

University of Reading

Extending Histories: from Medieval Mottes to Prehistoric Round Mounds

Hamstead Marshall Castle 3, West Berkshire

Interim Report

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SUMMARY

In September 2015 and February 2016 researchers from the University of Reading carried out a programme of archaeological fieldwork at the site of a castle motte (mound), Castle 3, near to Hamstead Marshall, West Berkshire. This fieldwork included the drilling of two boreholes through Castle 3 to collect sequences of undisturbed sediment cores, and an analytical earthwork survey of both mounds. In the laboratory, the core samples from Castle 3 were examined and the potential for evidence of past environmental conditions preserved within the samples was assessed. Suitable organic remains were taken from the cores for AMS ¹⁴C dating (radiocarbon dating). The results of this work indicate that Castle 3 was constructed from local geological material and most likely dates to the mid-12th to mid-13th centuries. The earthwork evidence suggests that Castle 3 was constructed utilising the natural topography, with the mound given the appearance of greater size by cleverly sculpting the natural spur on which it sat. The local environment immediately before Castle 3 was built was wet and marshy, and covered by scrubby Birch and Hazel woodland. During the drilling of the borehole in the centre of Castle 3 (BH1), a large air-filled void was discovered beneath the mound. This feature is most likely to be a natural dissolution feature in the underlying Chalk bedrock.

1. INTRODUCTION

1.1. In September 2015 and February 2016, staff from the University of Reading undertook a programme of fieldwork at Hamstead Marshall motte and bailey castles, West Berkshire. This work was carried out as part of the *Extending Histories: from Medieval Mottes to Prehistoric Round Mounds* project ('The Round Mounds project' for short), a University of Reading research project funded by The Leverhulme Trust. The research aims to unlocking the history of monumental mounds in the English landscape. It contends that fossilised within the main body of some medieval mottes are large Neolithic round mounds, which are among the rarest and least well understood monuments in Britain. 'Castle 3', Hamstead Marshall was one of 20 mottes from across England considered to have prehistoric potential and selected for detailed archaeological investigation.

2. TOPOGRAPHY, GEOLOGY AND LANDUSE

2.1. The motte and bailey castles at Hamstead Marshall (Scheduled Monument No: 1007924) are located approximately 1.5km to the north of the present village of Hamstead Marshall, West Berkshire (centred on SU 42150 66850). The Scheduled area comprises the earthwork remains of three castle mottes and a series of associated earthworks; the castles at the site were described and numbered by Myres (1932) as shown in Figure 1. The study area of the present works ('the site') is limited to the easternmost motte, Castle 3, and its immediate vicinity.

2.2. Castle 3 is positioned on the north-facing slope of a an area of raised ground approximately 80m south of the River Kennet / Kennet and Avon Canal at an elevation of approximately 100m OD. A number of small springs, some apparently seasonal, rise just below the crest of the hill at c.120m OD, and drain northwards into the River Kennet.

2.3. The site lies on bedrock of the Lambeth Group (predominantly clays, sands and silts), although the underlying Seaford Chalk Formation is mapped as outcropping less than 50m to the north. Whilst no superficial deposits are mapped immediately beneath the site, river terrace deposits of the Beenham Grange Gravel Member overlain in turn by Peat and Tufa are mapped c.100m north of the site (BGS 2015; Aldiss et al. 2010).

- 2.4. The higher ground to the south of the site is capped by deposits of the Hamstead Marshall Gravel over bedrock of the London Clay Formation that in turn overlies the Lambeth Group bedrock beneath the site. This situation, where a permeable deposit (i.e. gravel) overlies impermeable strata (London Clay Fm and Lambeth Group), gives rise to the large number of springs and small ephemeral watercourses which occur in the vicinity of the site.
- 2.5. The site currently forms part of the gardens of a residential property, Park Lodge. The principal dwelling is situated c.40m east of the centre of Castle 3 mound; stables and a garden shed are located immediately north and east of the mound, respectively. The site is maintained as parkland with a vegetation cover comprising open mixed-deciduous woodland interspersed with small patches of scrub and areas of improved grassland.

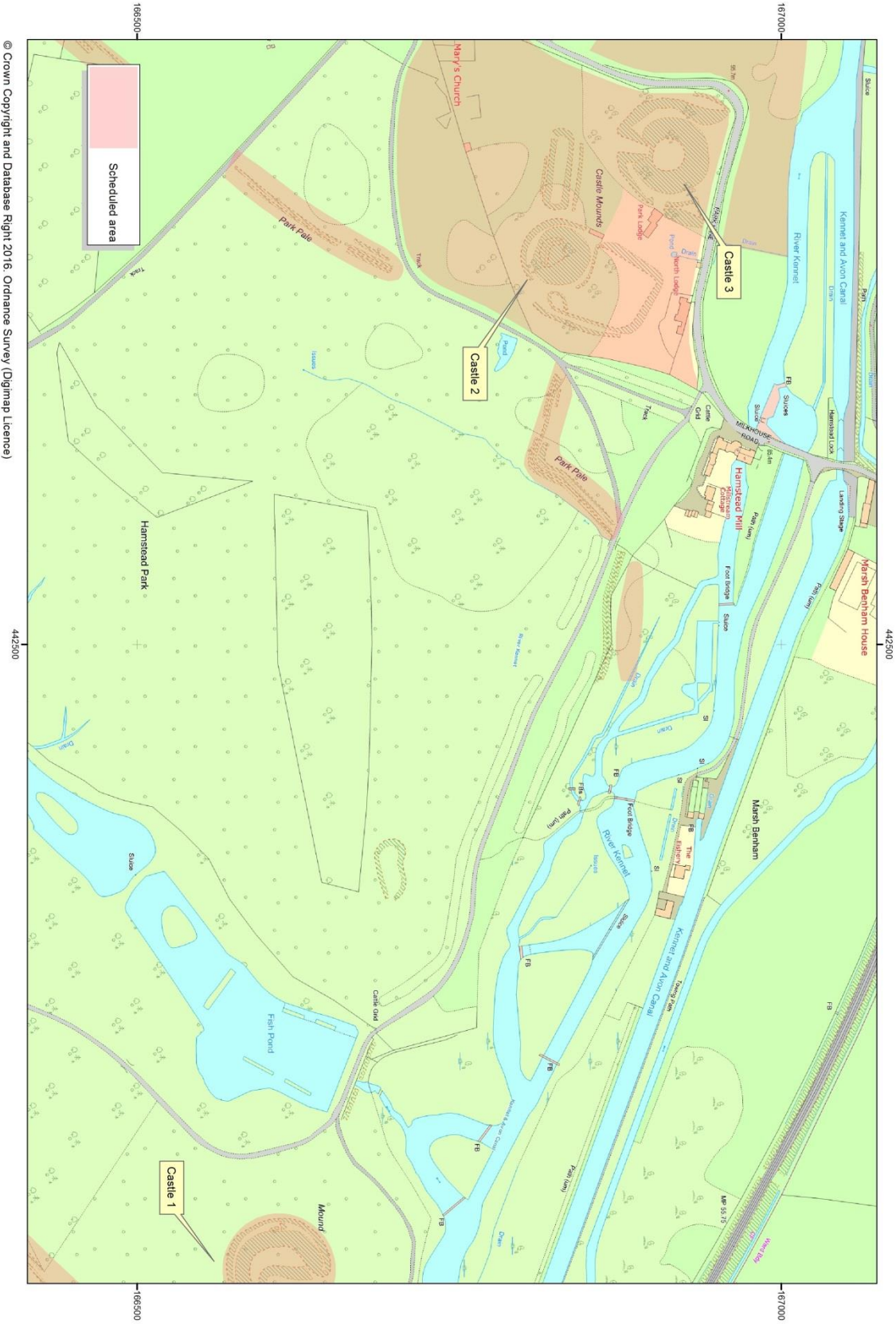


Figure 1. Location map and numbering of castle mottes after Myres (1932).

