# BATH ARCHAEOLOGICAL TRUST



High Common, Bath, Approach Golf Course.

The Roman, medieval and later landscape revealed during an Archaeological Watching Brief.

For Bath & North East Somerset Council and Aquaterra Leisure



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#### Site Details

Site address

Approach Golf Course, High Common, Bath

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Site code

HCG 04

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Site Type

Watching Brief

Client

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#### Contents

	Summary
1	Introduction
2	Aims and objectives
3	Archaeological background
4	Methodology
5	Results
6	Summary and conclusions
7	Acknowledgments
8	References

#### Illustrations

- Cover Excavation near the 8th green of the 18 hole course, looking south. The edge of the green is on the extreme right, and the greener patch to its left is the site of the unexploded bomb. The ridge and furrow field system can be seen beyond the machine.
- Fig. 1. Location map
- Fig. 2. Site plan, showing route of irrigation pipe network
- Fig. 3. Site plan, showing archaeological features
- Fig. 4. Medieval ridge and furrow south of the 8th and 9th greens of the 18-hole course
- Fig. 5. Plan of the north-west corner of the 18-hole course showing excavation areas and archaeological features
- Fig. 6. Trench 5B, showing Roman column drum and demolition rubble
- Fig. 7. Trench 5B. Section through stratigraphy
- Fig. 8. Trench 5D. Section through stratigraphy

Appendix 1: Geophysical survey report. Appendix 2: Description of archaeological contexts.

#### Summary

This report presents the results of a watching brief carried out by Bath Archaeological Trust between 1st June and 9th July 2004. The work comprised the monitoring of the installation of a new irrigation system on the Approach Golf Course, Bath, which comprised a mix of moled piping and open trench excavations. The watching brief revealed the existence of a previously unknown Roman building, possible Iron Age or early Roman roundhouses predating it, ditches and features of contemporary date, two lynchets of indeterminate date, an extensive area of well preserved late medieval ridge and furrow, and physical evidence of where bombs had impacted during the Second World War. A geophysical survey carried out in the vicinity of the Roman building revealed a complex area of features, which will act as an important tool to assist the determination of the design and layout of any future installations on the site.

#### 1 Introduction

#### 1.1 Location

1.1.1 The site occupies the High Common, an area of ground between the 50m and 105m contours on the northern slopes of the Avon valley, almost directly uphill from Bath city centre. It is bounded by Sion Hill and a small area of allotment gardens on the north, Cavendish Road on the east, Weston Road on the south and Cranhill Road on the west (Fig. 1). The golf course is divided into two courses, a 12-hole (western half) and 18-hole (eastern half), between which a footpath runs between Weston Road and the western loop of Sion Hill. The site is owned by Bath & North East Somerset Council, and is leased to operators Aquaterra Leisure.

### 1.2 Geology

1.2.1 The highest part of the course, and only on the 18-hole course, is occupied by the Great Oolite Limestone of the Great Oolite Series of the Middle Jurassic. Below this and again only on the 18-hole course is a band of Fullers Earth. This overlies yellow clays of the Upper and Middle Lias of the Lower Jurassic period, which extend across the lower half of the 18-hole course and the whole of the 12-hole.

## 1.3 Project background

- 1.3.1 The work comprised the excavation of a trench to receive a new underground water storage tank and the laying of a new system of pipes to irrigate the golf course. The tank was positioned immediately west of the southernmost of the two wooden kiosks near the entrance. The majority of the pipe would be laid by the moling method, with periodic excavation to make pipe connections. In the region of 3,000m of pipe was laid.
- 1.3.2 Bath & North East Somerset Council was advised by its Archaeological Officer that archaeological monitoring would be necessary throughout the installation process, and Bath Archaeological Trust was subsequently commissioned to undertake the work.

1.3.3 The watching brief took place between 1<sup>st</sup> June and 9<sup>th</sup> July 2004 and was carried out by the author. Post-excavation illustrations were prepared and produced by Gemma Riley. The geophysical survey in the vicinity of the 8<sup>th</sup> green of the 18-hole course, where a bomb had failed to explode in 1942, was carried out by Archaeological Engineering Services. The geophysical survey in the north-west corner of the 18-hole course was carried out by Bath & Camerton Archaeological Society.

# 2 Aims and Objectives

2.1 The aim of the watching brief was to provide data relating to the archaeological resource of the site and to record any damage incurred by the work to install the irrigation system.

The objectives were:

- 2.2 To locate any features and deposits of archaeological interest traversed by the route of the irrigation system.
- 2.3 To assess the survival, quality, condition and significance of any archaeological deposits and features within the area, and to record any that were encountered by the work.
- 2.4 To identify and recommend options for the management of the Archaeological resource for use in determining future archaeological responses to planned development.

# 3 Archaeology

- 3.1 Three areas of archaeological importance are not very distant from the site. The first of these is a Roman road, given the name of the Via Julia during the 19th century, which runs close to or on the same line as the present Weston Road. The second is an area to the east on which a cluster of Roman buildings and large number of burials have been found at the point where the 'Via Julia' meets an extension of the Fosse Way behind Royal Crescent. The full extent of these buildings and burials westwards is not known. The third site lies on Sion Hill, where a number of Iron Age sites and a Roman villa with associated burials have been found over the last 100 years.
- 3.2 On the golf course itself, archaeological knowledge extended no further than the fact that traces of medieval ridge and furrow on the lower slopes of the 12-hole course had been seen from Weston Road. These had not been investigated any further. It is not known what, if anything, was found when the golf course was first constructed. In addition to a number of bunkers, each green is terraced into and out from the slope of the hillside.
- 3.3 The High Common is in Walcot parish and was once part of the 'Barton' outside the city, which was granted by King John to Bath Priory in 1204. At this time Bath citizens retained their right of common upon it, and it is possible that the grazing of cattle referred to in an agreement of 1260 might have extended onto it. After the Dissolution

ultimate control of the Barton lands reverted to the Crown although management was retained by the Corporation (Keevil 1996). In 1619 the Recorder of Bath stated that 'the Common Fields were for the use and enjoyment of the free burgesses inhabiting the city, and should remain so forever' (Whalley 1994). At no point is it clear at what times the High Common was put to different uses, although from the ridge and furrow it is clear that part of it was arable for a time and the remainder presumably pasture.

3.4 From aerial photographs it is known that the whole of the lower half of the 18-hole course, extending up to a point just above the northern of the two diagonal footpaths to Cavendish Road, and the steep slope to the west side of the upper part of Cavendish Road, between the 9<sup>th</sup> and 11<sup>th</sup> greens, was turned over to allotment gardens as part of the Dig for Victory campaign in the 1940s.

# 4 Methodology

- 4.1 Before the commencement of the work, the golf course was walked over in order to see if any other surface features besides the ridge and furrow beside the Weston Road could be seen.
- 4.2 The trench to receive the water storage tank was excavated by tracked machine under archaeological observation. Topsoil was stripped first, followed by the subsoil, and finds were extracted during the process.
- 4.3 A total of seven longer stretches of pipe were laid, from which shorter stretches of pipe connected to the individual greens, at each of which four sprinkler heads were installed (Fig. 2).
- 4.4 At the start of each new stretch of pipe, a small trench was excavated by machine via which the pipe, attached to the machine-mounted blade, could be drawn into the ground. Additional small trenches, each measuring on average 0.4m wide and 1.5m long, were excavated in order to join pipes or to extricate obstructions from the line of the mole. The pipe was laid at a depth of 0.60m with just one or two cases where it was raised to 0.50m in order to ride over locally high solid bedrock.
- 4.5 The process of excavating some of the trenches for the pipe was observed, whilst others were not but were inspected and recorded afterwards. All of the trenches in the vicinity of the Roman building were excavated under archaeological supervision. In those cases where sensitive remains were encountered by the machine, completion of the excavation was carried out by the archaeologist, during which time the machine was able to continue the moling process. Rather than starting with the conventional numbering system, trenches were numbered in accordance with the nearest golfing green (e.g. Trench 5A).

