids were measured in from features on the ground and geopositioned using a TopCon GPS with a $\pm 2\text{m}$ accuracy. The rest of this section explains the positions of the grids

The Area A grid

The baseline for this survey was the fence on the northside of the track leading from Arborfield Mill to the Shinfield Grange. The Temporary Bench Mark (TBM) was the western of the two gate posts.

The GPS positions of the gatepost was SU 74796 68304. The GPS position of the western end of the grid SU 74673 68368 a distance from the TBM of 140m bearing 297 degrees.

The area B grid

The baseline for this survey was the road along the north side of the paddock. The TBM was the gatepost on the roadside at the eastern end of the grid. The grid started on the inside the wire fence 3.6m to the west to the gatepost. The GPS positions of this point was SU 75065 68153. The other end of the grid was at point SU 75024 68177, a distance of 50m from the TMB on a bearing of 300 degrees

The area C grid

This was measured along the fence line in the middle of this field. The TBM was 10m from the roadside fence. The GPS position of the TBM was SU 75040 68118. The other GPS position was 40m along the fence at SU 75065 68086. A calculation confirmed that the distance between them was 40m on a bearing of 142 degrees.

The area E grid

This was established using the GPS. The ends of the north edge were at SU 74860 68220 and SU 744880 68220 a distance of 20m on a west to east alignment.

Appendix B Equipment used on site

The equipment used on site was:

- Bartington 601 gradiometer with twin probes
- TAR-3 resistivity meter
- Topcon survey grade GPS owned by Andrew Hutt
- 60 survey poles and sticks
- 100m and 50m tapes and 20m ropes

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