3. BRIEF HISTORICAL BACKGROUND

- 3.1. The place-name Hamstead (OE *hāmstede* – ‘homestead’) suggests an early origin for the settlement at Hamstead Marshall (Gelling 1974, 299). Although the settlement is mentioned in Domesday, there is no mention of a castle nor is there any indication of the presence of a castle as there is no increase in the value of the *vill* between 1066 and 1086 (Bonney and Dunn 1989, 175).
- 3.2. Following its mention in Domesday, Hamstead is not mentioned in documentary sources until 1218 when it is first associated with the Marshall family, although it is possible that the family may have held the manor for some time before this (Bonney and Dunn 1989, 180).
- 3.3. In 1232 Richard Marshall entertained King Henry III at Hamstead, but soon afterwards, in 1233, Richard fell out of favour with the King and the Sheriff of Berkshire was ordered to demolish the houses and gardens at Hamstead Marshall. Following his death in 1234, Richard Marshall was succeeded by his brother Gilbert who was reconciled with the king and, from 1235 onwards began rebuilding the family home at Hamstead (VCH 1924, 180; Myres 1932, 123-4; Bonney and Dunn 1989, 180).
- 3.4. There are no direct documentary references to the castle (or castles) at Hamstead Marshall (Bonney and Dunn 1989, 180). Nevertheless, the complex of earthwork castles at Hamstead Marshall have stimulated considerable speculation as to their date and phasing: Myres (1932, 124) suggests that Castle 2 was dismantled when Richard Marshall fell afoul of the king in 1233, and that it was replaced by Castle 3 during Gilbert’s rebuilding after 1235. Bonney and Dunn (1989, 180-1), however, argue that motte and bailey castles were obsolete by the 13th century, and suggest that the castles at Hamstead Marshall may have been built during the Anarchy in the reign of King Stephen (1135-1154), pointing out the contemporary importance of the Kennet Valley as a communication route, and the known castle-building activity of John Marshall at Marlborough and Ludgershall (both within 20km of Hamstead Marshall).

4. METHODOLOGY

- 4.1. In September 2015, two boreholes were drilled through the motte of Castle 3 in order to recover core samples for geoarchaeological and palaeoenvironmental assessment. Both boreholes were drilled from the flattened top of the mound, BH1 was positioned in the centre of the mound, BH2 was position 9m to the north, see **Error! Reference source not found.**
- 4.2. Boreholes were drilled using an Eijkelkamp core sampling device (55mm outside diameter) driven by a petrol-powered Atlas Copco Cobra TT drill. This equipment was used to recover cores of sediment within 1m-long plastic tubes which were sealed and labelled on site. In this way a continuous sequence of cores was collected from the present ground surface to the base of the motte. The sealed cores were transported to the School of Archaeology Geography and Environmental Sciences (SAGES), University of Reading, and placed in cold storage prior to laboratory assessment. Cores were then opened using a circular saw and the exposed surface of the sample was cleaned with a scalpel, photographed and described using standard geoarchaeological criteria (Jones *et al.* 1999; Munsell Color 2000; Tucker 2011). Sub-samples for organic carbon and carbonate content determination (loss-on-ignition) were taken at 16cm intervals, and prepared according to standard methods (Dean 1974). The cores were then wrapped in cling-film and returned to cold storage prior to sub-sampling for palaeoenvironmental assessment (see Section 7) and AMS ¹⁴C dating (Section 8). The lithostratigraphy of the boreholes are summarised below and presented graphically in Figure 2; full descriptions of the borehole lithostratigraphy are provided in Appendix 1.
- 4.3. A total of 15 subsamples were wet-sieved to assess the plant macrofossil content of the core samples. Subsamples of 5cm+ stratigraphic thickness were disaggregated in water and wet-sieved over a nest of sieves of between 4mm and 300µm mesh sizes. The residues were then air-dried and assessed using a low-powered binocular microscope. The results of this assessment are summarised in Section 7, and detailed results are given in Appendix 2.
- 4.4. A further six subsamples were taken for pollen assessment from fine-grained and/or organic strata in BH1. 1cm³ subsamples were prepared as follows: i) sampling a

standard volume of sediment (1ml); ii) adding two tablets of the exotic clubmoss *Lycopodium clavatum* to provide a measure of pollen concentration in each sample; iii) deflocculation of the sample in 1% Sodium pyrophosphate; iv) sieving of the sample to remove coarse mineral and organic fractions ($>125\mu$); v) acetolysis; vi) removal of finer minerogenic fraction using Sodium polytungstate (specific gravity of 2.0g/cm³); vii) mounting of the sample in glycerol jelly. Pollen grains and spores were identified using the University of Reading pollen type collection and the following sources of keys and photographs: Moore et al. (1991); Reille (1992). The assessment procedure consisted of scanning the prepared slides, and recording the concentration and preservation of pollen grains and spores, and the principal taxa on four transects (10% of the slide). The results of the assessment are summarised in 7, and pollen counts are presented in Appendix 3.

- 4.5. Following the identification of the possible void feature in BH1 (see Section 6.6 below) a geophysical (Electrical Resistivity Tomography - ERT) survey of Castle 3 was carried out in April 2016. The results of this survey are summarised and incorporated into the Conclusion section of this report, whilst further details including the methodology and technical specifications are presented in a separate report (Fry and Stastney 2016).
- 4.6. A detailed analytical earthwork survey was carried out of Castle 3. This work was undertaken to complement the previous earthwork survey carried out by the Royal Commission on the Historical Monuments of England published in Bonney and Dunn (1989). The analytical earthwork survey was undertaken using a combination of Leica GS09 differential GNSS (Global Navigation Satellite System) equipment and Leica Viva TS12 TST (Total Station Theodolite) equipment, and was completed in the field using graphical survey methods. A digital hachured plan of the site was produced back in the office using AutoCAD software and completed for publication using Adobe Illustrator software.

5. EARTHWORK SURVEY DESCRIPTION AND INTERPRETATION

- 5.1. An analytical survey at 1:500 scale of the earthwork remains of Castle 2 and Castle 3 mottes at Hamstead Marshall was undertaken in February 2016, with the survey area extending to approximately 1.3ha. The impressive earthwork remains lie within the

gardens of Park Lodge, with both the grass-covered mounds supporting deciduous woodland and scrub. The fieldwork was therefore undertaken in the winter months to ensure the best possible conditions for earthwork survey. As the borehole work on Castle 2 has yet to be completed, this interim report will only focus on the earthworks

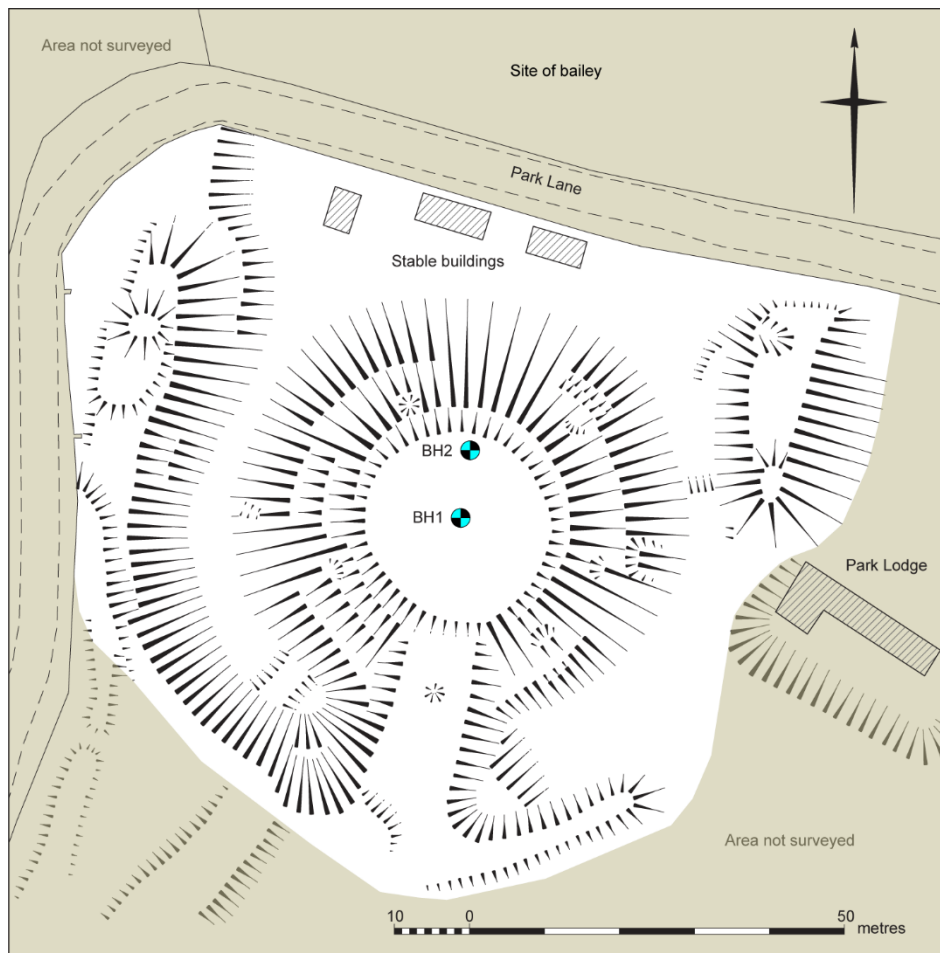


Figure 2. Hamstead Marshall Castle 3: earthwork survey plan of motte at 1:500 scale (reduced) showing borehole locations.

of the motte and surrounding ditch associated with Castle 3 (Figure 2).