#### 5 Results

#### 5.1 Surface archaeology

- 5.1.1 The initial walk over the golf course revealed that it contained a number of surface features (Fig. 3). The ridge and furrow seen at the lower end of the 12-hole course continued up the full height of the site, having been divided by two lynchets part way up, whilst a further and very well-preserved area of ridge and furrow existed at the top of the 18-hole course. Also on the 18-hole course, other features include: a small enclosure close to the north-west corner; a low bank rising up the steep slope from the upper part of Cavendish Road; and a platform terrace beside another bank extending down the slope from the ridge and furrow.
- 5.1.2 The ridge and furrow on the 12 hole course is clearly visible both on the ground and from the air (Fig. 2). Its visibility on the aerial photograph was enhanced by the fact that brown grass cuttings had gathered in the furrows and contrasted with the green grass on the ridges. There are two areas of ridge and furrow here, divided by a headland approximately 25m wide. Those on the west run parallel with the headland and continue so to the top of the course and presumably onto the adjoining allotment gardens. Those on the east run into the side of the headland at a slight angle, and stop approximately two thirds of the way up the course. From a point just south of this the sides of the headland runs between two lynchets, which gradually rise northwards until heights of 0.5m (western lynchet) and 1.5m (eastern) above the grounds to their west are achieved. The width of the headland narrows slightly at the northern end of the site. The distance between the crests of the ridges is 4.0m throughout both areas of ridge and furrow. It is just possible that they continued eastwards but had been truncated, as there are a few very vague lines towards the central footpath, but they are very slight and may be the result of later activity.
- 5.1.3 On the 12-hole course there is a hollow way on the east side, the south end of which commences just north of the 12<sup>th</sup> green. From here it takes an almost due-north course, and converges on the modern footpath to its east, but there it disappears and there is no trace of it on the 18-hole course. The hollow has an almost flat base approximately 4.5m wide. The rising ground on the west side leaves it set down almost 1.7m below the original level, less so on the east where the ground had already dropped down but where there is still a defined slope back up towards the original contours of the topography.
- 5.1.4 The ridge and furrow at the top of the 18-hole course are the same 4m apart as those on the 12-hole course, but are far better preserved and defined (Fig. 4). They extend throughout the upper part of the course where the gradient eases towards Sion Hill, but also extend down onto the upper part of the steeper slope between the 90m and 94m contours. On the east side they do not extend to the edge of the flatter ground, and stop short of the point at the edge of the 9th green where the ground drops steeply away towards Cavendish Road. On the north-east side there are a few very slight traces beyond the defined extent, but these are not clear. The easternmost clear ridge takes the form of a low bank, which continues downhill beyond the south-west corner of the system before disappearing just before reaching the footpath to Cavendish Road, where

the 1940s allotments presumably truncated it.

- 5.1.5 Part way down the bank described in paragraph 5.1.4, a short distance below the 10<sup>th</sup> green, a platform extends from its east side. The platform has a straight downhill or southern edge, 12m long and perpendicular to the bank. The eastern edge runs at 45 degrees to the southern edge, and heads up towards the 10<sup>th</sup> green for a distance of about 10m.
- 5.1.6 On the north-west edge of the 18-hole course, directly opposite the allotment gardens is one side of a sub-rectangular enclosure more-or-less parallel with the east side of the footpath. This takes the form of hollow, approximately 1m deep, the east side of which rises up to meet the original ground at a point 8m east of the footpath railings. The longer edge is fairly straight and 29m long. At the north end it takes an angled turn and swings to the west before disappearing under the footpath. At the south-east corner it turns 90 degrees to the west. The profile changes here, where the outline takes the form of a low ridge as if the soil is rising up and over a buried feature, possibly a wall.
- 5.1.7 In the north-west corner of the 18-hole course there is a short terrace cut into the slope a short distance north of the enclosure described in paragraph 5.1.6 and just south or downhill of the 7<sup>th</sup> tee.
- 5.1.8 Towards the north-east corner of the 18-hole course is a low raised bank which commences just east of the 9<sup>th</sup> green and runs eastwards down the slope towards the upper part of Cavendish Road. Although allotment gardens extended along this steep ground in the 1940s, their outlines have all but disappeared, and the bank seems to have no relationship to them. It is around 4m wide and raised approximately 0.2m above the adjacent ground.
- 5.1.9 The downhill portion of the 18-hole course, south of the footpath to Cavendish Road contains a few undulations, particularly along the western fringe, but these are almost certainly the ghosts of the 1940s allotment gardens, which extended throughout this area.
- Trust revealed that at least four and probably six bombs had fallen and exploded on the area now covered by the golf course. The craters of three of these are of a similar size and in a line running between the 7<sup>th</sup> green of the 12-hole course and a point half way between the 3<sup>rd</sup> and 11<sup>th</sup> greens of the 18-hole course. A fourth crater, however, between the 9<sup>th</sup> and 10<sup>th</sup> greens of the 18-hole course was much larger with a broad area of upcast stone. Of concern was what appeared to be the presence of a large hole but no crater two or three metres east of the nearby 8<sup>th</sup> green, and it was suggested to be the site of an unexploded bomb (Lewcun 2004). Subsequent research showed that in fact two unexploded bombs had fallen on the golf course, one in the blitz of April 1942 and the other a stray bomb in 1940, and that a search for them was made in 1945.
- 5.1.11 The site of the bomb by the 8<sup>th</sup> green is evident as a flat break in the ridge and furrow, where the grass is also greener as a result of the previous ground disturbance. The crater

between the 9<sup>th</sup> and 10<sup>th</sup> greens is very clear, but had not been seen during the walk over the site due its position off the route of the pipe. The crater is approximately 1.7m deep and 13m in diameter. The smaller crater to its south is just discernable as a shallow hollow, 0.3m deep and 6.5m in diameter. In the absence of any proof that the bombs were removed from the ground in 1945 it was deemed appropriate to ensure that the vibration of the moling machine did not trigger any undesired effects in this area, and a specialist in deep subterranean metal detection was brought in to survey an area in the vicinity of the 8<sup>th</sup> green. This revealed disturbance to the ground at the point where the aerial photograph suggested the impact of an unexploded bomb, but no buried metal (Brooks 2004). A quick scan of the large crater between the 9<sup>th</sup> and 10<sup>th</sup> greens revealed a large number of metal anomalies which are probably fragments of shrapnel left in the ground.

5.1.12 Below the canopies of the large trees south between the 9<sup>th</sup> and 10<sup>th</sup> greens of the 18-hole course is a manhole and chamber which controls two springs which formerly emerged at the surface. Two other springs are also known to have existed, at the northeast and south-east corners of the 12-hole course (Chapman 2003).