- 5.2. Castle 3 is located on the end of a natural north-facing spur on the south-side of the Kennet Valley. The motte and bailey castle has been much disturbed, with the bailey to the north now separated from the motte by Park Lane and largely destroyed through the process of agricultural improvement.
- 5.3. The earthwork remains of Castle 3 are therefore dominated by a substantial flat-topped motte which has a basal diameter of between 58-60m. The motte is bounded by a wide ditch which has been partly infilled along its eastern side. The top of the mound stands between 6.1m and 7.6m above the surrounding ground surface, the

sub-circular summit between 23.4-25.5m in diameter and defining an area of approximately 474m². The broad, flat-topped nature of the mound may suggest it originally supported a ring-wall or shell-keep, though no wall footings were observed during fieldwork.

- 5.4. A number of breaks-of-slope and ledges were identified around the circumference of the motte. A distinct break-of-slope was recorded between 3.3-3.8m below the summit of the mound, and could be traced around much of its circuit. On the south side this feature is associated with a narrow berm, a maximum of 2m wide, which separates the slope of the mound from the ditch cut. This would suggest that the break-of-slope signifies the level of the old ground surface, indicating that the lower 2.8-4.3m of the mound represents the sculpted natural ground. A further break-of-slope was identified between 0.4-0.9m below the summit of the mound, and can again be traced around most of its circuit. This break would appear to represent a distinct construction phase, possibly associated with the levelling of the mound top.
- 5.5. The mound has a well-defined ditch around its western and southern sides with the ditch disturbed and partly infill to the east, probably as a result of the construction of Park Lodge and its associated gardens. The ditch is a maximum of 7.2m wide at its base and ranges from 1.3-3.4m deep. There is no evidence of a ditch around the northern side of the mound, though this area is much disturbed and is now occupied by a range of stable buildings. It is conceivable that the ditch never entirely encircled the mound, with the bailey to the north directly adjoining the base of the mound. Only further archaeological investigations could resolve this. The ploughed-down remains of the ditch's outer scarp were also recorded running northwards beyond the mound on both the east and west sides. These would appear to represent the remains of the bailey's outer ditch, which has now been infilled and significantly truncated by Park Lane.
- 5.6. Ploughed-down sections of counterscarp bank were also identified associated with the ditch. A linear section of bank was recorded running eastwards along the outer lip of the ditch from the causeway on the south side of the mound, the bank standing no more than 0.6m high. A section of bank was also recorded on the west side of the ditch, standing around 0.8m high, which has been much disturbed and truncated by the garden boundary wall. A substantial section of bank, standing up to 3.1m high,

also survives on the north-east side of the mound and would appear to represent the remnant of the bailey bank. The earthwork evidence therefore indicates that both the motte and the bailey were originally enclosed by a ditch and outer bank, the bank possibly more pronounced surrounding the bailey on the north side.

- 5.7. A substantial causeway was recorded crossing the ditch on the south side of the motte. This causeway is 10.4m wide and gives access to the summit of the mound by way of a gently-sloping ramp. The ramp clearly overlies the mound and the causeway is secondary to the construction of the ditch, indicating this feature is a later addition. With the bailey enclosure located to the north of the motte, the original access to the mound would almost certainly have been from this side. However, there were no earthwork features identified on the north side of the mound which could be interpreted the remains of a structure or stairway which gave access to the top of the motte.

6. BOREHOLE FIELDWORK AND INTERPRETATION

- 6.1. BH1 was drilled to a depth of 15.00m below ground level (bgl) at which point the borehole was abandoned due to the lack of sample retention. A total of 10m of cores were recovered, down to a depth of 10.00m bgl. Below 5m bgl, sample retention was poor; ~50% of each core was either void or filled with loose material fallen-in from the sides of the borehole. Below 10.00m bgl the corer began to slowly descend under its own weight, and no sample was retained in the chamber. The poor sample retention and lack of resistance below 10.00m bgl indicates the presence of an air-filled void beneath BH1; it is likely that the poor sample recovery between 5.00m and 10.00m bgl is due to the partial collapse of strata overlying this void during drilling. BH2 was drilled to a depth of 8.00m bgl and reached *in-situ* geological strata at a depth of 5.88m bgl.

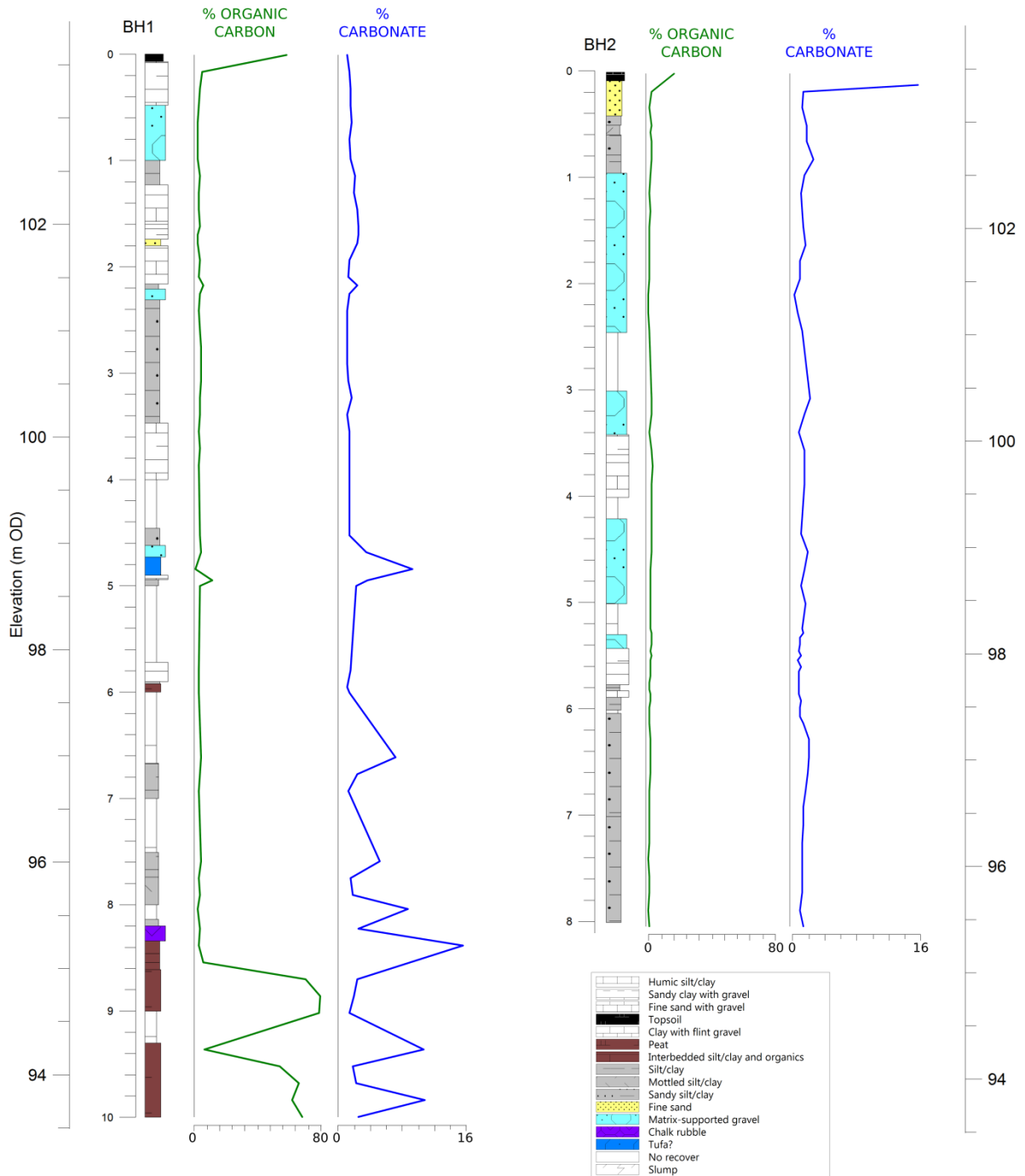


Figure 2: Borehole lithostratigraphy

6.2. Firm, locally friable, black peat, composed largely of partially-decayed wood fragments, was encountered at the base of BH1. Similar peaty strata were encountered at 10.00-9.30m, 9.00-8.61m, and 6.00-5.92m bgl. It is possible that these all formed a single stratum, but that the lower parts of this unit have moved out of position due to the collapse of material into an air-filled void during drilling; all other material recovered in the cores between 6.00m and 10.00m bgl is likely to have fallen

- in to the hole during drilling. Conformably overlying the peat, between 5.92m and 4.62m bgl, was 0.50m of grey soft, sandy, slightly calcareous and locally humic silt/clay with some chalk and flint pebbles, and with occasional charcoal granules in places. From 4.62m bgl to the surface in BH1 was a series of layers generally consisting of brown, firm, sandy silt/clay with varying amounts of subrounded flint gravel, with the present soil horizon developed on the top of these strata.
- 6.3. At the base of BH2, between 8.00m and 5.88m bgl was firm to hard pale yellow to grey or brown sandy silt/clay with occasional fine subrounded flint gravel. A sharp (unconformable) boundary was encountered at 5.88m bgl, above which was a succession of deposits of brown sandy silt/clay with varying amounts of flint gravel, at the top of which the present soil horizon was developed.
 - 6.4. Castle 3 motte appears to be constructed from redeposited Lambeth Group strata: strata encountered above 4.62m bgl in BH1 and above 5.88m bgl in BH2 are of an identical lithology to the *in-situ* bedrock of the Reading Formation (Lambeth Group) encountered at the base of BH2 (Ellison *et al.* 1994); this would suggest that the source of this the was the ditch surrounding the motte.
 - 6.5. In BH2, the reworked Reading Fm. material directly overlies the *in-situ* bedrock with no trace of an intervening former ground surface; this would appear to suggest that the site had been at least partially levelled, and the ground surface at BH2 truncated, prior to the construction of the mound.
 - 6.6. Whilst the makeup of the mound in BH1 (the upper 4.73m) is the same as in BH2, the lower portion of the sequence at BH1 is significantly different. As described above, BH1 was abandoned at a depth of 15.00m bgl due to the presence of an air-filled void. The most likely explanation for this feature is that it is related to a dissolution pipe (Clive Edmonds *pers. comm.*). Such features form by the slow dissolution of chalk (or other soluble rocks) by the downward percolation of water and usually consist of a large pipe, generally filled with unconsolidated material, which, over short geological timescales migrates towards the surface; as the dissolution feature develops, small air-filled voids periodically migrate to the ground surface, and therefore these features are usually identified as small hollows or depressions in the ground surface. Dissolution features of this kind are particularly common where the Chalk is covered by more recent deposits (Edmonds 2008, 263); as is the case at Hamstead Marshall,

see 2.3 above. The peat strata encountered at the base of BH1 appear to have formed *in-situ* from the remains of plants (mostly trees and shrubs, see below), possibly growing in a damp hollow which had developed above the dissolution feature. As such the top of the peat at 5.92m bgl may represent the former ground surface of the site prior to the construction of the mound – this is of a similar elevation (97.68m OD) to the truncated top of the *in-situ* bedrock in BH2 (97.58m OD) which may suggest that the ground was deliberately levelled prior to mound construction and that the peat formed in a small hollow, explaining the survival of the former ground surface in BH1, but not in BH2. The deposits which immediately overlie the peat are tentatively interpreted as a ‘trample layer’ directly related to the mound’s construction, as they are soft and structureless, conformably overlie the peat, and contain occasional fragments of charcoal and charred plant remains.

7. PALAEOENVIRONMENTAL ASSESSMENT

- 7.1. Two subsamples from the redeposited Lambeth Group strata in BH1 (4.62m bgl to surface) and four subsamples from BH2 were assessed for plant macrofossil content. These subsamples contained only low to moderate amounts of fine (<2mm) fragments unidentifiable wood charcoal. No other palaeoenvironmental indicators (floral or faunal remains) were present in these subsamples.
- 7.2. One plant macrofossil subsample was assessed from the possible ‘trample’ layer in BH1 between 4.63-4.73m bgl, this was found to contain large quantities of small charcoal fragments, a single charred cereal grain (c.f. *Hordeum* = barley), a number of fragments of highly burnt cereal, and a fragment of hazelnut shell (*Corylus*).
- 7.3. Other plant macrofossil subsamples assessed from the strata overlying the peat in BH1 yielded only small charcoal fragments, and no other floral or faunal remains.
- 7.4. Several subsamples from the peat strata in BH1 were assessed for their plant macrofossil content. One subsample from 5.92-5.97m bgl was composed almost entirely of partially decayed wood fragments (*Betula* = birch, and *Corylus* = hazel) with trace amounts of the leaves and stems of mosses, but contained no identifiable seeds or charred plant remains. Other subsamples from the peat strata were also largely made up of partially decayed wood fragments and contained low to moderate

amounts of small charcoal fragments and a small assemblage of partially waterlogged seeds dominated by Caryophyllaceae (pink/carnation family), *Chenopodium* (goosefoot), *Rumex* (dock/sorrel), *Carex* (sedge), *Betula* (birch) and *Corylus* (hazel). Additionally one subsample, at 8.61-8.66m bgl contained a single sherd of pottery, although this is thought to have fallen down the hole from the overlying strata during drilling.

- 7.5. Six pollen subsamples from BH1 were assessed. No pollen grains were found in three subsamples taken from the silt/clay strata at 7.51-7.74m bgl and 6.67-7.00m bgl in BH1. Three pollen samples taken from the basal peat strata in BH1 were found to contain moderate to high levels of moderately-well preserved pollen grains which were dominated by arboreal taxa: *Alnus* (alder), *Betula* (birch), *Corylus* (hazel), and *Quercus* (oak). A few testate amoebae tests were identified on two pollen slides, although these had been damaged by the pollen samples preparation; examination of a water-mounted subsample taken at 9.45-9.46m bgl (BH1) revealed a small assemblage of taxa indicative of wet soil and/or minerogenic aquatic conditions (e.g. Euglyphidae and *Centropyxis* spp.).
- 7.6. The redeposited Lambeth Group strata, which represent the main bulk of the makeup of the motte, are shown to have a low palaeoenvironmental potential: few, if any, palaeoenvironmental indicators are preserved in these sediments; the only exception to this is the presence of a small amount of charcoal fragments, but these are almost certainly residual, and there cannot be used to reconstruct past environmental conditions or to characterise past human activity in the vicinity of the site.
- 7.7. Preservation of organic remains in the 'trample' layer in BH1 (4.63-4.74m bgl) is generally restricted to charred plant remains. The calcareous nature of these sediments indicates that pollen is unlikely to be well preserved in this layer, and the heterogeneous nature of the layer would make the provenance of any pollen difficult to determine. However, the charred cereal and wood present in the layer is clearly indicative of human occupation in the immediate vicinity of the site prior to the construction of the main body of the mound.
- 7.8. Preservation of palaeoenvironmental indicators is moderate-good within the peat strata in BH1, thereby demonstrating good potential for reconstruction of the environment in the immediate vicinity of Castle 3 prior to the construction of the

motte. Nevertheless, since the peat most likely formed in a very small (perhaps <10m diameter) wooded basin, it is likely that the pollen assemblages reflect the vegetation cover of an extremely restricted catchment area (Prentice 1985; Sugita 2007). Furthermore, the results of the radiocarbon dating (see below) indicate that the peat in BH1 most likely formed within a short period of time, thus restricting the potential of these strata for the reconstruction of vegetation change and/or longer-term environmental dynamics.

8. RADIOCARBON DATING AND CHRONOLOGY

8.1. A total of four samples from the cores from Castle 3 were submitted to the Scottish Universities Environmental Research Centre (SUERC) for AMS ¹⁴C determination. The results of the ¹⁴C dating are shown in Table 1.

Table 1: Results of AMS ¹⁴C dating.