#### 5.2 Buried archaeology

- 5.2.1 On the 12-hole course, the irrigation pipe only traversed the eastern area of ridge and furrow, which is less defined and only undulates up to about 0.2m. The thickness of the soil varied from 0.2m to 0.3m in the small pipe connection trenches, a variation which did not seem to bear any relationship with the ridge and furrow. Only on the 6<sup>th</sup> green did the pipes for the sprinklers extend across the headland and onto the western ridge and furrow, but here the extrusion of the pipe only revealed terraced-out materials on the downhill side and natural clay on the uphill side. A similar lack of variation in soil depth on the ridge and furrow was encountered on the 18-hole course.
- 5.2.2 In the south-east corner of the 12-hole course a 45m-long open trench was excavated immediately north of the kiosks. Here a number of clay tobacco pipes and pottery dating between c.1620 and 1720 were recovered from a charcoaly variety of the brown loamy subsoil, which was not so evident west of the 1<sup>st</sup> green or north of the 12<sup>th</sup>. The same material was excavated in the trench for the storage tank This charcoaly subsoil extended onto the 18-hole course, and was observed in the area south of the 1<sup>st</sup>, 13<sup>th</sup> and 14<sup>th</sup> greens but no further northwards.
- 5.2.3 On the upper part of the 18-hole course, north of the footpath which crosses from Cavendish Road to a point just below the allotments, Roman material was encountered on the western fringes in an area between the 5<sup>th</sup> and 6<sup>th</sup> greens. The first sign of anything predating the ridge and furrow was pottery, including 1<sup>st</sup> or 2<sup>nd</sup> century Samian ware from Gaul, which emerged in a small trench close to the bunkers to the south-west of the 6<sup>th</sup> green. The odd scrap of pottery is not unusual on Sion Hill, as occupation has been recorded from near here. As the mole continued downhill, however, occasional grating on the blade suggested an increase in stone content below the surface. This was unusual, as the machine had at this point already traversed from the Oolite bedrock to the softer Fullers Earth. When it reached a point just before the junction with the pipe

serving the 4th, 5th and 10th greens the amount stone forced the turf to ripple and tear above the obstacles.

- 5.2.4 In consequence of the amount of buried stone west of the 5th green, a greater extent of open excavation became necessary (Fig. 5) to lay the pipe without snagging the electric control cable. When further Roman pottery was observed in the subsoil, the lower part of the main trench (Trench 5A) and 4m of the trench for pipe heading east (Trench 5B) were excavated archaeologically. This was carried out without delay to the irrigation project, and a limited amount of small-scale investigation below the intended dig level was permitted in order to ascertain some degree of understanding of the remains. This was carried out prior to the carrying out of the geophysical survey described in paragraph 5.3.
- 5.2.5 The bulk of Trenches 5A and 5B was occupied by demolition rubble from a building, which at the time remained as being of indeterminate size or extent. Its character was hinted at by the discovery of a column drum lying on its side, complete with a linear recess for a shutter and socket for a locking device (Fig. 6). The uppermost part of the drum lay at a depth of 0.86m below the surface. Although the material adjacent to the column was rich in charcoal, there was no evidence of burning to any of the surrounding rubble. These surrounding stones were all relatively small, and there were only occasional faced fragments. Below the column, a small area of what might be paving was encountered at a depth of 1.40m below the surface. Where the trench met Trench 5A, a drop in the stratigraphy might suggest the robber trench of a wall. A section through the deposits here is shown in Fig. 7.
- 5.2.6 On the trench for the main pipe (Trench 5A), a limited amount of investigation was available between the pipe being laid and backfilling. This exposed, immediately below the pipe and at a depth of 0.62m below the surface, a large block of upright Bath stone 0.20m wide and minimums of 0.45m long and 0.25m deep. This, judging from the fact that it was impossible to move it, had been set well into the ground. The block was 1.5m south of the column drum and perpendicular to it.
- 5.2.7 While irrigation work continued nearby, a third trench (Trench 5C), 0.35m wide and just over 5m long, serving only as a small area of archaeological investigation, was excavated at 45 degrees to the upper angle between Trenches 5A and 5B. This revealed the presence of a crude but well-laid surface of limestone cobbles, which extended throughout the trench. The majority of these lay at a depth of approximately 0.45m below and parallel to the existing surface, although towards the south end they became more broken and dropped to a depth of 0.6m as they neared the junction with the other trenches.
- 5.2.8 Limited archaeological excavation (Trench 5D) was also undertaken at the point where the sprinkler system for the 5<sup>th</sup> green was linked to the east-west pipe to its north. Here (Fig. 8) a ditch was found to have run north-west to south-east, towards the 5<sup>th</sup> green. Only one side of the ditch was found, and the base was not reached. Rubble on its east side may have either been cut by it or been dumped during its active life. Only a few small pieces of pottery were recovered from the loamy upper infill.

- 5.2.9 During the dry weather which prevailed for much of the work, a linear band of grass across the northern part of the 18-hole course, running just below the 7th, 8th and 9th greens, was recognised as drying out or browning faster than the grass to its sides. This 'crop mark' links the terrace described in paragraph 5.1.7 and the bank described in paragraph 5.1.8. The stone within this band was exposed in one of the small open trenches in this area and appeared to be more sorted, which would be expected on a trackway passing through a generally stony area.
- 5.2.10 No further information was obtained in relation to the bank on the east side of the ridge and furrow on the 18-hole course due to the fact that the pipe here was moled. The platform towards its southern end was not traversed by the pipe.

#### 5.3 Geophysical Survey

- 5.3.1 Soon after Roman building materials were encountered near the 5<sup>th</sup> green of the 18 hole course, Bath Archaeological Trust enquired as to whether or not the Bath & Camerton Archaeological Society (BACAS) would be prepared to undertake a geophysical survey of that area of the course. On agreement, a total of four evenings (and part of a moonlit night) and two mornings were spent surveying, with Bath Archaeological Trust in attendance for most of that time. A total of 7,600 sq.m were surveyed and BACAS prepared a report on their findings, which are reproduced in Appendix 1. The following summarises those findings.
- 5.3.2 The initial target of the survey had been the extent of the Roman building which had been identified west of the 5<sup>th</sup> green. The survey revealed that this had contained three rooms, with two larger rooms flanking a smaller central one, and may have possessed a corridor or verandah to the front, or downhill, side. There were slight traces of what might have been an earlier building of a similar size a short distance downhill from it. If this could be proved, it might have become obsolete and provided some of the building materials for what might then be considered to be a later structure just uphill. There were also faint traces of an outline suggestive of a building at the top of the slope, but this was less clear.
- 5.3.3 There are two circular features to the south and south-east of these buildings, one being immediately downhill of the 5<sup>th</sup> green and the other to its west. It is possible that these represent Iron Age or early Roman timber-framed roundhouses. On a larger scale print-out of the gradiometer survey the feint outlines of at least six more features are visible where the gradient eases between the 96m and 100m contours. These are also circular, between 6m and 8m in diameter, and appear to surround a larger central feature approximately 10m in diameter. These also might indicate roundhouse structures of a similar date.
- 5.3.4 The survey indicates the presence of a number of ditches. Three of these, east of the main building, form an enclosure with an entrance on the south-east side. Part of this ditch was excavated in Trench 5D,

- 5.3.5 On the north-west side of the area there are hints of activity, possibly a building and trackway, but this is not certain. There was no obvious evidence of the Roman road or track across the top of the hillside as suggested in paragraph 5.2.9. It is unlikely, however, that a gravelled or stone surface would have shown up against a rocky geological background, which would also have negated the need for drainage ditches in this area.
- 5.3.6 Two small, shallow, circular surface depressions were observed during the survey. One of these, between the bunkers approaching the 6<sup>th</sup> green, was not clear on the responses. The other, a short distance south of the 6<sup>th</sup> tee, was outside the survey area.

#### 5.4 Finds and dating

5.4.1 A small quantity of stratified pottery were recovered from the stratified deposits in the vicinity of the Roman building on the 18-hole course. With the exception of those from the ditch, none of the pottery appears to be any later than the 2<sup>nd</sup> century. Only a few sherds were recovered from the ditch Those from the ditch appear to be 3<sup>rd</sup> century.