Lab code	BH	Depth (m)	Material dated	C ¹⁴ age BP	δ ¹³ C ¹	Calibrated range (95% confidence) ²
GU 39774 (SUERC-64957)	BH1	9.90-9.95	Hazelnut fragment (<i>Corylus</i>)	824±35	-25.1	1158-1271 cal AD
GU39775 (SUERC-64961)	BH1	8.61-8.66	Hazelnut fragment (<i>Corylus</i>)	878±35	-24.7	1039-1242 cal AD
GU39776 (SUERC-64962)	BH1	4.63-4.73	Charred cereal ?barley (c.f. <i>Hordeum</i>)	854±35	-23.4	1048-1261 cal AD

¹ Relative to VPDB ‰

² Calibrated using IntCal13 calibration curve and OxCal 4.2 (Bronk Ramsey 2009; Reimer *et al.* 2013). Ranges merged.

GU40265	BH2	5.70-	Indet. charcoal	1156±30	-26.2	775-968 cal AD
(SUERC- 65841)		5.88	fragments ≤2mm			

8.2. The three samples dated from BH1 were taken from strata underlying the main body of the mound, and therefore must have been deposited prior to its construction. Although the hazel nut shells were recovered from the core broken into fragments, the results of the palaeoenvironmental assessment of the peat strata from which they were recovered indicates that it is likely that they were derived from mature hazel trees growing in the immediate vicinity of the site, potentially from trees felled and cleared to make way for the mound immediately before construction. All three samples, from the hazelnut shells and the charred cereal grains (presumably the residues of food preparation nearby), returned calibrated age ranges with considerable overlaps at the 95% confidence interval. The degree of overlap between these date ranges indicates that there may be little time-depth to these strata: conceivably all three dates may be contemporary and deposition may have occurred in a brief sequence of contiguous events: the peat strata may represent the surface vegetation present at the site prior to the mound construction, the 'trample' layer in which the charred cereals were incorporated may have formed immediately after those trees and shrubs were felled, and might then have been immediately sealed by upcast material from the external ditch as the mound was raised. Although stratigraphically lowest, the sample at 9.90-9.95m bgl returned the potentially most recent date (1158-1271 cal AD), and this therefore provides a *terminus post quem* for the construction of the motte, indicating a construction date in the second half of the 12th century or later.

8.3. The small fragments of unidentified wood charcoal dated from BH2 must, on stratigraphic grounds, have been incorporated into the mound makeup at some point after the hazelnuts and cereal grains were grown. Therefore the early date returned on the charcoal fragments (95% confidence: 775-968 cal AD) demonstrates that these are residual, perhaps reflecting an early phase of occupation or activity in the vicinity of the site during the later Anglo-Saxon period.

Two sherds of pottery recovered from the boreholes broadly corroborate the radiocarbon dating radiocarbon dating evidence (see

- 8.4. Appendix 4 – Pottery report). The sherds were identified as Kennet Valley ware, long-lived wares produced between the 10th and 13th centuries, and were thought most likely to date to the earlier part of this range (Mepham 2016). Given their subsequent incorporation into the makeup of the mound, these sherds are residual from earlier activity prior to the construction of Castle 3.

9. CONCLUSIONS

- 9.1. The new archaeological works at Hamstead Marshall undertaken by researchers from the University of Reading have significantly improved our understanding of parts of this Scheduled Monument. The work has conclusively demonstrated that the motte of Castle 3 was constructed in the medieval period at some time after 1158-1271 cal AD. As such, this is rather later than is generally considered typical for motte and bailey castles in England; this in turn might potentially support the recent suggestion that Castle 3 was a later successor to the smaller Castle 2 (Wright *et al.* 2015, 315). Further work at Castle 2 employing the same methodology utilised in this report will be carried out in 2016-2017 and may resolve the issue of the chronological relationship between the mottes at the site.
- 9.2. The dates obtained for the construction of Castle 3 conclusively indicate that it was built in the post-Anarchy period, contrary to the view put forward by Bonney and Dunn (1989). The date range from the radiocarbon samples, however, means it is impossible to identify definitively which member of the Marshal family was responsible of its construction. It is possible Castle 3 was built by William Marshal, who was elevated to great power by Richard I in 1189 when he was granted the hand of the daughter and heiress of the second earl of Pembroke, or by his successor, Richard Marshal. The theory put forward by Myres (1932) that Castle 2 was dismantled when Richard Marshal fell afoul of the king in 1233, and then replaced by Castle 3 during Gilbert's rebuilding after 1235, would also be feasible within the date range obtained.
- 9.3. The earthwork evidence indicates that Castle 3 was constructed utilising the natural topography, with the mound given the appearance of greater size by cleverly sculpting the natural spur on which it sat. The castle took the form of a flat-topped motte with a

bailey to the north, the entirety defined by a ditch and outer bank. The motte may have supported a shell-keep or ring-wall, although even at this relatively late date the castle may have been largely of timber and earth construction.

- 9.4. The borehole stratigraphy demonstrates that Castle 3 was constructed from reworked bedrock, most likely derived from the ditch around the mound. Within the centre of the mound, these deposits seal a thin 'trample' layer containing both charred and uncharred plant remains, which in turn seals a thick unit of woody peat. Further palaeoenvironmental analysis of this peat unit has the potential to provide a more detailed reconstruction the environment of the immediate vicinity of the site immediately prior to the construction of Castle 3.
- 9.5. The peat in BH1 contains both macro- and microfossil evidence indicative of formation in a damp, densely-vegetated stand of scrubby woodland. The peat appears to have formed in a small wet hollow, perhaps fed by one of the numerous springs presently known to rise at the site.
- 9.6. During drilling of BH1, a large, apparently air-filled void was encountered beneath the peat at the base of the sedimentary sequence. Subsequent survey of the mound using Electrical Resistivity Tomography identified a large high resistivity anomaly at a depth of ca.9m beneath the centre of the mound. Karst features such as sinkholes, stream sinks, and dissolution pipes are common in the vicinity of the site, and as such, the most likely explanation for the presence of a void is that it is related to a large dissolution pipe. As the underlying Chalk bedrock (which at the site is overlain by a relatively thin cover of younger deposits of the Lambeth Group) is dissolved by the downward percolation of water, air-filled voids may periodically migrate upwards to the ground surface, eventually forming a depression on the surface which gradually deepens and enlarges over geological timescales (Edmonds 2008). It is likely, therefore, that the peat formed in just such a depression formed by the dissolution feature unbeknown to the past occupants of the castle.
- 9.7. Although at present there is no sign on the surface of the mound of any disturbance associated with the upward migration of voids, the presence of a dissolution feature beneath castle 3, and potentially other parts of the Scheduled Monument, may be relevant to future management of the site.

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APPENDIX 1 – BOREHOLE LOGS

BH	Easting	Northing	Elevation
BH1	442119.75	166912.97	103.60
BH2	442121.15	166921.86	103.46

BH	Top	Base	Lithology	Comments
BH1	0.00	0.07	Topsoil	7.5 YR 3/2 Dark brown friable organic slightly fine sandy topsoil with abundant leaf litter and roots throughout. [Th1 Tl1 Sh1 Ga1] Grading into:
BH1	0.07	0.48	Fine sand with gravel	7.5 YR 4/4 Brown loose friable slightly silty fine sand (subsoil) with occasional roots and occasional subangular white flint pebbles and rare CBM granules and charcoal flecks. [Ga2 Ag1 Tl1 Gg(min)+] Grading into:
BH1	0.48	1.00	Matrix-supported gravel	7.5 YR 5/6 Strong brown loose matrix-supported gravel of (shattered) angular flint pebbles and frequent angular platy flint granules in a matrix of slightly silty fine sand. [Gg(maj)2 Ga2 Ag+ Gg(min)+] Unknown boundary (presumably grading?) to:
BH1	1.00	1.23	Sandy silt/clay	7.5 YR 5/6 Strong brown mottled GLEY 1 8/5GY light greenish grey firm fine sandy silt/clay. Frequent convoluted discontinuous orange bands of Fe staining throughout. Rare subrounded flint pebble at 1.16m. [As2 Ga2 Gg(maj)+] Diffuse boundary to:
BH1	1.23	1.60	Sandy clay with gravel	7.5 YR 5/3 Brown firm slightly fine sandy silt/clay with frequent subangular - subrounded flint pebbles and occasional very faint orange mottles. Rare granule-sized charcoal flecks and granule-sized CBM fleck at 1.58m. Vertical woody root seen at 1.46-1.51m depth. [Ag2 Ga1 Gg(maj)1 Tl+] Diffuse boundary to:
BH1	1.60	1.64	Sandy clay with gravel	Band of 7.5 YR 5/6 Strong brown mottled GLEY 1 8/5GY light greenish grey firm slightly fine sandy clay with rare white rounded flint pebbles. [As3 Ga1 Gg(maj)+] Sub-horizontal diffuse boundary to:
BH1	1.64	1.74	Sandy clay with gravel	7.5 YR 5/4 Brown firm sandy silt/clay with frequent subrounded flint granules and occasional granular charcoal flecks (especially towards base) and occasional subrounded flint pebbles. [As2 Ga2 Gg(maj)+] Sub-horizontal diffuse boundary to:
BH1	1.74	1.80	Fine sand	GLEY 1 8/5GY Light greenish grey mottled 7.5 YR 6/6 Reddish yellow firm slightly clayey mottled fine sand. Bioturbation (rooting) visible with Fe-stained sand and clay infilled rootholes (~5mm in diameter). [Ga3 Ag1] Irregular grading boundary to:

BH	Top	Base	Lithology	Comments
BH1	1.80	2.16	Sandy clay with gravel	7.5 YR 5/4 Brown firm slightly fine sandy silt/clay with occasional subrounded to subangular white (weathered) flint pebbles and occasional faint orangey mottling. [Ag2 Ga1 Gg(maj.)1] Diffuse to:
BH1	2.16	2.21	Mottled silt/clay	Gley 1 7/10Y Light greenish grey firm mottled clay with very fine (~1mm) dark blue mottles. [As4] Diffuse to:
BH1	2.21	2.31	Matrix-supported gravel	7.5 YR 6/2 Pinkish grey loose matrix supported gravel of angular (shattered) flint pebbles in a slightly clayey fine sand matrix with some 5 YR 4/4 reddish brown mottles/nodules. [Gg(maj.)3 Ga1 As+] Diffuse to:
BH1	2.31	3.47	Sandy silt/clay	10 YR 7/2 Light grey mottled 5 YR 4/4 brown compact, becoming friable below 2.84m, silty fine sand with occasional white subrounded to subangular flint pebbles and frequent reddish brown mottles, nodules, and irregular discontinuous fine wavy bands (Fe oxide?) and occasional small (~1-2mm) black flecks (Mn?). [As2 Ga2 Gg(maj.)+] Diffuse to:
BH1	3.47	4.00	Sandy clay with gravel	10 YR 5/3 Brown firm faintly mottled (light greenish grey) slightly fine sandy clay with occasional granule-sized orange/red Fe mottles and subrounded flint granules, rare subangular-angular flint pebbles. Recovery slightly poor below 3.74m. Partial void between 3.74 and 3.80m. [As3 Ga1 Gg(maj.)+]
BH1	4.00	4.46	No recover	Void
BH1	4.46	4.62	Sandy silt/clay	10 YR 5/3 Brown firm faintly mottled (light greenish grey) slightly fine sandy clay with occasional granule-sized orange/red Fe mottles and subrounded flint granules, rare subangular-angular flint pebbles. [As3 Ga1 Gg(maj.)+] Diffuse to:
BH1	4.62	4.73	Matrix-supported gravel	10 YR 4/1 Dark grey friable mixed deposit consisting of subrounded chalk pebbles, subangular flint pebbles, frequent charcoal granules and a single (?Greensand?) sandstone pebble in a sandy silt/clay matrix. [As3 Gg(maj.)1 Ga+] Diffuse to:
BH1	4.73	4.90	Tufa?	10 YR 7/2 Light grey matrix-supported gravel of subangular chalk pebbles and granules and occasional angular flint granules in a sandy clay matrix. Rare charcoal granules, especially towards base. [Ga1 As2 Gg(maj.)1 Gg(min.)+] Sharp to:
BH1	4.90	4.94	Humic silt/clay	10 YR 3/1 Very dark grey soft ?organic silt/clay with occasional charcoal granules and fine pebbles, and rare subangular flint granules. [As3 Sh1 Gg(min.)+] Diffuse to:
BH1	4.94	5.00	Silt/clay	10 YR 5/1 Grey very soft silt/clay with subangular to subrounded flint granules (white) and occasional charcoal granules and rare subrounded flint pebbles. [As4 Gg(min.)+]

BH	Top	Base	Lithology	Comments
BH1	5.00	5.72	No recover	Void
BH1	5.72	5.90	Sandy clay with gravel	10 YR 7/1 Light grey very soft fine sandy silt/clay with frequent subrounded flint granules and pebbles. [As3 Ga1 Gg(maj.)+] Diffuse to:
BH1	5.90	5.92	Sandy silt/clay	10 YR 5/2 Greyish brown soft sandy silt/clay with occasional subrounded flint granules. [Ga2 Ag2 Gg(min.)+] Diffuse to:
BH1	5.92	6.00	Peat	10 YR 2/1 Black partially decayed soft fibrous ?woody peat. [TI/DI4 Sh+ Ag+]
BH1	6.00	6.50	No recover	Void
BH1	6.50	6.67	Slump	Slump: loose chalk and flint pebbles (grey) and black organic peaty sediment. Disturbed/fallen into borehole.
BH1	6.67	7.00	Silt/clay	10 YR 6/3 Pale brown mottled grey/green and orange soft silt/clay with rare subrounded chalk pebbles down to 6.81m. Some very faint silt and fine sand laminae. [As4]
BH1	7.00	7.46	No recover	Void
BH1	7.46	7.51	Slump	Disturbed material fallen into hole including fragments of black organics and light grey crumbly tufa granules.
BH1	7.51	7.74	Silt/clay	Apparently disturbed. 10 YR 6/3 Pale brown very soft silt/clay [As4] Grading into:
BH1	7.74	8.00	Mottled silt/clay	10 YR 6/3 Pale brown faintly mottled soft silt/clay with occasional Fe granular mottles/nodules, some crumbly tufa granules at 7.90-7.92m, and a single grey chalk pebble at 7.91-7.93m. [As4 Gg(min.)+ Gg(maj.)+ Lc+ Ga+]
BH1	8.00	8.14	No recover	Void
BH1	8.14	8.20	Mottled silt/clay	10 YR 6/3 Pale brown soft faintly mottled silt/clay. Possibly disturbed? [As4]. Diffuse to:
BH1	8.20	8.34	Chalk rubble	2.5 Y 6/2 Light brownish grey poorly sorted gravel/rubble of hard fine ?sandstone and white subangular chalk pebbles. [Gg(maj.)3 Ga1] Sharp to:
BH1	8.34	8.61	Interbedded silt/clay and organics	2.5 Y 6/2 Light brownish grey mixed deposit consisting of subhorizontal layers of organic silt/clay and subangular chalk pebbles in a sandy silt/clay matrix. Tufaceous? [Gg(maj.)1 Ga1 Sh1 As1]. Sharp boundary to:
BH1	8.61	9.00	Peat	5 Y 2.5/1 Black friable horizontally-bedded peat with horizontal woody fragments and rare monocot remains visible in the core. Rare sub-angular flint granules. [TI2 Th1 Sh1].
BH1	9.00	9.24	No recover	Void
BH1	9.24	9.30	Slump	Disturbed/slump material loose friable peat with pockets of brown silt/clay.