## 6 Summary and Conclusions

- 6.1 It is possible that a Roman building at the north-west corner of the 18-hole course was preceded by two Iron Age or early Roman timber roundhouses. This would not be unusual for the area, as the same arrangement of roundhouses superceded by masonry structures has been found both on the Lower Common to the south and on Sion Hill to the north. There appear to be further circular features which might represent additional structures of a similar date further up the slope, but these would require further investigation to prove both date and character.
- 6.2 The Roman building was probably a small house, possibly a farmstead, terraced into the hillside and not dissimilar to others in the region, and would have afforded spectacular views over the Roman town and surrounding countryside. The vista would have extended from the Roman quarries below Bathampton Down in the east to the Roman villa at Newton St. Loe in the west, with a full view of the Fosse Way as it entered Bath from the crest of Odd Down. No decorative wall plaster, which would normally be found in a higher status building, was found in the small area excavated. The presence of a column drum, possibly on the front of a verandah, however, suggests that although the building was small some attempt at giving it a more imposing facade had been made. The stone block a short distance south of the building (Trench 5A) might have related to a small enclosure to a terraced yard or garden. The cobbled surface found in Trench 5C probably belonged to a sloping yard on the north-east side of the house. The building was ideally situated, adjacent to a spring of fresh water and close to a source of building materials, whilst being not too far from two of the more substantial Roman roads serving the Roman town. It is not known how far the lands or estate belonging to this building extended, but the lynchets in the north-west corner of the 12-hole course might relate to contemporary cultivation.

- 6.3 The ditched enclosure to the east of the house was probably used to hold livestock, and was certainly in use during the lifetime of the building but may have had earlier origins. The ditch found in Trench 5D is part of this enclosure, and was excavated just downhill of the western corner. A Roman date can be demonstrated for this but, without excavation, dates for the others remain unknown although they are probably Iron Age or Roman. The other ditches, apart from defining areas set aside for different usage, would have served to keep the boundaries dry from any water emerging from the interface between the geological rock and clay. Their alignment respects that of the outcropping bedrock, and would have intercepted water emerging from where it overlaid the impermeable clay layers.
- The absence of faced stone amongst the demolition rubble suggests that after the building collapsed or had been demolished any useful stone had been taken away and recycled elsewhere at a later date, leaving only less-useful pieces from the core of the walls and unwieldy blocks such as the column drum. There are entries in the accounts of the Freemen of Bath for the 17th and 18th centuries which make payments for 'digging stones in the Common' and removing them (Freemen's Estate Papers, Bath Record Office). It seems likely that this sort of activity would only be carried out where stone was commonplace and at or near the surface. In the absence, to the author's knowledge of this area, of any other stone close to the surface other than here at the High Common and at the Roman settlement on the Lower Common, it seems conceivable that some of the building stones of the Roman buildings, either in-situ or collapsed, were being robbed at a relatively late date.
- 6.5 The dating evidence from the trenches, though a small quantity, suggest that the building was in use during the first and second centuries, and may have been abandoned during the 3<sup>rd</sup> century. There might have been a number of motives for this, but its exposed position, open to prevailing winds from the south-west may have been one of them.
- 6.6 The Roman building would have been served by at least one trackway to serve lands belonging to it and another to give access to the Roman town on the valley floor. The crop mark described in paragraph 5.2.8 indicates that there is band of a stones which are closer to the surface than the bedrock surrounding it, and does not tie in to the geological alignment revealed by the geophysical survey. This would suggest that it probably relates to a track, and that the terrace at its west end and the bank to its east are related, and a position behind or uphill from the building would have been best suited to such a route as the gradient below the building is more severe. Projected eastwards this would meet the Roman road which runs along the broad lines of present-day Lansdown Road somewhere in the vicinity of the east end of Lansdown Crescent, where the gradient there eases. A projection westwards would take it downhill towards Weston Lane.
- 6.7 The path or trackway occupying the hollow way on the east side of the 12-hole course does not appear on any old maps, the earliest of which to cover this area is dated 1740 (Thorpe 1740), and thus it probably predates this time. The alignment is particularly interesting, for if it is projected northwards it arrives at the south side of the potential earlier Roman building hinted at by the geophysical survey. Projected southwards it

becomes even more interesting, as this would take it straight to the iron Age and Roman settlement on the Lower Common, and beyond that the point where the Fosse Way crossed the River Avon. No Roman date should be assumed from this statement, but the coincidence is remarkable and a Roman date does seem the most likely. The only other unmapped track known on this side of Bath ran across the Lower Common on a separate alignment, and took the form of a deeply-rutted and short-lived track of a date c.1760-1780 which probably served the quarry below the present Parks Department buildings. Crossing similar terrain and gradient, this had not created any form of a hollow, suggesting that the track on the High Common may have been in use for a much longer period of time.

- 6.8 It is not known what activity apart from livestock grazing took place between the abandonment of the Roman building and the development of the ridge and furrow field systems. The distance between the furrows is of the shorter and thus later type, and are probably no later than the 14th century. On the 12-hole course they extended throughout the slope on the western half, with a headland break between two individual groups respecting two lynchets of earlier date. The surviving system on the 18-hole course is confined to the upper part of the site, where the gradient eases. They extend slightly onto the upper part of the steeper slope, but do not appear to have continued southwards. A low bank forming their eastern boundary continues further down the slope, but is lost near the diagonal footpath where 1940s allotments probably truncated it. It is possible that further ridge and furrow existed where the gradient eases south of the footpath, served by the same boundary, but any trace has also been lost to the former allotments.
- 6.9 The platform or terrace on the east side of the ridge and furrow boundary, just south of the 10<sup>th</sup> green of the 18-hole course, could be of the same medieval date. It probably relates to a structure of some form, possibly a shelter, which served the lands here. It cannot be dismissed, however, that it might relate to something earlier, possibly Roman, which the medieval boundary later respected.
- 6.10 Between c1620 and 1720 domestic artefacts, in the form of clay pipes and pottery, made their way onto the site and were spread out across the southern half of the area, and may have infilled an extension eastwards of the ridge and furrow system on the 12-hole course. These probably arrived here amongst night soil and road sweepings from the centre of the city, which are known to have been collected by a scavenger and spread out on the Town Commons from 1615 onwards (Fawcettt 2001).
- 6.11 The enclosure on the north-west edge of the 18-hole course remains undated. During the 1790s there were plans to build a reservoir at the top of the High Common, fed by the spring in the north-east corner of the 12-hole course (Mike Chapman, pers. comm), but none of the documentary evidence which would normally be associated with such a structure, if ever realised or completed, is known. The original design was for a chamber 30ft (9.14m) long, 20ft (6.10m) wide and 10ft (3.05m) deep. The existing feature seems too large to have any relationship to those plans, extending much too far north to be connected, although upcast material from a trench to accommodate a tank of the specified tank could have created such a volume.

- 6.12 The watching brief on the High Common golf course was an extremely valuable and informative exercise. It was recognised that given the evidence of Roman activity not too far away that there was a chance of remains being found, even if only piecemeal. The overall result, however, has been the discovery of a rich and varied archaeological landscape which has been spared by the 18th century and later urban sprawl of the city of Bath. The building at the top of the 18-hole course is an important discovery, and confirms a belief that Roman Bath was ringed by a mixture of both simple and well-appointed, medium to large size houses, too close together to be the seat of country estates, but more like a group of comfortable suburban houses set in large gardens, just a few hundred metres apart.
- 6.13 The geophysical survey played an important role in the project. It has not only defined the extent of a Roman building but revealed that there is a much wider area of related features surrounding it, the full extent of which is unknown. The survey will perform a vital function in determining how best to position any future installations or carry out any other works on the golf course, such that the archaeology can be preserved where possible but recorded where not, and permit the recovery of further dating evidence.