BH	Top	Base	Lithology	Comments
BH1	9.30	10.00	Peat	5 Y 2.5/1 Black friable horizontally-bedded peat with horizontal woody fragments and rare monocot remains visible in the core. Rare sub-angular flint granules. [Tl2 Th1 Sh1].
BH2	0.00	0.08	Topsoil	7.5 YR 4/3 Brown loose sandy topsoil with abundant fine and coarse herbaceous roots, some moss on surface. [Th2 Ga2 Ag+ Tb+ Sh+] Grading into:
BH2	0.08	0.41	Fine sand	7.5 YR 6/4 Light brown friable silty fine sand with rare CBM granules and occasional poorly sorted subrounded to subangular flint gravel (granule-pebble size) becoming frequent towards base. [Ag2 Ga2 Gg(maj.)+] Grading into:
BH2	0.41	0.50	Sandy silt/clay	10 YR 6/4 Light yellowish brown firm slightly fine sandy silt/clay with occasional angular (shattered by corer?) flint pebbles. [As3 Ga1 Gg(maj.)+] Diffuse to:
BH2	0.50	0.59	Mottled silt/clay	10 YR 7/4 Very pale brown very firm slightly mottled clay with pockets of very fine sand. [Ag3 Ga1] Diffuse to:
BH2	0.59	0.78	Sandy silt/clay	10 YR 5/3 Brown firm slightly fine sandy silt/clay with occasional subangular flint pebbles and granules. Slightly bioturbated with some clay pockets and a coarse (woody) root at 0.69m. [As3 Ga1 Ag+ Gg(maj.)+ Tl+] Sharp to:
BH2	0.78	0.95	Sandy silt/clay	10 YR 4/4 Dark yellowish brown to 10 YR 6/4 Light yellowish brown with pale grey green mottles firm mottled clay with occasional rounded to subrounded flint pebbles and occasional pockets of silty fine sand. [As3 Gg(maj.)1 Ga+] Diffuse boundary to:
BH2	0.95	2.45	Matrix-supported gravel	10 YR 5/4 Yellowish brown matrix-supported gravel consisting of poorly-sorted angular to subangular flint gravel in a firm slightly fine sandy silt/clay matrix, becoming more gravelly with depth. [Gs2 Gg(maj.)2 Ga+ As+]
BH2	2.45	3.00	No recover	Gouged-out hole - corer pushed down a cobble. Yellowish brown matrix-supported flint gravel and sandy clay recovered.
BH2	3.00	3.44	Matrix-supported gravel	10 YR 5/2 Greyish brown loose (?possibly disturbed by corer) diamict consisting of occasional subangular flint pebbles and granules in a sandy silt/clay matrix. Large subrounded flint pebbles at base. Occasional fine granule-sized charcoal flecks at 3.08-3.10m. [Ag2 Ga1 Gg(maj.)1] Diffuse to:
BH2	3.41	3.60	Sandy clay with gravel	10 YR 3/2 Very dark greyish brown firm sandy silt/clay with occasional subrounded flint pebbles towards top and angular flint pebbles towards base. Faint reddish brown mottling throughout. [Ga1 Ag3 Gg(maj.)+] Grading into:

BH	Top	Base	Lithology	Comments
BH2	3.60	4.00	Sandy clay with gravel	10 YR 5/4 Yellowish brown firm sandy silt/clay with faint reddish brown mottling throughout and occasional subangular to subrounded flint pebbles and granules. Rare charcoal flecks, large (fine pebble-sized) charcoal fragments seen at 3.81m. Pebble-sized sherd of dark grey pottery at 3.95m. Rare woody roots and rootlets. [Ga1 Ag3 Gg(maj)+ Tl+].
BH2	4.00	4.20	No recover	Void
BH2	4.20	5.00	Matrix-supported gravel	?Possibly disturbed due to pushing down of flint cobble? 10 YR 6/2 Light brownish grey to 10 YR 7/2 Light grey loose/disturbed matrix-supported gravel of angular to subrounded flint pebbles in a sandy silt/clay matrix. Grey shattered flint cobble at 4.83-4.88m, may be cobble pushed down by sampler. [Ag2 Gg(maj.)2 Ga+] N.B. 5.00 - 6.00m sampled using gouge auger - sediments subsampled in spits.
BH2	5.00	5.19	No recover	Void
BH2	5.19	5.29	Slump	10 YR 4/4 Dark yellowish brown friable/disturbed slightly sandy silt/clay with occasional subangular fine pebbles of flint and rare 7.5 YR 4/6 strong brown Fe mottling. Appears to be material scraped from sides of borehole by the gouge auger and fallen into the hole. Some large (pebble-sized) angular fragments of smashed flint recovered. [As2 Ga1 Gg(maj.)1] Sharp boundary to:
BH2	5.29	5.42	Matrix-supported gravel	10 YR 3/3 Dark brown, apparently charcoal-rich silt/clay with some fine-coarse sand and very frequent angular to subangular flint pebbles and granules and rare subrounded chalk pebbles. [As2 Ga1 Gg(maj.)1] Diffuse to:
BH2	5.42	5.56	Clay with flint gravel	10 YR 5/4 Yellowish brown mottled 7.5 YR 6/4 light brown stiff silt/clay with occasional angular flint granules and rare angular to subangular flint pebbles. [As3 Gg(maj.)1] Diffuse inclined boundary to:
BH2	5.56	5.76	Fine sand with gravel	10 YR 4/2 Dark greyish brown firm clayey fine sand with frequent subangular to subrounded flint pebbles (one possibly burnt? At 5.64m) and rare fine charcoal granules. [Ga3 Gg(maj.)1 As+] Diffuse boundary to:
BH2	5.76	5.82	Silt/clay	7.5 YR 6/4 Light brown stiff silt/clay with occasional subrounded flint pebbles and occasional charcoal granules. [As4 Gg(maj.)+] Diffuse to:
BH2	5.82	5.88	Sandy clay with gravel	10 YR 6/3 Pale brown clayey sand with very frequent subangular flint pebbles and granules and rare charcoal granules [As1 Ga2 Gg(maj.)1] Sharp to:
BH2	5.88	6.00	Sandy silt/clay	10 YR 6/2 Light brownish grey firm slightly fine sandy silt/clay with 10 YR 6/4 light brown mottling, possibly oxides in infilled rootholes? Frequent whitish angular platy flint granules and subrounded to rounded flint

BH	Top	Base	Lithology	Comments
				pebbles. [As2 Ga1 Gg(maj.)1] LAMBETH GROUP
BH2	6.00	6.03	Slump	Mixed dark brown silt/clay and gravel. Very soft. Material fallen into borehole.
BH2	6.03	7.00	Sandy silt/clay	2.5 Y 7/2 Light grey mottled 7.5 YR 4/6 strong brown firm to hard silty fine sand with occasional to rare subrounded white flint granules and rare pebbles passing down into firm plastic clay with Fe mottling and rare white rounded flint granules. 6.36-6.39m: Band of intense reddish Fe mottling. 6.72-6.74m: band of fine to coarse sand with rounded granular to fine pebble-sized flints. [Ga2 Ag2 Gg(min)+ becoming As4 Gg(min)+] LAMBETH GROUP
BH2	7.00	8.00	Sandy silt/clay	2.5 Y 7/3 Pale yellow slightly greyish slightly fine sandy silt/clay with occasional white subrounded to subangular flint granules and rare pebbles. [Ga1 As3 Gg(min)+] LAMBETH GROUP. End of BH.

APPENDIX 2 – WET SIEVING RESULTS

BH	Depth	Vol.	Charcoal (>2mm)*	Charcoal (<2mm)*	Charred remains	Artefacts	Seeds
BH1	1.37-1.47	100ml		1			
BH1	1.67-1.75	30ml		2			
BH1	4.63-4.73	40ml		5	Fragments of charred cereal (c.f. <i>Hordeum</i>) x 5.		<i>Corylus</i> (fragment) x 1.
BH1	4.77-4.87	50ml		5			
BH1	4.90-4.94	25ml		5			
BH1	4.94-4.99	50ml		5			
BH1	5.92-5.97	50ml					
BH1	6.80-6.90	75ml		1			
BH1	8.42-8.52	25ml	1	1			
BH1	8.61-8.66	25ml	0	3		1 sherd Med. Pottery	Apiaceae x 1; Asteraceae x 1; <i>Betula</i> x 1; <i>Carex</i> x 3; Caryophyllaceae x 9; <i>Chenopodium</i> x 6; <i>Corylus</i> (fragments) x 3; <i>Rumex</i> x 4.
BH1	9.30-10.00	250ml	1	4			Apiaceae x 2; Asteraceae x 5; <i>Betula</i> x 4; <i>Carex</i> x 7; Caryophyllaceae x 6; <i>Chenopodium</i> x 8; <i>Corylus</i> (fragments) x 5; Fabaceae x 1; <i>Galium</i> x 1; Pineaceae x 2; Poaceae x 1; Polygonaceae x 1; <i>Rubus</i> x 1; <i>Rumex</i> x 10.