### 7 Acknowledgments

- 7.1 Bath Archaeological Trust would like to thank Chris Jones and Andy McKimm at Bath & North East Somerset Council and Rory Budds of Aquaterra Leisure for their assistance during the project and their keen interest shown in the archaeology, and Roger Davey at Irritech for providing the results of the GPS survey. The contractors, M. J. Abbott of Salisbury, led by Greg Wyatt, were particularly helpful during the installation work.
- 7.2 Thanks are also due to the Bath & Camerton Archaeological Society for carrying out the geophysical survey, in particular Bob Whitaker OBE (chairman) for its negotiation, John Oswin and Owen Dicker for co-ordinating it, Keith Turner for preparing the graphics, and not least the small army of volunteers gathered by Ken Appleby who gave up four evenings (and part of a moon-lit night on one occasion) and two mornings to carry out the survey itself.

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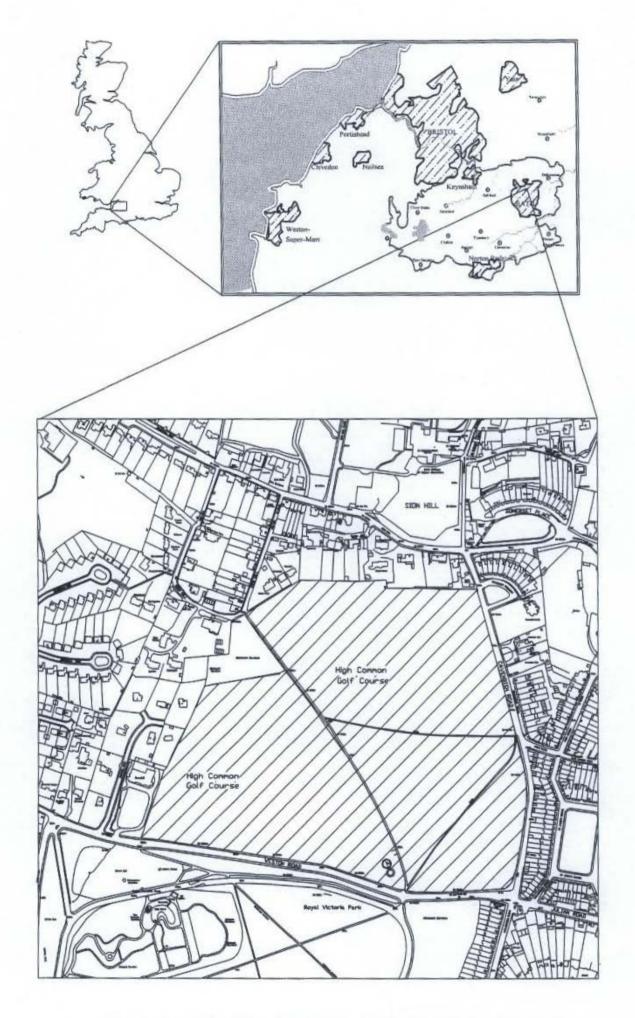
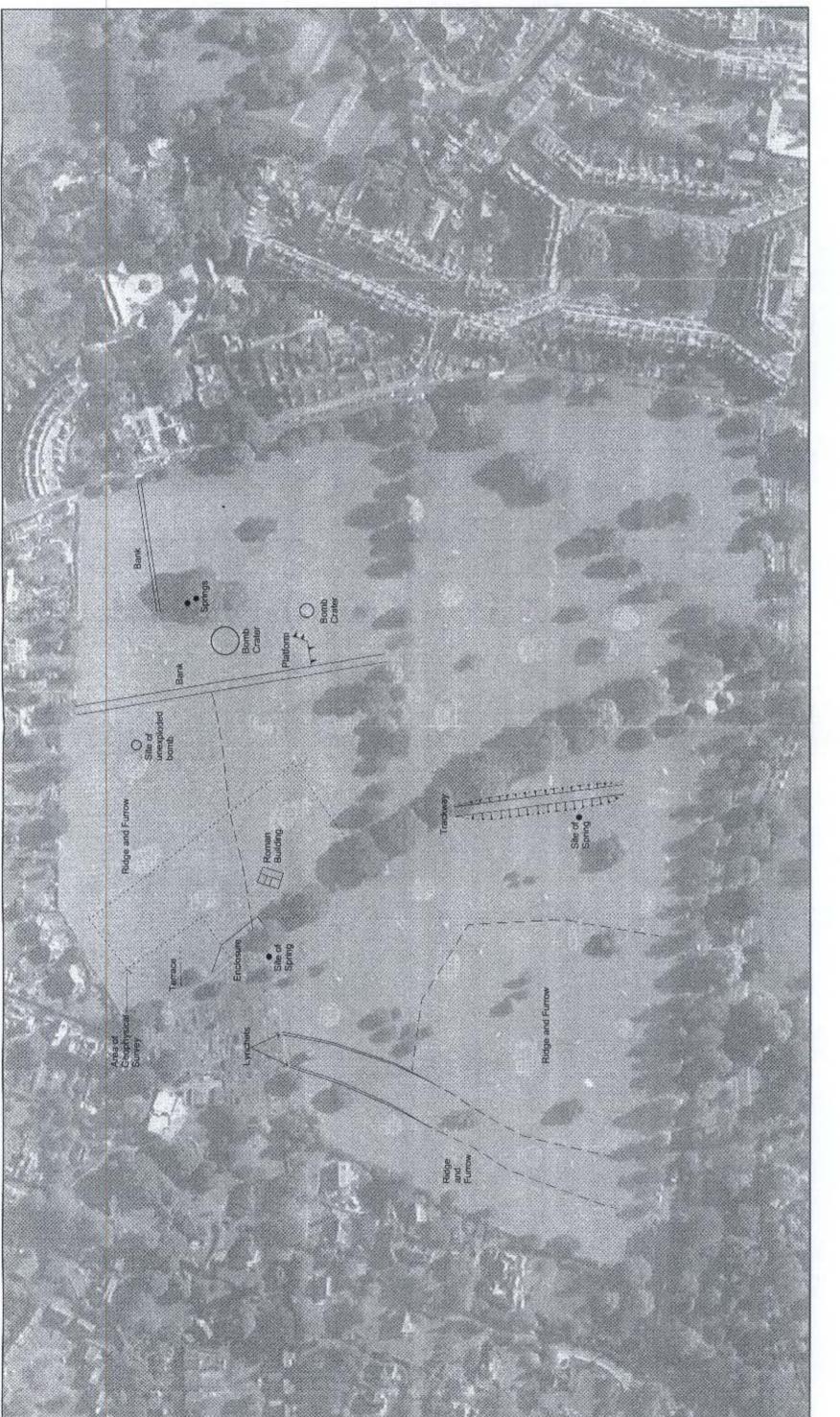


Fig. 1. Location Plan (the site is hatched on the lower plan)





Fig. 2. Site plan, showing route of irrigation pipe network.



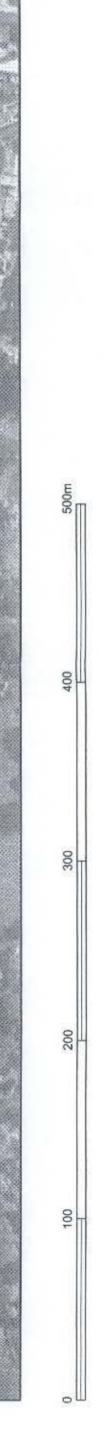


Fig. 3. Site plan, showing archaeological features.



Fig. 4. Medieval ridge and furrow south of the 8th and 9th greens of the 18 hole course, looking south-west towards Southdown and Twerton. The irrigation pipe has been moled diagonally across the foreground, with a typical valve/pipe junction trench on the left.

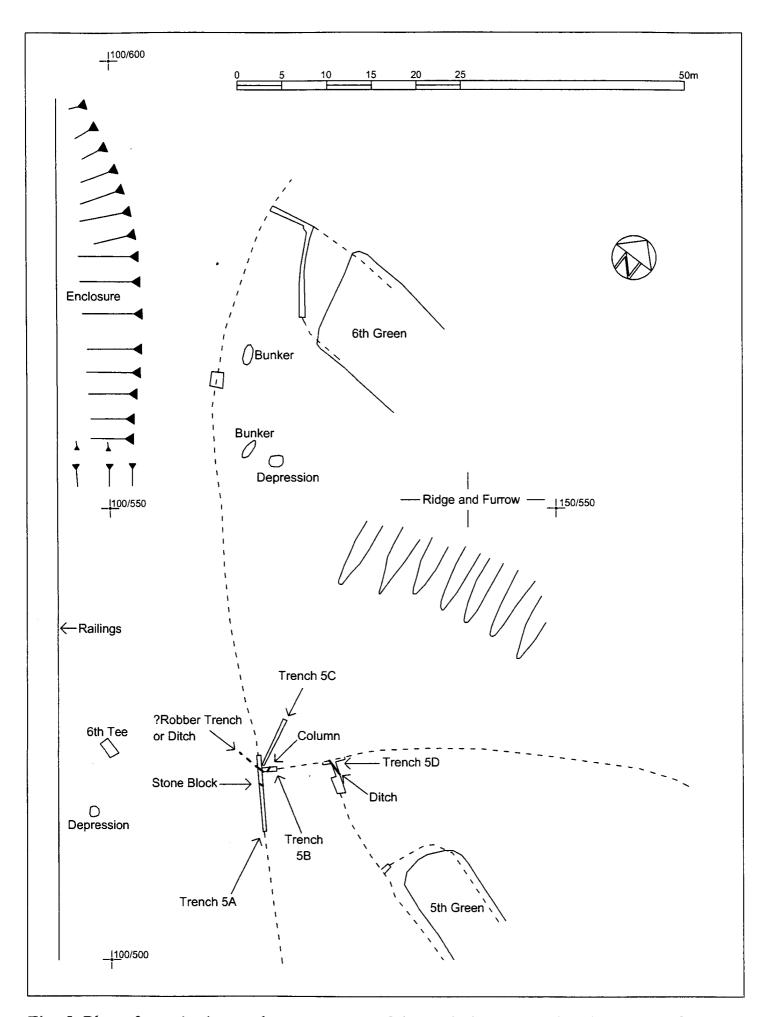


Fig. 5. Plan of area in the north-west corner of the 18-hole course, showing route of irrigation pipes (dashed), excavation trenches and archaeological features.



Fig. 6. Trench 5B looking south-west. The large stone in the base is a column drum, on which the recess for a shutter is uppermost and is surrounded by demolition rubble from the Roman building.

SW NE

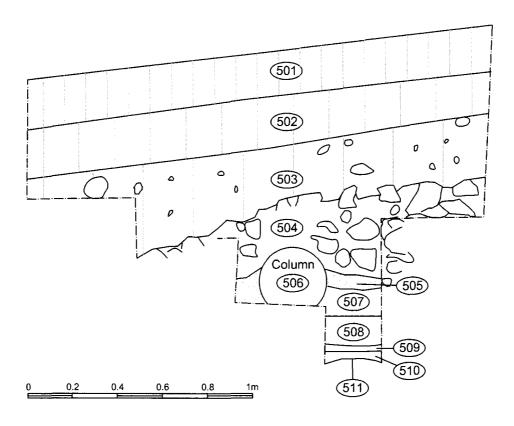


Fig. 7. Trench 5B. Section on the north-west side of the trench.

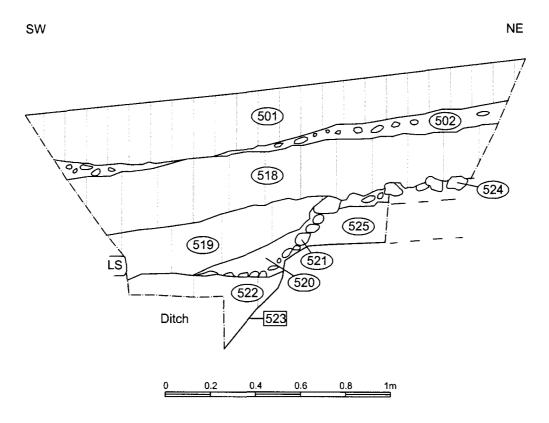


Fig. 8. Trench 5D. Section (reversed) on the south side of the trench.

# APPENDIX 1

Geophysical Survey Report

# Geophysical Survey on the Approach Golf Course, High Common, Bath. June 27<sup>th</sup>-July 5<sup>th</sup>, 2004

# John Oswin Bath and Camerton Archaeological Society

#### **Background**

Bath Archaeological Trust (BAT) performed a watching brief for Bath & North East Somerset Council and Aquaterra during new irrigation work on the Approach Golf Course at High Common, Bath in late June, 2004. During that exercise, evidence of occupation in Roman times was unearthed on the 18-hole course. BAT requested that the Bath and Camerton Archaeological Society (BACAS) perform a geophysical survey to observe more of this occupation.

It was expected that the golf course would be open to the public by the time of the survey, so it was set up as an evening exercise, from 6.30 pm to sunset. As it happened, the course remained closed so it was possible to work during the day, and in total, four evenings and two mornings were worked. The work was performed by volunteering members of BACAS under the direction of Marek Lewcun of BAT.

#### Procedure

The area to be surveyed was marked out in advance by BAT and was laid out in 20 metre squares. These were set by vertical projection, while the instrumentation operated on over-ground measurements, so there is a slight discrepancy, up to 0.3m, between corners of the grids. The north-south baseline of the grid was set 6 metres east of and parallel with the fence of the path from Weston Road to Sion Hill.

The intention was to survey an area 80 metres (grid) north by 60 metres (grid) east, and an extra area 40 metres by 40 metres attached to the north end, 20 to 60 metres east of the baseline. A further set of three grids was added at the south end of the area. A total number of 19 grids was surveyed. Grid coordinates were from 100, 480 to 160, 620 metres. Grid north was approximately 25 degrees west of compass north.

The survey was conducted using a TR/CIA twin-probe resistivity device (half metre frame) and also using a FM36 fluxgate gradiometer. Each 20 by 20 metre grid was laid out with strings 1 metre apart east-west, marked in half metre intervals north-south, giving 800 points per grid. First reading was 1 metre (grid) east of origin, 0.5 metre north of baseline.

All squares were of complete dimensions, but it proved impossible to take resistivity readings on the greens, and gradiometer readings on steep slopes next to greens, near metal tee-off points and close to some drain covers. Dummy zero readings were inserted at these points. The presence of iron railings immediately west of the grids had some limited effect on the gradiometer readings.

Resistivity was set nominally at about 20 ohms for base readings, with values rising up to about 100 for strong features. The gradiometer was zero'd for base readings, with features of interest causing swings typically of +5 nT. Very strong signals, such as iron covers and strong water flow could cause saturation over 200 nT.

A contour survey was also conducted using a dumpy level and staff. The very steepness of the terrain made this a complex operation, requiring many stations. Relative spot heights were measured at 10 metre intervals east and north of point 100, 480. Two grids not surveyed by instruments were included in the contour survey. The contour map obtained was tied into Ordnance Survey height above datum by means of a benchmark on the gatepost of Ormonde Lodge, just outside the top gate of High Common. This was found by reference to 1st Edition Ordnance Survey 6" map to be 321.2 feet, that is 97.8m above datum.

The contours and a map of the site have been overlaid on the results presented here, so that the location of features of interest can be more readily mapped on the ground.