BH	Depth	Vol.	Charcoal (>2mm)*	Charcoal (<2mm)*	Charred remains	Artefacts	Seeds
BH2	5.35-5.42	50ml					
BH2	5.7-5.76	75ml		1			
BH2	5.76-5.82	50ml		1			
BH2	5.82-5.88	80ml		1			

* Estimated number of fragments: 1 = 1-25; 2 = 26-50; 3 = 51-75; 4 = 76-100; 5 = 100+

APPENDIX 3 – POLLEN ASSESSMENT COUNTS

Hamstead Marshall BH1		6.68-6.69m	6.99-7.00m	7.52-7.53m	8.74-8.75m	9.38-9.39m	9.94-9.95m
Trees/Shrubs							
<i>Alnus</i>	alder	0	0	0	11	36	3
<i>Betula</i>	birch	0	0	0	6	19	2
<i>Calluna</i>	heather	0	0	0	2	5	0
<i>Corylus</i>	hazel	0	0	0	12	11	1
<i>Quercus</i>	oak	0	0	0	10	20	0
<i>Salix</i>	willow	0	0	0	3	0	0
<i>Ulmus</i>	elm	0	0	0	0	1	0
Herbs							
Apiaceae	parsley family	0	0	0	3	0	1
<i>Artemisia</i>	e.g. mugwort	0	0	0	1	0	0
Asteraceae	daisy family	0	0	0	1	0	0
Caryophyllaceae	carnation family	0	0	0	0	3	1
<i>Galium</i>	bedstraw	0	0	0	0	1	0
Lactuceae	e.g. chicory, dandelion	0	0	0	1	1	2
Poaceae	grass family	0	0	0	0	3	1
Poaceae c.f. <i>cereale</i>	cultivated cereals	0	0	0	1	0	1
<i>Rumex</i>	e.g. dock, sorrel	0	0	0	3	0	2
Spores							
Spore (indet.)	fungus spores	0	0	0	0	4	0
Other							
Unidentifiable pollen		0	0	0	3	0	0
Testate amoebae (undif.)		0	0	0	0	3	3
Total pollen (ex. Spores and indet.)		0	0	0	54	100	14
Preservation	(1=very poor, 5=excellent)	0	0	0	3	3	3
Concentration		0	0	0	3	4	2

APPENDIX 4 – POTTERY REPORT

POTTERY FROM HAMSTEAD MARSHALL

By Lorraine Mephram

Two sherds of pottery recovered from the site were submitted for specialist comment. Both came from boreholes drilled through the motte, one (weighing 3 grammes) from Borehole 1, and one (weighing 12 grammes; broken in two with a modern break) from Borehole 2. In stratigraphic terms, the sherd from Borehole 1, found at the top of an organic layer sealed by mound material, is the earlier, while the sherd from Borehole 2 was incorporated in the mound itself.

Both sherds are in similar fabrics, with coarse clay matrices containing sparse inclusions of subrounded quartz and subangular flint, mostly under 1mm in size but with a few up to 2mm. The flint inclusions are patinated (grey or white), and have the appearance of naturally occurring gravel flint. Both are undiagnostic body sherds.

This sandy/flint-tempered fabric type falls into a long-lived and widespread ceramic tradition found across west Berkshire, north Hampshire, south Oxfordshire and north-east Wiltshire. At Newbury, sandy/flint-tempered wares formed Vince's group A wares (Vince 1997, 46–51). A ware of a similar composition but also containing chalk or limestone, and found in the same vessel forms, is clearly closely linked (*ibid.*, group B wares). Vince recognised the two wares as a ceramic tradition, with a wide distribution, largely riverine, and centring on the Kennet valley (*ibid.*, fig. 28); the wares have subsequently been renamed as 'Kennet Valley' wares (Mephram 2000).

Kennet Valley wares have a length chronology. At Newbury, group A wares occurred throughout the sequence from the late Saxon period (10th or more probably early 11th century) at least until the end of the 13th century, and possibly beyond, and Vince also noted the occurrence of sherds of group A wares from Silbury Hill, from occupation debris from a short-lived fortification of the hilltop associated with a coin of c. 1010 (Vince 1997, 64). An early start date for the tradition is confirmed by evidence from the manorial site at Faccombe Netherton in north Hampshire, which produced sandy/flint-tempered wares (as well as sandy/flint-/chalk-tempered wares) from a sequence starting in the mid-Saxon period, although the mid-Saxon fabrics tend to be coarser and softer-fired - fabrics which provide a parallel for the Hamstead Marshall sherds occurred from the mid-10th century up to the early 13th century (Fairbrother 1990, 279–95, fabrics D/P, K, P, A7, A8). In Winchester, sandy/flint-tempered wares cover the period c. 850–1250, but mostly from c. 1050–1225 (Cotter 2011, 266); again, the mid-Saxon variants are generally distinctive by means of firing, and mid- to late Saxon variants tend to be less obviously sandy.

Ultimately, while the sherd from Borehole 1 provides confirmatory evidence that the mound is medieval rather than of prehistoric origin, neither this sherd nor the sherd from Borehole 2 offers much more in the way of chronological resolution. The likely potential date range of the two sherds is 10th to 13th century, and there is little to narrow down the date range any further beyond the observation that the sand content is relatively low, which would tend to place them earlier rather than later in the sequence, perhaps 10th to 11th century. This is only a tentative dating, however, and such a small sample should not be taken as definitive dating evidence for the mound.

References

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- Vince, A.G., 1997, Excavations at Nos. 143–5 Bartholomew Street, 1979, in A.G. Vince, S.J. Lobb, J.C. Richards and L. Mephram, *Excavations in Newbury 1979–1990*, Salisbury: Wessex Archaeol Monograph 13, 7–85

23rd February 2016

APPENDIX 5 - OASIS FORM

OASIS ID: theunive1-253786**Project details**

Project name	CASTLE 3 HAMSTEAD MARSHALL: CORING AND EARTHWORK SURVEY
Short description of the project	Part of a research project: 'Extending Histories: from Medieval Mottes to Prehistoric Round Mounds' funded by Leverhulme Trust. Two power auger boreholes were put down through the motte of 'Castle 3', Hamstead Marshall, W. Berks, to investigate the makeup of the mound, recover material for dating, and any palaeoenvironmental indicators. In addition to this, a detailed analytical earthwork survey covering 'Castle 3' and the adjacent 'Castle 2' was carried out to investigate the form and phasing of the site.
Project dates	Start: 24-09-2015 End: 01-03-2016
Previous/future work	Yes / Yes
Any associated project reference codes	theunive1-253446 - OASIS form ID
Type of project	Research project
Site status	Scheduled Monument (SM)
Current Land use	Residential 1 - General Residential
Current Land use	Other 5 - Garden
Monument type	MOTTE AND BAILEY Medieval
Significant Finds	NONE None

Project location

Country	England
Site location	BERKSHIRE WEST BERKSHIRE HAMPSTEAD MARSHALL Motte and Bailey Castles, Hamstead Marshall
Postcode	RG20 0JD
Study area	2 Hectares
Site coordinates	SU 42136 66888 51.398962848558 -1.394242165218 51 23 56 N 001 23 39 W Point

Project creators

Name of Organisation	The University of Reading
Project brief originator	Self (i.e. landowner, developer, etc.)
Project design originator	Dr Phil Stastney
Project director/manager	Dr Jim Leary
Project supervisor	Dr Phil Stastney

Type of sponsor/funding body	The Leverhulme Research Trust
Project archives	
Physical Archive recipient	University of Reading
Physical Contents	"Environmental"
Physical Archive notes	Core samples (these have been opened and heavily subsampled) retained in cold store at School of Archaeology Geography and Environmental Sciences (SAGES), University of Reading.
Digital Archive recipient	University of Reading
Digital Contents	"Environmental", "Stratigraphic", "Survey"
Digital Media available	"Database", "GIS", "Images raster / digital photography", "Spreadsheets", "Text"
Digital Archive notes	Digital archive held by Dr Jim Leary, Elaine Jamieson, and Dr Phil Stastney all at Dept. of Archaeology, University of Reading,
Paper Archive recipient	University of Reading
Paper Contents	"Environmental", "Stratigraphic", "Survey"
Paper Media available	"Notebook - Excavation', ' Research', ' General Notes", "Plan", "Report", "Survey "
Paper Archive notes	Field plans of earthworks, laboratory notes, and written interim report held at Dept. of Archaeology, University of Reading.

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Extending Histories: from Medieval Mottes to Prehistoric Round Mounds - Hamstead Marshall Castle 3, West Berkshire - Interim Report
Author(s)/Editor(s)	Stastney, P. and Jamieson, E.
Date	2016
Issuer or publisher	University of Reading
Place of issue or publication	Reading
Description	Illustrated interim report published in PDF and Word format.
Entered by	Dr Phil Stastney (p.stastney@reading.ac.uk)
Entered on	14 September 2016