#### Results

Both instruments showed a high level of activity. The problem came in interpreting what was of archaeological interest from the effects of modern disturbance and from geological intrusion. The interpretation given is the responsibility of the author. As an instance, a strong, broad line of high resistivity heading north on the eastern edge of the lower grids, matched by a pair of ditch-like lines in the gradiometry looked reminiscent of a road, but as it went directly to a green, it was likely to be modern. Investigation in a small excavation revealed a gravel spread of no apparent age.

A plot of the gradiometer output is given in figure 1. Regular white patches indicate insertion of dummy readings. Bands with alternating black and white (top left, diagonal and bottom, horizontal) are most likely pipes with flowing water. Faint diagonal striping at the top of the plot is the effect of (mediaeval) ridge and furrow still clearly visible on the flatter hilltop, but also extending south and east on to the upper part of the steeper gradient. There are possible small circular features in this area. A stronger diagonal line descending to the 6th green (upper centre) and a pair of diagonal lines perpendicular to these and heading south-east are most likely modern.

The contours indicate the severe gradients of this site. There is a 20 metre rise across the extent of the survey, suggesting an average gradient of about 1 in 9. However gradients of 1 in 6 are met on parts of the site, particularly lower down and heading in a north-easterly direction. The gradient eases at the top of the hill, where the ridge and furrow is still clearly visible, but plough lines continue down on to the steep slopes.

Most of the activity of archaeological interest appears across the entire width of the downhill part of the survey area. There are a number of lines, apparently ditches, following a general alignment of south-east to north-west. Some of these possibly forming a sub-rectangular enclosure with a funnel entranceway to the south-east. This has been interrupted by a water pipe signal and by a green. There is a substantial circular feature bottom centre, on the 84 metre contour.

A plot of resistivity output is shown in figure 2. The irregular dark diagonal bands at the top of the plot, which follow the contours probably represent outcrops of stone near the surface at changes of gradient. The sub-rectangular feature at the very top of the plot straddling the 98 metre contour may be a building, but the signal is somewhat irregular. There were magnetic anomalies in this area. There is a pair of parallel lines

below this, but they do not extend to the edge of the plot, so cannot be interpreted reliably as a road.

The much fainter diagonal lines perpendicular to the darker bands represent the medieval ridge and furrow. The diagonal broad black band heading south-east to the lower right is most likely a modern feature associated with the golf course.

The principal feature of interest is apparently a house of Romano-British design at the west end of the 88m contour, facing east-south-east. This appears to comprise two large outer rooms with a smaller central room. There is also a suggestion of a corridor along the south-east frontage. Overall dimensions are approximately 12.5 by 9 metres. Note that the contours spread a little wider at this point, indicating an easing of the gradient. There has probably been some terracing to accommodate the building. Very faint lines to the east between the 84 and 86 metre contours may represent an earlier building. These lines also appear on the gradiometer plot, but the signal is not strong enough to be definite.

Figure 3 shows a combination of the gradiometer and resistivity data overlaid on map and contour data. This allows an appreciation of the relative positions of all features of interest, and their relative heights. The building can be seen in relation to the farmstead features.

#### Interpretation

The principal archaeological features of the survey area would appear to be the medieval ridge and furrow still clearly visible on the lesser gradient at the top of the hill, and a Romano-British farmstead on the steeper slopes below them. The farmstead may have been preceded by an Iron Age dwelling. These features were not in any way visible, but finds of Roman material in the irrigation trenches confirmed a Roman date. The area of activity of the farmstead goes beyond the eastern, southern and western bounds of the survey.

The focus of the settlement was a house, apparently of three rooms and a corridor, facing approximately south-east. The ground plan is very similar to that on the BACAS excavation site at Blacklands, Hemington, 7m south of Bath. It is not possible to say from the plot whether the building was of one or two stories. The building has been placed where the gradient eases slightly. The farmstead is indicated by a number of probable ditches on the same orientation as the house. In at least one case, these form a sub-rectangular enclosure with an entrance. There are possible signs of an earlier rectangular building and also of a round feature, possibly pre-Roman.

There is the possibility of a building at the top of the hill and there are faint suggestions of a road nearby running across the top of the survey area, but these are not confirmed.

Figure 4 shows an annotated plan of these interpreted features, combined with map and contours. This should be compared with the details of figures 1 and 2. Some features are definite, others more conjectural. This is an interpretation of the author only.

#### **Future suggestions**

Any further work would require access to the golf course when it is closed to the public. The summer is now too far gone to permit late evening working, so closure during the day would be needed. It is unlikely that any excavation would be allowed, so geophysical survey is the best method of exploration.

Providing the grid baseline has been retained, it would be relatively easy to continue the survey to the south to explore the farmstead further, although the next grids to the south would be disrupted by a metalled public footpath.

The possibility of surveying the western course adjacent to this area should be considered. The fenced and metalled public footpath would cause significant obstruction, but any future survey would best pick up the present grid. This would make overlaying and interpreting data easier. Any further work should also include gradiometer, resistivity and contour survey.

#### Acknowledgments

Thanks to Aquaterra Ltd and their contractors M J Abbott for allowing access to the site for the survey during their civil engineering activities.

The survey was negotiated by Bob Whittaker of BACAS and Marek Lewcun of BAT and was led by John Oswin and Owen Dicker of BACAS. Thanks are also due to Keith Turner for preparing the graphics and Ken Appleby for organising the volunteers.

Thanks most of all to all those volunteers who gave time and effort to make the survey happen. These are listed in Appendix A.

John Oswin
Bath and Camerton Archaeological Society
© July 2004.

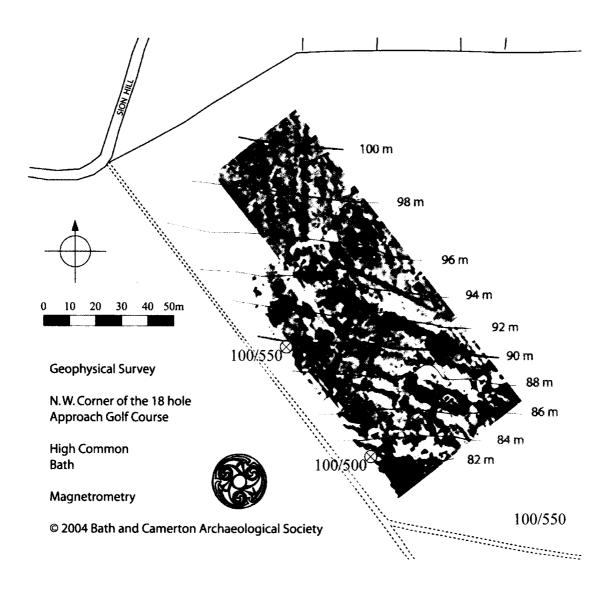


Figure 1. High Common. Plot of gradiometry results.

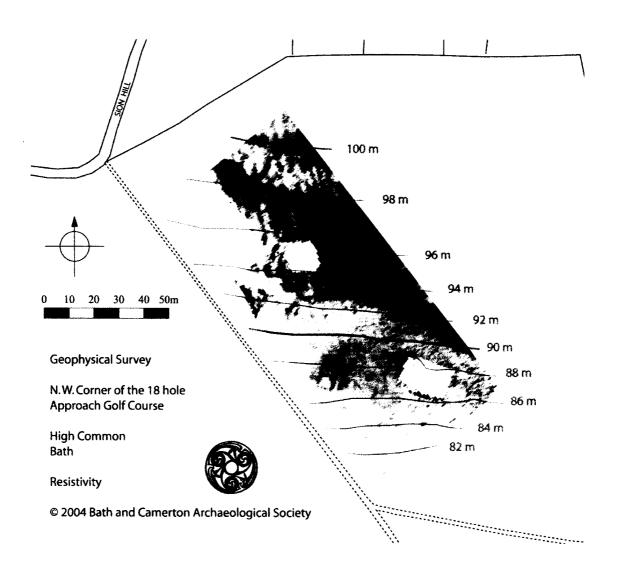


Figure 2 High Common. Plot of resistivity results.

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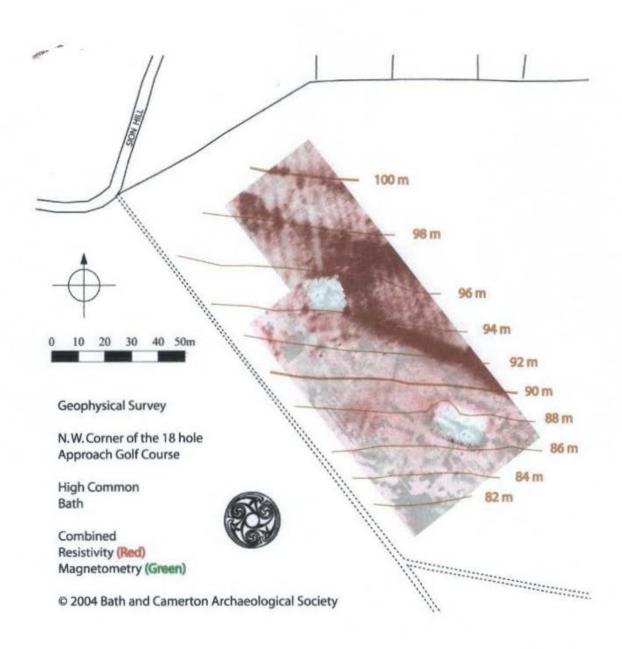


Figure 3 High Common. Overlay of gradiometer, resistivity data.

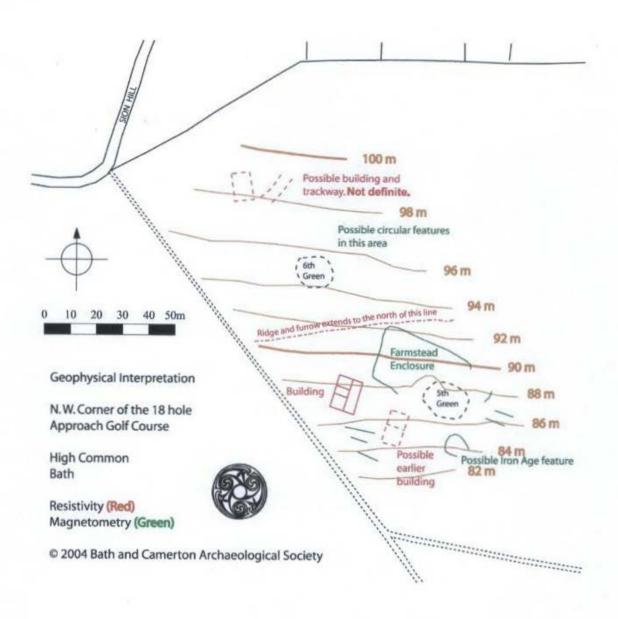


Figure 4. High Common. Interpretation of archaeological features.

High Common Golf Course. Geophysical Survey Report.

#### Appendix A. Personnel

The survey was led by Dr John Oswin of the Bath and Camerton Archaeological Society, assisted throughout by Owen Dicker. The figures were prepared by Keith Turner. Marek Lewcun of the Bath Archaeological Trust was in attendance for most of the time.

The volunteers from BACAS assisted with the survey

Dr Malcolm Aylott, Steve Drew, Jennifer Harmsworth, Jude Harris, Les Hayes, Dawn Hodgson, Mary Huntley, Jayne Lawes, Hannah Lawes, Tim Lunt, Clive Peacock, Bill Rowe, Laurie Scott, Simon Tyler, Bob Whitaker, Tracey Williams and Sophie Williams.

# APPENDIX 2

Description of archaeological contexts

High Common Golf Course. Appendix 2. Description of archaeological contexts.

#### High Common Golf Course, Bath. Description of archaeological contexts.

#### 501-525. Trenches 5A - 5D, near 5th green of 18-hole course.

- 501 Trenches 5A-5D. Topsoil
- Trenches 5A-5D. Subsoil, Brown loam with scattered small stones. Undulates.
- 503 Trenches 5A-5D. Below 502. Stony brown loam, containing pottery and small particles of mortar...
- Trenches 5A-5C. Below 503. Dense rubble, mostly angular Bath stone. Average size 60x70x150mm. A few 60x200x250mm.
- Trenches 5B. Sooty deposit, banked up against side of column drum 506
- Trenches 5B. Column drum. 300mm diameter, with a shutter recess 15mm wide and 10mm deep and a slot for a bolt or locking device beside it at the top of the visible face.
- Trenches 5B. Below 505. Gritty brown clayey loam.
- Trenches 5B. Below 507. Denser and paler brown clay loam with rusty brown particles.
- Trenches 5B. Below 508. Gravelly horizon with small pockets of clay. Possible floor surface.
- 510 Trenches 5B. Below 509. Soft to medium density brown clay.
- 511 Trenches 5B. Below 511. Worn surface of limestone cobbles. Only two stones, each c.110x220mm, exposed in small area at base of trench, but laid horizontally and closely set. Not excavated below here.
- 512 Trench 5C. Below 504. Thin layer of gritty loam with charcoal, tile and crushed mortar.
- 513 Trench 5C. Below 512. Small pieces of fragmented stone. May have continued into Trench 5B but were not clear.
- 514 Trench 5C. Below 504. Well-laid surface of worn Bath stone cobbles. A shallow wheel rut crosses the axis of the trench, 1.2m from the north end.
- 515 Trench 5C. Below 512. Thin horizon of white lime and soot.
- 516 Trench 5C. Soft brow stone-free loam. Only small area excavated, at limit of excavation.
- 517 Trench 5C. In upper half of trench, thin layer of pennant roof tile fragments with yellowish cream mortar in a matrix of brown loam, directly overlying surface 514..
- 518 Trenches 5C-5D. Between 502 and 517. Brown loam with grit and scattered angular pieces of limestone.
- 519 Trench 5D. Uppermost fill of ditch 523, probably post abandonment. Soft to medium density dark brown loam with frequent particles of tile-coloured material and occasional charcoal.
- 520 Trench 5D. Below 519. Paler brown clayey loam with pale yellow pockets.
- 521 Trench 5D. Below 520. Thin layer of angular stones, lying flat. Probably washed in from 524.
- 522 Trench 5D. Below 521. Dark grey loam with pieces of limestone. Not excavated below this
- 523 Trench 5D. Ditch, aligned NW-SE. Only the eastern half was excavated, and the base was not reached. Minimum depth 0.50m.
- 524 Trench 5D. On east side of ditch 523, below 518. Mixed angular and sub-rounded limestone rubble up to 80x150x150mm, in a brown loam matrix.
- 525 Trench 5D. Below 524.brown loam with chunks of limestone. Early subsoil.

High Common Golf Course. Appendix 2. Description of archaeological contexts.

#### 1201-1206: 12 hole course, general

- 1201 Topsoil
- 1202 Subsoil. Brown loam, gritty in places.
- 1203 Ridge and furrow system on west side of course.
- 1204 Charcoaly and ashy brown loam filling bottoms of furrows. Contains 17<sup>th</sup> century clay pipes.
- 1205 Lower lynchet in NW corner
- 1206 Higher lynchet in NW corner, east of 1205.

#### **1801-1803: 18-hole course general**

- 1801 Topsoil
- Subsoil. Brown loam, gritty in places. Thinner at the top of the course where it overlies bedrock. Subsoil south of the 1<sup>st</sup>, 13<sup>th</sup> and 14<sup>th</sup> greens is charcoaly and contains fragments of 17<sup>th</sup> century clay pipe.